

MINUTES OF THE 129TH MEETING OF STATE LEVEL EXPERT APPRAISAL COMMITTEE (SEAC), JHARKHAND HELD ON 17TH, 18TH, 19TH, 20TH AND 21ST JANUARY, 2026.

The 129th meeting of State Level Expert Appraisal Committee (SEAC), Jharkhand was held on 17th, 18th, 19th, 20th and 21st January, 2026 under the Chairmanship of Shri Ashok Kumar Singh, IFS (Retd.) in the Conference Room at SEAC, Ranchi.

The following members were present:

1. Shri Ashok Kumar Singh, IFS (Retd.) - Chairman
2. Shri Niranjana Lal Agarwalla - Member
3. Dr. Raju Kumar - Member
4. Shri Ashok Kumar Dubey, IFS (Retd.) - Member (Virtual mode)
5. Dr. Ajay Govind Bhatt - Member (Absent on 18th & 19th)
6. Shri Srikant Verma, IFS - Member Secretary

The various projects applied in SEAC for the technical appraisal after the last SEAC meeting held on 19th, 20th, 21st, 22nd, 23rd and 24th December, 2025. These projects have been put up for discussions. Besides, these Projects, wherein PP's were asked to provide requisite information / clarifications in the earlier meeting of SEAC, were also considered for appraisal. The Project Proponents have been asked to make technical presentation for the appraisal of their projects before the committee.

The following observations /recommendations were made during the presentation (Project - wise), as under :-

Day 1 : 17th January, 2026 [Saturday]

Consideration of proposals :

1. Telmakri Stone Mine of M/s Sai Minerals (Partners : (i) Shri Kailash Prasad Verma (ii) Shri Birendra Prasad Mehta (iii) Shri Girdhari Lal Mehta (iv) Zakir Ansari), Village : Telmakri, Thana : Jamua, Distt.: Giridih, Jharkhand (1.76 Ha).

(Proposal no.: SIA/JH/MIN/565209/2026)


This is an expansion project. Earlier EC was issued by SEIAA, Jharkhand vide letter no. EC/SEIAA/2022-23/2751/2023/443, dated 21.03.2023.

Regional Office, Ranchi, MoEF&CC, Govt. of India has issued a Certified Compliance Report (CCR) vide F. No. 111-25/ROR-2025/02, dated 02.01.2026 wherein 12 conditions of the earlier EC are stated to be not complied or partially complied.

Project Authorities stated that they have submitted an Action Taken Report in compliance of the CCR as above.

PAs have been asked to obtain a fresh CCR from Regional Office, Ranchi, MoEF&CC, Govt. of India after having submitted the Action Taken Report.

Further, during appraisal it was also found that the approved mine plan submitted was not commensurate with the earlier approved mine plan. Hence, the required to prepare afresh

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mine plan and having approved by the Competent Authority.

Accordingly, this proposal will be taken up for consideration after compliance of the above.

2. Jamdiha Stone Mine of M/s Mahesh Enterprises (Prop. : Shri Mahesh Kumar Mahato),
Village : Jamdiha, Thana : Topchanchi, Distt.: Dhanbad, Jharkhand (0.405 Ha).

(Proposal no.: SIA/JH/MIN/564245/2026)

Name of the consultant : Sathi Planners Pvt. Ltd., Ranchi, Jharkhand.

This is a new project which has been taken for appraisal on 17.01.2026.

Project Sector: 1(a) Mining of Minerals, Category: B2.

Application for Environmental Clearance (EC).

EC Application for: Proposed Capacity: 8085cum. Per Year (Max)/21830 TonsPer Year(max)

Project and Location Details:

I	Parameter	Details	
1	Project Name	: Jamdiha Stone Mine	
2	Lessee:	: M/s Mahesh Enterprises Proprietor: Shri Mahesh Kumar Mahato	
3	Lease Address	: Shri Mahesh Kumar Mahato, S/o Late Teklal Mahato, R/o Village – Sadariyadih, P.O. – Nadkhurki, P.S. – Baghmara, District – Dhanbad, Jharkhand.	
4	Mine Lease Area	: 0.405 Ha	
5	Type of Land	: Non-Forest Raiyati Land	
6	Project Cost	Capital Cost: Rs.121.44Lakhs	
7	EMP Budget	Capital Cost: Rs. 14.22 Lakhs	Recurring Cost: Rs. 6.022 Lakhs/year
8	New or Expansion	: New	
9	Mineable Reserves	cum: 37,400	Tonnes: 1,00,980
10	Mine Life	: 5 Years	
11	Man power	: 17 Person	

12	Water Requirement	:	3.87 KLD(Drinking: 0.255 KLD, Dust Suppression: 0.72 KLD, Plantation: 2.895 KLD)
13	Water Source	:	Will be sourced from authorized vendors
14	DG Set / power	:	20 KVA D.G. Set proposed
15	Crusher	:	No
16	Nearest Water Body	:	Jamunia River flowing NW to south at 450 m west Direction from the Mine site. Seasonal Nalla- 50 m-North. Emp Submitted
17	Nearest Habitation	:	Jamdiha-220m SE as per kml and house at 120 m (Emp Submitted)
18	Nearest Rail Station	:	Jamuniatand Railway Station is at aerial distance of 1.00 km North direction.
19	Nearest Air Port	:	Birsa Munda Airport (Ranchi) is at aerial distance of 100.43 km SW direction.
20	Nearest Forest	:	More than 250 m, as per Division Forest Officer, Dhanbad, vide Letter no.-1180, Dated- 21.05.2025.
21	Road & Highways	:	Approach road is 180 meters long, after this, the road connects to Village Road.
22	Approach Road	:	The distance of approach road is 180m.

CO-ORDINATES

Point ID	Latitude	Longitude
1	23° 44' 43.79832638" N	086° 11' 32.18059435" E
2	23° 44' 44.06683836" N	086° 11' 31.47987726" E
3	23° 44' 44.13717801" N	086° 11' 31.51590010" E
4	23° 44' 44.17858067" N	086° 11' 31.57024329" E
5	23° 44' 44.30429206" N	086° 11' 31.64641523" E
6	23° 44' 44.42975593" N	086° 11' 31.67523485" E
7	23° 44' 45.02434544" N	086° 11' 32.27908667" E
8	23° 44' 45.53621265" N	086° 11' 32.79892921" E
9	23° 44' 45.57060303" N	086° 11' 33.12425745" E
10	23° 44' 45.87319637" N	086° 11' 33.68469195" E
11	23° 44' 45.80957914" N	086° 11' 34.02246485" E
12	23° 44' 45.92683647" N	086° 11' 34.56628546" E
13	23° 44' 46.02713046" N	086° 11' 34.99183278" E
14	23° 44' 45.73261462" N	086° 11' 34.93445667" E
15	23° 44' 45.19766504" N	086° 11' 34.74242737" E
16	23° 44' 44.82591638" N	086° 11' 34.50204237" E
17	23° 44' 44.61326805" N	086° 11' 34.25619121" E
18	23° 44' 44.41078914" N	086° 11' 34.01695715" E
19	23° 44' 43.99593449" N	086° 11' 33.94520887" E
20	23° 44' 43.95037813" N	086° 11' 33.76851144" E
21	23° 44' 43.84472182" N	086° 11' 33.62127290" E
22	23° 44' 43.64768162" N	086° 11' 33.49642023" E
23	23° 44' 43.80701403" N	086° 11' 33.23845356" E
24	23° 44' 43.51066773" N	086° 11' 32.90355141" E

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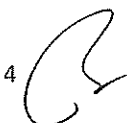
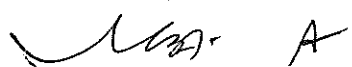


LAND DETAILS

Khata no.	Plot no.
105	234/P

STATUTORY CLEARANCES

1	LOI / Lease docs	:	The Letter of Intent (Lol) has been issued by District Mining Officer, Dhanbad vide letter no. 1257/M, dated 14.08.2025.
2	CO	:	The CO, Baghmara (Dhanbad) vide letter no. 510, dated 24.04.2025 has mentioned the plot no. of the project is not recorded as "Jungle- Jhari" in R.S. Khatiyani & Register II. During the appraisal it was seen from the KML that a few houses at a distance of 120 meter and Jamdiha village at a distance of 220 meter, Nala at a distance of 50 meter and Jamuniya River at a distance of 450 meter. For which detailed Environmental Management Plan has been prepared and submitted.
3	DMO Cluster	:	DMO, Dhanbad vide memo no. 1654/M, dated 06.11.2025 certified that no other mining lease area exists within 500 meters radius from proposed project site.
4	DFO Wild Life	:	DFO, Wildlife Division, Hazaribag vide letter no. 1034, dated 10.06.2025 certified that the proposed project site is outside Eco Sensitive Zone of Parasnath & Topchanchi Wildlife Sanctuary.
5	DFO Territorial	:	Divisional Forest Officer, Dhanbad Forest Division vide letter no. 1180, dated 21.05.2025 certified that the distance of reserved / protected forest is more than 250 meters from proposed project site.
6	DSR	:	The Lol was granted on 14.08.2025. The DSR for Dhanbad was approved by the Sub-Divisional Committee on 23.09.2024 and submitted to SEIAA for approval on 15.10.2024. However, DC, Dhanbad vide letter no. 1767/M, dated 24.11.2025 requested to consider the said project proposal as part of approved District Survey Report & further requested that this project may be taken up for consideration for grant of EC. The Committee accepted the request of the DC, Dhanbad as Lol is granted after the approval of DSR.
7	Gram Sabha	:	Gram Sabha conducted on 08.07.2025.
8	Mine Plan	:	Approved by DMO, Dhanbad vide Memo No. 1652/M, dated



	Approval	04.11.2025.
9	Qualified Person	: Shri Malay Kumar Mukhopadhyay was present in the meeting and affirmed that the mine plan has been prepared by him.

Working Details

1	Mining Method	: Semi-mechanized Method
2	Quarry Area	: 0.188Ha. Life of Mine – 5 Years
3	Waste Generation	: 7425cum
4	Stripping Ratio	: 01:0.07
5	Working Days	: 300
6	Benches: size	: 6 m x 6 m
7	Elevation of Mine	: 186m to 177m AMSL
8	Ground Level Elevation	: 177m AMSL
9	Ultimate Working Depth	: 169mAMSL
10	Water Table	: 160m AMSL (Source-JSAC Ground Water Prospect Map)
11	Topography of Mine	: Area represents gently sloping land.
12	Explosive Requirement	: 8 kg Nitro mix explosives/day, will be obtained from Licensed vendors.
13	Diesel/Fuel requirement	: HSD – 217.86 liters / day (71.893 KL/year)

Production Details

Year	Production of Stone / Year		Removal of O.B.
	Cum	Tonnes	Cum
1st	7040	19008	7425
2nd	7150	19305	0
3rd	7425	20048	0
4th	7700	20790	0
5th	8085	21830	0
Total	37400	100980	7425

Land Use pattern

Sl. No.	Pattern of Utilization	Present/Existing land use pattern in (Ha)	Proposed Land use for current plan period (Ha)	Land used at the conceptual stage i.e. end of mine life in (Ha)	Area to be converted in the conceptual period.
1	Mining Activities	0	0.188	0.114	Water body
2	Dead Benches	0	0	0.074	Plantation
3	Dumping	0	0.010	0.010	Plantation

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4	Garland Drain	0	0.005	0.005	-
5	Settling Tank	0	0.001	0.001	
6	Safety Zone	0	0.201	0.201	Plantation
7	Unutilized	0.405	0	0	-
Total		0.405	0.405	0.405	-






ENVIRONMENT MANAGEMENT

Green Belt Development

S. No.	Location		Area/Length	No of Trees
1	Dead Benches	:	0.074 Ha.	185
2	Safety Zone	:	0.201Ha	502
3	Dumping	:	0.010 Ha.	25
4	Along Approach Road	:	180m	240
TOTAL 0.405 Ha.				952

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.
- 952 tree proposed to be planted out of which 10% plantation will be carried out i.e. (100 trees) as per MoEF&CC, Govt. of India Scheme "Ek Ped Ma Ke Naam"
- Project Cost

Sl. No.	Head	Capital Cost Rs. in Lakhs	Recurring Cost Rs. in Lakhs
1.	Government Revenue (Dead Rent & Royalty)	26.00	--
2.	Cost of infrastructure	5.0	0.5
3.	Mining Machineries owned by applicant <ul style="list-style-type: none"> Wagon Drill -01 Compressor-01 Tippers 25 tons-01 Water Tanker- 01 Diesel Pump-01 D.G. Set-01 	74.4	
	Mining Machineries on hired basis- (Excavator- 01, Tipper-0)		3
4.	Lease Agreement (lump-sum)	--	0.10
5.	Statutory Clearance & Others	5.0	-

6.	Contingency	11.04	-
Total		121.44	3.6
Budget for Environment Management		14.22	6.022

• Budget for Environmental Management

Sl. No.	Particulars	Capital Cost in lakhs.	Recurring Cost in lakhs per year
1	Water facility for Dust Suppression, watering plants etc. (Rs. 1000 per Tanker)	--	3
2	Fencing	1.5	--
3	Plantation 240 X 800 = Rs. 1,92,000 Gabion Plantation along approach road) 725X 400 = Rs.2,90,000 (Plantation within lease area/Green Belt) (also includes Fertilizer, Pesticides, Maintenance)	4.82	0.482
4	Environmental Monitoring (One Day Monitoring) • Ambient Air 24 hrs (3 point) - Rs.27,270 • Ground Water (2 point) - Rs.12,420 • Noise 24 hrs (3 point) - Rs.21,000 • Soil (1point) -Rs.13640 Total -Rs. 1,01,610 (Per Season) At least two seasons in a Year -Rs. 1,01,610 x 2 = Rs. 2,03,220 <i>Source: Central Pollution Control Board Notification, New Delhi, the 23rd February, 2022</i>	--	1.75
5	Budget for additional EMP (Habitation)	7.90	0.79
Total		14.22	6.022

Environment Monitoring Programmed

SL. No.	Description	No. of Monitoring Stations	Duration
1.	Air	3 stations	6 Monthly
2.	Water	2 stations	6 Monthly
3.	Noise	3 stations	6 Monthly
4.	Soil	1 Station	6 Monthly

Organizational Structure of Environmental Management Cell: with respective roles



Environment Management Practices to be followed:

Aspect	Mitigation Measures / Control Measures
Solid Waste Management	<p>Solid waste management is important from both aesthetic and environmental points of view and will be managed as per the Solid Waste Management Rules, 2016.</p> <ul style="list-style-type: none"> • An O.B. (Overburden) dump area of 0.010 ha has been provided on the western side corner within the lease area. • The O.B. dump area will accommodate 7425cum of overburden during the working plan period. • After completion of the working plan, the generated O.B. will be backfilled into the stone quarry faces. • Part of the O.B. will be used for haul road and village road maintenance. • The remaining O.B. will be utilized for plantation activities. • No hazardous or other solid waste generation is envisaged from the stone mining activities.
Air Quality Management	<ul style="list-style-type: none"> • Wet drilling and use of sharp drill bits to minimize dust generation. • Controlled blasting using optimum explosive charge during favourable weather conditions. • Regular maintenance of diesel equipment and vehicles to reduce emissions. • Water sprinkling on haul roads, loading/unloading points, and working areas. • All transport vehicles will have valid PUC certificates. • Greenbelt and roadside plantation to act as dust and noise barriers.
Water Quality Management	<ul style="list-style-type: none"> • Mining will be confined only above the Ground Water Table (GWT). • Rainwater accumulated in the pit will be collected and pumped out regularly during monsoon. • Settling sump will be provided to desilt pumped out of mine-pit and collected through garland drain before discharge into natural drainage. • Garland and foot drains will be constructed around the quarry to control surface runoff. • Sewage from rest shelters will be treated through septic tank-soak pit systems. • Foot drain would be provided around the external dump, if any.
Noise Quality Management	<ul style="list-style-type: none"> • Mining activities will be restricted to daytime and carried out with controlled blasting techniques. • Acoustic enclosures and mufflers will be provided for drilling and

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	<p>DG set operations.</p> <ul style="list-style-type: none"> • Regular maintenance of mining machinery to minimize vibration and noise. • Greenbelt development around the lease boundary to attenuate noise propagation. • Use of delayed blasting technique to minimize the adverse impact of vibration.
Soil Quality Management	<ul style="list-style-type: none"> • Topsoil will be carefully removed and stored separately for future use in plantation and reclamation. • Garland drains and retaining walls will prevent soil erosion and siltation. • Spillage of oil or fuel will be avoided; impervious flooring and oil traps provided near storage areas • Post-mining, the area will be rehabilitated using stored topsoil and native vegetation
Flora & Fauna management	<ul style="list-style-type: none"> • No tree felling will be undertaken without obtaining permission from the competent authority. • Greenbelt and plantation will be developed using native species along approach roads and lease periphery (7.5m Safety Zone). • Dust suppression measures will minimize impact on surrounding vegetation
Socio Economy:	<ul style="list-style-type: none"> • Priority employment to local people in mining and ancillary activities. • Community development initiatives such as tree plantation drives, road maintenance, and local infrastructure support. • Awareness programs on safety, hygiene, and environmental protection
Monitoring & Reporting:	<ul style="list-style-type: none"> • Periodic monitoring of air, water (ground & surface), noise, and soil quality as per CPCB and SPCB guidelines. • All monitoring reports will be submitted to statutory authorities as per the compliance schedule. • Corrective measures will be taken immediately if any deviation from standards is observed.
Risk & Hazard	<p>Activities which are likely to create risk are: Temporary Storage of Explosives, Charging of Explosives, Blasting, Drilling, Bench Formation, Loading / Unloading, Transportation</p> <p>Proposed Preventive measures:</p> <ul style="list-style-type: none"> ▪ Overall slope angles of benches will be maintained at 45°. ▪ Unmanageable heights are not created. ▪ Loose sides are properly dressed. ▪ No loose stone or debris will be permitted to remain on the top of the bench or side of any excavation (Regulation 106(4) of MMR 1961).

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	<ul style="list-style-type: none"> ▪ No undercutting of any face or sides will be permitted so as to cause any overhanging (Regulation 106(5) of MMR 1961) ▪ It will be ensured that the drilling equipment is suitable for the job. ▪ The person in charge of the drilling machine is competent to carry out the drilling operation; part of the training includes instructions to always face towards the open edge of the bench so that any inadvertent backward step is away from the edge. ▪ Provision of portable rail fencing between the drilling operations and the edge of the bench ▪ Provision to attach a safety line to the drilling rig and provide a harness for the driller to wear. ▪ Restricted access to the area to all persons except those necessary for the drilling operation. ▪ Wet drilling will be carried out by constantly injecting a jet of water at the drill bit inside the hole, which prevents dust generation. ▪ In case due to any reason, wet drilling is not possible (due to non-availability of water), exhaust/ vacuum system will be provided which removes the dust from the drill hole continuously and discharges the same in a dust collector specially provided for the purpose. ▪ Drilling machine shall be fitted with dust suppression, collection and disposal arrangement.
<p>Blasting & Handling of Explosives</p>	<ul style="list-style-type: none"> ▪ Blast hole geometry shall be properly designed. ▪ Blast site shall be wetted before and after blasting operations are completed. ▪ Only optimum quantity of permissible explosives shall be used so that the vibrations do not damage the structures/houses if the quarrying operations are close to human habitation. ▪ Blasting shall be conducted only during favourable weather conditions and only during the day time and permissible hours. ▪ While carrying out blasting operations near habitations, wide publicity will be given in the local area through announcement and other available media so that local people become aware of the blasting activities being undertaken in the area and take appropriate precautions. ▪ The vibrations should be monitored periodically in consultation with the local Mining authorities. ▪ Use of explosives is specialist work. Planning for a round of shots is necessary to ensure that the face is properly surveyed, holes correctly drilled, direction logged, the weight of explosive suitable for good fragmentation and the continuity of the initiator are but

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	<p>a few of the steps necessary to ensure its safe use.</p> <ul style="list-style-type: none"> ▪ Proper and safe storage of explosives in approved and Licensed Magazine. ▪ Proper security system to prevent theft/ pilferage, unauthorized entry into Magazine area and checking authorized persons to prevent carrying of match box, lights, mobile phones, cigarette or Bidi etc. will be put in place. ▪ Explosives shall be conveyed in special containers. ▪ Explosives and detonators shall not be carried in the same container. ▪ The holes which have been charged with explosives will not be left unattended till blasting is completed.
Health Hazards	<p>Health hazards should be interpreted as being harmful dust and noise which is emitted during surface mining operations. All suitable steps and precautions will be undertaken to ensure minimum health hazard. Provision of use of Personal Protective Equipment (PPE) will be kept.</p> <p>The PPE shall be of good make and quality, wherever possible ISI certified, suitable for the hazard e.g. a dust respirator fitted with the correct filter to capture the particulate hazardous dust and maintained to recommended standards. As personal protective equipment only affords limited protection it will only be used as a last resort and as an interim arrangement until other steps are taken to reduce the risk of personal injury to an acceptable level</p>
Accident Prevention	<ul style="list-style-type: none"> ▪ Mine road shall be made smooth regularly with a road roller. ▪ Mine road will be made sufficiently wide to keep two-way traffic. Regular water sprinkling will be done on mine road and haul road to avoid suspension of dust. ▪ All transportation within the mine lease area should be carried out directly under the supervision and control of management. ▪ The vehicles will be maintained in good working condition and checked thoroughly at least once a month by the competent person authorized for the purpose by the management. ▪ Navigation signs will be provided at each and every turning point up to the main road (wherever required). ▪ To avoid danger while reversing the vehicles especially at working place/loading points, stopper should be posted to properly guide reversing/spotting operating.

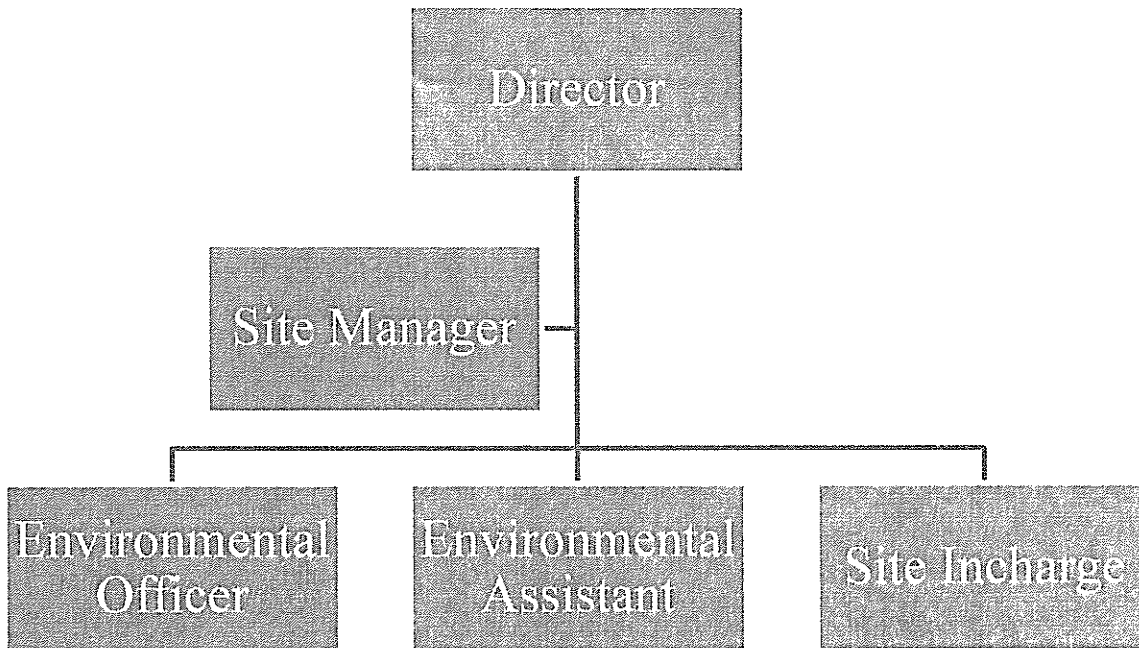
- Organizational Structure of Environment Management Cell:

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EMP Cell structure

The EMP Cell is committed to ensuring environmental sustainability and compliance with regulatory requirements for the Stone Mining Project. With a clear structure, roles, and responsibilities, the EMP Cell is equipped to manage environmental impacts and promote sustainable practices.

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District Survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- i. If any tree felling than necessary permission shall be taken from the competent authority.
- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.

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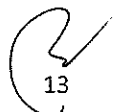
- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.
- l. Personal protective equipments such as clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

The Lol has been granted although this area is not included in the approved DSR. This EC has been considered on the request of the DC, Dhanbad. However, the DC must ensure that the area over which the Lol is granted is meeting all the guideline as required for approval of the DSR and also to take concurrence from the Sub-Divisional Committee. The lease is to be granted only after taking concurrence of the Sub-Divisional Committee.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Jamdiha Stone Mine of M/s Mahesh Enterprises (Prop. : Shri Mahesh Kumar Mahato), Village : Jamdiha, Thana : Topchanchi, Distt.: Dhanbad, Jharkhand (0.405 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I along with following specific conditions :

- I. The mine will come in operation only after obtaining permission from DGMS for controlled and delayed blasting.
- II. In compliance of Office Memorandum no. IA-J-11013/20/2025-IA-P, dated 25.11.2025 of MoEF&CC, Govt. of India, the PAs will mandatorily obtain the Environmental Safeguard to be implemented from Jharkhand State Pollution Control Board within 30 days of issuance of EC or 31.01.2026 which ever is earlier.
- III. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "EkPed Ma KeNaam" and the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.
- IV. The Deputy Commissioner through District Mining Officer will ensure that the mines owner of the respective leases to complete the plantation and maintenance in a time bound manner.
- V. Suitable plant species of not less than 2 M height to be planted equal to twice the area of saplings proposed in Safety zone. This is to be planted in land available near mines and outside safety zone. This will be in addition to plantation in safety zone. Newly planted saplings to be maintained for minimum 3 years with Geo-Tagged photographs.
- VI. Dedicated water tanker to be provided for mine. The tanker to be used for spraying water on haul road and for irrigating newly planted saplings only. Sprinkling to be done such that the haul road is kept moistened all the time with Geo-Tagged photographs.

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- VII. Pre employment Occupational health check up for employees to be done and thereafter at annual interval for PLFT, Audiometry and other required tests .Summary findings of same to submitted along with 6 monthly compliance.
- VIII. Ensure use of Quality PPEs equivalent not less than 3M make. Records of same to be maintained and submitted with 6 monthly compliance report with Geo-Tagged photographs.
- IX. Keep vulnerable areas unmanned. Ensure rotation of duties. Records to be maintained and submitted with 6 monthly compliance report.
- X. Failing of any of terms & conditions mentioned in EC can lead to revocation / cancellation of EC.

3. Piplatanr Stone Mine of Shri Santosh Kumar Mandal, Village : Piplatanr, Thana : Pabiya, Distt.: Jamtara, Jharkhand (1.873 Ha).

(Proposal no.: SIA/JH/MIN/564835/2026)

Name of the consultant : Sathi Planners Pvt. Ltd., Ranchi, Jharkhand.

This is a new project which has been taken for appraisal on 17.01.2026.

Project Sector: 1(a) Mining of Minerals, Category: B2.

Application for Environmental Clearance (EC).

EC Application for: Proposed Capacity: 49,328cumper Year (max.) / 1,33,185 Tonsper Year(max.)

Project and Location Details:

Sl. No.	Parameter	Details
1	Project Name	: Piplatanr Stone Mine
2	Lessee:	: Shri Santosh Kumar Mandal
3	Lease Address	: Shri Santosh Kumar Mandal Village – Piplatanr, Thana – Pabiya, Thana No.- 17, District – Jamtara, Jharkhand
4	Mine Lease Area	: 1.873 Ha
5	Type of Land	: Non-Forest Raiyati Land
6	Project Cost	Capital Cost: Rs. 94.985 Lakh
7	EMP Budget	: Capital Cost: Rs. 48.86Lakh Recurring Cost: Rs. 8.6 Lakh/year

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8	New or Expansion	:	New
9	Mineable Reserves	:	cum: 4,78,365 Tonnes: 12,91,585
10	Mine Life	:	10 Years
11	Man power	:	20 Person
12	Water Requirement	:	11 KLD (Drinking: 0.3 KLD, Dust Suppression: 1.632KLD, Plantation: 8.625 KLD)
13	Water Source	:	Will be sourced from authorized vendors
14	DG Set / power	:	20 KVA D.G. Set proposed
15	Crusher	:	No
16	Nearest Water Body	:	Bansjora River is at an aerial distance of 500 m in the SW direction. Seasonal Nala at 100 m in N.(EMP Submitted)
17	Nearest Habitation	:	Piplatanr-220 m in the SSE direction.(EMP Submitted)
18	Nearest Rail Station	:	Kasetanr Halt Railway Station is at an aerial distance of 5.40 km in the SE direction
19	Nearest Air Port	:	Deoghar Airport is at an aerial distance of 47 km in the NNE direction.
20	Nearest Forest	:	Divisional Forest Officer, Hazaribagh, vide Letter no.-2258 Dated-30.10.2024 certified that the distance of reserved/protected forest is more than 250 m from proposed project site.
21	Road & Highways	:	The mine can be approached by the NH-419 at 6.15 km (aerial distance) in the SW direction and Jamtara-Dhanbad Road at 1 km (aerial distance) in the S direction, both of which are easily approachable via the approach road and the village roads.
22	Approach Road	:	The distance of approach road is 288m.

CO-ORDINATES

Point ID	Latitude	Longitude
1	24° 1' 12.487" N	86° 41' 45.916" E
2	24° 1' 13.039" N	86° 41' 44.285" E
3	24° 1' 13.300" N	86° 41' 44.331" E
4	24° 1' 13.659" N	86° 41' 42.982" E
5	24° 1' 14.016" N	86° 41' 41.771" E
6	24° 1' 14.874" N	86° 41' 42.012" E
7	24° 1' 15.680" N	86° 41' 40.141" E
8	24° 1' 16.525" N	86° 41' 40.672" E
9	24° 1' 16.447" N	86° 41' 41.580" E
10	24° 1' 16.656" N	86° 41' 42.499" E
11	24° 1' 16.760" N	86° 41' 43.977" E
12	24° 1' 16.484" N	86° 41' 44.557" E
13	24° 1' 17.217" N	86° 41' 45.480" E
14	24° 1' 16.803" N	86° 41' 46.264" E
15	24° 1' 16.482" N	86° 41' 47.294" E

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16	24° 1' 16.289" N	86° 41' 47.221" E
17	24° 1' 15.948" N	86° 41' 48.048" E
18	24° 1' 15.161" N	86° 41' 47.738" E
19	24° 1' 13.023" N	86° 41' 47.053" E
20	24° 1' 13.273" N	86° 41' 46.362" E

LAND DETAILS

KHATA NO.	PLOT NO.
08	594
09	673/P
13	671
19	616/P

STATUTORY CLEARANCES

1	LOI / Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Officer, Jamtara vide letter no. 572/M, dated 28.08.2025.
2	CO	:	The CO, Narayanpur vide letter no. 252/Ra., dated 23.03.2024 has mentioned the plot no. of the project is not recorded as "Jungle- Jhari" in R.S. Khatiyani & Register II. During the appraisal it was seen from the KML that habitation at a distance of 220 meter, Barsati Nala at a distance of 100 meter and Bansjora River at a distance of 500 meter. For which detailed Environmental Management Plan has been prepared and submitted.
3	DMO Cluster	:	DMO, Jamtara vide memo no. 748/M, dated 21.11.2025 certified that no other mining lease area exists within 500 meters radius from proposed project site.
4	DFO Wild Life	:	DFO, Wildlife Division, Hazaribag vide letter no. 2258, dated 30.10.2024 certified that the proposed project site is outside Eco Sensitive Zone of Parasnath & Topchanchi Wildlife Sanctuary.
5	DFO Territorial	:	Divisional Forest Officer, Jamtara Forest Division vide letter no. 1840, dated 29.11.2023 certified that the distance of reserved / protected forest is more than 250 meters from proposed project site.
6	DSR	:	The LoI was granted on 28.08.2025. The DSR for Jamtara was approved by the Sub-Divisional Committee on 28.12.2023 and submitted to SEIAA for approval on 29.12.2023. However, DC, Jamtara vide letter no. 37/M, dated 16.01.2026

		requested to consider the said project proposal as part of approved District Survey Report & further requested that this project may be taken up for consideration for grant of EC. The Committee accepted the request of the DC, Jamtara as Lol is granted after the approval of DSR.
7	Gram Sabha	: BDO, Narayanpur vide letter no. 1468/Vi, dated 02.08.2025 informed that Gram Sabha conducted on 13.02.2024.
8	Mine Plan Approval	: Approved by DMO, Jamtara vide Memo No. 795/M, dated 12.12.2025.
9	Qualified Person	: Shri Vidya Bhushan Mishra was present in the meeting and affirmed that the mine plan has been prepared by him.


Working Details

1	Mining Method	: Semi-mechanized Method
2	Quarry Area	: 1.427Ha. Life of Mine – 10 Years
3	Waste Generation	: 35,809cum
4	Stripping Ratio	: 01:0.05
5	Working Days	: 300
6	Benches: size	: 6 m x 6 m
7	Elevation of Mine	: 231 m to 221 m AMSL
8	Ground Level Elevation	: 221 m AMSL
9	Ultimate Working Depth	: 180m AMSL
10	Water Table	: 148m AMSL (Source- JSAC Ground Water Prospect Map)
11	Topography of Mine	: Area represents gently sloping land.
12	Explosive Requirement	: 42 kg Nitro mix explosives/day, will be obtained from Licensed vendors.
13	Diesel/Fuel requirement	: HSD - 204 liters / day (61.20 KL/year)

Production Details

Year	Production of Stone / Year		Removal of O.B.
	Cum	Tonnes	Cum
1 st	44100	119070	24873
2 nd	45418	122628	2390
3 rd	46352	125151	2440
4 th	47540	128358	2502
5 th	49328	133185	3604
Total	232738	628392	35809

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Land Use pattern

Sl. No.	Pattern of Utilization	Present/Existing land use pattern in (Ha)	Land to be at the end of plan period. (Ha)	Area to be converted in the conceptual period (Ha)
1	Excavation	0	1.194	1.427 (0.123 ha area shall be backfilled, 1.044 ha converted in to water reservoir & 0.260 ha shall be left as dead benches)
2	Waste Dump	0	0.19	Nil (comes under quarry)
3	Road	0	0.002	Nil (comes under quarry)
4	Infrastructure	0	0	0
5	Safety zone Plantation (greenbelt)	0	0.446 (within 7.5 m safety barrier)	0.446
	Total	0	1.832	1.873
	Unutilized	1.873	0.041	0
	Total	1.873	1.873	1.873

ENVIRONMENT MANAGEMENT

Green Belt Development

Location	Area Ha.	No of Trees
Backfilled	0.123	308
Dead benches	0.26	650
Safety zone	0.446	1115
Along Approach Road	288m	192
Total		2269

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

2269 tree proposed to be planted out of which 10% plantation will be carried out i.e. (226 trees) as per MoEF&CC, Govt. of India Scheme "Ek Ped Ma Ke Naam"

Project Cost

Sl. No.	Head	Capital Cost Rs. in Lakhs	Recurring Cost Rs. in Lakhs
1.	Government Revenue (Dead Rent & Royalty)	23.00	--

2.	Infrastructure	5.00	0.50
3.	Mining Machineries owned by applicant <ul style="list-style-type: none"> • Compressor-01 • Tippers 25 tons-02 • Diesel Pump-01 • D.G. Set-01 	53.35	--
	Mining Machineries on hired basis (Excavator- 01)	--	3
4.	Lease Agreement (lump-sum)	--	1.1575
5.	Statutory Clearance & Others	5.0	
6.	Contingency	8.635	
Total		94.985	1.6575
Budget for Environment Management		48.86	8.6

Budget for Environmental Management

Sl. No.	Particulars	Capital Cost in Rs.	Recurring Cost in Rs. per year
1	Water facility for Dust Suppression, watering plants etc. (Rs. 800 per Tanker)	--	2,40,000
2	Plantation 192 X 800 = Rs. 1,53,600 (Gabion Plantation along approach road) 2073 X 400 = Rs. 8,29,200 (Plantation within lease area) (also includes Fertilizer, Pesticides, Maintenance)	9,82,800	98,280
3	Fencing	1,50,000	
4	Environmental Monitoring (One Day Monitoring) <ul style="list-style-type: none"> • Ambient Air 24 hr (3 points) Rs.27,270 • Ground Water (2 points)-Rs.12,420 • Noise 24 hr (3 points)-Rs.21,000 <ul style="list-style-type: none"> • Soil (1 points) -Rs.13640 Total -Rs. 74330(Per Season) At least two seasons in a Year -Rs. 74330 x 2= Rs. 148660 Source: Central Pollution Control Board Notification, New Delhi, the 23rd February, 2022	--	148660
5	Additional EMP fo Seasonal Nala	27,53,350	2,75,335
6	Additional EMP fo habitation	1000000	100000
Total		4,886,150	862275

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Environment Monitoring Programmed

SL. No.	Description	No. of Monitoring Stations	Duration
1.	Air	3 stations	6 Monthly
2.	Water	2 stations	6 Monthly
3.	Noise	3 stations	6 Monthly
4.	Soil	1 Station	Yearly

Organizational Structure of Environmental Management Cell: with respective roles

Environment Management Practices to be followed:

Aspect	Mitigation Measures / Control Measures
Solid Waste Management	<p>Solid waste management is important from both aesthetic and environmental points of view and will be managed as per the Solid Waste Management Rules, 2016.</p> <ul style="list-style-type: none"> • An O.B. (Overburden) dump area of 0.19 ha has been provided on the western side corner within the lease area. • The O.B. dump area will accommodate 35,809cum of overburden during the working plan period. • After completion of the working plan, the generated O.B. will be backfilled into the stone quarry faces. • Part of the O.B. will be used for haul road and village road maintenance. • The remaining O.B. will be utilized for plantation activities. • ☑ No hazardous or other solid waste generation is envisaged from the stone mining activities.
Air Quality Management	<ul style="list-style-type: none"> • Wet drilling and use of sharp drill bits to minimize dust generation. • Controlled blasting using optimum explosive charge during favourable weather conditions. • Regular maintenance of diesel equipment and vehicles to reduce emissions. • Water sprinkling on haul roads, loading/unloading points, and working areas. • All transport vehicles will have valid PUC certificates. • Greenbelt and roadside plantation to act as dust and noise barriers.
Water Quality Management	<ul style="list-style-type: none"> • Mining will be confined only above the Ground Water Table (GWT). • Rainwater accumulated in the pit will be collected and pumped out regularly during monsoon. • Settling sump will be provided to desilt pumped out of mine-pit and collected through garland drain before discharge into natural

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	<p>drainage.</p> <ul style="list-style-type: none"> • Garland and foot drains will be constructed around the quarry to control surface runoff. • Sewage from rest shelters will be treated through septic tank-soak pit systems. • Foot drain would be provided around the external dump, if any.
Noise Quality Management	<ul style="list-style-type: none"> • Mining activities will be restricted to daytime and carried out with controlled blasting techniques. • Acoustic enclosures and mufflers will be provided for drilling and DG set operations. • Regular maintenance of mining machinery to minimize vibration and noise. • Greenbelt development around the lease boundary to attenuate noise propagation. • Use of delayed blasting technique to minimize the adverse impact of vibration.
Soil Quality Management	<ul style="list-style-type: none"> • Topsoil will be carefully removed and stored separately for future use in plantation and reclamation. • Garland drains and retaining walls will prevent soil erosion and siltation. • Spillage of oil or fuel will be avoided; impervious flooring and oil traps provided near storage areas • Post-mining, the area will be rehabilitated using stored topsoil and native vegetation
Flora & Fauna management	<ul style="list-style-type: none"> • No tree felling will be undertaken without obtaining permission from the competent authority. • Greenbelt and plantation will be developed using native species along approach roads and lease periphery (7.5m Safety Zone). • Dust suppression measures will minimize impact on surrounding vegetation
Socio Economy:	<ul style="list-style-type: none"> • Priority employment to local people in mining and ancillary activities. • Community development initiatives such as tree plantation drives, road maintenance, and local infrastructure support. • Awareness programs on safety, hygiene, and environmental protection
Monitoring & Reporting:	<ul style="list-style-type: none"> • Periodic monitoring of air, water (ground & surface), noise, and soil quality as per CPCB and SPCB guidelines. • All monitoring reports will be submitted to statutory authorities as per the compliance schedule. • Corrective measures will be taken immediately if any deviation from standards is observed.

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Risk & Hazard	<p>Activities which are likely to create risk are: Temporary Storage of Explosives, Charging of Explosives, Blasting, Drilling, Bench Formation, Loading / Unloading, Transportation</p> <p>Proposed Preventive measures:</p> <ul style="list-style-type: none"> ▪ Overall slope angles of benches will be maintained at 45°. ▪ Unmanageable heights are not created. ▪ Loose sides are properly dressed. ▪ No loose stone or debris will be permitted to remain on the top of the bench or side of any excavation (Regulation 106(4) of MMR 1961). ▪ No undercutting of any face or sides will be permitted so as to cause any overhanging (Regulation 106(5) of MMR 1961) ▪ It will be ensured that the drilling equipment is suitable for the job. ▪ The person in charge of the drilling machine is competent to carry out the drilling operation; part of the training includes instructions to always face towards the open edge of the bench so that any inadvertent backward step is away from the edge. ▪ Provision of portable rail fencing between the drilling operations and the edge of the bench ▪ Provision to attach a safety line to the drilling rig and provide a harness for the driller to wear. ▪ Restricted access to the area to all persons except those necessary for the drilling operation. ▪ Wet drilling will be carried out by constantly injecting a jet of water at the drill bit inside the hole, which prevents dust generation. ▪ In case due to any reason, wet drilling is not possible (due to non-availability of water), exhaust/ vacuum system will be provided which removes the dust from the drill hole continuously and discharges the same in a dust collector specially provided for the purpose. ▪ Drilling machine shall be fitted with dust suppression, collection and disposal arrangement.
Blasting & Handling of Explosives	<ul style="list-style-type: none"> ▪ Blast hole geometry shall be properly designed. ▪ Blast site shall be wetted before and after blasting operations are completed. ▪ Only optimum quantity of permissible explosives shall be used so that the vibrations do not damage the structures/houses if the quarrying operations are close to human habitation. ▪ Blasting shall be conducted only during favourable weather conditions and only during the day time and permissible hours.

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	<ul style="list-style-type: none"> ▪ While carrying out blasting operations near habitations, wide publicity will be given in the local area through announcement and other available media so that local people become aware of the blasting activities being undertaken in the area and take appropriate precautions. ▪ The vibrations should be monitored periodically in consultation with the local Mining authorities. ▪ Use of explosives is specialist work. Planning for a round of shots is necessary to ensure that the face is properly surveyed, holes correctly drilled, direction logged, the weight of explosive suitable for good fragmentation and the continuity of the initiator are but a few of the steps necessary to ensure its safe use. ▪ Proper and safe storage of explosives in approved and Licensed Magazine. ▪ Proper security system to prevent theft/ pilferage, unauthorized entry into Magazine area and checking authorized persons to prevent carrying of match box, lights, mobile phones, cigarette or Bidi etc. will be put in place. ▪ Explosives shall be conveyed in special containers. ▪ Explosives and detonators shall not be carried in the same container. ▪ The holes which have been charged with explosives will not be left unattended till blasting is completed.
Health Hazards	<p>Health hazards should be interpreted as being harmful dust and noise which is emitted during surface mining operations. All suitable steps and precautions will be undertaken to ensure minimum health hazard. Provision of use of Personal Protective Equipment (PPE) will be kept.</p> <p>The PPE shall be of good make and quality, wherever possible ISI certified, suitable for the hazard e.g. a dust respirator fitted with the correct filter to capture the particulate hazardous dust and maintained to recommended standards. As personal protective equipment only affords limited protection it will only be used as a last resort and as an interim arrangement until other steps are taken to reduce the risk of personal injury to an acceptable level</p>
Accident Prevention	<ul style="list-style-type: none"> ▪ Mine road shall be made smooth regularly with a road roller. ▪ Mine road will be made sufficiently wide to keep two-way traffic. Regular water sprinkling will be done on mine road and haul road to avoid suspension of dust. ▪ All transportation within the mine lease area should be carried out directly under the supervision and control of management. ▪ The vehicles will be maintained in good working condition and checked thoroughly at least once a month by the competent

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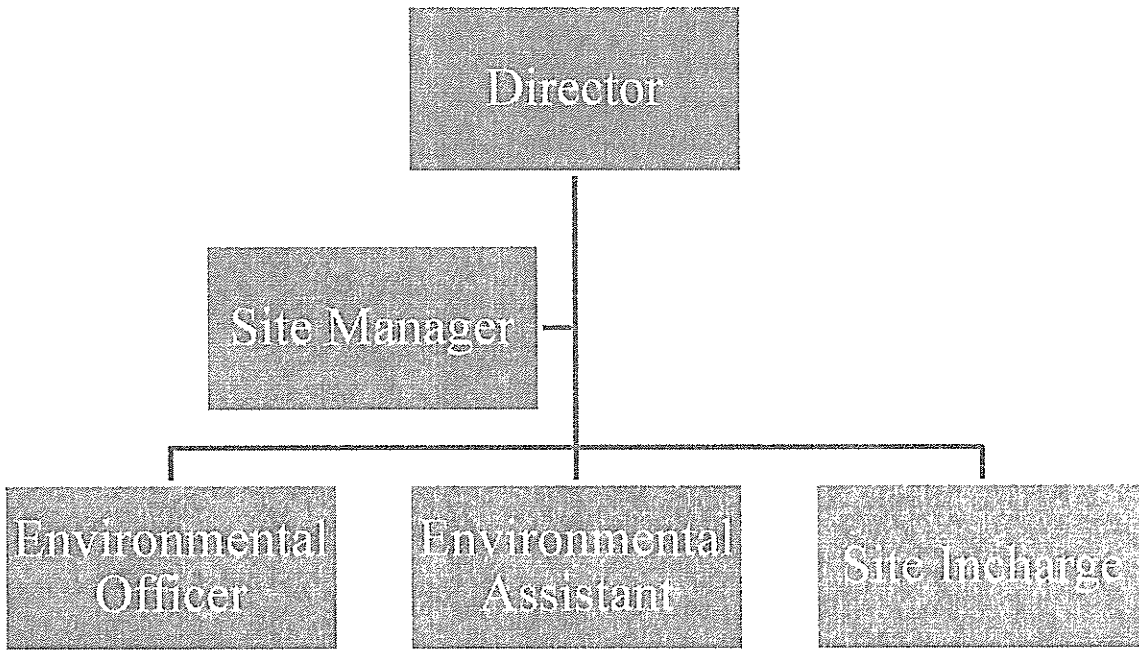
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	<p>person authorized for the purpose by the management.</p> <ul style="list-style-type: none"> ▪ Navigation signs will be provided at each and every turning point up to the mainroad (wherever required). ▪ To avoid danger while reversing the vehicles especially at working place/loading points, stopper should be posted to properly guide reversing/spotting operating.
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Organizational Structure of Environment Management Cell:



EMP Cell structure

The EMP Cell is committed to ensuring environmental sustainability and compliance with regulatory requirements for the Stone Mining Project. With a clear structure, roles, and responsibilities, the EMP Cell is equipped to manage environmental impacts and promote sustainable practices.

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District Survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.

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- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- i. If any tree felling than necessary permission shall be taken from the competent authority.
- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.
- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.
- l. Personal protective equipments such as clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

The Lol has been granted although this area is not included in the approved DSR. This EC has been considered on the request of the DC, Jamtara. However, the DC must ensure that the area over which the Lol is granted is meeting all the guideline as required for approval of the DSR and also to take concurrence from the Sub-Divisional Committee. The lease is to be granted only after taking concurrence of the Sub-Divisional Committee.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Piplatanr Stone Mine of Shri Santosh Kumar Mandal, Village : Piplatanr, Thana : Pabiya, Distt.: Jamtara, Jharkhand (1.873 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I along with following specific conditions :

- I. The mine will come in operation only after obtaining permission from DGMS for controlled and delayed blasting.
- II. In compliance of Office Memorandum no. IA-J-11013/20/2025-IA-P, dated 25.11.2025 of MoEF&CC, Govt. of India, the PAs will mandatorily obtain the Environmental Safeguard to be implemented from Jharkhand State Pollution Control Board within 30 days of issuance of EC or 31.01.2026 which ever is earlier.
- III. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "Ek Ped Ma Ke Naam" and the details of the same shall be uploaded in the MeriLIFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.
- IV. The Deputy Commissioner through District Mining Officer will ensure that the mines owner of the respective leases to complete the plantation and maintenance in a time bound manner.
- V. Suitable plant species of not less than 2 M height to be planted equal to twice the area of saplings proposed in Safety zone. This is to be planted in land available near mines and outside safety zone. This will be in addition to plantation in safety

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zone. Newly planted saplings to be maintained for minimum 3 years with Geo-Tagged photographs.

- VI. Dedicated water tanker to be provided for mine. The tanker to be used for spraying water on haul road and for irrigating newly planted saplings only. Sprinkling to be done such that the haul road is kept moistened all the time with Geo-Tagged photographs.
- VII. Pre employment Occupational health check up for employees to be done and thereafter at annual interval for PLFT, Audiometry and other required tests .Summary findings of same to be submitted along with 6 monthly compliance.
- VIII. Ensure use of Quality PPEs equivalent not less than 3M make. Records of same to be maintained and submitted with 6 monthly compliance report with Geo-Tagged photographs.
- IX. Keep vulnerable areas unmanned. Ensure rotation of duties. Records to be maintained and submitted with 6 monthly compliance report.
- X. Failing of any of terms & conditions mentioned in EC can lead to revocation / cancellation of EC.

4. Betla Stone Mine of Shri Shatrudhan Prasad, Village : Betla, Thana : Manika, Thana no. : 135, Distt.: Latehar, Jharkhand (1.770 Ha).

(Proposal no.: SIA/JH/MIN/556929/2025)

Name of the consultant : Sathi Planners Pvt. Ltd., Ranchi, Jharkhand.

This is a new project which has been taken for appraisal on 17.01.2026.

Project Sector: 1(a) Mining of Minerals, Category: B2.

Application for Environmental Clearance (EC).

EC Application for: Proposed Capacity: 31376 Cum. (Max.) / 84715 Tons (max.) per year

Project and Location Details:

Sl. No.	Parameter	Details
1	Project Name	: Betla Stone Mine
2	Lessee:	: Proprietor- Shri Shatrudhan Prasad

3	Lease Address	:	Shri Shatrudhan Prasad, Village – Betla, Thana – Manika, Thana No. 135, District- Latehar, Jharkhand.
4	Mine Lease Area	:	1.770 Ha
5	Type of Land	:	Non-Forest Raiyati Land
6	Project Cost	:	Capital Cost: Rs.121.44Lakhs
7	EMP Budget	:	Capital Cost: Rs.25.75Lakhs Recurring Cost: Rs. 6.904Lakhs/year
8	New or Expansion	:	New
9	Mineable Reserves	:	cum.: 2,86,642 Tonnes: 7,73,933
10	Mine Life	:	10 Years
11	Man power	:	22 Person
12	Water Requirement	:	11.32 KLD(Drinking: 0.330 KLD, Dust Suppression: 0.656KLD, Plantation: 10.329KLD).
13	Water Source	:	Will be sourced from authorized vendors
14	DG Set / power	:	20 KVA D.G. Set proposed
15	Crusher	:	Yes (200 TPH)
16	Nearest Water Body	:	The nearest water body (Pond) is located at a distance of approximately 1.43 km from the mine site.
17	Nearest Habitation	:	Few House at 70 m and Betla Village – 200 m towards south.(Emp Submitted)
18	Nearest Rail Station	:	Birsa Munda Airport (Ranchi) is at Aerial distance of 119 km SE direction.
19	Nearest Air Port	:	Deoghar Airport is at areal distance of 122.46 km SW direction.
20	Nearest Forest	:	More than 250 m, as per Division Forest Officer, Latehar, vide memo no.-434 Dated- 28.02.2025.
21	Road & Highways	:	The distance of Approach Road is 164m, after that, this road connects to village road.
22	Approach Road	:	The distance of approach road is 164m.

CO-ORDINATES

POINT NAME	LATITUDE	LONGITUDE
1	23° 56' 22.54359733" N	084° 22' 37.69778138" E
2	23° 56' 22.58375981" N	084° 22' 38.29749846" E
3	23° 56' 22.64355721" N	084° 22' 39.19041379" E
4	23° 56' 22.71325925" N	084° 22' 40.23122344" E
5	23° 56' 22.76447024" N	084° 22' 40.99591971" E
6	23° 56' 22.82753370" N	084° 22' 41.93758661" E
7	23° 56' 22.94111647" N	084° 22' 43.63363677" E
8	23° 56' 23.14960765" N	084° 22' 43.68413467" E
9	23° 56' 23.06117227" N	084° 22' 44.61640052" E

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10	23° 56' 21.54911076" N	084° 22' 44.30635670" E
11	23° 56' 19.90872940" N	084° 22' 43.97000159" E
12	23° 56' 19.93938642" N	084° 22' 42.76341073" E
13	23° 56' 19.95336711" N	084° 22' 41.89909955" E
14	23° 56' 18.97772680" N	084° 22' 41.70206559" E
15	23° 56' 18.38714305" N	084° 22' 41.69716942" E
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38	23° 56' 19.11195055" N	084° 22' 36.07256733" E
39	23° 56' 20.40694123" N	084° 22' 36.54250983" E
40	23° 56' 21.14767702" N	084° 22' 36.68936606" E
41	23° 56' 22.12786460" N	084° 22' 36.78374522" E
42	23° 56' 22.09064008" N	084° 22' 37.18476286" E

LAND DETAILS

Khata no.	Plot no.
31	534 (P) & 539 (P)
82	544 (P)
92	545 (P) & 543 (P)
86	537 (P)

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STATUTORY CLEARANCES

1	LOI / Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Officer, Latehar vide letter no. 751/M, dated 24.06.2025.
2	CO	:	The CO, Manika vide letter no. 05, dated 05.01.2024 has mentioned the plot no. of the project is not recorded as "Jungle-Jhari" in R.S. Khatiyani & Register II. During the appraisal it was seen from the KML that few houses at a distance of 70 meter and Betla Village at a distance of about 200 meter. For which detailed Environmental Management Plan has been prepared and submitted.
3	DMO Cluster	:	DMO, Latehar vide memo no. 988/M, dated 25.08.2025 certified that no other mining lease area exists within 500 m radius from proposed project site.
4	DFO Wild Life	:	Deputy Director, Palamau Tiger Project, South Division, Medininagar vide letter no. 186, dated 11.03.2025 certified that the proposed project site is outside Eco Sensitive Zone of Palamau Tiger Reserve.
5	DFO Territorial	:	Divisional Forest Officer, Latehar Forest Division vide letter no. 434, dated 28.02.2025 certified that the distance of reserved / protected forest is more than 250 meter from proposed project site.
6	DSR	:	This project is mentioned in approved District Survey Report (DSR) of Latehar District (Sl. no. 04, Page no. 56).
7	Gram Sabha	:	BDO, Manika (Latehar) vide letter no. 1566, Dated 22.12.2023 informed that Gram Sabha conducted on 14.12.2023.
8	Mine Plan Approval	:	Approved by AMO –cum- Incharge DMO, Latehar vide memo no. 1003/M, dated 29.08.2025.
9	Qualified Person	:	Shri Malay Kumar Mukhopadhyay was present in the meeting and affirmed that the mine plan has been prepared by him.

Working Details

1	Mining Method	:	Semi-mechanized Method
2	Quarry Area	:	0.962Ha. Life of Mine – 10 Years
3	Waste Generation	:	18762cum
4	Stripping Ratio	:	01:0.05
5	Working Days	:	300
6	Bench: size	:	6 m x 6 m
7	Elevation of Mine	:	399m to 376m AMSL

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8	Ground Level Elevation	:	376m AMSL
9	Ultimate Working Depth	:	351m AMSL
10	Water Table	:	342(Source-JSAC Ground Water Prospect Map)
11	Topography of Mine	:	Area represents gently sloping land.
12	Explosive Requirement	:	32 kg Nitro mix explosives/day, will be obtained from Licensed vendors.
13	Diesel/Fuel requirement	:	HSD – 245.58 liters / day (81.0414 KL/year)

Production Details

Year	Production of Stone / Year		Removal of O.B.
	Cum	Tonnes	Cum
1st	28090	75843	10918
2nd	31376	84715	7844
3rd	27560	74412	0
4th	27772	74984	0
5th	28302	76415	0
Total	143100	386370	18762

Land Use pattern

Si. No.	Pattern of Utilization	Present/Existing land use pattern in (Ha.)	Proposed Land use for current plan period (Ha.)	Land to be used in remaining period of the life of the mine. (Ha.)	Land used at the conceptual stage i.e. end of mine life in (Ha.)	Area to be converted in the conceptual period.
1	Mining Quarry	-	0.690	0.962	0.476	Water body
2	Dead Benches	-	-	-	0.310	Plantation
3	Reclaimed Quarry	-	-	-	0.176	Plantation
4	Dumping	-	0.084	-	-	-
5	Garland Drain	-	0.041	0.041	0.041	-
6	Settling Tank	-	0.005	0.005	0.005	-

7	Safety Zone	-	0.691	0.691	0.691	Plantation
8	Unutilized	1.770	0.188	-	-	-
9	Crusher	-	0.071	0.071	0.071	Plantation
Total		1.770	1.770	1.770	1.770	-

ENVIRONMENT MANAGEMENT

Green Belt Development

S. No	Location		Area/Length	No of Trees
1	Within 7.5 m Safety Zone (1 st Year)	:	0.691 Ha.	1,728
2	Dead Benches	:	0.310 Ha.	775
3	Crusher	:	0.071 Ha.	177
4	Reclaimed Quarry	:	0.176 Ha.	440
5	Approach Road	:	164 m	220
TOTAL			1.289 Ha.	3341

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

3341 trees proposed to be planted out of which 10% plantation will be carried out i.e. (334 trees) as per MoEF&CC, Govt. of India Scheme "Ek Ped Ma Ke Naam"

Project Cost

Sl. No.	Head	Capital Cost Rs. in Lakhs	Recurring Cost Rs. in Lakhs
1.	Government Revenue (Dead Rent & Royalty)	26.00	--
2.	Cost of infrastructure	5.0	0.5
3.	Mining Machineries owned by applicant <ul style="list-style-type: none"> Wagon Drill -01 Compressor-01 Tippers 25 tons-01 Water Tanker- 01 Diesel Pump-01 D.G. Set-01 	74.4	
	Mining Machineries on hired basis- (Excavator- 01, Tipper-02)		
4.	Lease Agreement (lump-sum)	--	1.09
5.	Statutory Clearance & Others	5.0	-

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6.	Contingency	11.04	-
Total		121.44	9.59
Budget for Environment Management		25.74	6.904

• **Budget for Environmental Management**

Sl. No.	Particulars	Capital Cost in lakhs.	Recurring Cost in lakhs per year
1	Water facility for Dust Suppression, watering plants etc. (Rs. 1000 per Tanker)	--	3
2	Fencing	1.5	--
3	Plantation 220 X 800 = Rs. 1,76,000 (Gabion Plantation along approach road) 3121X 400 = Rs. 12,48,400 (Plantation within lease area/Green Belt) (also includes Fertilizer, Pesticides, Maintenance)	14.24	1.424
4	Environmental Monitoring (One Day Monitoring) • Ambient Air 24 hr (3 points) Rs.27,270 • Ground Water (2 points) -Rs.12,420 • Noise 24 hr (3 points) -Rs.21,000 • Soil (1 points) -Rs.13640 Total -Rs. 74330(Per Season) At least two seasons in a Year -Rs. 74330 x 2= Rs. 148660 Source: Central Pollution Control Board Notification, New Delhi, the 23rd February, 2022	--	1.48
5	Additional Emp for Habitation	10	1
Total		25.74	6.904

Environment Monitoring Programmed

SL. No.	Description	No. of Monitoring Stations	Duration
1.	Air	3 stations	6 Monthly
2.	Water	2 stations	6 Monthly
3.	Noise	3 stations	6 Monthly
4.	Soil	1 Station	Yearly

Organizational Structure of Environmental Management Cell: with respective roles

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Environment Management Practices to be followed:

Aspect	Mitigation Measures / Control Measures
Solid Waste Management	<p>Solid waste management is important from both aesthetic and environmental points of view and will be managed as per the Solid Waste Management Rules, 2016.</p> <ul style="list-style-type: none"> • The O.B. dump area will accommodate 35,809cum of overburden during the working plan period. • After completion of the working plan, the generated O.B. will be backfilled into the stone quarry faces. • Part of the O.B. will be used for haul road and village road maintenance. • The remaining O.B. will be utilized for plantation activities. • No hazardous or other solid waste generation is envisaged from the stone mining activities.
Air Quality Management	<ul style="list-style-type: none"> • Wet drilling and use of sharp drill bits to minimize dust generation. • Controlled blasting using optimum explosive charge during favourable weather conditions. • Regular maintenance of diesel equipment and vehicles to reduce emissions. • Water sprinkling on haul roads, loading/unloading points, and working areas. • All transport vehicles will have valid PUC certificates. • Greenbelt and roadside plantation to act as dust and noise barriers.
Water Quality Management	<ul style="list-style-type: none"> • Mining will be confined only above the Ground Water Table (GWT). • Rainwater accumulated in the pit will be collected and pumped out regularly during monsoon. • Settling sump will be provided to desilt pumped out of mine-pit and collected through garland drain before discharge into natural drainage. • Garland and foot drains will be constructed around the quarry to control surface runoff. • Sewage from rest shelters will be treated through septic tank-soak pit systems. • Foot drain would be provided around the external dump, if any.
Noise Quality Management	<ul style="list-style-type: none"> • Mining activities will be restricted to daytime and carried out with controlled blasting techniques. • Acoustic enclosures and mufflers will be provided for drilling and DG set operations. • Regular maintenance of mining machinery to minimize

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	<p>vibration and noise.</p> <ul style="list-style-type: none"> • Greenbelt development around the lease boundary to attenuate noise propagation. • Use of delayed blasting technique to minimize the adverse impact of vibration.
Soil Quality Management	<ul style="list-style-type: none"> • Topsoil will be carefully removed and stored separately for future use in plantation and reclamation. • Garland drains and retaining walls will prevent soil erosion and siltation. • Spillage of oil or fuel will be avoided; impervious flooring and oil traps provided near storage areas • Post-mining, the area will be rehabilitated using stored topsoil and native vegetation
Flora & Fauna management	<ul style="list-style-type: none"> • No tree felling will be undertaken without obtaining permission from the competent authority. • Greenbelt and plantation will be developed using native species along approach roads and lease periphery (7.5m Safety Zone). • Dust suppression measures will minimize impact on surrounding vegetation
Socio Economy:	<ul style="list-style-type: none"> • Priority employment to local people in mining and ancillary activities. • Community development initiatives such as tree plantation drives, road maintenance, and local infrastructure support. • Awareness programs on safety, hygiene, and environmental protection
Monitoring & Reporting:	<ul style="list-style-type: none"> • Periodic monitoring of air, water (ground & surface), noise, and soil quality as per CPCB and SPCB guidelines. • All monitoring reports will be submitted to statutory authorities as per the compliance schedule. • Corrective measures will be taken immediately if any deviation from standards is observed.
Risk & Hazard	<p>Activities which are likely to create risk are: Temporary Storage of Explosives, Charging of Explosives, Blasting, Drilling, Bench Formation, Loading / Unloading, Transportation</p> <p>Proposed Preventive measures:</p> <ul style="list-style-type: none"> ▪ Overall slope angles of benches will be maintained at 45°. ▪ Unmanageable heights are not created. ▪ Loose sides are properly dressed. ▪ No loose stone or debris will be permitted to remain on the top of the bench or side of any excavation (Regulation 106(4) of MMR 1961). ▪ No undercutting of any face or sides will be permitted so as to

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	<p>cause any</p> <p>overhanging (Regulation 106(5) of MMR 1961)</p> <ul style="list-style-type: none"> ▪ It will be ensured that the drilling equipment is suitable for the job. ▪ The person in charge of the drilling machine is competent to carry out the drilling operation; part of the training includes instructions to always face towards the open edge of the bench so that any inadvertent backward step is away from the edge. ▪ Provision of portable rail fencing between the drilling operations and the edge of the bench ▪ Provision to attach a safety line to the drilling rig and provide a harness for the driller to wear. ▪ Restricted access to the area to all persons except those necessary for the drilling operation. ▪ Wet drilling will be carried out by constantly injecting a jet of water at the drill bit inside the hole, which prevents dust generation. ▪ In case due to any reason, wet drilling is not possible (due to non-availability of water), exhaust/ vacuum system will be provided which removes the dust from the drill hole continuously and discharges the same in a dust collector specially provided for the purpose. ▪ Drilling machine shall be fitted with dust suppression, collection and disposal arrangement.
<p>Blasting & Handling of Explosives</p>	<ul style="list-style-type: none"> ▪ Blast hole geometry shall be properly designed. ▪ Blast site shall be wetted before and after blasting operations are completed. ▪ Only optimum quantity of permissible explosives shall be used so that the vibrations do not damage the structures/houses if the quarrying operations are close to human habitation. ▪ Blasting shall be conducted only during favourable weather conditions and only during the day time and permissible hours. ▪ While carrying out blasting operations near habitations, wide publicity will be given in the local area through announcement and other available media so that local people become aware of the blasting activities being undertaken in the area and take appropriate precautions. ▪ The vibrations should be monitored periodically in consultation with the local Mining authorities. ▪ Use of explosives is specialist work. Planning for a round of shots is necessary to ensure that the face is properly surveyed, holes correctly drilled, direction logged, the weight of

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	<p>explosive suitable for good fragmentation and the continuity of the initiator are but a few of the steps necessary to ensure its safe use.</p> <ul style="list-style-type: none"> ▪ Proper and safe storage of explosives in approved and Licensed Magazine. ▪ Proper security system to prevent theft/ pilferage, unauthorized entry into Magazine area and checking authorized persons to prevent carrying of match box, lights, mobile phones, cigarette or Bidi etc. will be put in place. ▪ Explosives shall be conveyed in special containers. ▪ Explosives and detonators shall not be carried in the same container. ▪ The holes which have been charged with explosives will not be left unattended till blasting is completed.
Health Hazards	<p>Health hazards should be interpreted as being harmful dust and noise which is emitted during surface mining operations. All suitable steps and precautions will be undertaken to ensure minimum health hazard. Provision of use of Personal Protective Equipment (PPE) will be kept.</p> <p>The PPE shall be of good make and quality, wherever possible ISI certified, suitable for the hazard e.g. a dust respirator fitted with the correct filter to capture the particulate hazardous dust and maintained to recommended standards. As personal protective equipment only affords limited protection it will only be used as a last resort and as an interim arrangement until other steps are taken to reduce the risk of personal injury to an acceptable level</p>
Accident Prevention	<ul style="list-style-type: none"> ▪ Mine road shall be made smooth regularly with a road roller. ▪ Mine road will be made sufficiently wide to keep two-way traffic. Regular water sprinkling will be done on mine road and haul road to avoid suspension of dust. ▪ All transportation within the mine lease area should be carried out directly under the supervision and control of management. ▪ The vehicles will be maintained in good working condition and checked thoroughly at least once a month by the competent person authorized for the purpose by the management. ▪ Navigation signs will be provided at each and every turning point up to the main road (wherever required). ▪ To avoid danger while reversing the vehicles especially at working place/loading points, stopper should be posted to properly guide reversing/spotting operating.

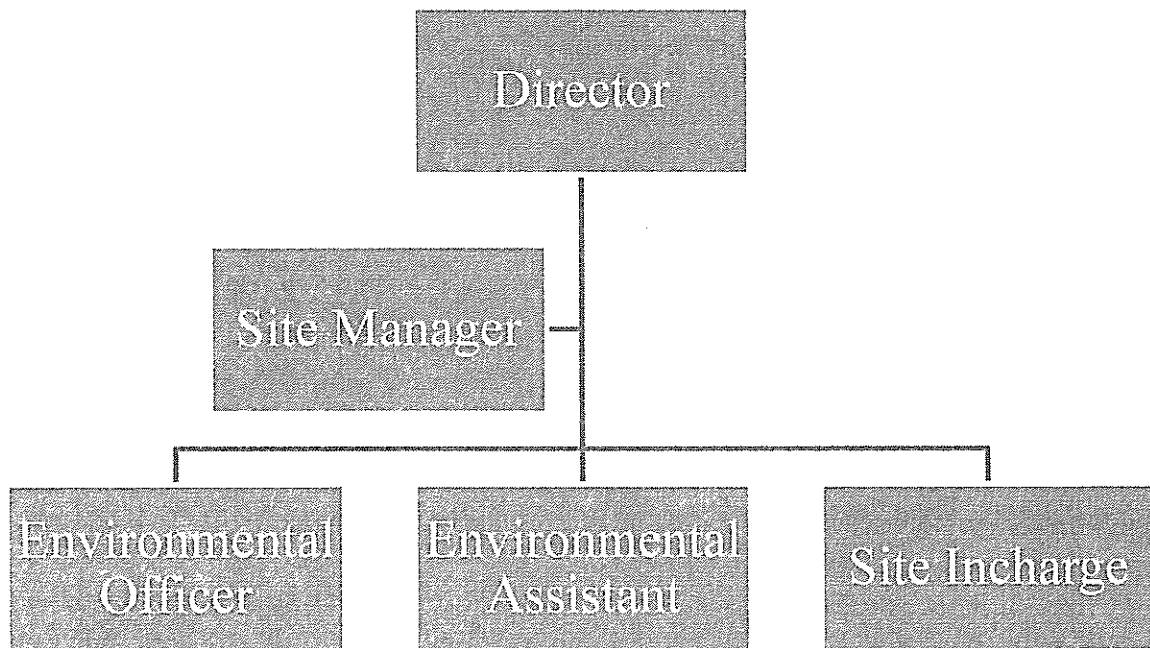
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Organizational Structure of Environment Management Cell:



EMP Cell structure

The EMP Cell is committed to ensuring environmental sustainability and compliance with regulatory requirements for the Stone Mining Project. With a clear structure, roles, and responsibilities, the EMP Cell is equipped to manage environmental impacts and promote sustainable practices.

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District Survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- i. If any tree felling than necessary permission shall be taken from the competent authority.

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- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.
- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.
- l. Personal protective equipments such as clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Betla Stone Mine of Shri Shatrudhan Prasad, Village : Betla, Thana : Manika, Thana no. : 135, Distt.: Latehar, Jharkhand (1.770 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I along with following specific conditions :

- I. The mine will come in operation only after obtaining permission from DGMS for controlled and delayed blasting.
- II. In compliance of Office Memorandum no. IA-J-11013/20/2025-IA-P, dated 25.11.2025 of MoEF&CC, Govt. of India, the PAs will mandatorily obtain the Environmental Safeguard to be implemented from Jharkhand State Pollution Control Board within 30 days of issuance of EC or 31.01.2026 which ever is earlier.
- III. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "Ek Ped Ma Ke Naam" and the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.
- IV. The Deputy Commissioner through District Mining Officer will ensure that the mines owner of the respective leases to complete the plantation and maintenance in a time bound manner.
- V. Suitable plant species of not less than 2 M height to be planted equal to twice the area of saplings proposed in Safety zone. This is to be planted in land available near mines and outside safety zone. This will be in addition to plantation in safety zone. Newly planted saplings to be maintained for minimum 3 years with Geo-Tagged photographs.
- VI. Dedicated water tanker to be provided for mine. The tanker to be used for spraying water on haul road and for irrigating newly planted saplings only. Sprinkling to be done such that the haul road is kept moistened all the time with Geo-Tagged photographs.
- VII. Pre employment Occupational health check up for employees to be done and thereafter at annual interval for PLFT, Audiometry and other required tests .Summary findings of same to submitted along with 6 monthly compliance.
- VIII. Ensure use of Quality PPEs equivalent not less than 3M make. Records of same to be maintained and submitted with 6 monthly compliance report with Geo-Tagged

photographs.

- IX. Keep vulnerable areas unmanned. Ensure rotation of duties. Records to be maintained and submitted with 6 monthly compliance report.
- X. Failing of any of terms & conditions mentioned in EC can lead to revocation / cancellation of EC.

5. Chumba Stone Mine of M/s Maa Bhadrakali Minerals (Partners : (i) Mahmud Khan (ii) Shri Sashikant Kumar Sahay (iii) Rijwan Alam (iv) Shri Umesh Kumar (v) Md. Gulam Sarwar (vi) Shri Devnand Kumar), Village : Chumba, Thana : Bariyatu, Thana no. : 31, Distt.: Latehar, Jharkhand (1.21 Ha).

(Proposal no.: SIA/JH/MIN/561154/2026)

Name of the consultant : Sathi Planners Pvt. Ltd., Ranchi, Jharkhand.

This is a new project which was listed for appraisal on 17.01.2026. On the request of the PAs it was taken up for consideration on 18.01.2026.

Project Sector: 1(a) Mining of Minerals, Category: B2.

Application for Environmental Clearance (EC).

EC Application for: Proposed Capacity: 39205 Cum. Per Year (Max.) / 105852Tons Per Year (max.)

Project and Location Details:

I	Parameter		Details
1	Project Name	:	Chumba Stone Mine
2	Lessee:	:	Maa Bhadrakali Minerals
3	Lessee Address	:	Partners- 1. Mahmud Khan, 2. Sashikant Kumar Sahay 3. Rijwan Alam 4. Umesh Kumar 5. Md Gulam Sarwar 6. Devnand Kumar Village – Chumba, Thana – Bariyatu, District – Latehar, Jharkhand.
4	Mine Lease Area	:	1.21 Ha
5	Type of Land	:	Non-Forest Raiyati Land
6	Project Cost		Capital Cost: Rs.102.74Lakhs
7	EMP Budget	:	Capital Cost: Rs.40.419Lakhs Recurring Cost: Rs.

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			7.233Lakhs/year
8	New or Expansion	:	New
9	Mineable Reserves	:	cum.: 1,76,818 Tonnes: 4,77,408
10	Mine Life	:	5 Years
11	Man power	:	29 Person
12	Water Requirement	:	5 KLD (Drinking: 0.435 KLD, Dust Suppression: 0.8 KLD, Plantation: 3.5 KLD)
13	Water Source	:	Will be sourced from authorized vendors
14	DG Set / power	:	20 KVA D.G. Set proposed
15	Crusher	:	No
16	Nearest Water Body	:	Seasonal nala in 30m in SW direction.(Emp Submitted)
17	Nearest Habitation	:	Few houses at 290m and habitation within 430m in East side as per KML.(Emp Submitted)
18	Nearest Rail Station	:	Tori Junction is at areal distance of 31.58 km in NW direction.
19	Nearest Air Port	:	Birsa Munda Airport (Ranchi) is at areal distance of 90 km NE direction.
20	Nearest Forest	:	More than 250 m, as per Division Forest Officer, Latehar, vide memo no.- 878 Dated- 29.06.2024.
21	Road & Highways	:	The distance of Approach Road is 200m, after that this road connects to village road. The village road continues for 4.12 km and after this the road connects to MDR Chatra - Balumath Road.
22	Approach Road	:	The distance of approach road is 200m.

CO-ORDINATES

Point ID	Latitude	Longitude
1	23° 57' 47.42650399" N	084° 47' 22.74438856" E
2	23° 57' 47.77351783" N	084° 47' 22.78095307" E
3	23° 57' 48.34534354" N	084° 47' 22.84023522" E
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32	23° 57' 45.93760036" N	084° 47' 24.31556053" E
33	23° 57' 46.38383834" N	084° 47' 24.34927834" E
34	23° 57' 46.42715811" N	084° 47' 23.88740026" E
35	23° 57' 46.49742772" N	084° 47' 23.49249317" E
36	23° 57' 46.89298527" N	084° 47' 23.47704535" E
37	23° 57' 47.39158881" N	084° 47' 23.53814660" E
38	23° 57' 47.37196151" N	084° 47' 23.14694730" E

LAND DETAILS

Khata no.	Plot no.
36	521 (P)

STATUTORY CLEARANCES

1	LOI / Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Officer, Latehar vide letter no. 902/M, dated 01.10.2024.
2	CO	:	The CO, Bariyatu vide letter no. 162, dated 09.04.2024 has mentioned the plot no. of the project is not recorded as "Jungle-Jhari" in R.S. Khatiyan & Register II. During the appraisal it was seen from the KML that few houses at a distance of 290 meter, Barsati Nala at a distance of 30 meter and habitation at a distance of 430 meter. For which detailed Environmental Management Plan has been prepared and submitted.
3	DMO Cluster	:	DMO, Latehar vide memo no. 1249/M, dated 01.12.2025 certified that 01 other mining lease area (3.21 Acre) exists within 500 m radius from proposed project site and total area is 6.21 Acre.
4	DFO Wild Life	:	DFO, Wildlife Division, Hazaribag vide letter no. 1695, dated 23.07.2024 certified that the proposed project site is outside Eco Sensitive Zone of Lawalong Wildlife Sanctuary.

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5	DFO Territorial	:	Divisional Forest Officer, Latehar Forest Division vide letter no. 878, dated 29.06.2024 certified that the distance of reserved / protected forest is more than 250 meter from proposed project site.
6	DSR	:	This project is mentioned in approved District Survey Report (DSR) of Latehar District (Sl. no. 02, Page no. 56).
7	Gram Sabha	:	BDO, Bariyatu vide letter no. 303, Dated 08.07.2024 informed that Gram Sabha conducted on 05.07.2024.
8	Mine Plan Approval	:	Approved by AMO –cum- Incharge DMO, Latehar vide memo no. 1173/M, dated 03.11.2025.
9	Qualified Person	:	Shri Malay Kumar Mukhopadhyay was present in the meeting and affirmed that the mine plan has been prepared by him.

Working Details

1	Mining Method	:	Semi-mechanized Method	
2	Quarry Area	:	0.83 ha	Life of Mine – 5Years
3	Waste Generation	:	20292cum	
4	Stripping Ratio	:	01:0.04	
5	Working Days	:	300	
6	Benches: size	:	6 m x 6 m	
7	Elevation of Mine	:	513 m to 507 m AMSL	
8	Ground Level Elevation	:	507 m AMSL	
9	Ultimate Working Depth	:	471 mAMSL	
10	Water Table	:	459 m AMSL (Source Ground water prospecting map JSAC)	
11	Topography of Mine	:	Area represents gently sloping land.	
12	Explosive Requirement	:	47.4 kg Nitro mix explosives/day, will be obtained from Licensed vendors.	
13	Diesel/Fuel requirement	:	HSD – 301.02liters / day (99.336 KL/year)	

Production Details

Year	Production of Stone / Year		Removal of O.B.
	Cum	Tonnes	Cum
1st	39205	105852	20292
2nd	35378	95521	0
3rd	34367	92791	0
4th	34295	92597	0
5th	33573	90647	0

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Total	176818	477408	20292
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Land Use pattern

Sl. No.	Pattern of Utilization	Present / Existing Land Use (Ha)	Land Used at Conceptual Stage i.e. End of Mine Life (Ha)	Area to be Converted in Conceptual Period
1	Mining Activities	0.000	0.830	Water body
2	Garland Drain	0.000	0.020	—
3	Safety Zone	0.000	0.360	Plantation
4	Unutilized	1.210	0.000	—
Total		1.210	1.210	—

ENVIRONMENT MANAGEMENT

Green Belt Development

S. No.	Location	Area/ Length	No. of Trees
1	Within 7.5 m Safety Zone (1st Year)	: 0.36	900
2	Along Approach Road	: 200m	267
Total		: 0.36	1,167

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

1167 trees are proposed to be planted out of which 10% plantation will be carried out i.e. (116 trees) as per MoEF&CC, Govt. of India Scheme "Ek Ped Ma Ke Naam"

Project Cost

Sl. No.	Head	Capital Cost Rs. in Lakhs	Recurring Cost Rs. in Lakhs
1.	Government Revenue (Dead Rent & Royalty)	26.00	--
2.	Cost of infrastructure	5.0	0.5
3.	Mining Machineries owned by applicant <ul style="list-style-type: none"> Wagon Drill -01 Compressor-01 Tippers 25 tons-03 Water Tanker- 01 Diesel Pump-01 	57.4	

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	• D.G. Set-01		
	Mining Machineries on hired basis- (Excavator- 01, Tipper-04)		13
4.	Lease Agreement(lump-sum)	--	3.02
5.	Statutory Clearance & Others	5.0	-
6.	Contingency	9.34	-
Total		102.74	16.52
Budget for Environment Management		40.419	7.233

Budget for Environmental Management

Sl. No.	Particulars	Capital Cost in lakhs.	Recurring Cost in lakhs per year
1	Water facility for Dust Suppression, watering plants etc. (Rs. 1000 per Tanker)	--	3
2	Fencing	1.5	--
3	Plantation 268 X 800 = Rs. 2,14,400 Gabion Plantation along approach road) 1,710 X 400 = Rs. 6,84,000 (Plantation within lease area/Green Belt) (also includes Fertilizer, Pesticides, Maintenance)	5.736	0.573
4	Environmental Monitoring (One Day Monitoring) • Ambient Air 24 hrs (3 point) - Rs.27,270 • Ground Water (2 point) - Rs.12,420 • Noise 24 hrs (3 point) - Rs.21,000 • Soil (1point) -Rs. 13,640 Total -Rs. 74,330 (Per Season) At least two seasons in a Year -Rs. 74,330 x 2 = Rs. 1,48,660 <i>Source: Central Pollution Control Board Notification, New Delhi, the 23rd February, 2022</i>	--	1.48
5	Additional EMP Habitation	10	-
6	Additional EMP Seasonal nala	23.18	2.18
Total		40.419	7.233

Environment Monitoring Programmed

SL. No.	Description	No. of Monitoring Stations	Duration
1.	Air	3 stations	6 Monthly
2.	Water	2 stations	6 Monthly
3.	Noise	3 stations	6 Monthly
4.	Soil	1 Station	Yearly

- **Organizational Structure of Environmental Management Cell: with respective roles**

Environment Management Practices to be followed:

Aspect	Mitigation Measures / Control Measures
Solid Waste Management	Total 20292 cum of Intercalated Waste will be generated during the plan period. It will use in maintenance of haul road and approach road.
Air Quality Management	<ul style="list-style-type: none"> • Wet drilling and use of sharp drill bits to minimize dust generation. • Controlled blasting using optimum explosive charge during favourable weather conditions. • Regular maintenance of diesel equipment and vehicles to reduce emissions. • Water sprinkling on haul roads, loading/unloading points, and working areas. • All transport vehicles will have valid PUC certificates. • Greenbelt and roadside plantation to act as dust and noise barriers.
Water Quality Management	<ul style="list-style-type: none"> • Mining will be confined only above the Ground Water Table (GWT). • Rainwater accumulated in the pit will be collected and pumped out regularly during monsoon. • Settling sump will be provided to desilt pumped out of mine-pit and collected through garland drain before discharge into natural drainage. • Garland and foot drains will be constructed around the quarry to control surface runoff. • Sewage from rest shelters will be treated through septic tank-soak pit systems. • Foot drain would be provided around the external dump, if any.
Noise Quality Management	<ul style="list-style-type: none"> • Mining activities will be restricted to daytime and carried out with controlled blasting techniques. • Acoustic enclosures and mufflers will be provided for drilling and DG set operations. • Regular maintenance of mining machinery to minimize vibration and noise. • Greenbelt development around the lease boundary to attenuate noise propagation. • Use of delayed blasting technique to minimize the adverse impact of vibration.

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Soil Quality Management	<ul style="list-style-type: none"> • Topsoil will be carefully removed and stored separately for future use in plantation and reclamation. • Garland drains and retaining walls will prevent soil erosion and siltation. • Spillage of oil or fuel will be avoided; impervious flooring and oil traps provided near storage areas • Post-mining, the area will be rehabilitated using stored topsoil and native vegetation
Flora & Fauna management	<ul style="list-style-type: none"> • No tree felling will be undertaken without obtaining permission from the competent authority. • Greenbelt and plantation will be developed using native species along approach roads and lease periphery (7.5m Safety Zone). • Dust suppression measures will minimize impact on surrounding vegetation
Socio Economy:	<ul style="list-style-type: none"> • Priority employment to local people in mining and ancillary activities. • Community development initiatives such as tree plantation drives, road maintenance, and local infrastructure support. • Awareness programs on safety, hygiene, and environmental protection
Monitoring & Reporting:	<ul style="list-style-type: none"> • Periodic monitoring of air, water (ground & surface), noise, and soil quality as per CPCB and SPCB guidelines. • All monitoring reports will be submitted to statutory authorities as per the compliance schedule. • Corrective measures will be taken immediately if any deviation from standards is observed.
Risk & Hazard	<p>Activities which are likely to create risk are: Temporary Storage of Explosives, Charging of Explosives, Blasting, Drilling, Bench Formation, Loading / Unloading, Transportation</p> <p>Proposed Preventive measures:</p> <ul style="list-style-type: none"> ▪ Overall slope angles of benches will be maintained at 45°. ▪ Unmanageable heights are not created. ▪ Loose sides are properly dressed. ▪ No loose stone or debris will be permitted to remain on the top of the bench or side of any excavation (Regulation 106(4) of MMR 1961). ▪ No undercutting of any face or sides will be permitted so as to cause any overhanging (Regulation 106(5) of MMR 1961) ▪ It will be ensured that the drilling equipment is suitable for the job. ▪ The person in charge of the drilling machine is competent to carry out the drilling operation; part of the training includes instructions to always face towards the open edge of the bench so that any inadvertent backward step is away from the edge. ▪ Provision of portable rail fencing between the drilling operations and the edge of the bench ▪ Provision to attach a safety line to the drilling rig and provide a harness for the driller to wear.

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	<ul style="list-style-type: none"> ▪ Restricted access to the area to all persons except those necessary for the drilling operation. ▪ Wet drilling will be carried out by constantly injecting a jet of water at the drill bit inside the hole, which prevents dust generation. ▪ In case due to any reason, wet drilling is not possible (due to non-availability of water), exhaust/ vacuum system will be provided which removes the dust from the drill hole continuously and discharges the same in a dust collector specially provided for the purpose. ▪ Drilling machine shall be fitted with dust suppression, collection and disposal arrangement.
<p>Blasting & Handling of Explosives</p>	<ul style="list-style-type: none"> ▪ Blast hole geometry shall be properly designed. ▪ Blast site shall be wetted before and after blasting operations are completed. ▪ Only optimum quantity of permissible explosives shall be used so that the vibrations do not damage the structures/houses if the quarrying operations are close to human habitation. ▪ Blasting shall be conducted only during favourable weather conditions and only during the day time and permissible hours. ▪ While carrying out blasting operations near habitations, wide publicity will be given in the local area through announcement and other available media so that local people become aware of the blasting activities being undertaken in the area and take appropriate precautions. ▪ The vibrations should be monitored periodically in consultation with the local Mining authorities. ▪ Use of explosives is specialist work. Planning for a round of shots is necessary to ensure that the face is properly surveyed, holes correctly drilled, direction logged, the weight of explosive suitable for good fragmentation and the continuity of the initiator are but a few of the steps necessary to ensure its safe use. ▪ Proper and safe storage of explosives in approved and Licensed Magazine. ▪ Proper security system to prevent theft/ pilferage, unauthorized entry into Magazine area and checking authorized persons to prevent carrying of match box, lights, mobile phones, cigarette or Bidi etc. will be put in place. ▪ Explosives shall be conveyed in special containers. ▪ Explosives and detonators shall not be carried in the same container. ▪ The holes which have been charged with explosives will not be left unattended till blasting is completed.
<p>Health Hazards</p>	<p>Health hazards should be interpreted as being harmful dust and noise which is emitted during surface mining operations. All suitable steps and precautions will be undertaken to ensure minimum health hazard. Provision of use of Personal Protective Equipment (PPE) will be kept.</p>

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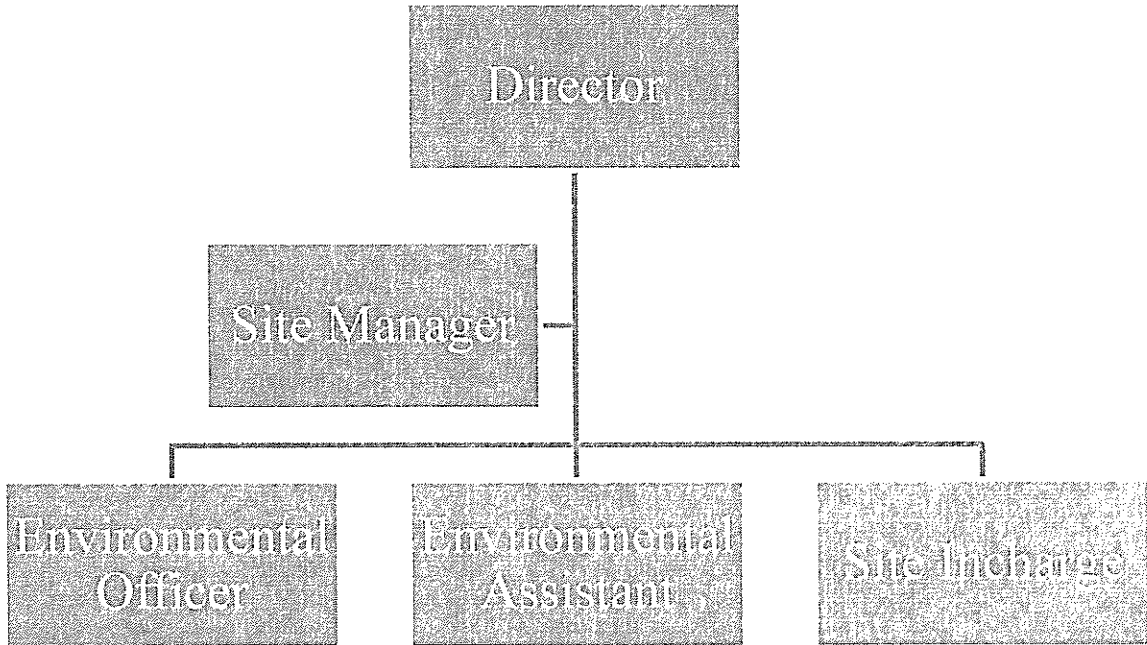
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	<p>The PPE shall be of good make and quality, wherever possible ISI certified, suitable for the hazard e.g. a dust respirator fitted with the correct filter to capture the particulate hazardous dust and maintained to recommended standards. As personal protective equipment only affords limited protection it will only be used as a last resort and as an interim arrangement until other steps are taken to reduce the risk of personal injury to an acceptable level</p>
<p>Accident Prevention</p>	<ul style="list-style-type: none"> ▪ Mine road shall be made smooth regularly with a road roller. ▪ Mine road will be made sufficiently wide to keep two-way traffic. Regular water sprinkling will be done on mine road and haul road to avoid suspension of dust. ▪ All transportation within the mine lease area should be carried out directly under the supervision and control of management. ▪ The vehicles will be maintained in good working condition and checked thoroughly at least once a month by the competent person authorized for the purpose by the management. ▪ Navigation signs will be provided at each and every turning point up to the main road (wherever required). ▪ To avoid danger while reversing the vehicles especially at working place/loading points, stopper should be posted to properly guide reversing/spotting operating.

Organizational Structure of Environment Management Cell:



EMP Cell structure

The EMP Cell is committed to ensuring environmental sustainability and compliance with regulatory requirements for the Stone Mining Project. With a clear structure, roles, and responsibilities, the EMP Cell is equipped to manage environmental impacts and promote sustainable practices.



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Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District Survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- i. If any tree felling than necessary permission shall be taken from the competent authority.
- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.
- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.
- l. Personal protective equipments such as clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Chumba Stone Mine of M/s Maa Bhadrakali Minerals (Partners : (i) Mahmud Khan (ii) Shri Sashikant Kumar Sahay (iii) Rijwan Alam (iv) Shri Umesh Kumar (v) Md. Gulam Sarwar (vi) Shri Devnand Kumar), Village : Chumba, Thana : Bariyatu, Thana no. : 31, Distt.: Latehar, Jharkhand (1.21 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I along with following specific conditions :

- I. The mine will come in operation only after obtaining permission from DGMS for controlled and delayed blasting.
- II. In compliance of Office Memorandum no. IA-J-11013/20/2025-IA-P, dated 25.11.2025 of MoEF&CC, Govt. of India, the PAs will mandatorily obtain the Environmental Safeguard to be implemented from Jharkhand State Pollution Control Board within 30 days of issuance of EC or 31.01.2026 which ever is earlier.

- III. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "Ek Ped Ma Ke Naam" and the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.
- IV. The Deputy Commissioner through District Mining Officer will ensure that the mines owner of the respective leases to complete the plantation and maintenance in a time bound manner.
- V. Suitable plant species of not less than 2 M height to be planted equal to twice the area of saplings proposed in Safety zone. This is to be planted in land available near mines and outside safety zone. This will be in addition to plantation in safety zone. Newly planted saplings to be maintained for minimum 3 years with Geo-Tagged photographs.
- VI. Dedicated water tanker to be provided for mine. The tanker to be used for spraying water on haul road and for irrigating newly planted saplings only. Sprinkling to be done such that the haul road is kept moistened all the time with Geo-Tagged photographs.
- VII. Pre employment Occupational health check up for employees to be done and thereafter at annual interval for PLFT, Audiometry and other required tests .Summary findings of same to submitted along with 6 monthly compliance.
- VIII. Ensure use of Quality PPEs equivalent not less than 3M make. Records of same to be maintained and submitted with 6 monthly compliance report with Geo-Tagged photographs.
- IX. Keep vulnerable areas unmanned. Ensure rotation of duties. Records to be maintained and submitted with 6 monthly compliance report.
- X. Failing of any of terms & conditions mentioned in EC can lead to revocation / cancellation of EC.

6. Dev Pahar Stone Mine of M/s Sai Multi Services (Prop. : Shri Suresh Singh), Village : Dev Pahar, Thana : Banjhi, Thana no. : 08, Distt.: Sahibganj, Jharkhand (2.428 Ha).

(Proposal no.: SIA/JH/MIN/563773/2025)

Name of the consultant : Sathi Planners Pvt. Ltd., Ranchi, Jharkhand.

This is a new project which has been taken for appraisal on 17.01.2026.

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Project Sector: 1(a) Mining of Minerals, Category: B2.

Application for Environmental Clearance (EC).

EC Application for: Proposed Capacity: 68864 cum. Per Year (Max) / 192819 Tons Per Year (max)

Project and Location Details:

I	Parameter	Details
1	Project Name	: Dev Pahar Stone Mine
2	Lessee:	: M/s Sai Multi Services Proprietor - Shri Suresh Singh
3	Lease Address	: Proprietor - Shri Suresh Singh, Village- Dev Pahar, Thana No. 08, District – Sahibganj, Jharkhand. (2.428 Ha.)
4	Mine Lease Area	: 2.428 Ha
5	Type of Land	: Non-Forest Raiyati Land
6	Project Cost	Capital Cost: Rs. 181.28 Lakhs
7	EMP Budget	: Capital Cost: Rs. 23.81 Lakhs Recurring Cost: Rs. 6.711 Lakhs/year
8	New or Expansion	: New
9	Mineable Reserves	: cum.: 6,85,440 Tonnes: 19,19,232
10	Mine Life	: 10 Years
11	Man power	: 31 Person
12	Water Requirement	: 10 KLD (Drinking: 0.510 KLD, Dust Suppression: 1.944 KLD, Plantation: 15.3 KLD)
13	Water Source	: Will be sourced from authorized vendors
14	DG Set / power	: 20 KVA D.G. Set proposed
15	Crusher	: No
16	Nearest Water Body	: Ganga River -9.92 km -South.
17	Nearest Habitation	: Devpahar– 470 m -North. (Emp Submitted)
18	Nearest Rail Station	: Sahibganj Station is at areal distance of 10 km in NW direction.
19	Nearest Air Port	: Deoghar Airport is at areal distance of 125 km SW direction.
20	Nearest Forest	: More than 250 m, as per Division Forest Officer, Sahibganj, vide Letter no.-3114 Dated- 08.11.2025.
21	Road & Highways	: The distance of Approach Road is 50m, after that this road connects to village road.
22	Approach Road	: The distance of approach road is 50m.

CO-ORDINATES

Name	Latitude	Longitude
1	N25° 09' 13.26950841"	E087° 39' 46.86431939"
2	N25° 09' 13.42092697"	E087° 39' 46.91863333"

3	N25° 09' 13.41075766"	E087° 39' 47.97585843"
4	N25° 09' 13.39860659"	E087° 39' 49.23892673"
5	N25° 09' 13.38630330"	E087° 39' 50.51795126"
6	N25° 09' 13.37333260"	E087° 39' 51.86636958"
7	N25° 09' 13.36094149"	E087° 39' 53.15469167"
8	N25° 09' 12.59002552"	E087° 39' 53.06805132"
9	N25° 09' 11.65833644"	E087° 39' 53.07762700"
10	N25° 09' 11.31725026"	E087° 39' 53.20215614"
11	N25° 09' 10.52730337"	E087° 39' 53.36966104"
12	N25° 09' 09.79494651"	E087° 39' 53.51328333"
13	N25° 09' 09.55660673"	E087° 39' 53.65690561"
14	N25° 09' 08.83204948"	E087° 39' 53.59581658"
15	N25° 09' 08.27736506"	E087° 39' 53.53760252"
16	N25° 09' 08.03052943"	E087° 39' 53.42117115"
17	N25° 09' 07.74786058"	E087° 39' 53.14590831"
18	N25° 09' 07.54728482"	E087° 39' 53.10865014"
19	N25° 09' 07.25441107"	E087° 39' 53.04197934"
20	N25° 09' 07.22601037"	E087° 39' 52.62037770"
21	N25° 09' 07.18028880"	E087° 39' 52.06829324"
22	N25° 09' 07.09697185"	E087° 39' 51.50244517"
23	N25° 09' 07.08400974"	E087° 39' 51.41440775"
24	N25° 09' 06.55861084"	E087° 39' 51.34969671"
25	N25° 09' 06.23378484"	E087° 39' 51.22812016"
26	N25° 09' 06.02966048"	E087° 39' 51.09477532"
27	N25° 09' 05.82113920"	E087° 39' 50.82275287"
28	N25° 09' 05.74210758"	E087° 39' 50.66533138"
29	N25° 09' 05.89869544"	E087° 39' 50.50946218"
30	N25° 09' 06.26805779"	E087° 39' 50.14179288"
31	N25° 09' 06.45743426"	E087° 39' 49.85939273"
32	N25° 09' 07.17140019"	E087° 39' 50.04920911"
33	N25° 09' 08.12784853"	E087° 39' 49.99932862"
34	N25° 09' 09.81012568"	E087° 39' 49.52762308"
35	N25° 09' 11.23297558"	E087° 39' 48.81220563"
36	N25° 09' 12.26113931"	E087° 39' 48.07938367"

LAND DETAILS

Khata no.	Plot no.
48	293 (P) & 366 (P)

STATUTORY CLEARANCES

1	LOI / Lease docs	:	The Letter of Intent (Loi) has been issued by District Mining
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		Officer, Sahibganj vide letter no. 2018/M, dated 09.12.2025.
2	CO	: The CO, Borio, Sahibganj vide letter no. 899/Ra., dated 10.09.2025 has mentioned the plot no. of the project is not recorded as "Jungle- Jhari" in R.S. Khatiyar & Register II. During the appraisal it was seen from the KML that habitation at a distance of 470 meter. For which detailed Environmental Management Plan has been prepared and submitted.
3	DMO Cluster	: DMO, Sahibganj vide memo no. 2022/M, dated 09.12.2025 certified that 01 other mining lease area (5.25 Acre) exists within 500 meters radius from proposed project site and total area is 11.25 Acre.
4	DFO Wild Life	: DFO – cum- Incharge Wildlife Sanctuary, Udhwa (Sahibganj) vide letter no. 3113, dated 08.11.2025 certified that the proposed project site is outside Eco Sensitive Zone of Udhwa Bird Sanctuary.
5	DFO Territorial	: Divisional Forest Officer, Sahibganj Forest Division vide letter no. 3114, dated 08.11.2025 certified that the distance of reserved / protected forest is more than 250 meters from proposed project site.
6	DSR	: The DMO, Sahibganj has certified vide memo no. 2023/M, dated 09.12.2025 that this project is mentioned in approved DSR of Sahibganj District as a potential area (Page no. 182).
7	Gram Sabha	: Gram Sabha conducted on 03.09.2025.
8	Grid certificate	: DMO, Sahibganj vide memo no. 1563/M, dated 26.08.2025 certified that said project falls under grid no. 26 and Hon'ble NGT does not decided the production capacity of that Grid. The DMO also stated that this certificate is issued in the light of order passed by Hon'ble NGT on 22.12.2021 in OA No. 23/2017/EZ, O.A. no. 776/2018 and O.A. no. 373/2019. It also states this certificate is issued in compliance of report of Expert Committee.
9	Mine Plan Approval	: Approved by DMO, Sahibganj vide Letter No. 2046/M, dated 16.12.2025.
10	Qualified Person	: Shri Malay Kumar Mukhopadhyay was present in the meeting and affirmed that the mine plan has been prepared by him.

Working Details

1	Mining Method	: Semi-mechanized Method
2	Quarry Area	: 1.751Ha. Life of Mine – 10 Years

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3	Waste Generation	:	25856 cum
4	Stripping Ratio	:	01:0.02
5	Working Days	:	300
6	Benches: size	:	6 m x 6 m
7	Elevation of Mine	:	220 m to 205 m AMSL
8	Ground Level Elevation	:	205 m AMSL
9	Ultimate Working Depth	:	178m AMSL
10	Water Table	:	171m AMSL (Source-JSAC Ground Water Prospect Map)
11	Topography of Mine	:	Area represents gently sloping land.
12	Explosive Requirement	:	66.48 kg Nitro mix explosives/day, will be obtained from Licensed vendors.
13	Diesel/Fuel requirement	:	HSD – 301.02 liters / day (99.336 KL/year)

Production Details

Year	Production of Stone / Year		Removal of O.B.
	Cum recoverable	Tonnes	Cum
1st	66560	186368	20608
2nd	67456	188877	0
3rd	68352	191386	5248
4th	68224	191027	0
5th	68864	192819	0
Total	339456	950477	25856

Land Use pattern

Si. No.	Pattern of Utilization	Present/Existing land use pattern in (Ha.)	Proposed Land use for current plan period (Ha.)	Land to be used in remaining period of the life of the mine. (Ha.)	Land used at the conceptual stage i.e. end of mine life in (Ha.)	Area to be converted in the conceptual period.
1	Mining Activities	0	1.751	1.751	1.245	Water Body
2	Dead Benches	0	0.000	0.000	0.506	Plantation
3	Dumping	0	0.113	0.113	0.113	Plantation
4	Garland drain	0	0.033	0.033	0.033	-
5	Settling Tank	0	0.001	0.001	0.001	-
6	Safety Zone	0	0.530	0.530	0.530	Plantation

7	Unutilized	2.428	0.000	0	0	-
Total		2.428	2.428	2.428	2.428	-

ENVIRONMENT MANAGEMENT

Green Belt Development

S. No.	Location		Area/Length	No of Trees
1	Dead Benches	:	0.506 Ha	1,265
2	Dumping	:	0.113 Ha	282
3	Safety Zone	:	0.530 Ha	1,325
4	Along Approach Road	:	50m	68
TOTAL 2.428 Ha				3,010

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

- 3010 trees proposed to be planted out of which 10% plantation will be carried out i.e. (301 trees) as per MoEF&CC, Govt. of India Scheme "Ek Ped Ma Ke Naam"

- Project Cost

Sl. No.	Head	Capital Cost Rs. in Lakhs	Recurring Cost Rs. in Lakhs
1.	Government Revenue (Dead Rent & Royalty)	26.00	--
2.	Cost of infrastructure	5.0	0.5
3.	Mining Machineries owned by applicant <ul style="list-style-type: none"> • Wagon Drill -02 • Compressor-02 • Tippers 25 tons-03 • Water Tanker- 01 • Diesel Pump-01 • D.G. Set-01 	128.8	12.88
	Mining Machineries on hired basis- (Excavator- 01, Tipper-04)		13
4.	Lease Agreement(lump-sum)	--	1.5
5.	Statutory Clearance & Others	5.0	-
6.	Contingency	16.48	-
Total		181.28	27.88
Budget for Environment Management		23.81	6.711

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Budget for Environmental Management

Sl. No.	Particulars	Capital Cost in lakhs.	Recurring Cost in lakhs per year
1	Water facility for Dust Suppression, watering plants etc. (Rs. 1000 per Tanker)	--	3
2	Fencing	1.5	--
3	Plantation 68 X 800 = Rs. 54,400 Gabion Plantation along approach road) 2942 X 400 = Rs. 11,76,800 (Plantation within lease area/Green Belt) (also includes Fertilizer, Pesticides, Maintenance)	12.31	1.231
4	Environmental Monitoring (One Day Monitoring) <ul style="list-style-type: none"> Ambient Air 24 hr (3 points) Rs.27,270 Ground Water (2 points) -Rs.12,420 Noise 24 hr (3 points) -Rs.21,000 <ul style="list-style-type: none"> Soil (1 points) -Rs.13640 Total -Rs. 74330(Per Season) At least two seasons in a Year -Rs. 74330 x 2= Rs. 148660 <i>Source: Central Pollution Control Board Notification, New Delhi, the 23rd February, 2022</i>	--	1.48
5	Additional EMP of Habitation	10	1
Total		23.81	6.711

Environment Monitoring Programmed

SL. No.	Description	No. of Monitoring Stations	Duration
1.	Air	3 stations	6 Monthly
2.	Water	2 stations	6 Monthly
3.	Noise	3 stations	6 Monthly
4.	Soil	1 Station	Yearly

- Organizational Structure of Environmental Management Cell: with respective roles

Environment Management Practices to be followed:

Aspect	Mitigation Measures / Control Measures
Solid Waste Management	Solid waste management is important from both aesthetic and environmental points of view and will be managed as per the Solid

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	<p>Waste Management Rules, 2016.</p> <ul style="list-style-type: none"> • An O.B. (Overburden) dump area of 0.113 ha has been provided on the western side corner within the lease area. • The O.B. dump area will accommodate 25856cum of overburden during the working plan period. • After completion of the working plan, the generated O.B. will be backfilled into the stone quarry faces. • Part of the O.B. will be used for haul road and village road maintenance. • The remaining O.B. will be utilized for plantation activities. • <input checked="" type="checkbox"/> No hazardous or other solid waste generation is envisaged from the stone mining activities.
Air Quality Management	<ul style="list-style-type: none"> • Wet drilling and use of sharp drill bits to minimize dust generation. • Controlled blasting using optimum explosive charge during favourable weather conditions. • Regular maintenance of diesel equipment and vehicles to reduce emissions. • Water sprinkling on haul roads, loading/unloading points, and working areas. • All transport vehicles will have valid PUC certificates. • Greenbelt and roadside plantation to act as dust and noise barriers.
Water Quality Management	<ul style="list-style-type: none"> • Mining will be confined only above the Ground Water Table (GWT). • Rainwater accumulated in the pit will be collected and pumped out regularly during monsoon. • Settling sump will be provided to desilt pumped out of mine-pit and collected through garland drain before discharge into natural drainage. • Garland and foot drains will be constructed around the quarry to control surface runoff. • Sewage from rest shelters will be treated through septic tank-soak pit systems. • Foot drain would be provided around the external dump, if any.
Noise Quality Management	<ul style="list-style-type: none"> • Mining activities will be restricted to daytime and carried out with controlled blasting techniques. • Acoustic enclosures and mufflers will be provided for drilling and DG set operations. • Regular maintenance of mining machinery to minimize vibration and noise. • Greenbelt development around the lease boundary to attenuate noise propagation. • Use of delayed blasting technique to minimize the adverse impact of vibration.
Soil Quality Management	<ul style="list-style-type: none"> • Topsoil will be carefully removed and stored separately for future use in plantation and reclamation. • Garland drains and retaining walls will prevent soil erosion and siltation.

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	<ul style="list-style-type: none"> • Spillage of oil or fuel will be avoided; impervious flooring and oil traps provided near storage areas • Post-mining, the area will be rehabilitated using stored topsoil and native vegetation
Flora & Fauna management	<ul style="list-style-type: none"> • No tree felling will be undertaken without obtaining permission from the competent authority. • Greenbelt and plantation will be developed using native species along approach roads and lease periphery (7.5m Safety Zone). • Dust suppression measures will minimize impact on surrounding vegetation
Socio Economy:	<ul style="list-style-type: none"> • Priority employment to local people in mining and ancillary activities. • Community development initiatives such as tree plantation drives, road maintenance, and local infrastructure support. • Awareness programs on safety, hygiene, and environmental protection
Monitoring & Reporting:	<ul style="list-style-type: none"> • Periodic monitoring of air, water (ground & surface), noise, and soil quality as per CPCB and SPCB guidelines. • All monitoring reports will be submitted to statutory authorities as per the compliance schedule. • Corrective measures will be taken immediately if any deviation from standards is observed.
Risk & Hazard	<p>Activities which are likely to create risk are: Temporary Storage of Explosives, Charging of Explosives, Blasting, Drilling, Bench Formation, Loading / Unloading, Transportation</p> <p>Proposed Preventive measures:</p> <ul style="list-style-type: none"> ▪ Overall slope angles of benches will be maintained at 45°. ▪ Unmanageable heights are not created. ▪ Loose sides are properly dressed. ▪ No loose stone or debris will be permitted to remain on the top of the bench or side of any excavation (Regulation 106(4) of MMR 1961). ▪ No undercutting of any face or sides will be permitted so as to cause any overhanging (Regulation 106(5) of MMR 1961) ▪ It will be ensured that the drilling equipment is suitable for the job. ▪ The person in charge of the drilling machine is competent to carry out the drilling operation; part of the training includes instructions to always face towards the open edge of the bench so that any inadvertent backward step is away from the edge. ▪ Provision of portable rail fencing between the drilling operations and the edge of the bench ▪ Provision to attach a safety line to the drilling rig and provide a harness for the driller to wear. ▪ Restricted access to the area to all persons except those necessary for the drilling operation. ▪ Wet drilling will be carried out by constantly injecting a jet of water at the drill bit inside the hole, which prevents dust generation.

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	<ul style="list-style-type: none"> ▪ In case due to any reason, wet drilling is not possible (due to non-availability of water), exhaust/ vacuum system will be provided which removes the dust from the drill hole continuously and discharges the same in a dust collector specially provided for the purpose. ▪ Drilling machine shall be fitted with dust suppression, collection and disposal arrangement.
<p>Blasting & Handling of Explosives</p>	<ul style="list-style-type: none"> ▪ Blast hole geometry shall be properly designed. ▪ Blast site shall be wetted before and after blasting operations are completed. ▪ Only optimum quantity of permissible explosives shall be used so that the vibrations do not damage the structures/houses if the quarrying operations are close to human habitation. ▪ Blasting shall be conducted only during favourable weather conditions and only during the day time and permissible hours. ▪ While carrying out blasting operations near habitations, wide publicity will be given in the local area through announcement and other available media so that local people become aware of the blasting activities being undertaken in the area and take appropriate precautions. ▪ The vibrations should be monitored periodically in consultation with the local Mining authorities. ▪ Use of explosives is specialist work. Planning for a round of shots is necessary to ensure that the face is properly surveyed, holes correctly drilled, direction logged, the weight of explosive suitable for good fragmentation and the continuity of the initiator are but a few of the steps necessary to ensure its safe use. ▪ Proper and safe storage of explosives in approved and Licensed Magazine. ▪ Proper security system to prevent theft/ pilferage, unauthorized entry into Magazine area and checking authorized persons to prevent carrying of match box, lights, mobile phones, cigarette or Bidi etc. will be put in place. ▪ Explosives shall be conveyed in special containers. ▪ Explosives and detonators shall not be carried in the same container. ▪ The holes which have been charged with explosives will not be left unattended till blasting is completed.
<p>Health Hazards</p>	<p>Health hazards should be interpreted as being harmful dust and noise which is emitted during surface mining operations. All suitable steps and precautions will be undertaken to ensure minimum health hazard. Provision of use of Personal Protective Equipment (PPE) will be kept.</p> <p>The PPE shall be of good make and quality, wherever possible ISI certified, suitable for the hazard e.g. a dust respirator fitted with the correct filter to capture the particulate hazardous dust and maintained to recommended standards. As personal protective equipment only affords limited protection it will only be used as a last resort and as an interim arrangement until other steps are taken to reduce the risk of personal injury to an acceptable level</p>

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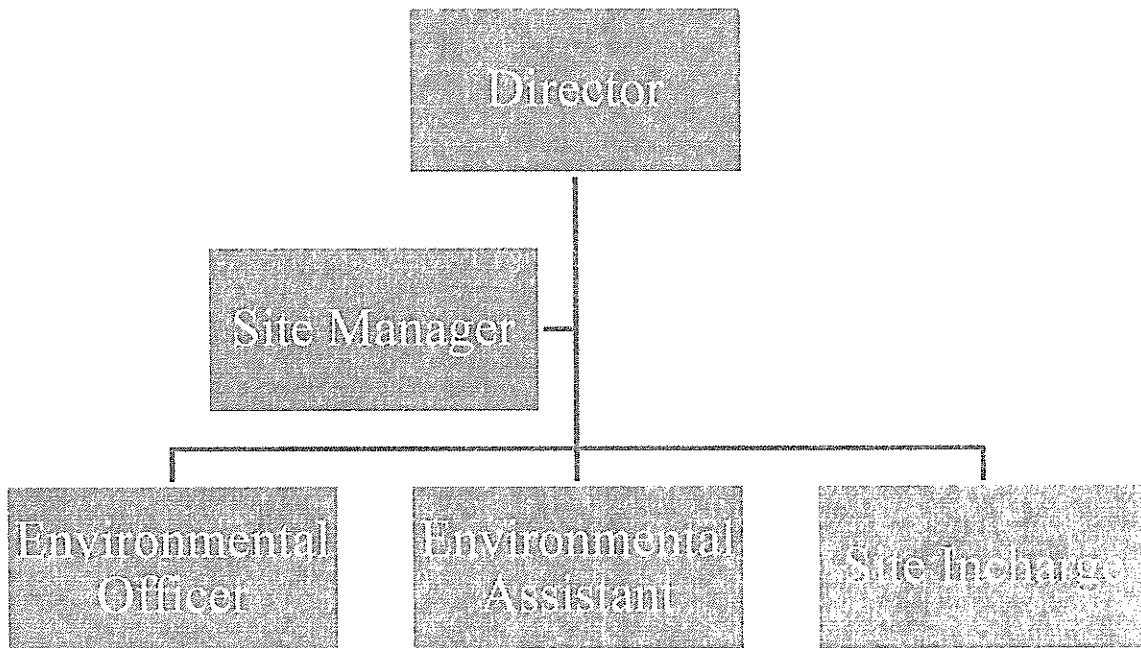
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<p>Accident Prevention</p>	<ul style="list-style-type: none"> ▪ Mine road shall be made smooth regularly with a road roller. ▪ Mine road will be made sufficiently wide to keep two-way traffic. Regular water sprinkling will be done on mine road and haul road to avoid suspension of dust. ▪ All transportation within the mine lease area should be carried out directly under the supervision and control of management. ▪ The vehicles will be maintained in good working condition and checked thoroughly at least once a month by the competent person authorized for the purpose by the management. ▪ Navigation signs will be provided at each and every turning point up to the main road (wherever required). ▪ To avoid danger while reversing the vehicles especially at working place/loading points, stopper should be posted to properly guide reversing/spotting operating.
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Organizational Structure of Environment Management Cell:








EMP Cell structure

The EMP Cell is committed to ensuring environmental sustainability and compliance with regulatory requirements for the Stone Mining Project. With a clear structure, roles, and responsibilities, the EMP Cell is equipped to manage environmental impacts and promote sustainable practices.

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District Survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard



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- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- i. If any tree felling than necessary permission shall be taken from the competent authority.
- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.
- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.
- l. Personal protective equipments such as clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Dev Pahar Stone Mine of M/s Sai Multi Services (Prop. : Shri Suresh Singh), Village : Dev Pahar, Thana : Banjhi, Thana no. : 08, Distt.: Sahibganj, Jharkhand (2.428 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I along with following specific conditions :

- I. That the Deputy Commissioner, Sahibganj will ensure compliance of the order passed by Hon'ble NGT in OA No. 23/2017/EZ, O.A. no. 776/2018 and O.A. no. 373/2019 in the matter of Syed Arshad Nasar Vs Union of India with Ramchandra Chaurasia Vs State of Jharkhand with Pradeep Kumar Singh Vs State of Jharkhand before grant of mining lease.
- II. The mine will come in operation only after obtaining permission from DGMS for controlled and delayed blasting.
- III. In compliance of Office Memorandum no. IA-J-11013/20/2025-IA-P, dated 25.11.2025 of MoEF&CC, Govt. of India, the PAs will mandatorily obtain the Environmental Safeguard to be implemented from Jharkhand State Pollution Control Board within 30 days of issuance of EC or 31.01.2026 which ever is earlier.
- IV. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "Ek Ped Ma Ke Naam" and the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.

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- V. The Deputy Commissioner through District Mining Officer will ensure that the mines owner of the respective leases to complete the plantation and maintenance in a time bound manner.
- VI. Suitable plant species of not less than 2 M height to be planted equal to twice the area of saplings proposed in Safety zone. This is to be planted in land available near mines and outside safety zone. This will be in addition to plantation in safety zone. Newly planted saplings to be maintained for minimum 3 years with Geo-Tagged photographs.
- VII. Dedicated water tanker to be provided for mine. The tanker to be used for spraying water on haul road and for irrigating newly planted saplings only. Sprinkling to be done such that the haul road is kept moistened all the time with Geo-Tagged photographs.
- VIII. Pre employment Occupational health check up for employees to be done and thereafter at annual interval for PLFT, Audiometry and other required tests .Summary findings of same to submitted along with 6 monthly compliance.
- IX. Ensure use of Quality PPEs equivalent not less than 3M make. Records of same to be maintained and submitted with 6 monthly compliance report with Geo-Tagged photographs.
- X. Keep vulnerable areas unmanned. Ensure rotation of duties. Records to be maintained and submitted with 6 monthly compliance report.
- XI. Failing of any of terms & conditions mentioned in EC can lead to revocation / cancellation of EC.

7. Pagar Stone Mine of M/s Maa Tara Stone Works (Partners : Shri Kunal Kumar Gupta & Others), Village : Pagar, Thana : Taljhari, Thana no. : 55, Distt.: Sahibganj, Jharkhand (2.326 Ha).

(Proposal no.: SIA/JH/MIN/561383/2025)

Name of the consultant : Sathi Planners Pvt. Ltd., Ranchi, Jharkhand.




This is a new project which has been taken for appraisal on 17.01.2026.

Project Sector: 1(a) Mining of Minerals, Category: B2.

Application for Environmental Clearance (EC).

EC Application for: Proposed Capacity: 81168 cum. Per Year (Max) / 227270TonsPer Year(max)

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Project and Location Details:

l	Parameter	Details	
1	Project Name	: Pagar Stone Mine	
2	Lessee:	: M/s Maa Tara Stone Works Partners- Shri Kunal Kumar Gupta and others	
3	Lease Address	: Shri Kunal Kumar Gupta Village- Pagar, Block- Taljahari, Thana No- 55, District- Sahibganj, Jharkhand	
4	Mine Lease Area	: 2.326 Ha.	
5	Type of Land	: Non-Forest Raiyati Land	
6	Project Cost	Capital Cost: Rs. 153.78 Lakhs	
7	EMP Budget	Capital Cost: Rs.29.48 Lakhs	Recurring Cost: Rs. 7.27 Lakhs/year
8	New or Expansion	: New	
9	Mineable Reserves	cum.: 7,56,048	Tonnes: 21,16,934
10	Mine Life	: 10 Years	
11	Man power	: 34 Person	
12	Water Requirement	: 14.21 KLD (Drinking: 0.510 KLD, Dust Suppression: 0.4 KLD, Plantation: 13.311 KLD)	
13	Water Source	: Will be sourced from authorized vendors	
14	DG Set / power	: 20 KVA D.G. Set proposed	
15	Crusher	: Yes	
16	Nearest Water Body	: Ganga River flowing at 11.31km in N.E Direction.	
17	Nearest Habitation	: Few Houses are at a Distance of 90 m & Pagar Village -460 m S.E. (Emp Submitted)	
18	Nearest Rail Station	: Taljhari Station is at areal distance of 6.63 km in NE direction.	
19	Nearest Air Port	: Deoghar Airport is at areal distance of 120 km SW direction.	
20	Nearest Forest	: More than 250 m, as per Division Forest Officer, Sahibganj, vide Letter no.-2713 Dated- 15.09.2025.	
21	Road & Highways	: The distance of Approach Road is 100m, after that this road connects to village road	
22	Approach Road	: The distance of approach road is 100m.	

CO-ORDINATES

Point ID	Latitude	Longitude
1	25° 02' 58.65990000" N	087° 41' 14.42954760" E
2	25° 02' 58.79592240" N	087° 41' 15.88003440" E
3	25° 02' 58.91941320" N	087° 41' 17.19695760" E
4	25° 02' 59.05588920" N	087° 41' 18.65234040" E
5	25° 02' 59.19220680" N	087° 41' 20.10613560" E
6	25° 02' 59.32616640" N	087° 41' 21.53477660" E







7	25° 02' 58.29582840" N	087° 41' 21.37205200" E
8	25° 02' 59.12910800" N	087° 41' 21.21186200" E
9	25° 02' 56.20961040" N	087° 41' 21.12517320" E
10	25° 02' 55.24659240" N	087° 41' 21.03410040" E
11	25° 02' 54.33951480" N	087° 41' 19.90605120" E
12	25° 02' 54.63234960" N	087° 41' 17.80778280" E
13	25° 02' 54.94496640" N	087° 41' 17.45867220" E
14	25° 02' 55.26897400" N	087° 41' 16.14495360" E
15	25° 02' 55.60867320" N	087° 41' 16.14495360" E
16	25° 02' 55.89987800" N	087° 41' 15.07269080" E
17	25° 02' 56.22236520" N	087° 41' 13.78083480" E
18	25° 02' 57.38821080" N	087° 41' 11.09411040" E

LAND DETAILS

Khata no.	Plot no.
01, 06 & 11	02 (P), 03 (P), 23 (P), 24 (P) & 25 (P)

STATUTORY CLEARANCES

1	LOI / Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Officer, Sahibganj vide letter no. 1969/M, dated 03.12.2025.
2	CO	:	The CO, Taljhari vide letter no. 151, dated 14.03.2020 has mentioned the plot no. of the project is not recorded as "Jungle-Jhari" in R.S. Khatiyani & Register II. During the appraisal it was seen from the KML that 15 houses at a distance of 90 meter. For which detailed Environmental Management Plan has been prepared and submitted.
3	DMO Cluster	:	DMO, Sahibganj vide memo no. 1973/M, dated 03.12.2025 certified that no other mining lease area exists within 500 meters radius from proposed project site.
4	DFO Wild Life	:	DFO – cum- Incharge Wildlife Sanctuary, Udhwa (Sahibganj) vide letter no. 2714, dated 15.09.2025 certified that the proposed project site is outside Eco Sensitive Zone of Udhwa Bird Sanctuary.
5	DFO Territorial	:	Divisional Forest Officer, Sahibganj Forest Division vide letter no. 2713, dated 15.09.2025 certified that the distance of reserved / protected forest is more than 250 meters from proposed project site.
6	DSR	:	The DMO, Sahibganj has certified vide memo no. 1977/M, dated 04.12.2025 that this project is mentioned in approved DSR of Sahibganj District as a potential area (Page no. 192).

7	Gram Sabha	:	Gram Sabha conducted on 07.03.2020.
8	Grid certificate	:	DMO, Sahibganj vide memo no. 1573/M, dated 26.08.2025 certified that said project falls under grid no. 56 and production is within the over all permissible production limit. The DMO also stated that this certificate is issued in the light of order passed by Hon'ble NGT on 22.12.2021 in OA No. 23/2017/EZ, O.A. no. 776/2018 and O.A. no. 373/2019. It also states this certificate is issued in compliance of report of Expert Committee.
9	Mine Plan Approval	:	Approved by DMO, Sahibganj vide Memo No. 1999/M, dated 05.12.2025.
10	Qualified Person	:	Shri Malay Kumar Mukhopadhyay was present in the meeting and affirmed that the mine plan has been prepared by him.

Working Details

1	Mining Method	:	Semi-mechanized Method
2	Quarry Area	:	1.705Ha. Life of Mine – 10 Years
3	Waste Generation	:	20520 cum
4	Stripping Ratio	:	01:0.02
5	Working Days	:	300
6	Benches: size	:	6 m x 6 m
7	Elevation of Mine	:	270 m to 220 m AMSL
8	Ground Level Elevation	:	220m AMSL
9	Ultimate Working Depth	:	196m AMSL
10	Water Table	:	193m AMSL(Source-JSAC Ground Water Prospect Map)
11	Topography of Mine	:	Area represents gently sloping land.
12	Explosive Requirement	:	77.56 kg Nitro mix explosives/day, will be obtained from Licensed vendors.
13	Diesel/Fuel requirement	:	HSD – 314.88 liters / day (103.9104 KL/year)

Production Details

Year	Production of Stone / Year		Removal of O.B.
	Cum	Tonnes	Cum
1st	81168	227270	10336
2nd	76152	213226	3344
3rd	75544	211523	3496
4th	75088	210246	3344
5th	78736	220461	0

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Total	386688	1082726	20520
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Land Use pattern

Si. No.	Pattern of Utilization	Present/Existing land use pattern in (Ha.)	Proposed Land use for current plan period (Ha.)	Land to be used in remaining period of the life of the mine. (Ha.)	Land used at the conceptual stage i.e. end of mine life in (Ha.)	Area to be converted in the conceptual period.
1	Mining Activities	0	1.404	1.705	0.602	Water Body
2	Dead Benches	0	0.000	0.000	1.103	Plantation
3	Dumping	0	0.020	0.020	0.020	Plantation
4	Garland drain	0	0.029	0.029	0.029	-
5	Settling Tank	0	0.002	0.002	0.002	-
6	Office	0	0	0	0	-
7	Safety Zone	0	0.459	0.459	0.459	Plantation
8	Unutilized	2.326	0.301	0	0	-
9	Crusher	0	0.111	0.111	0.111	Plantation
Total		2.326	2.326	2.326	2.326	-

ENVIRONMENT MANAGEMENT

Green Belt Development

S. No.	Location	Area/Length	No of Trees
1	Within 7.5 m Safety Zone (1 st Year)	0.459 Ha	1,148
2	Dead Benches	1.103 Ha	2,757
3	Dumping	0.020 Ha	50
4	Crusher	0.111 Ha	277
5	Along Approach Road	100 m	132
TOTAL 2.326Ha.			4364

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

- 4364 trees proposed to be planted out of which 10% plantation will be carried out i.e. (436 trees) as per MoEF&CC, Govt. of India Scheme "Ek Ped Ma Ke Naam"
- Project Cost

Sl. No.	Head	Capital Cost Rs. in Lakhs	Recurring Cost Rs. in Lakhs
1.	Government Revenue (Dead Rent& Royalty)	26.00	--
2.	Cost of infrastructure	5.0	0.5
3.	Mining Machineries owned by applicant <ul style="list-style-type: none"> • Wagon Drill -02 • Compressor-02 • Tippers 25 tons-02 • Water Tanker- 01 • Diesel Pump-01 • D.G. Set-01 	103.8	10.38
	Mining Machineries on hired basis- (Excavator- 01, Tipper-06)		18
4.	Lease Agreement(lump-sum)	--	
5.	Statutory Clearance & Others	5.0	-
6.	Contingency	13.98	-
Total		153.78	28.88
Budget for Environment Management		29.48	7.27

- Budget for Environmental Management

Sl. No.	Particulars	Capital Cost in lakhs.	Recurring Cost in lakhs per year
1	Water facility for Dust Suppression, watering plants etc. (Rs. 1000 per Tanker)	--	3
2	Fencing	1.5	--
3	Plantation 132 X 800 = Rs. 1,05,600 Gabion Plantation along approach road 4232 X 400 = Rs.16,92,000 (Plantation within lease area/Green Belt) (also includes Fertilizer, Pesticides, Maintenance)	17.98	1.79
4	Environmental Monitoring (One Day Monitoring) <ul style="list-style-type: none"> • Ambient Air 24 hr (3 points) Rs.27,270 • Ground Water (2 points) -Rs.12,420 • Noise 24 hr (3 points) -Rs.21,000 <ul style="list-style-type: none"> • Soil (1 points) -Rs.13640 Total -Rs. 74330(Per Season) At least two seasons in a Year -Rs. 74330 x 2= Rs. 148660	--	1.48

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Sl. No.	Particulars	Capital Cost in lakhs.	Recurring Cost in lakhs per year
	Source: Central Pollution Control Board Notification, New Delhi, the 23rd February, 2022		
5	Additional EMP for habitation	10	1
Total		29.48	7.27

Environment Monitoring Programmed

SL. No.	Description	No. of Monitoring Stations	Duration
1.	Air	3 stations	6 Monthly
2.	Water	2 stations	6 Monthly
3.	Noise	3 stations	6 Monthly
4.	Soil	1 Station	Yearly

Organizational Structure of Environmental Management Cell: with respective roles

Environment Management Practices to be followed:

Aspect	Mitigation Measures / Control Measures
Solid Waste Management	<p>Solid waste management is important from both aesthetic and environmental points of view and will be managed as per the Solid Waste Management Rules, 2016.</p> <ul style="list-style-type: none"> • An O.B. (Overburden) dump area of 0.20 ha has been provided on the western side corner within the lease area. • The O.B. dump area will accommodate 20,520cum of overburden during the working plan period. • After completion of the working plan, the generated O.B. will be backfilled into the stone quarry faces. • Part of the O.B. will be used for haul road and village road maintenance. • The remaining O.B. will be utilized for plantation activities. • No hazardous or other solid waste generation is envisaged from the stone mining activities.
Air Quality Management	<ul style="list-style-type: none"> • Wet drilling and use of sharp drill bits to minimize dust generation. • Controlled blasting using optimum explosive charge during favourable weather conditions. • Regular maintenance of diesel equipment and vehicles to reduce emissions. • Water sprinkling on haul roads, loading/unloading points, and

	<p>working areas.</p> <ul style="list-style-type: none"> • All transport vehicles will have valid PUC certificates. • Greenbelt and roadside plantation to act as dust and noise barriers.
Water Quality Management	<ul style="list-style-type: none"> • Mining will be confined only above the Ground Water Table (GWT). • Rainwater accumulated in the pit will be collected and pumped out regularly during monsoon. • Settling sump will be provided to desilt pumped out of mine-pit and collected through garland drain before discharge into natural drainage. • Garland and foot drains will be constructed around the quarry to control surface runoff. • Sewage from rest shelters will be treated through septic tank-soak pit systems. • Foot drain would be provided around the external dump, if any.
Noise Quality Management	<ul style="list-style-type: none"> • Mining activities will be restricted to daytime and carried out with controlled blasting techniques. • Acoustic enclosures and mufflers will be provided for drilling and DG set operations. • Regular maintenance of mining machinery to minimize vibration and noise. • Greenbelt development around the lease boundary to attenuate noise propagation. • Use of delayed blasting technique to minimize the adverse impact of vibration.
Soil Quality Management	<ul style="list-style-type: none"> • Topsoil will be carefully removed and stored separately for future use in plantation and reclamation. • Garland drains and retaining walls will prevent soil erosion and siltation. • Spillage of oil or fuel will be avoided; impervious flooring and oil traps provided near storage areas • Post-mining, the area will be rehabilitated using stored topsoil and native vegetation
Flora & Fauna management	<ul style="list-style-type: none"> • No tree felling will be undertaken without obtaining permission from the competent authority. • Greenbelt and plantation will be developed using native species along approach roads and lease periphery (7.5m Safety Zone). • Dust suppression measures will minimize impact on surrounding vegetation
Socio Economy:	<ul style="list-style-type: none"> • Priority employment to local people in mining and ancillary activities. • Community development initiatives such as tree plantation drives, road maintenance, and local infrastructure support. • Awareness programs on safety, hygiene, and environmental protection
Monitoring & Reporting:	<ul style="list-style-type: none"> • Periodic monitoring of air, water (ground & surface), noise, and soil quality as per CPCB and SPCB guidelines. • All monitoring reports will be submitted to statutory authorities as

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		<p>per the compliance schedule.</p> <ul style="list-style-type: none"> • Corrective measures will be taken immediately if any deviation from standards is observed.
Risk & Hazard		<p>Activities which are likely to create risk are: Temporary Storage of Explosives, Charging of Explosives, Blasting, Drilling, Bench Formation, Loading / Unloading, Transportation</p> <p>Proposed Preventive measures:</p> <ul style="list-style-type: none"> ▪ Overall slope angles of benches will be maintained at 45°. ▪ Unmanageable heights are not created. ▪ Loose sides are properly dressed. ▪ No loose stone or debris will be permitted to remain on the top of the bench or side of any excavation (Regulation 106(4) of MMR 1961). ▪ No undercutting of any face or sides will be permitted so as to cause any overhanging (Regulation 106(5) of MMR 1961) ▪ It will be ensured that the drilling equipment is suitable for the job. ▪ The person in charge of the drilling machine is competent to carry out the drilling operation; part of the training includes instructions to always face towards the open edge of the bench so that any inadvertent backward step is away from the edge. ▪ Provision of portable rail fencing between the drilling operations and the edge of the bench ▪ Provision to attach a safety line to the drilling rig and provide a harness for the driller to wear. ▪ Restricted access to the area to all persons except those necessary for the drilling operation. ▪ Wet drilling will be carried out by constantly injecting a jet of water at the drill bit inside the hole, which prevents dust generation. ▪ In case due to any reason, wet drilling is not possible (due to non-availability of water), exhaust/ vacuum system will be provided which removes the dust from the drill hole continuously and discharges the same in a dust collector specially provided for the purpose. ▪ Drilling machine shall be fitted with dust suppression, collection and disposal arrangement.
Blasting & Handling of Explosives		<ul style="list-style-type: none"> ▪ Blast hole geometry shall be properly designed. ▪ Blast site shall be wetted before and after blasting operations are completed. ▪ Only optimum quantity of permissible explosives shall be used so that the vibrations do not damage the structures/houses if the quarrying operations are close to human habitation. ▪ Blasting shall be conducted only during favourable weather conditions and only during the day time and permissible hours. ▪ While carrying out blasting operations near habitations, wide publicity will be given in the local area through announcement and other available media so that local people become aware of the blasting activities being undertaken in the area and take

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	<p>appropriate precautions.</p> <ul style="list-style-type: none"> ▪ The vibrations should be monitored periodically in consultation with the local Mining authorities. ▪ Use of explosives is specialist work. Planning for a round of shots is necessary to ensure that the face is properly surveyed, holes correctly drilled, direction logged, the weight of explosive suitable for good fragmentation and the continuity of the initiator are but a few of the steps necessary to ensure its safe use. ▪ Proper and safe storage of explosives in approved and Licensed Magazine. ▪ Proper security system to prevent theft/ pilferage, unauthorized entry into Magazine area and checking authorized persons to prevent carrying of match box, lights, mobile phones, cigarette or Bidi etc. will be put in place. ▪ Explosives shall be conveyed in special containers. ▪ Explosives and detonators shall not be carried in the same container. ▪ The holes which have been charged with explosives will not be left unattended till blasting is completed.
Health Hazards	<p>Health hazards should be interpreted as being harmful dust and noise which is emitted during surface mining operations. All suitable steps and precautions will be undertaken to ensure minimum health hazard. Provision of use of Personal Protective Equipment (PPE) will be kept.</p> <p>The PPE shall be of good make and quality, wherever possible ISI certified, suitable for the hazard e.g. a dust respirator fitted with the correct filter to capture the particulate hazardous dust and maintained to recommended standards. As personal protective equipment only affords limited protection it will only be used as a last resort and as an interim arrangement until other steps are taken to reduce the risk of personal injury to an acceptable level</p>
Accident Prevention	<ul style="list-style-type: none"> ▪ Mine road shall be made smooth regularly with a road roller. ▪ Mine road will be made sufficiently wide to keep two-way traffic. Regular water sprinkling will be done on mine road and haul road to avoid suspension of dust. ▪ All transportation within the mine lease area should be carried out directly under the supervision and control of management. ▪ The vehicles will be maintained in good working condition and checked thoroughly at least once a month by the competent person authorized for the purpose by the management. ▪ Navigation signs will be provided at each and every turning point up to the main road (wherever required). ▪ To avoid danger while reversing the vehicles especially at working place/loading points, stopper should be posted to properly guide reversing/spotting operating.

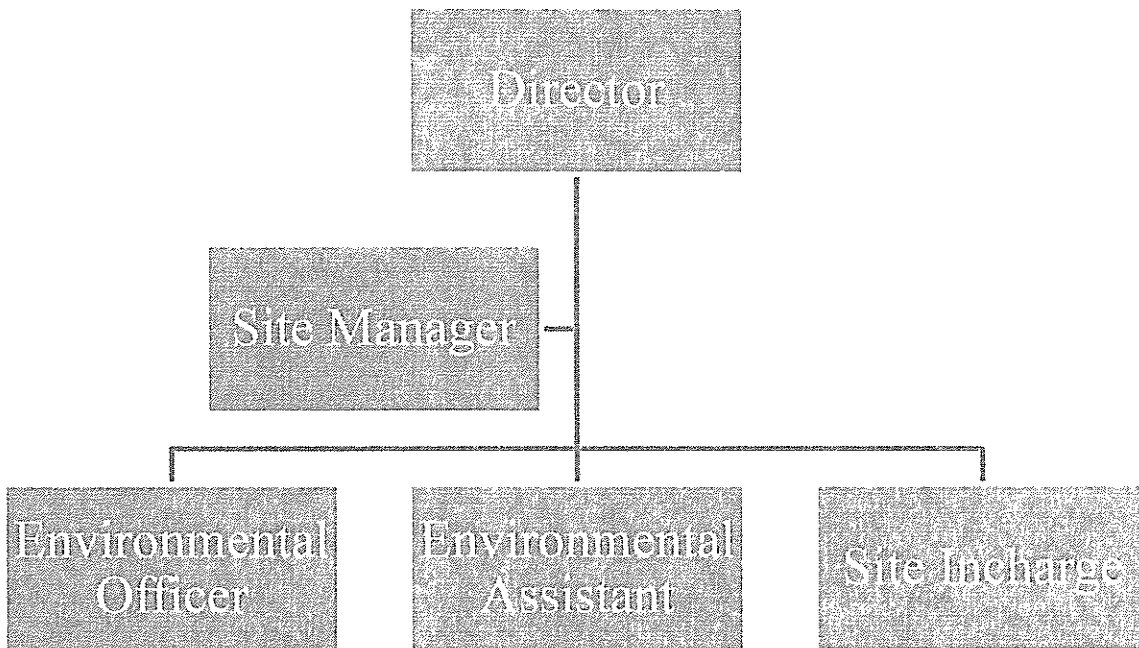
Organizational Structure of Environment Management Cell:

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EMP Cell structure

The EMP Cell is committed to ensuring environmental sustainability and compliance with regulatory requirements for the Stone Mining Project. With a clear structure, roles, and responsibilities, the EMP Cell is equipped to manage environmental impacts and promote sustainable practices.

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District Survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- i. If any tree felling than necessary permission shall be taken from the competent authority.
- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.

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- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.
- l. Personal protective equipments such as clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Pagar Stone Mine of M/s Maa Tara Stone Works (Partners : Shri Kunal Kumar Gupta & Others), Village : Pagar, Thana : Taljhari, Thana no. : 55, Distt.: Sahibganj, Jharkhand (2.326 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I along with following specific conditions :

- I. That the Deputy Commissioner, Sahibganj will ensure compliance of the order passed by Hon'ble NGT in OA No. 23/2017/EZ, O.A. no. 776/2018 and O.A. no. 373/2019 in the matter of Syed Arshad Nasar Vs Union of India with Ramchandra Chaurasia Vs State of Jharkhand with Pradeep Kumar Singh Vs State of Jharkhand before grant of mining lease.
- II. The mine will come in operation only after obtaining permission from DGMS for controlled and delayed blasting.
- III. In compliance of Office Memorandum no. IA-J-11013/20/2025-IA-P, dated 25.11.2025 of MoEF&CC, Govt. of India, the PAs will mandatorily obtain the Environmental Safeguard to be implemented from Jharkhand State Pollution Control Board within 30 days of issuance of EC or 31.01.2026 which ever is earlier.
- IV. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "Ek Ped Ma Ke Naam" and the details of the same shall be uploaded in the MeriLIFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.
- V. The Deputy Commissioner through District Mining Officer will ensure that the mines owner of the respective leases to complete the plantation and maintenance in a time bound manner.
- VI. Suitable plant species of not less than 2 M height to be planted equal to twice the area of saplings proposed in Safety zone. This is to be planted in land available near mines and outside safety zone. This will be in addition to plantation in safety zone. Newly planted saplings to be maintained for minimum 3 years with Geo-Tagged photographs.
- VII. Dedicated water tanker to be provided for mine. The tanker to be used for spraying water on haul road and for irrigating newly planted saplings only. Sprinkling to be done such that the haul road is kept moistened all the time with Geo-Tagged photographs.



- VIII. Pre employment Occupational health check up for employees to be done and thereafter at annual interval for PLFT, Audiometry and other required tests .Summary findings of same to submitted along with 6 monthly compliance.
- IX. Ensure use of Quality PPEs equivalent not less than 3M make. Records of same to be maintained and submitted with 6 monthly compliance report with Geo-Tagged photographs.
- X. Keep vulnerable areas unmanned. Ensure rotation of duties. Records to be maintained and submitted with 6 monthly compliance report.
- XI. Failing of any of terms & conditions mentioned in EC can lead to revocation / cancellation of EC.

8. Mandar Stone Mine of M/s Srishthy Work Pvt. Ltd. (Director : Shri Abhishek Anand), Village : Mandar, Thana : Naudiha Bazar, Distt.: Palamu, Jharkhand (2.258 Ha).

(Proposal no.: SIA/JH/MIN/559408/2026)

Name of the consultant : Sathi Planners Pvt. Ltd., Ranchi, Jharkhand.

This is a new project which was listed for appraisal on 17.01.2026. On the request of the PAs it was taken up for consideration on 18.01.2026.

Project Sector: 1(a) Mining of Minerals, Category: B2.

Application for Environmental Clearance (EC).

EC Application for: Proposed Capacity: 66,830 Cum. (Max.) / 1,87,124 Tons (max.) per year.

Project and Location Details:

Sl. No.	Parameter	Details
1	Project Name	: Mandar Stone Mine
2	Lessee:	: SRISHTHY WORK PVT. LTD.
3	Lease Address	: Director- Shri Abhishek Anand Village – Mandar, Thana – Naudiha Bazar, District – Palamu, Jharkhand
4	Mine Lease Area	: 2.258 Ha.
5	Type of Land	: Non-Forest Raiyati Land
6	Project Cost	- Capital Cost: Rs.180.84Lakhs

7	EMP Budget	:	Capital Cost: Rs.21.16Lakhs	Recurring Cost: Rs. 6.4Lakhs/year
8	New or Expansion	:	New	
9	Mineable Reserves	:	cum.: 6,50,854	Tonnes: 18,22,391
10	Mine Life	:	10 Years	
11	Man power	:	26 Person	
12	Water Requirement	:	6.56 KLD(Drinking: 0.390 KLD, Dust Suppression: 0.732 KLD, Plantation: 5.445 KLD)	
13	Water Source	:	Will be sourced from authorized vendors	
14	DG Set / power	:	20 KVA D.G. Set proposed	
15	Crusher	:	No	
16	Nearest Water Body	:	Batanidam- 0.91 Km- SW.	
17	Nearest Habitation	:	Approximately 260 m towards the northeast direction from the lease area, there are Approx 15 houses present. (EMP Submitted)	
18	Nearest Rail Station	:	Japla Railway Station is at areal distance of 30 km in NWdirection	
19	Nearest Air Port	:	Birsa Munda Airport (Ranchi) is at areal distance of 163 km SE direction.	
20	Nearest Forest	:	More than 250 m, as per Division Forest Officer, Medininagar, vide memo no.-955 Dated- 13.03.2024.	
21	Road & Highways	:	The distance of Approach Road is 183m, after that this road connects to Village Road.	
22	Approach Road	:	The distance of approach road is 183m.	

CO-ORDINATES

Point Name	Latitude	Longitude
1	24° 25' 40.80947254" N	084° 16' 26.85415868" E
2	24° 25' 40.78309318" N	084° 16' 26.97505257" E
3	24° 25' 40.79906200" N	084° 16' 27.55269773" E
4	24° 25' 40.48789795" N	084° 16' 28.05880019" E
5	24° 25' 40.56108169" N	084° 16' 28.87805752" E
6	24° 25' 40.54496762" N	084° 16' 28.98446866" E
7	24° 25' 40.14481933" N	084° 16' 28.97541071" E
8	24° 25' 39.71253643" N	084° 16' 28.97525870" E
9	24° 25' 39.80640773" N	084° 16' 29.15414161" E
10	24° 25' 39.92847185" N	084° 16' 29.45514017" E
11	24° 25' 39.93639444" N	084° 16' 30.15976373" E
12	24° 25' 39.85434179" N	084° 16' 30.52851474" E
13	24° 25' 39.68982472" N	084° 16' 30.87899222" E
14	24° 25' 39.59436008" N	084° 16' 31.12912433" E
15	24° 25' 39.24940463" N	084° 16' 31.31617717" E
16	24° 25' 39.12694531" N	084° 16' 31.71082789" E
17	24° 25' 38.97878536" N	084° 16' 32.00265630" E

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18	24° 25' 38.53796814" N	084° 16' 32.02834824" E
19	24° 25' 38.02131410" N	084° 16' 31.99064907" E
20	24° 25' 37.96625405" N	084° 16' 32.30140177" E
21	24° 25' 37.91100402" N	084° 16' 33.00738386" E
22	24° 25' 37.91013936" N	084° 16' 33.01349184" E
23	24° 25' 38.24239151" N	084° 16' 33.04463007" E
24	24° 25' 38.71065993" N	084° 16' 33.03860818" E
25	24° 25' 39.32187532" N	084° 16' 33.08075957" E
26	24° 25' 39.47185274" N	084° 16' 33.08995646" E
27	24° 25' 39.82058567" N	084° 16' 33.08729129" E
28	24° 25' 39.53228602" N	084° 16' 33.78259255" E
29	24° 25' 39.22083294" N	084° 16' 34.39564400" E
30	24° 25' 38.75378329" N	084° 16' 34.40439918" E
31	24° 25' 38.30071067" N	084° 16' 34.42432658" E
32	24° 25' 37.77849877" N	084° 16' 34.44784035" E
33	24° 25' 37.79909797" N	084° 16' 33.91398631" E
34	24° 25' 37.29999036" N	084° 16' 33.85294138" E
35	24° 25' 36.84511116" N	084° 16' 33.79963305" E
36	24° 25' 36.51621197" N	084° 16' 33.75622925" E
37	24° 25' 36.51201083" N	084° 16' 33.60237460" E
38	24° 25' 36.50636721" N	084° 16' 33.35041470" E
39	24° 25' 36.16545378" N	084° 16' 33.35068993" E
40	24° 25' 35.77854795" N	084° 16' 33.34811040" E
41	24° 25' 35.51460267" N	084° 16' 33.31767929" E
42	24° 25' 35.09007704" N	084° 16' 33.27562825" E
43	24° 25' 34.43722191" N	084° 16' 33.24139031" E
44	24° 25' 34.39159397" N	084° 16' 33.03513063" E
45	24° 25' 34.35981518" N	084° 16' 32.83475143" E
46	24° 25' 34.42461627" N	084° 16' 32.46953780" E
47	24° 25' 34.51827311" N	084° 16' 32.16229795" E
48	24° 25' 34.73392692" N	084° 16' 32.20292514" E
49	24° 25' 35.06838402" N	084° 16' 32.26447641" E
50	24° 25' 35.29585610" N	084° 16' 32.28842329" E
51	24° 25' 35.59968573" N	084° 16' 32.32712354" E
52	24° 25' 35.71392286" N	084° 16' 32.24247960" E
53	24° 25' 35.91946753" N	084° 16' 32.00693909" E
54	24° 25' 36.15637952" N	084° 16' 31.86236641" E
55	24° 25' 36.32960187" N	084° 16' 31.75696205" E
56	24° 25' 36.46792067" N	084° 16' 31.46171313" E
57	24° 25' 36.87289724" N	084° 16' 30.67308836" E
58	24° 25' 36.96468703" N	084° 16' 30.65535593" E
59	24° 25' 37.06809645" N	084° 16' 30.29800762" E
60	24° 25' 37.12014199" N	084° 16' 29.79840733" E
61	24° 25' 37.27191267" N	084° 16' 29.27071917" E
62	24° 25' 37.39261860" N	084° 16' 28.68874508" E
63	24° 25' 37.38257846" N	084° 16' 28.40028638" E
64	24° 25' 37.34837532" N	084° 16' 28.15562945" E

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65	24° 25' 36.98321688" N	084° 16' 27.69042904" E
66	24° 25' 36.75750904" N	084° 16' 27.45974480" E
67	24° 25' 36.76144757" N	084° 16' 26.95007217" E
68	24° 25' 36.56014985" N	084° 16' 26.89478823" E
69	24° 25' 36.29022479" N	084° 16' 26.86427302" E
70	24° 25' 36.29122200" N	084° 16' 26.47082002" E
71	24° 25' 36.92702808" N	084° 16' 25.62426811" E
72	24° 25' 37.67630293" N	084° 16' 25.88859862" E
73	24° 25' 38.52656862" N	084° 16' 26.18602747" E
74	24° 25' 39.28298580" N	084° 16' 26.41041543" E
75	24° 25' 40.15181189" N	084° 16' 26.66687910" E

LAND DETAILS

Khata no.	Plot no.
01, 03, 28 & 38	62 / P, 67, 68, 69 & 70/P

STATUTORY CLEARANCES

1	LOI / Lease docs	:	The Letter of Intent (LoI) has been issued by DMO, Palamu, Medininagar vide letter no. 1368/M, dated 02.07.2024.
2	CO	:	The CO, Naudiha Bazar, Palamu vide letter no. 413, dated 20.09.2023 has mentioned the plot no. of the project is not recorded as "Jungle- Jhari" in R.S. Khatiyani & Register II and also mentioned that the habitation (15 houses) and Solar Jalminar within 500 meters of proposed project site, accordingly PAs has submitted EMP for the same.
3	DMO Cluster	:	DMO, Palamau, Medininagar vide memo no. 118/M, dated 17.01.2026 certified that 01 other mining lease area (3.26 Acre) exists within 500 m radius from proposed project site and total area is 8.84 Acre (3.58 Ha).
4	DFO Wild Life	:	Deputy Director, Palamau Tiger Project, South Division, Medininagar vide letter no. 842, dated 31.12.2025 certified that the proposed project site is outside Eco Sensitive Zone of Palamau Tiger Reserve.
5	DFO Territorial	:	Divisional Forest Officer, Medininagar Forest Division vide letter no. 955, dated 13.03.2024 certified that the distance of reserved / protected forest is more than 250 meter from proposed project boundary.
6	DSR	:	This project is mentioned in approved DSR of Palamau District (Sl. no. 18,Page no. 105).

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7	Gram Sabha	:	BDO, Naudiha Bazar vide letter no. 532, dated 20.09.2023 informed that Gram Sabha conducted on 21.07.2023
8	Mine Plan Approval	:	Mine plan approved by Assistant Director, Geology, District Geological Officer, Palamau, Jharkhand vide letter no. 116, dated 06.08.2025.
9	Qualified Person	:	Shri Malay Kumar Mukhopadhyay was present in the meeting and affirmed that the mine plan has been prepared by him.

Working Details

1	Mining Method	:	Semi-mechanized Method
2	Quarry Area	:	1.478 Ha Life of Mine – 10 Years
3	Waste Generation	:	24124cum
4	Stripping Ratio	:	01:0:02
5	Working Days	:	300
6	Bench: size	:	6.0 m x 6.0 m
7	Elevation of Mine	:	245m to 242m AMSL
8	Ground Level Elevation	:	242m AMSL
9	Ultimate Working Depth	:	212m AMSL
10	Water Table	:	205m AMSL (Source-JSAC Ground Water Prospect Map)
11	Topography of Mine	:	Area represents gently sloping land.
12	Explosive Requirement	:	60.984 kg Nitro mix explosives/day, will be obtained from Licensed vendors.
13	Diesel/Fuel requirement	:	HSD – 301.02 liters / day (60.204 KL/year)

Production Details

Year	Production of Stone / Year		Removal of O.B.
	Cum	Tonnes	Cum
1st	65363	183016	10432
2nd	66830	187124	8965
3rd	66504	186211	4727
4th	66341	185755	0
5th	65689	183929	0
Total	330727	926036	24124

Land Use pattern

Si. No.	Pattern of Utilization	Present/Existing land use pattern in (Ha.)	Proposed Land use for current plan period (Ha.)	Land to be used in remaining period of the life of the mine.	Land used at the conceptual stage i.e. end of mine life	Area to be converted in the conceptual period.

				(Ha)	in (Ha.)	
1	Mining Quarry	-	1.170	1.478	1.478	Water body
2	Dumping	-	0.081	0.081	0.081	OB used for backfilling & area under plantation
3	Garland drain	-	0.045	0.045	0.045	-
4	Settling Tank	-	0.009	0.009	0.009	-
5	Safety Zone	-	0.645	0.645	0.645	Plantation
6	Unutilized	2.258	0.308	-	-	-
Total		2.258	2.258	2.258	2.258	-

ENVIRONMENT MANAGEMENT.

Green Belt Development

S. No.	Location		Area/Length	No of Trees
1	Safety Zone	:	0.645 Ha.	1,613
2	Dumping	:	0.081 Ha.	202
3	Along Approach Road	:	183 m	244
TOTAL				2,059

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.
- 2,059 tree proposed to be planted out of which 10% plantation will be carried out i.e. (205 trees) as per MoEF&CC, Govt. of India Scheme "Ek Ped Ma Ke Naam"
- **Project Cost**

Sl. No.	Head	Capital Cost Rs. in Lakhs	Recurring Cost Rs. in Lakhs
1.	Government Revenue (Dead Rent & Royalty)	26.00	--
2.	Cost of infrastructure	5.0	0.5
3.	Mining Machineries owned by applicant <ul style="list-style-type: none"> • Wagon Drill -02 • Compressor-01 • Tippers 25 tons-03 • Water Tanker- 01 • Diesel Pump-01 • D.G. Set-01 	128.4	

	Mining Machineries on hired basis- (Excavator- 01, Tipper-04)		13
4.	Lease Agreement(lump-sum)	--	1.39
5.	Statutory Clearance & Others	5.0	-
6.	Contingency	16.44	-
Total		180.84	14.89
Budget for Environment Management		21.16	6.4

• Table: Budget for Environmental Management

Sl. No.	Particulars	Capital Cost in lakhs.	Recurring Cost in lakhs per year
1	Water facility for Dust Suppression, watering plants etc. (Rs. 1000 per Tanker)	--	3
2	Fencing	1.5	--
3	Plantation 244 X 800 = Rs.1,95,200 Gabion Plantation along approach road 1,815X 400 = Rs. 7,26,000 (Plantation within lease area/Green Belt) (also includes Fertilizer, Pesticides, Maintenance)	9.21	0.92
4	Environmental Monitoring (One Day Monitoring) <ul style="list-style-type: none"> • Ambient Air 24 hrs (3 point) - Rs.27,270 • Ground Water (2 point) - Rs.12,420 • Noise 24 hrs (3 point) - Rs.21,000 • Soil (1point) -Rs.13,640 Total -Rs. 74330 (Per Season) At least two seasons in a Year -Rs. 74,330 x 2 = Rs.1,48,660 <i>Source: Central Pollution Control Board Notification, New Delhi, the 23rd February, 2022</i>	--	1.48
5	Additional EMP for habitation	10	1
Total		21.71	6.4

Environment Monitoring Programmed

SL. No.	Description	No. of Monitoring Stations	Duration
1.	Air	3 stations	6 Monthly
2.	Water	2 stations	6 Monthly
3.	Noise	3 stations	6 Monthly
4.	Soil	1 Station	Yearly

Organizational Structure of Environmental Management Cell: with respective roles

Environment Management Practices to be followed:

Aspect	Mitigation Measures / Control Measures
Solid Waste Management	In the mining plan period, a total of 24124 cum. Of O.B will be generated. Out of this, 2,196 cum. & 552 cum. An O.B. (Overburden) dump area of 0.081 ha has been provided . O.B will be utilized for levelling the approach road & haul respectively, while the remaining 22,480 cum. O.B will be designated for back filling of mines void.
Air Quality Management	<ul style="list-style-type: none"> • Wet drilling and use of sharp drill bits to minimize dust generation. • Controlled blasting using optimum explosive charge during favourable weather conditions. • Regular maintenance of diesel equipment and vehicles to reduce emissions. • Water sprinkling on haul roads, loading/unloading points, and working areas. • All transport vehicles will have valid PUC certificates. • Greenbelt and roadside plantation to act as dust and noise barriers.
Water Quality Management	<ul style="list-style-type: none"> • Mining will be confined only above the Ground Water Table (GWT). • Rainwater accumulated in the pit will be collected and pumped out regularly during monsoon. • Settling sump will be provided to desilt pumped out of mine-pit and collected through garland drain before discharge into natural drainage. • Garland and foot drains will be constructed around the quarry to control surface runoff. • Sewage from rest shelters will be treated through septic tank-soak pit systems. • Foot drain would be provided around the external dump, if any.
Noise Quality Management	<ul style="list-style-type: none"> • Mining activities will be restricted to daytime and carried out with controlled blasting techniques. • Acoustic enclosures and mufflers will be provided for drilling and DG set operations. • Regular maintenance of mining machinery to minimize vibration and noise. • Greenbelt development around the lease boundary to attenuate noise propagation. • Use of delayed blasting technique to minimize the adverse impact of vibration.
Soil Quality Management	<ul style="list-style-type: none"> • Topsoil will be carefully removed and stored separately for future use in plantation and reclamation. • Garland drains and retaining walls will prevent soil erosion and siltation. • Spillage of oil or fuel will be avoided; impervious flooring and oil traps provided near storage areas • Post-mining, the area will be rehabilitated using stored topsoil and

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	native vegetation
Flora & Fauna management	<ul style="list-style-type: none"> • No tree felling will be undertaken without obtaining permission from the competent authority. • Greenbelt and plantation will be developed using native species along approach roads and lease periphery (7.5m Safety Zone). • Dust suppression measures will minimize impact on surrounding vegetation
Socio Economy:	<ul style="list-style-type: none"> • Priority employment to local people in mining and ancillary activities. • Community development initiatives such as tree plantation drives, road maintenance, and local infrastructure support. • Awareness programs on safety, hygiene, and environmental protection
Monitoring & Reporting:	<ul style="list-style-type: none"> • Periodic monitoring of air, water (ground & surface), noise, and soil quality as per CPCB and SPCB guidelines. • All monitoring reports will be submitted to statutory authorities as per the compliance schedule. • Corrective measures will be taken immediately if any deviation from standards is observed.
Risk & Hazard	<p>Activities which are likely to create risk are: Temporary Storage of Explosives, Charging of Explosives, Blasting, Drilling, Bench Formation, Loading / Unloading, Transportation</p> <p>Proposed Preventive measures:</p> <ul style="list-style-type: none"> ▪ Overall slope angles of benches will be maintained at 45°. ▪ Unmanageable heights are not created. ▪ Loose sides are properly dressed. ▪ No loose stone or debris will be permitted to remain on the top of the bench or side of any excavation (Regulation 106(4) of MMR 1961). ▪ No undercutting of any face or sides will be permitted so as to cause any overhanging (Regulation 106(5) of MMR 1961) ▪ It will be ensured that the drilling equipment is suitable for the job. ▪ The person in charge of the drilling machine is competent to carry out the drilling operation; part of the training includes instructions to always face towards the open edge of the bench so that any inadvertent backward step is away from the edge. ▪ Provision of portable rail fencing between the drilling operations and the edge of the bench ▪ Provision to attach a safety line to the drilling rig and provide a harness for the driller to wear. ▪ Restricted access to the area to all persons except those necessary for the drilling operation. ▪ Wet drilling will be carried out by constantly injecting a jet of water at the drill bit inside the hole, which prevents dust generation. ▪ In case due to any reason, wet drilling is not possible (due to non-availability of water), exhaust/ vacuum system will be provided

		<p>which removes the dust from the drill hole continuously and discharges the same in a dust collector specially provided for the purpose.</p> <ul style="list-style-type: none"> ▪ Drilling machine shall be fitted with dust suppression, collection and disposal arrangement.
Blasting & Handling of Explosives		<ul style="list-style-type: none"> ▪ Blast hole geometry shall be properly designed. ▪ Blast site shall be wetted before and after blasting operations are completed. ▪ Only optimum quantity of permissible explosives shall be used so that the vibrations do not damage the structures/houses if the quarrying operations are close to human habitation. ▪ Blasting shall be conducted only during favourable weather conditions and only during the day time and permissible hours. ▪ While carrying out blasting operations near habitations, wide publicity will be given in the local area through announcement and other available media so that local people become aware of the blasting activities being undertaken in the area and take appropriate precautions. ▪ The vibrations should be monitored periodically in consultation with the local Mining authorities. ▪ Use of explosives is specialist work. Planning for a round of shots is necessary to ensure that the face is properly surveyed, holes correctly drilled, direction logged, the weight of explosive suitable for good fragmentation and the continuity of the initiator are but a few of the steps necessary to ensure its safe use. ▪ Proper and safe storage of explosives in approved and Licensed Magazine. ▪ Proper security system to prevent theft/ pilferage, unauthorized entry into Magazine area and checking authorized persons to prevent carrying of match box, lights, mobile phones, cigarette or Bidi etc. will be put in place. ▪ Explosives shall be conveyed in special containers. ▪ Explosives and detonators shall not be carried in the same container. ▪ The holes which have been charged with explosives will not be left unattended till blasting is completed.
Health Hazards		<p>Health hazards should be interpreted as being harmful dust and noise which is emitted during surface mining operations. All suitable steps and precautions will be undertaken to ensure minimum health hazard. Provision of use of Personal Protective Equipment (PPE) will be kept.</p> <p>The PPE shall be of good make and quality, wherever possible ISI certified, suitable for the hazard e.g. a dust respirator fitted with the correct filter to capture the particulate hazardous dust and maintained to recommended standards. As personal protective equipment only affords limited protection it will only be used as a last resort and as an interim arrangement until other steps are taken to reduce the risk of personal injury to an acceptable level</p>
Accident Prevention		<ul style="list-style-type: none"> ▪ Mine road shall be made smooth regularly with a road roller. ▪ Mine road will be made sufficiently wide to keep two-way traffic.

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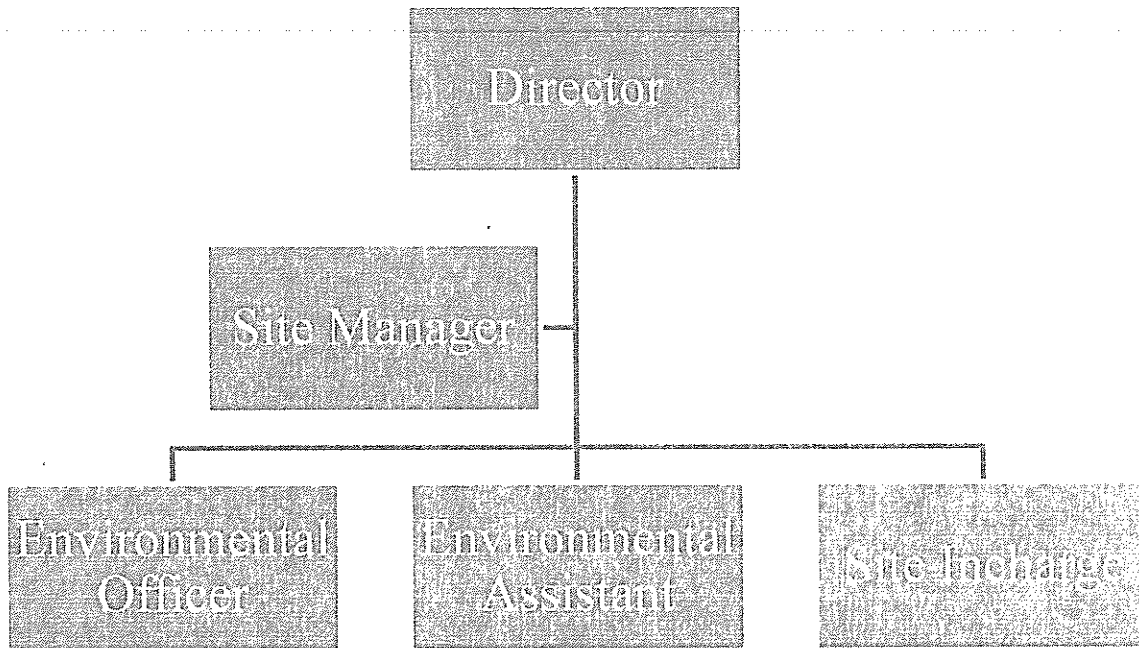
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	<p>Regular water sprinkling will be done on mine road and haul road to avoid suspension of dust.</p> <ul style="list-style-type: none"> ▪ All transportation within the mine lease area should be carried out directly under the supervision and control of management. ▪ The vehicles will be maintained in good working condition and checked thoroughly at least once a month by the competent person authorized for the purpose by the management. ▪ Navigation signs will be provided at each and every turning point up to the main road (wherever required). ▪ To avoid danger while reversing the vehicles especially at working place/loading points, stopper should be posted to properly guide reversing/spotting operating.
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Organizational Structure of Environment Management Cell:



EMP Cell structure

The EMP Cell is committed to ensuring environmental sustainability and compliance with regulatory requirements for the Stone Mining Project. With a clear structure, roles, and responsibilities, the EMP Cell is equipped to manage environmental impacts and promote sustainable practices.

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District Survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.

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- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- i. If any tree felling than necessary permission shall be taken from the competent authority.
- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.
- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.
- l. Personal protective equipments such as clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Mandar Stone Mine of M/s Srishthy Work Pvt. Ltd. (Director : Shri Abhishek Anand), Village : Mandar, Thana : Naudiha Bazar, Distt.: Palamu, Jharkhand (2.258 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I along with following specific conditions :

- I. The mine will come in operation only after obtaining permission from DGMS for controlled and delayed blasting.
- II. In compliance of Office Memorandum no. IA-J-11013/20/2025-IA-P, dated 25.11.2025 of MoEF&CC, Govt. of India, the PAs will mandatorily obtain the Environmental Safeguard to be implemented from Jharkhand State Pollution Control Board within 30 days of issuance of EC or 31.01.2026 which ever is earlier.
- III. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "Ek Ped Ma Ke Naam" and the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.
- IV. The Deputy Commissioner through District Mining Officer will ensure that the mines owner of the respective leases to complete the plantation and maintenance in a time bound manner.
- V. Suitable plant species of not less than 2 M height to be planted equal to twice the area of saplings proposed in Safety zone. This is to be planted in land available near mines and outside safety zone. This will be in addition to plantation in safety zone. Newly planted saplings to be maintained for minimum 3 years with Geo-Tagged photographs.

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- VI. Dedicated water tanker to be provided for mine. The tanker to be used for spraying water on haul road and for irrigating newly planted saplings only. Sprinkling to be done such that the haul road is kept moistened all the time with Geo-Tagged photographs.
- VII. Pre employment Occupational health check up for employees to be done and thereafter at annual interval for PLFT, Audiometry and other required tests .Summary findings of same to submitted along with 6 monthly compliance.
- VIII. Ensure use of Quality PPEs equivalent not less than 3M make. Records of same to be maintained and submitted with 6 monthly compliance report with Geo-Tagged photographs.
- IX. Keep vulnerable areas unmanned. Ensure rotation of duties. Records to be maintained and submitted with 6 monthly compliance report.
- X. Failing of any of terms & conditions mentioned in EC can lead to revocation / cancellation of EC.

9. Porabasuria Stone Mine of Shri Sanjla Besra, Village : Porabasuria, Thana : Shikaripara, Distt. : Dumka, Jharkhand (2.577 Ha).

(Proposal no.: SIA/JH/MIN/ 564811 /2025)

Name of the consultant : Sathi Planners Pvt. Ltd., Ranchi, Jharkhand.

This is a new project which has been taken for appraisal on 17.01.2026.

Project Sector: 1(a) Mining of Minerals, Category: B1.

Application for Environmental Clearance (EC) after Terms of Reference (ToR).

The State Expert Appraisal Committee, Jharkhand deliberated the project during its 119th meeting held on 17.12.2024 - 22.12.2024 and SEIAA, Jharkhand has approved the ToRs in 119th meeting held on 30th & 31st December, 2024. TOR for the project was issued by SEIAA, Jharkhand vide letter no. EC/SEIAA/2024-25/3399/2024/520, dated 13.01.2025. The final EIA / EMP submitted by PP to SEAC on 12.01.2026.

EC Application for: Proposed Capacity – 38,849 cum/annum or 1,04,893 TPA.

Project and Location Details:

Sl	Parameter	Details
1	Project Name	: Porabasuria Stone Mine

2	Applicant	:	Shri Sanjla Besra
3	Lease Address	:	Mouza- Porabasuria, Thana- Shikaripara, Thana No.- 14, District- Dumka, State- Jharkhand
4	Lease Area	:	2.577 Ha Acres- 6.37 Acres
5	Cluster Details	:	2 no of mines including project site having total cluster area 6.88 Acres
6	Type of Land	:	Non-Forest Raiyati Land
7	Project Cost	:	Rs. 131.28 Lakhs
8	EMP Budget	:	Capital: Rs. 42.76 lakhs Recurring: Rs. 7.97 Lakh / year
9	New or Expansion	:	New
10	Mineable Reserves	:	cum.: 1,37,022 cum Tonnes: 3,69,960 tones
11	Mine Life	:	5 years
12	Man power	:	29
13	Water Requirement	:	14.30 KLD {Manpower (29 nos.)- 1.305 KLD, Plantation (3,642 nos.)- 10.926 KLD, Dust Suppression- 2.07 KLD.}
14	Water Source	:	By authorised hired water tankers
15	DG Set / power	:	60 KVA D.G. Set proposed
16	Crusher	:	No crusher
17	Nearest Water Body	:	Brahmani River- 8.17 km. in North direction of mine site.
18	Nearest Habitation	:	Porabasuria Village (520 m) in West Direction
19	Nearest Rail Station	:	Pakdaha Railway station is at areal distance of 6.15 Km North – East direction.
20	Nearest Air Port	:	Deoghar Airport, approx. 94.1 km towards NW direction
21	Nearest Forest	:	More than 250 m, as per Division Forest Officer letter no.- 1742, dated 31/07/2024.
22	Road & Highways	:	The distance of the approach road is 70 m. After that, this road connects to the village road. The village road continues for 3.56 km, and after this, the road connects to MDR Sarasdangal to Shikaripara.
23	Approach Road	:	The distance of Approach Road is 70m.
24	SE Budget	:	Rs. 6.8 Lakh (Need Based Survey)

CO-ORDINATES

Pillar No.	Latitude	Longitude
1	24° 11' 04.13128388" N	87° 35' 18.19904533" E
2	24° 11' 04.05154599" N	87° 35' 18.46700679" E
3	24° 11' 04.25984302" N	87° 35' 18.59991737" E
4	24° 11' 04.05433439" N	87° 35' 18.96688939" E
5	24° 11' 03.87083345" N	87° 35' 19.21837453" E

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6	24° 11' 03.77721068" N	87° 35' 19.16046105" E
7	24° 11' 03.48138078" N	87° 35' 19.61098507" E
8	24° 11' 03.45786052" N	87° 35' 20.30945566" E
9	24° 11' 03.02553639" N	87° 35' 20.25663740" E
10	24° 11' 02.67443235" N	87° 35' 20.18066745" E
11	24° 11' 02.63889946" N	87° 35' 20.01488847" E
12	24° 11' 02.56777144" N	87° 35' 19.96202536" E
13	24° 11' 01.83380916" N	87° 35' 20.47361911" E
14	24° 11' 01.33828221" N	87° 35' 20.74819175" E
15	24° 11' 01.08609297" N	87° 35' 20.62323374" E
16	24° 11' 00.68788783" N	87° 35' 21.37518169" E
17	24° 11' 01.33147785" N	87° 35' 21.56672193" E
18	24° 11' 01.86514647" N	87° 35' 21.60673626" E
19	24° 11' 02.05350452" N	87° 35' 21.56622739" E
20	24° 11' 02.13353814" N	87° 35' 21.34425402" E
21	24° 11' 02.44158422" N	87° 35' 21.17733281" E
22	24° 11' 02.60709448" N	87° 35' 21.28777999" E
23	24° 11' 02.58582992" N	87° 35' 21.46571189" E
24	24° 11' 02.90407181" N	87° 35' 21.78659838" E
25	24° 11' 02.84326831" N	87° 35' 21.95786188" E
26	24° 11' 02.92953533" N	87° 35' 22.05704195" E
27	24° 11' 02.58435670" N	87° 35' 22.65473621" E
28	24° 11' 02.31545785" N	87° 35' 23.08685028" E
29	24° 11' 01.84589300" N	87° 35' 23.06848613" E
30	24° 11' 01.35873909" N	87° 35' 22.98116333" E
31	24° 11' 00.78597876" N	87° 35' 23.17453909" E
32	24° 11' 00.65771576" N	87° 35' 23.57169977" E
33	24° 11' 01.34868357" N	87° 35' 24.07116538" E
34	24° 11' 01.76418622" N	87° 35' 25.06812132" E
35	24° 11' 01.66183338" N	87° 35' 25.44034411" E
36	24° 11' 02.27723005" N	87° 35' 25.33121238" E
37	24° 11' 02.58968522" N	87° 35' 24.82364772" E
38	24° 11' 02.06333685" N	87° 35' 24.49506814" E
39	24° 11' 02.36266351" N	87° 35' 23.99265967" E
40	24° 11' 02.90563437" N	87° 35' 24.34926092" E
41	24° 11' 03.44860498" N	87° 35' 24.70586301" E
42	24° 11' 03.23527378" N	87° 35' 25.19169028" E
43	24° 11' 03.72867115" N	87° 35' 25.43727879" E
44	24° 11' 03.99088255" N	87° 35' 25.69902135" E
45	24° 11' 04.72398248" N	87° 35' 26.25285549" E
46	24° 11' 05.34512108" N	87° 35' 26.62052585" E
47	24° 11' 04.99177116" N	87° 35' 27.33328653" E
48	24° 11' 04.32826981" N	87° 35' 27.08832215" E
49	24° 11' 04.13291762" N	87° 35' 27.48893949" E
50	24° 11' 05.02491092" N	87° 35' 27.84879573" E
51	24° 11' 05.91690392" N	87° 35' 28.20865340" E

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52	24° 11' 05.84924922" N	87° 35' 28.65328723" E
53	24° 11' 05.53467715" N	87° 35' 28.84851222" E
54	24° 11' 05.27617030" N	87° 35' 28.82071057" E
55	24° 11' 04.74221293" N	87° 35' 28.70314586" E
56	24° 11' 04.20825552" N	87° 35' 28.58558144" E
57	24° 11' 03.78125113" N	87° 35' 28.52098977" E
58	24° 11' 03.77792659" N	87° 35' 28.24026154" E
59	24° 11' 03.14317623" N	87° 35' 28.12113222" E
60	24° 11' 02.51406415" N	87° 35' 27.83412542" E
61	24° 11' 02.12370766" N	87° 35' 27.72078454" E
62	24° 11' 02.14252029" N	87° 35' 27.46599964" E
63	24° 11' 01.39634960" N	87° 35' 27.12580506" E
64	24° 11' 00.43536419" N	87° 35' 26.70043323" E
65	24° 11' 00.28684930" N	87° 35' 26.93078857" E
66	24° 11' 00.15905725" N	87° 35' 27.10916219" E
67	24° 11' 00.14043511" N	87° 35' 27.35923850" E
68	24° 11' 00.01491540" N	87° 35' 27.40676844" E
69	24° 10' 59.50045441" N	87° 35' 27.37565430" E
70	24° 10' 58.99118085" N	87° 35' 27.16471188" E
71	24° 10' 58.98171233" N	87° 35' 27.08198148" E
72	24° 10' 59.16817225" N	87° 35' 26.61543680" E
73	24° 10' 59.39396973" N	87° 35' 26.07335621" E
74	24° 10' 59.27779004" N	87° 35' 26.02479039" E
75	24° 10' 59.27553931" N	87° 35' 25.96782016" E
76	24° 10' 59.62608964" N	87° 35' 25.24781311" E
77	24° 10' 59.86329014" N	87° 35' 24.62349971" E
78	24° 10' 59.55441066" N	87° 35' 23.89063048" E
79	24° 10' 59.24553018" N	87° 35' 23.15776222" E
80	24° 10' 59.30996069" N	87° 35' 22.55040097" E
81	24° 10' 59.25188366" N	87° 35' 22.45148075" E
82	24° 10' 58.81588474" N	87° 35' 22.03072039" E
83	24° 10' 58.83501660" N	87° 35' 21.85520795" E
84	24° 10' 59.03741236" N	87° 35' 21.58553034" E
85	24° 10' 59.38756604" N	87° 35' 21.30470615" E
86	24° 10' 59.88362246" N	87° 35' 21.02114069" E
87	24° 11' 00.27742037" N	87° 35' 20.69978283" E
88	24° 11' 00.96027997" N	87° 35' 19.75286873" E
89	24° 11' 01.57371409" N	87° 35' 19.78355201" E
90	24° 11' 01.72810765" N	87° 35' 19.66864442" E
91	24° 11' 01.98703323" N	87° 35' 19.11813459" E
92	24° 11' 02.27805344" N	87° 35' 18.63429842" E
93	24° 11' 02.69542115" N	87° 35' 18.96924017" E
94	24° 11' 02.94124003" N	87° 35' 18.58446532" E
95	24° 11' 02.78684188" N	87° 35' 18.34418523" E
96	24° 11' 02.87097258" N	87° 35' 18.20641915" E

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LAND DETAILS

Khata no.	Plot no.
08	875, 877, 880/P, 881, 882, 884/P, 886, 887, 888/P, 890 & 891

STATUTORY CLEARANCES

1	LOI / Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Officer, Dumka vide letter no. 1093/M, dated 24.09.2024.
2	CO	:	The CO, Shikaripara vide letter no. 718/Ra., dated 12.08.2024 has mentioned the plot no. of the project is not recorded as "Jungle-Jhari" in R.S. Khatiyon & Register II.
3	DMO Cluster	:	DMO, Dumka vide memo no. 1161/M, dated 14.10.2024 certified that 01 other mining lease area (6.88 Acre) exists within 500 meters radius from proposed project site and total area is 13.25 Acre.
4	DFO Wild Life	:	DFO, Wildlife Division, Hazaribag vide letter no. 1870, dated 27.08.2024 certified that the proposed project site is outside Eco Sensitive Zone of Parasnath & Topchanchi Wildlife Sanctuary.
5	DFO Territorial	:	Divisional Forest Officer, Dumka Forest Division vide letter no. 1742, dated 31.07.2024 certified that the distance of reserved / protected forest is more than 250 meters from proposed project site.
6	DSR	:	This project is mentioned in approved DSR of Dumka District (Sl. no. 72, Page no. 164).
7	Gram Sabha	:	Gram Sabha conducted on 16.04.2023.
8	Mine Plan Approval	:	Approved by District Mining Officer, Dumka vide Letter No. 1192/M, dated 18.10.2024.
9	Qualified Person	:	Shri Malay Kumar Mukhopadhyay was present in the meeting and affirmed that the mine plan has been prepared by him.
10	Baseline monitoring period	:	December, 2024 to February, 2025.
11	Public Hearing	:	Public hearing conducted on 08.09.2025.

Working Details

1	Mining Method	:	Opencast Fully mechanised method
2	Quarry Area	:	2.577 ha.
3	Waste Generation	:	24790 cum.
4	Stripping Ratio	:	05:08
5	Working Days	:	300
6	Benches: size & No	:	6m x 6m
7	Elevation of Mine	:	104 m AMSL to 99 m AMSL
8	Ground Level Elevation	:	99 m AMSL
9	Ultimate Working Depth	:	78 m AMSL
10	Water Table	:	60 m AMSL (Source: JSAC Ground water Prospect Map)
11	Topography of Mine	:	The area represents a hillock land with rock mass of Basalt
12	Explosive Requirement	:	47.4 kg/day Slurry Explosives/day
13	Diesel/Fuel requirement	:	HSD-301 liters/day (90.3 KL/year)

Production Details

Year	Production of Stone		Removal of O.B
	In cum	In tonnes	Cum
1st	22,420	60,534	12,400
2nd	22,800	61,560	0
3rd	26,885	72,590	0
4th	38,849	1,04,893	6,118
5th	26,068	70,384	6,272
Total	1,37,022	3,69,960	24,790

Land Use

Si. No.	Pattern of Utilization	Present/Existing land use pattern in (Ha.)	Proposed Land use for current plan period (Ha.)	Land used at the conceptual stage i.e. end of mine life in (Ha.)	Area to be converted in the conceptual period.
1	Mining Activities	0	1.237	1.119	Water Body
2	Dead Benches	0	0.000	0.118	Backfill & Plantation
3	Dumping	0	0.180	0.180	Plantation
4	Garland	0	0.072	0.072	-

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	drain				
5	Settling Tank	0	0.020	0.020	-
6	Safety Zone	0	1.068	1.068	Plantation
7	Unutilized	2.577	0.000	0.000	Plantation
Total		2.577	2.577	2.577	-

Green Belt Development

Year	Location	No. of Plants	Area to be Covered (Ha)	Species of Plant
1 st Year	Within 7.5m in Safety Zone Area	2,670	1.068	Mixed plants i.e. Mango, Guava, Saguan, Jackfruit, Gulmohar, Teak, Gamhar, etc. as available in the locality
Conceptual	Dead Benches	295	0.118	
Conceptual	Dumping	450	0.180	
Conceptual	Garland drain	180	0.072	
1 st Year	Approach Road	47	70 m	
Total		3,642	1.534	

Note- 3,642 tree proposed to be planted out of which 10% plantation will be carried out i.e. (364 trees) as per MoEF&CC, Govt. of India Scheme "Ek Ped Ma Ke Naam".

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

BUDGETARY PROVISION (IN LAKHS)

PROJECT COST

Sl. No.	Head	Capital Cost Rs. in Lakhs	Recurring Cost Rs. in Lakhs
1.	Government Revenue (Dead Rent & Royalty)	27.00	--
2.	Cost of Infrastructure	5.0	0.5
3.	Mining Machineries owned by applicants Wagon Drill -01 Compressor-01 Tippers 25 tons-03 Diesel Pump-01 D.G. Set-01	82.35	--
	Mining Machineries on hired basis (Excavator- 01,	--	13.0

	Tipper-14)		
4.	Lease Agreement (lump-sum)	--	1.59
5.	Statutory Clearance & Others	5.0	-
6.	Contingency	11.93	-
Total		131.28	15.09

ENVIRONMENT MANAGEMENT PLAN (EMP)

S. No.	EMP Activity	Capital Cost (₹ in Lakhs)	Recurring Cost / Year (₹ in Lakhs)
1.	Air Pollution Control (Water sprinkling, greenbelt, dust suppression)	-	3.00
2.	Water Pollution Control (Garland drains, settling tank, rainwater harvesting)	3.00	1.00
3.	Noise & Vibration Control (acoustic enclosures, monitoring)	1.50	0.50
4.	Occupational Health & Safety (PPE, health camps, first aid, training)	1.50	1.00
5.	Greenbelt Development (plantation, maintenance)	14.76	1.47
6.	Environmental Monitoring (air, water, noise, soil)	-	1.00
7.	PH Compliance Budget	22.00	-
Total		42.76	7.97

Environment Monitoring Plan

Monitoring Parameters and Frequency of Monitoring

S. no	Monitoring Parameters	No. of Locations	Frequency of Monitoring
1	Ambient Air: Ambient Air Quality at appropriate location for PM10, PM2.5, SO2, NOx in the vicinity of the mine area. In the surrounding area covering project site only.	4 Stations	Six Monthly
2	Water: Surface water sample in the vicinity of the Project area.	2 Surface water 2 Ground water	Six Monthly
3	Noise: Day & Night level Noise Monitoring.	4 stations	Six Monthly
4	Soil: Soil Monitoring, Qualitative and quantitative testing/analysis to check the soil fertility, porosity, texture, water holding capacity, etc.	2 stations	Six Monthly

Summary of Baseline Data:

Monitoring season - December 2024 - February 2025 for Winter season.

Type	Parameter
AAQ Parameter at 7 locations	PM10 = 58.2 µg/m ³ to 80.4 µg/m ³ PM2.5 = 20.60 µg/m ³ to 38.5 µg/m ³ SO ₂ = 4.8 µg/m ³ to 9.4 µg/m ³ NO _x = 21.20 µg/m ³ to 30.5 µg/m ³
Noise quality at 7 locations	Daytime 54.5 to 50.2 dB(A) Nighttime 43.6 to 40.2 dB(A)
Surface water at 2 locations	pH – 7.17 to 7.56 TDS – 248.7 to 266.8 mg/l Sulphate – 12.62 to 14.08 mg/l Fluoride – 0.26 mg/l to 0.32 mg/l
Ground water at 6 locations	Turbidity – <1 to 2.5 NTU pH – 6.72 to 7.42 Chloride – 18.1 to 37.18 mg/l Total Hardness – 122.4 to 189.72 mg/l TDS – 288.1 to 463.2 mg/l
Soil at 5 locations	pH – 5.62 to 7.03 Conductivity – 0.3 to 0.29 µS/cm Iron - <2.5mg/l Organic Matter – 0.78 to 5.24 % Magnesium -1236.8 to 1794.6 mg/kg Calcium – 1680 to 2320 mg/kg Organic Carbon – 0.42 to 3.04 %

Public Hearing (Action Plan) –

Sl. No.	Issue Raised	Commitment by Project Proponent (Brief)	Time Frame	Funds to be Spent Capital (in Lakhs)
1	Rural roads should be repaired, proper solution should be found for the water problem, and employment should be provided to the villagers.	The project proponent assured that the rural roads would be repaired, deep boring would be done at the places identified by the villagers to address the water problem and the villagers would be given priority in employment as per their qualifications and needs.	<ul style="list-style-type: none"> • Road repair of Rural Roads-within 6 months. • Drinking Water Problem-Deep Borewells- Within 3-4 months • Initial Recruitment-Skill Development & Training (During mine development and Construction phase) 	Rs. 4.00 Lakhs Rs. 3.00 Lakhs Rs. 1.00 Lakhs

			(0-6 months) • Continued Employment Wages & Salary (Throughout the life cycle of the mining project)	Rs. 3.00 Lakhs
2	Financial help should be provided and doctor facilities and medical camps should be organized.	The project proponent assured that financial assistance, doctor's facility and monthly medical camps would be organised under CSR.	Financial Assistance- Within 3 months Doctor Facility- Monthly Medical Camps- Half yearly	Under CSR Funds.
3	Jerseys, footballs and boots should be provided for football games and financial assistance should be provided for organizing football games in the village	The project proponent assured financial support for football jerseys and football games under CSR.	Support for Football Activities- Within 2 months	Rs. 1.00 Lakh
4	The mine should be fenced with wire.	The project proponent assured that the mine would be fenced with wire	Safety of mine Area- With 6 months	Rs. 5.00 Lakhs
5	Vehicles should be provided or arranged to transport pregnant women and sick people to the hospital.	Provision of transportation for pregnant women and those in need will be arranged.	Arrangement- When required.	Rs. 5.00 Lakhs
Total				22.00 Lakhs

SE Need based Survey detail (included in CSR)

Zone	Coverage & Survey Details	Key Socio-Economic Observations	Workforce Characteristics	Priority Needs (Focused)	Proposed Budget (₹ Lakhs)	Implementation Timeline
0-2 km	Villages: 5 Households surveyed: 15 Population covered: 90 FGDs Conducted: 1	Balanced gender composition with presence of children and vulnerable groups. Proximity to mine increases sensitivity to dust, traffic and occupational health issues.	Low workforce participation (~35%); dominance of informal and "other" occupations indicating livelihood instability.	<ul style="list-style-type: none"> Preventive healthcare & health check-ups Local skill development linked to mine & allied activities 	3.5	Short-term & ongoing (Year 1-2)
2-5	Villages: 12	Moderate literacy	Mixed	<ul style="list-style-type: none"> Education 	3.3	Medium-term

km	Households surveyed: 24 Population covered: 116 FGDs Conducted: 0	levels with gender disparity; limited access to secondary education and structured training facilities.	workforce pattern; dependence on agriculture and daily wage labour.	support (secondary level / scholarships) • Agricultural productivity support (inputs, awareness)		(Year 2–3)
Total (0–5 km)					6.8 Lakhs	

Environment Management Practices to be followed:

Aspect	Mitigation Measures / Control Measures
Solid Waste Management	<ul style="list-style-type: none"> • Solid waste management is important from both aesthetic and environmental points of view and will be managed as per the Solid Waste Management Rules, 2016. • An O.B. (Overburden) dump area of 0.18 ha has been provided within the lease area. • The O.B. dump area will accommodate 24,790 cum of overburden during the working plan period. • After completion of the working plan, the generated O.B. will be backfilled into the stone quarry faces. • Part of the O.B. will be used for haul road and village road maintenance. • The remaining O.B. will be utilized for plantation activities. • No hazardous or other solid waste generation is envisaged from the stone mining activities.
Air Quality Management	<ul style="list-style-type: none"> • Wet drilling and use of sharp drill bits to minimize dust generation. • Controlled blasting using optimum explosive charge during favorable weather conditions. • Regular maintenance of diesel equipment and vehicles to reduce emissions. • Water sprinkling on haul roads, loading/unloading points, and working areas. • All transport vehicles will have valid PUC certificates. • Greenbelt and roadside plantation to act as dust and noise barriers.
Water Quality Management	<ul style="list-style-type: none"> • Mining will be confined only above the Ground Water Table (GWT). • Rainwater accumulated in the pit will be collected and pumped out regularly during monsoon. • Settling sump will be provided to desilt pumped out of mine-pit and collected through garland drain before discharge into natural drainage. • Garland and foot drains will be constructed around the quarry to control surface runoff. • Sewage from rest shelters will be treated through septic tank–soak pit systems. • Foot drain would be provided around the external dump, if any.
Noise Quality	<ul style="list-style-type: none"> • Mining activities will be restricted to daytime and carried out with

Management	<p>controlled blasting techniques.</p> <ul style="list-style-type: none"> • Acoustic enclosures and mufflers will be provided for drilling and DG set operations. • Regular maintenance of mining machinery to minimize vibration and noise. • Greenbelt development around the lease boundary to attenuate noise propagation. • Use of delayed blasting technique to minimize the adverse impact of vibration.
Soil Quality Management	<ul style="list-style-type: none"> • Topsoil will be carefully removed and stored separately for future use in plantation and reclamation. • Garland drains and retaining walls will prevent soil erosion and siltation. • Spillage of oil or fuel will be avoided; impervious flooring and oil traps provided near storage areas
	<ul style="list-style-type: none"> • Post-mining, the area will be rehabilitated using stored topsoil and native vegetation
Flora & Fauna management	<ul style="list-style-type: none"> • No tree felling will be undertaken without obtaining permission from the competent authority. • Greenbelt and plantation will be developed using native species along approach roads and lease periphery (7.5m Safety Zone). • Dust suppression measures will minimize impact on surrounding vegetation
Socio Economy:	<ul style="list-style-type: none"> • Priority employment to local people in mining and ancillary activities. • Community development initiatives such as tree plantation drives, road maintenance, and local infrastructure support. • Awareness programs on safety, hygiene, and environmental protection
Monitoring & Reporting:	<ul style="list-style-type: none"> • Periodic monitoring of air, water (ground & surface), noise, and soil quality as per CPCB and SPCB guidelines. • All monitoring reports will be submitted to statutory authorities as per the compliance schedule. • Corrective measures will be taken immediately if any deviation from standards is observed.
Risk & Hazard	<p>Activities which are likely to create risk are: Temporary Storage of Explosives, Charging of Explosives, Blasting, Drilling, Bench Formation, Loading / Unloading, Transportation</p> <p>Proposed Preventive measures:</p> <ul style="list-style-type: none"> ▪ Overall slope angles of benches will be maintained at 45°. ▪ Unmanageable heights are not created. ▪ Loose sides are properly dressed. ▪ No loose stone or debris will be permitted to remain on the top of the bench or side of any excavation (Regulation 106(4) of MMR 1961). ▪ No undercutting of any face or sides will be permitted so as to cause any overhanging (Regulation 106(5) of MMR 1961) ▪ It will be ensured that the drilling equipment is suitable for the job.

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	<ul style="list-style-type: none"> ▪ The person in charge of the drilling machine is competent to carry out the drilling operation; part of the training includes instructions to always face towards the open edge of the bench so that any inadvertent backward step is away from the edge. ▪ Provision of portable rail fencing between the drilling operations and the edge of the bench ▪ Provision to attach a safety line to the drilling rig and provide a harness for the driller to wear. ▪ Restricted access to the area to all persons except those necessary for the drilling operation. ▪ Wet drilling will be carried out by constantly injecting a jet of water at the drill bit inside the hole, which prevents dust generation. ▪ In case due to any reason, wet drilling is not possible (due to non-availability of water), exhaust/ vacuum system will be provided which removes the dust from the drill hole continuously and discharges the same in a dust collector specially provided for the purpose.
Blasting & Handling of Explosives	<ul style="list-style-type: none"> ▪ Drilling machine shall be fitted with dust suppression, collection and disposal arrangement. ▪ Blast hole geometry shall be properly designed. ▪ Blast site shall be wetted before and after blasting operations are completed. ▪ Only optimum quantity of permissible explosives shall be used so that the vibrations do not damage the structures/houses if the quarrying operations are close to human habitation. ▪ Blasting shall be conducted only during favourable weather conditions and only during the day time and permissible hours. ▪ While carrying out blasting operations near habitations, wide publicity will be given in the local area through announcement and other available media so that local people become aware of the blasting activities being undertaken in the area and take appropriate precautions. ▪ The vibrations should be monitored periodically in consultation with the local Mining authorities. ▪ Use of explosives is specialist work. Planning for a round of shots is necessary to ensure that the face is properly surveyed, holes correctly drilled, direction logged, the weight of explosive suitable for good fragmentation and the continuity of the initiator are but a few of the steps necessary to ensure its safe use. ▪ Proper and safe storage of explosives in approved and Licensed Magazine. ▪ Proper security system to prevent theft/ pilferage, unauthorized entry into Magazine area and checking authorized persons to prevent carrying of match box, lights, mobile phones, cigarette or Bidi etc. will be put in place. ▪ Explosives shall be conveyed in special containers. ▪ Explosives and detonators shall not be carried in the same container. ▪ The holes which have been charged with explosives will not be left unattended till blasting is completed.
Health Hazards	Health hazards should be interpreted as being harmful dust and noise which is emitted during surface mining operations. All suitable steps and

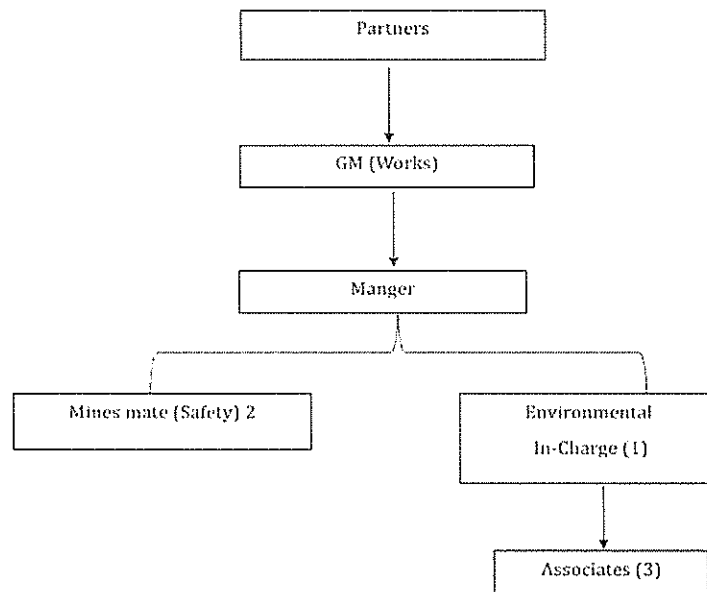
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	<p>precautions will be undertaken to ensure minimum health hazard. Provision of use of Personal Protective Equipment (PPE) will be kept. The PPE shall be of good make and quality, wherever possible ISI certified, suitable for the hazard e.g. a dust respirator fitted with the correct filter to capture the particulate hazardous dust and maintained to recommended standards. As personal protective equipment only affords limited protection it will only be used as a last resort and as an interim arrangement until other steps are taken to reduce the risk of personal injury to an acceptable level</p>
Accident Prevention	<ul style="list-style-type: none"> ▪ Mine road shall be made smooth regularly with a road roller. ▪ Mine road will be made sufficiently wide to keep two-way traffic. Regular water sprinkling will be done on mine road and haul road to avoid suspension of dust. ▪ All transportation within the mine lease area should be carried out directly under the supervision and control of management. ▪ The vehicles will be maintained in good working condition and checked thoroughly at least once a month by the competent person authorized for the purpose by the management. ▪ Navigation signs will be provided at each and every turning point up to the main road (wherever required). ▪ To avoid danger while reversing the vehicles especially at working place/loading points, stopper should be posted to properly guide reversing/spotting operating.

Organizational Structure of Environment Management Cell:

ORGANIZATION CHART OF ENVIRONMENTAL MONITORING CELL



EMP Cell structure

The EMP Cell is committed to ensuring environmental sustainability and compliance with regulatory requirements for the Stone Mining Project. With a clear structure, roles, and responsibilities, the EMP Cell is equipped to manage environmental impacts and promote sustainable practices.

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Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District Survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- i. If any tree felling than necessary permission shall be taken from the competent authority.
- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.
- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.
- l. Personal protective equipments such as clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Porabasuria Stone Mine of Shri Sanjla Besra, Village : Porabasuria, Thana : Shikaripara, Distt. : Dumka, Jharkhand (2.577 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I along with following specific conditions :

- I. In compliance of Office Memorandum no. IA-J-11013/20/2025-IA-P, dated 25.11.2025 of MoEF&CC, Govt. of India, the PAs will mandatorily obtain the Environmental Safeguard to be implemented from Jharkhand State Pollution Control Board within 30 days of issuance of EC or 31.01.2026 which ever is earlier.
- II. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "Ek Ped Ma Ke Naam" and the details of the same shall be uploaded in the MeriLIFE Portal

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(<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.

- III. The Deputy Commissioner through District Mining Officer will ensure that the mines owner of the respective leases to complete the plantation and maintenance in a time bound manner.
- IV. Suitable plant species of not less than 2 M height to be planted equal to twice the area of saplings proposed in Safety zone. This is to be planted in land available near mines and outside safety zone. This will be in addition to plantation in safety zone. Newly planted saplings to be maintained for minimum 3 years with Geo-Tagged photographs.
- V. Dedicated water tanker to be provided for mine. The tanker to be used for spraying water on haul road and for irrigating newly planted saplings only. Sprinkling to be done such that the haul road is kept moistened all the time with Geo-Tagged photographs.
- VI. Pre employment Occupational health check up for employees to be done and thereafter at annual interval for PLFT, Audiometry and other required tests .Summary findings of same to submitted along with 6 monthly compliance.
- VII. Ensure use of Quality PPEs equivalent not less than 3M make. Records of same to be maintained and submitted with 6 monthly compliance report with Geo-Tagged photographs.
- VIII. Keep vulnerable areas unmanned. Ensure rotation of duties. Records to be maintained and submitted with 6 monthly compliance report.
- IX. Failing of any of terms & conditions mentioned in EC can lead to revocation / cancellation of EC.

10. Manjhladih Stone Mine of Shri Sanjay Prasad Singh, Village : Manjhladih, Thana : Shikaripara, Distt. : Dumka, Jharkhand (2.93 Ha).

(Proposal no.: SIA/JH/MIN/ 564531 /2026)

Name of the consultant : Sathi Planners Pvt. Ltd., Ranchi, Jharkhand.

This is a new project which has been taken for appraisal on 17.01.2026.

Project Sector: 1(a) Mining of Minerals, Category: B1.

Application for Environmental Clearance (EC) after Terms of Reference (ToR).

The State Expert Appraisal Committee, Jharkhand deliberated the project during its 120th meeting held on 20.01.2025 - 24.01.2025 and SEIAA, Jharkhand has approved the ToRs in 120th meeting held on 28th & 29th January, 2025. TOR for the project was issued by SEIAA,

Jharkhand vide letter no. EC/SEIAA/2024-25/3449/2024/554, dated 31.01.2025. The final EIA / EMP submitted by PP to SEAC on 12.01.2026.

EC Application for: Proposed Capacity – 90,171 cum/annum or 2,43,462 TPA.

Project and Location Details:

Sl	Parameter	Details	
1	Project Name	: Manjhladih Stone Mine	
2	Applicant	: Shri Sanjay Prasad Singh	
3	Lease Address	: Mouza– Manjhladih, Thana No.- 06, Thana- Shikaripara, District- Dumka, State- Jharkhand	
4	Lease Area	: 2.93 Ha	Acres- 7.25 Acres
5	Cluster Details	: 8 no of mines including project site having total cluster area 41.84 Acres/16.93 Ha.	
6	Type of Land	: Non-Forest Raiyati Land	
7	Project Cost	: Rs. 138.99 Lakhs	Recurring: Rs. 40.31 Lakhs /year
8	EMP Budget	: Capital: Rs. 47.49 lakhs	Recurring: Rs. 11.26 Lakh / year
9	New or Expansion	: New	
10	Mineable Reserves	: cum.: 4,29,758 cum	Tonnes: 11,60,347 tones
11	Mine Life	: 5 years	
12	Man power	: 39	
13	Water Requirement	: 11.43 KLD {Manpower (39 nos.)- 1.755 KLD, Plantation (2705 nos.)- 8.115 KLD, Dust Suppression- 1.559 KLD.}	
14	Water Source	: By authorised hired water tankers	
15	DG Set / power	: 20 KVA DG Set	
16	Crusher	: No crusher	
17	Nearest Water Body	: Brahmani River- 6.56 km. in North direction of mine site.	
18	Nearest Habitation	: Haripur Village (60 m) in East Direction	
19	Nearest Rail Station	: Pakdaha Harinsing Railway station is at areal distance of 4.7 Km in NW direction.	
20	Nearest Air Port	: Deoghar Airport, approx. 92.65 km towards NW direction	
21	Nearest Forest	: More than 250 m, as per the letter of the Divisional Forest Officer, Dumka, Letter No. 1858 dated 12.08.2024.	
22	Road & Highways	: The distance of Approach Road is 0.300 Km, after that this road connects to village road. The village road connects to NH 114A.	
23	Approach Road	: The distance of Approach Road is 300m.	
24	SE Budget	: Rs. 6.2 Lakh (Need Based Survey)	

CO-ORDINATES

Pillar No.	Longitude	Latitude
1	087° 34' 42.27787780" E	24° 11' 44.22174858" N
2	087° 34' 42.87062099" E	24° 11' 43.87090500" N
3	087° 34' 43.16848657" E	24° 11' 44.31107757" N

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4	087° 34' 43.78692951" E	24° 11' 43.81857758" N
5	087° 34' 44.36016025" E	24° 11' 43.25521103" N
6	087° 34' 44.01982322" E	24° 11' 42.92447361" N
7	087° 34' 43.48150515" E	24° 11' 42.46650652" N
8	087° 34' 43.15191528" E	24° 11' 42.58439091" N
9	087° 34' 43.03175928" E	24° 11' 42.06765558" N
10	087° 34' 42.96215275" E	24° 11' 41.60977960" N
11	087° 34' 43.59200160" E	24° 11' 41.40632380" N
12	087° 34' 43.30387271" E	24° 11' 40.88966127" N
13	087° 34' 42.91275187" E	24° 11' 40.28676080" N
14	087° 34' 42.41719648" E	24° 11' 39.59518907" N
15	087° 34' 42.97463561" E	24° 11' 39.39903350" N
16	087° 34' 43.60426613" E	24° 11' 39.06264026" N
17	087° 34' 44.58763863" E	24° 11' 38.73126437" N
18	087° 34' 45.21162909" E	24° 11' 38.53645916" N
19	087° 34' 44.96876174" E	24° 11' 38.18660544" N
20	087° 34' 44.55577845" E	24° 11' 38.00256100" N
21	087° 34' 44.24170486" E	24° 11' 37.43858462" N
22	087° 34' 44.14111557" E	24° 11' 36.56432887" N
23	087° 34' 43.99786728" E	24° 11' 35.10415561" N
24	087° 34' 43.46644385" E	24° 11' 33.88135283" N
25	087° 34' 42.92577625" E	24° 11' 33.95020609" N
26	087° 34' 42.13654529" E	24° 11' 34.30834672" N
27	087° 34' 41.20111926" E	24° 11' 34.87344211" N
28	087° 34' 40.69975757" E	24° 11' 35.11628394" N
29	087° 34' 40.37317327" E	24° 11' 35.22244795" N
30	087° 34' 39.92034036" E	24° 11' 35.81995235" N
31	087° 34' 40.00874631" E	24° 11' 36.57868811" N
32	087° 34' 40.06408218" E	24° 11' 37.14025878" N
33	087° 34' 39.29627041" E	24° 11' 37.31672227" N
34	087° 34' 38.55950262" E	24° 11' 37.56061636" N
35	087° 34' 38.68935062" E	24° 11' 38.04597614" N
36	087° 34' 39.09897777" E	24° 11' 38.36861574" N
37	087° 34' 39.31482081" E	24° 11' 38.92667865" N
38	087° 34' 39.51313453" E	24° 11' 40.03881644" N
39	087° 34' 39.90909443" E	24° 11' 40.94707481" N
40	087° 34' 40.32876082" E	24° 11' 41.48255977" N
41	087° 34' 40.97742888" E	24° 11' 41.12179465" N
42	087° 34' 41.50283670" E	24° 11' 42.00604278" N
43	087° 34' 42.01080528" E	24° 11' 42.63371644" N
44	087° 34' 42.15974204" E	24° 11' 43.01367275" N
45	087° 34' 41.58050333" E	24° 11' 43.41545207" N
46	087° 34' 41.95756160" E	24° 11' 43.83903132" N

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LAND DETAILS

Khata no.	Plot no.
24	1309
44	1311
16	1310
13	1319
48	1313
20	1305 (P) & 1312

STATUTORY CLEARANCES

1	LOI / Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Officer, Dumka vide letter no. 1059/M, dated 13.09.2024.
2	CO	:	The CO, Shikaripara vide letter no. 779/Ra., dated 30.08.2024 has mentioned the plot no. of the project is not recorded as "Jungle-Jhari" in R.S. Khatiyani & Register II. During the appraisal it was seen from the KML that few houses at a distance of 60 meters from mining lease area. For which detailed Environmental Management Plan has been prepared and submitted.
3	DMO Cluster	:	DMO, Dumka vide memo no. 1119/M, dated 01.10.2024 certified that 01 other mining lease area (4.04 Acre) and 06 LoI (4.80 Acre, 7.39 Acre, 3.27 Acre, 4.45 Acre, 4.08 Acre & 6.56 Acre) exists within 500 meters radius from proposed project site and total area is 41.84 Acre.
4	DFO Wild Life	:	DFO, Wildlife Division, Hazaribag vide letter no. 1878, dated 27.08.2024 certified that the proposed project site is outside Eco Sensitive Zone of Parasnath & Topchanchi Wildlife Sanctuary.
5	DFO Territorial	:	Divisional Forest Officer, Dumka Forest Division vide letter no. 1858, dated 12.08.2024 certified that the distance of reserved / protected forest is more than 250 meters from proposed project site.
6	DSR	:	This project is mentioned in approved DSR of Dumka District (Sl. no. 66, Page no. 162).
7	Gram Sabha	:	Gram Sabha conducted on 31.07.2024.
8	Mine Plan Approval	:	Approved by District Mining Officer, Dumka vide Letter No. 1337/M, dated 09.12.2024.

9	Qualified Person	:	Shri Malay Kumar Mukhopadhyay was present in the meeting and affirmed that the mine plan has been prepared by him.
10	Baseline monitoring period	:	December, 2024 to February, 2025.
11	Public Hearing	:	Public hearing conducted on 06.08.2025.

Working Details

1	Mining Method	:	Opencast Fully mechanised method
2	Quarry Area	:	2.93 ha.
3	Waste Generation	:	37,400 cum.
4	Stripping Ratio	:	02:05
5	Working Days	:	300
6	Benches: size & No	:	6m x 6m
7	Elevation of Mine	:	159 m AMSL to 142 m AMSL
8	Ground Level Elevation	:	142 m AMSL
9	Ultimate Working Depth	:	111 m AMSL
10	Water Table	:	60 m AMSL (Source: JSAC Ground water Prospect Map)
11	Topography of Mine	:	The area represents gently sloping land
12	Explosive Requirement	:	79 kg/day Slurry Explosives
13	Diesel/Fuel requirement	:	HSD- 440 litres/ day(132 KL/year)

Production Details

Year	Production of Stone		Removal of O.B
	In cum	In tonnes	Cum
1st	78,594	2,12,202	37,400
2nd	86,336	2,33,107	0
3rd	86,849	2,34,492	0
4th	87,809	2,37,083	0
5th	90,171	2,43,462	0
Total	4,29,758	11,60,347	37,400

Land Use

Si. No.	Pattern of Utilization	Present/Existing land use pattern in (Ha.)	Proposed Land use for current plan period (Ha.)	Land used at the conceptual stage i.e. end of mine life in (Ha.)	Area to be converted in the conceptual period.
1	Mining	0	1.904	1.904	Water Body

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	Activities				
4	Dumping	0	0.250	0.250	Plantation
5	Garland drain	0	0.040	0.040	Plantation
6	Settling Tank	0	0.024	0.024	-
7	Safety Zone	0	0.702	0.702	Plantation
8	Unutilized	2.93	0.010	0.010	Plantation
Total		2.93	2.93	2.93	-

Green Belt Development

Year	Location	No. of Plants	Area to be Covered (Ha)	Species of Plant
1 st Year	Within 7.5m in Safety Zone Area	1755	0.702	Mixed plants i.e. Mango, Guava, Saguan, Jackfruit, Gulmohar, Teak, Gamhar, etc. as available in the locality
Conceptual	Dumping	625	0.250	
Conceptual	Garland drain	100	0.040	
Conceptual	Unutilized	25	0.010	
1 st Year	Approach Road	200	300 m	
Total		2,705	1.002	

Note- 2705 tree proposed to be planted out of which 10% plantation will be carried out i.e. (270 trees) as per MoEF&CC, Govt. of India Scheme "Ek Ped Ma Ke Naam".

BUDGETARY PROVISION (IN LAKHS)

PROJECT COST

Sl. No.	Head	Capital Cost Rs. in Lakhs	Recurring Cost Rs. in Lakhs
1.	Government Revenue (Dead Rent & Royalty)	30	--
2.	Cost of Infrastructure	5.0	0.5
3.	Mining Machineries owned by applicant <ul style="list-style-type: none"> • Wagon Drill -01 • Compressor-01 • Tippers 25 tons-03 • Diesel Pump-01 • D.G. Set-01 	82.35	--
	Mining Machineries on hired basis (Excavator- 01, Tipper-14)	--	38
4.	Lease Agreement (lump-sum)	--	1.81
5.	Statutory Clearance & Others	9.0	
6.	Contingency	12.64	
Total		138.99	40.31

ENVIRONMENT MANAGEMENT PLAN (EMP)

S. No.	EMP Activity	Capital Cost (₹ in Lakhs)	Recurring Cost / Year
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			(₹ in Lakhs)
1.	Air Pollution Control (Water sprinkling, greenbelt, dust suppression)	-	3.00
2.	Water Pollution Control (Garland drains, settling tank, rainwater harvesting)	4.00	1.00
3.	Noise & Vibration Control (acoustic enclosures, monitoring)	1.50	0.50
4.	Occupational Health & Safety (PPE, health camps, first aid, training)	1.50	1.00
5.	Greenbelt Development (plantation, maintenance)	7.69	0.76
6.	Environmental Monitoring (air, water, noise, soil)	-	1.00
7.	PH Compliance Budget	22.80	3.00
8.	Environment management plan (For habitation)	10.00	1.00
	Total	47.49	11.26

Environment Monitoring Plan

Monitoring Parameters and Frequency of Monitoring

S. no	Monitoring Parameters	No. of Locations	Frequency of Monitoring
1	Ambient Air: Ambient Air Quality at appropriate location for PM10, PM2.5, SO2, NOx in the vicinity of the mine area. In the surrounding area covering project site only.	4 Stations	Six Monthly
2	Water: Surface water sample in the vicinity of the Project area.	2 Surface water 2 Ground water	Six Monthly
3	Noise: Day & Night level Noise Monitoring.	4 stations	Six Monthly
4	Soil: Soil Monitoring, Qualitative and quantitative testing/analysis to check the soil fertility, porosity, texture, water holding capacity, etc.	2 stations	Six Monthly

Summary of Baseline Data:

Monitoring season - December 2024 - February 2025 for Winter season.

Type	Parameter
AAQ Parameter at 7 locations	PM ₁₀ = 63 mg/m ³ to 83 mg/m ³ PM _{2.5} = 34 mg/m ³ to 59 mg/m ³ SO ₂ = 5.50 mg/m ³ to 11.6 µg/m ³ NO _x = 14.2 mg/m ³ to 30.7 mg/m ³

Noise quality at 7 locations	Daytime 60.1 to 64.8 dB(A) Nighttime 38.4 to 40.5 dB(A)
Surface water at 2 locations	pH – 7.84 to 8.09 TDS – 422 to 523 mg/l Sulphate – 12.80 to 16.20 mg/l Fluoride – 0.22 mg/l to 0.28 mg/l
Ground water at 6 locations	Turbidity – 0.75 to 2.66 NTU pH – 7.51-7.97 Chloride - 61.2 to 43.1 mg/l Total Hardness – 96.7 to 308.1 mg/l TDS – 323 to 495 mg/l
Soil at 5 locations	pH – 6.0 to 6.9 Phosphorus - 6.1 to 6.8 kg/ha. Sodium - 15.8 to 17.6 mg/kg. Total potassium - 55.2 to 58.4 kg/ha.

Public Hearing (Action Plan) –

Sl. No.	Issue Raised	Commitment by Project Proponent (Brief)	Time Frame	Funds to be Spent	
				Capital (in Lakhs)	Recurring (in Lakhs)
1	A deep boring should be done for drinking water.	The project proponent assured that deep boring would be done at the place identified by the villagers for drinking water.	With in 6 months from the date of Environmental Clearance.	Capital Cost- Rs. 3.00 Lakhs	-
2	Construction of club house, provision of jerseys for players, repair of rural road.	The project proponent assured that club house will be constructed and jerseys for players will be provided, and the rural road will be regularly repaired as per the weather.	Club house construction – Within 12 months from the date of EC. Provision of Jerseys- Within 3 months Rural Road Repair & Maintenance- Immediate and continuous	Rs. 8.00 Lakhs (Capital) Rs. 0.50 Lakhs (One time)	Rs. 3.00 Lakhs per year. (Recurring per year)
3	Employment, road, and water facilities should be provided to the villagers	The project proponent assured that local people would be employed according to their qualifications and needs.	Initial Recruitment-Skil Development & Training (During mine development and construction phase 0-6 months). Continued Employment-	Rs. 1.00 Lakhs Rs. 4.00 Lakhs	-

			Wages & Salary (Throughout the life cycle of the mining project)		
4	The electricity problem should be resolved. The department should organize a support and inspection camp.	Electricity and Deep boring will be conducted at locations identified by the villagers for drinking water, and CSR funding will be provided for testing. Health check-up camps will be held every three months.	Deep bore well drinking water- Within 6 months. Water quality testing- Once every year. Health check-up support camps.	▪ Rs. 0.30 Lakhs ▪ As per CSR	-
5	Football jerseys should be given once a year.	The project proponent assured that football jerseys will be given once a year.	Once every year during the project life.	Under CSR activities	-
6	Indira Awas has not been received; the rural road should be paved	The project proponent assured that appropriate solutions would be found by contacting the Indira Awas Yojana department, and that the rural road would be regularly repaired as needed.	Coordination with Indira Awas Yojana department- Within 3 months from the date of EC. Rural Road repair & Maintenance- Immediate and continuous	No direct financial implication (facilitation/Liaison activity) ▪ As per above Rs. 2.00 Lakhs	-
7	Assistance should be provided to the sick, and a health center should be established.	Vehicles would be arranged to transport patients to the health center.	Medical Transport vehicle arrangement (within 3 months of project Commencement)	Rs. 2.00 Lakhs	-
8	wire fencing should be installed all around to prevent accidents.	Wire fencing will also be installed around the project area to prevent accidents.	• Installation of wire fencing around the project area to prevent accidents- within 3 months.	Rs. 2.00 Lakhs	-
Total				22.80	3.00

SE Need based Survey detail (included in CSR)

Zone	Coverage & Survey Details	Key Socio-Economic Observations	Workforce Characteristics	Priority Needs (Focused)	Proposed Budget (₹ Lakhs)	Implementation Timeline
0-2 km	Villages: 7 Households surveyed: 21 Population covered: 90 FGDs Conducted: 1	Balanced gender composition with presence of children and vulnerable groups. Proximity to mine increases sensitivity to dust, traffic and occupational health issues.	Low workforce participation (~35%); dominance of informal and "other" occupations indicating livelihood instability.	<ul style="list-style-type: none"> Preventive healthcare & health check-ups Local skill development linked to mine & allied activities 	3.2	Short-term & ongoing (Year 1-2)
2-5 km	Villages: 18 Households surveyed: 30 Population covered: 150 FGDs Conducted: 0	Moderate literacy levels with gender disparity; limited access to secondary education and structured training facilities.	Mixed workforce pattern; dependence on agriculture and daily wage labour.	<ul style="list-style-type: none"> Education support (secondary level / scholarships) Agricultural productivity support (inputs, awareness) 	3.0	Medium-term (Year 2-3)
Total (0-5 km)					6.2	

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Environment Management Practices to be followed:

Aspect	Mitigation Measures / Control Measures
Solid Waste Management	<ul style="list-style-type: none"> Solid waste management is important from both aesthetic and environmental points of view and will be managed as per the Solid Waste Management Rules, 2016. An O.B. (Overburden) dump area of 0.250 ha has been provided within the lease area. The O.B. dump area will accommodate 37,400 cum of overburden during the working plan period. After completion of the working plan, the generated O.B. will be backfilled into the stone quarry faces.

	<ul style="list-style-type: none"> • Part of the O.B. will be used for haul road and village road maintenance. • The remaining O.B. will be utilized for plantation activities. • No hazardous or other solid waste generation is envisaged from the stone mining activities.
Air Quality Management	<ul style="list-style-type: none"> • Wet drilling and use of sharp drill bits to minimize dust generation. • Controlled blasting using optimum explosive charge during favorable weather conditions. • Regular maintenance of diesel equipment and vehicles to reduce emissions. • Water sprinkling on haul roads, loading/unloading points, and working areas. • All transport vehicles will have valid PUC certificates. • Greenbelt and roadside plantation to act as dust and noise barriers.
Water Quality Management	<ul style="list-style-type: none"> • Mining will be confined only above the Ground Water Table (GWT). • Rainwater accumulated in the pit will be collected and pumped out regularly during monsoon. • Settling sump will be provided to desilt pumped out of mine-pit and collected through garland drain before discharge into natural drainage. • Garland and foot drains will be constructed around the quarry to control surface runoff. • Sewage from rest shelters will be treated through septic tank-soak pit systems. • Foot drain would be provided around the external dump, if any.
Noise Quality Management	<ul style="list-style-type: none"> • Mining activities will be restricted to daytime and carried out with controlled blasting techniques. • Acoustic enclosures and mufflers will be provided for drilling and DG set operations. • Regular maintenance of mining machinery to minimize vibration and noise. • Greenbelt development around the lease boundary to attenuate noise propagation. • Use of delayed blasting technique to minimize the adverse impact of vibration.
Soil Quality Management	<ul style="list-style-type: none"> • Topsoil will be carefully removed and stored separately for future use in plantation and reclamation. • Garland drains and retaining walls will prevent soil erosion and siltation. • Spillage of oil or fuel will be avoided; impervious flooring and oil traps provided near storage areas • Post-mining, the area will be rehabilitated using stored topsoil and native vegetation
Flora & Fauna management	<ul style="list-style-type: none"> • No tree felling will be undertaken without obtaining permission from the competent authority. • Greenbelt and plantation will be developed using native species along approach roads and lease periphery (7.5m Safety Zone). • Dust suppression measures will minimize impact on surrounding vegetation
Socio Economy:	<ul style="list-style-type: none"> • Priority employment to local people in mining and ancillary activities. • Community development initiatives such as tree plantation drives, road maintenance, and local infrastructure support. • Awareness programs on safety, hygiene, and environmental protection
Monitoring & Reporting:	<ul style="list-style-type: none"> • Periodic monitoring of air, water (ground & surface), noise, and soil quality as per CPCB and SPCB guidelines. • All monitoring reports will be submitted to statutory authorities as per the compliance schedule. • Corrective measures will be taken immediately if any deviation from standards is observed.

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Risk & Hazard	<p>Activities which are likely to create risk are: Temporary Storage of Explosives, Charging of Explosives, Blasting, Drilling, Bench Formation, Loading / Unloading, Transportation</p> <p>Proposed Preventive measures:</p> <ul style="list-style-type: none"> ▪ Overall slope angles of benches will be maintained at 45°. ▪ Unmanageable heights are not created. ▪ Loose sides are properly dressed. ▪ No loose stone or debris will be permitted to remain on the top of the bench or side of any excavation (Regulation 106(4) of MMR 1961). ▪ No undercutting of any face or sides will be permitted so as to cause any overhanging (Regulation 106(5) of MMR 1961) ▪ It will be ensured that the drilling equipment is suitable for the job. ▪ The person in charge of the drilling machine is competent to carry out the drilling operation; part of the training includes instructions to always face towards the open edge of the bench so that any inadvertent backward step is away from the edge.
Blasting & Handling of Explosives	<ul style="list-style-type: none"> ▪ Provision of portable rail fencing between the drilling operations and the edge of the bench ▪ Provision to attach a safety line to the drilling rig and provide a harness for the driller to wear. ▪ Restricted access to the area to all persons except those necessary for the drilling operation. ▪ Wet drilling will be carried out by constantly injecting a jet of water at the drill bit inside the hole, which prevents dust generation. ▪ In case due to any reason, wet drilling is not possible (due to non-availability of water), exhaust/ vacuum system will be provided which removes the dust from the drill hole continuously and discharges the same in a dust collector specially provided for the purpose. ▪ Drilling machine shall be fitted with dust suppression, collection and disposal arrangement. <ul style="list-style-type: none"> ▪ Blast hole geometry shall be properly designed. ▪ Blast site shall be wetted before and after blasting operations are completed. ▪ Only optimum quantity of permissible explosives shall be used so that the vibrations do not damage the structures/houses if the quarrying operations are close to human habitation. ▪ Blasting shall be conducted only during favourable weather conditions and only during the day time and permissible hours. ▪ While carrying out blasting operations near habitations, wide publicity will be given in the local area through announcement and other available media so that local people become aware of the blasting activities being undertaken in the area and take appropriate precautions. ▪ The vibrations should be monitored periodically in consultation with the local Mining authorities. ▪ Use of explosives is specialist work. Planning for a round of shots is necessary to ensure that the face is properly surveyed, holes correctly drilled, direction logged, the weight of explosive suitable for good fragmentation and the continuity of the initiator are but a few of the steps necessary to ensure its safe use. ▪ Proper and safe storage of explosives in approved and Licensed Magazine. ▪ Proper security system to prevent theft/ pilferage, unauthorized entry into Magazine area and checking authorized persons to prevent carrying of match box, lights, mobile phones, cigarette or Bidi etc. will be put in place. ▪ Explosives shall be conveyed in special containers.

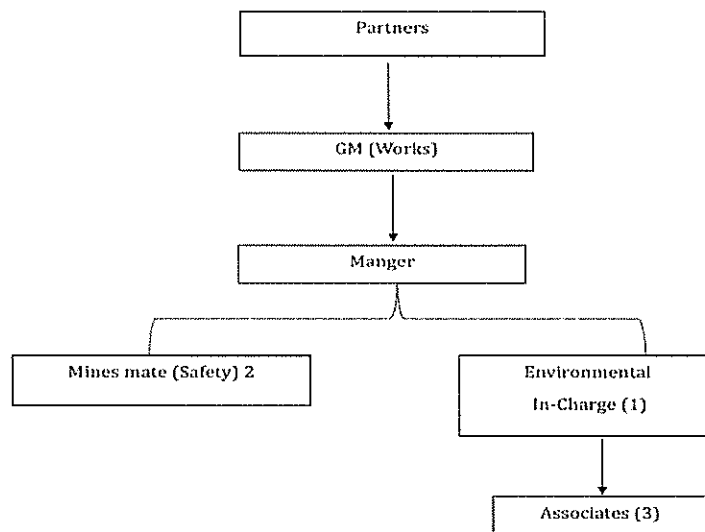
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	<ul style="list-style-type: none"> ▪ Explosives and detonators shall not be carried in the same container. ▪ The holes which have been charged with explosives will not be left unattended till blasting is completed.
Health Hazards	<p>Health hazards should be interpreted as being harmful dust and noise which is emitted during surface mining operations. All suitable steps and precautions will be undertaken to ensure minimum health hazard. Provision of use of Personal Protective Equipment (PPE) will be kept.</p> <p>The PPE shall be of good make and quality, wherever possible ISI certified, suitable for the hazard e.g. a dust respirator fitted with the correct filter to capture the particulate hazardous dust and maintained to recommended standards. As personal protective equipment only affords limited protection it will only be used as a last resort and as an interim arrangement until other steps are taken to reduce the risk of personal injury to an acceptable level</p>
Accident Prevention	<ul style="list-style-type: none"> ▪ Mine road shall be made smooth regularly with a road roller. ▪ Mine road will be made sufficiently wide to keep two-way traffic. Regular water sprinkling will be done on mine road and haul road to avoid suspension of dust. ▪ All transportation within the mine lease area should be carried out directly under the supervision and control of management. ▪ The vehicles will be maintained in good working condition and checked thoroughly at least once a month by the competent person authorized for the purpose by the management. ▪ Navigation signs will be provided at each and every turning point up to the main road (wherever required). ▪ To avoid danger while reversing the vehicles especially at working place/loading points, stopper should be posted to properly guide reversing/spotting operating.

Organizational Structure of Environment Management Cell:

ORGANIZATION CHART OF ENVIRONMENTAL MONITORING CELL



EMP Cell structure

The EMP Cell is committed to ensuring environmental sustainability and compliance with regulatory requirements for the Stone Mining Project. With a clear structure, roles, and responsibilities, the EMP Cell is equipped to manage environmental impacts and promote sustainable practices.

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Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District Survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- i. If any tree felling than necessary permission shall be taken from the competent authority.
- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.
- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.
- l. Personal protective equipments such as clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Manjhladih Stone Mine of Shri Sanjay Prasad Singh, Village : Manjhladih, Thana : Shikaripara, Distt. : Dumka, Jharkhand (2.93 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I along with following specific conditions :

- I. The mine will come in operation only after obtaining permission from DGMS for controlled and delayed blasting.
- II. In compliance of Office Memorandum no. IA-J-11013/20/2025-IA-P, dated 25.11.2025 of MoEF&CC, Govt. of India, the PAs will mandatorily obtain the Environmental Safeguard to be implemented from Jharkhand State Pollution Control Board within 30 days of issuance of EC or 31.01.2026 which ever is earlier.
- III. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked







green belt area as the part of tree plantation campaign "Ek Ped Ma Ke Naam" and the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.

- IV. The Deputy Commissioner through District Mining Officer will ensure that the mines owner of the respective leases to complete the plantation and maintenance in a time bound manner.
- V. Suitable plant species of not less than 2 M height to be planted equal to twice the area of saplings proposed in Safety zone. This is to be planted in land available near mines and outside safety zone. This will be in addition to plantation in safety zone. Newly planted saplings to be maintained for minimum 3 years with Geo-Tagged photographs.
- VI. Dedicated water tanker to be provided for mine. The tanker to be used for spraying water on haul road and for irrigating newly planted saplings only. Sprinkling to be done such that the haul road is kept moistened all the time with Geo-Tagged photographs.
- VII. Pre employment Occupational health check up for employees to be done and thereafter at annual interval for PLFT, Audiometry and other required tests. Summary findings of same to be submitted along with 6 monthly compliance.
- VIII. Ensure use of Quality PPEs equivalent not less than 3M make. Records of same to be maintained and submitted with 6 monthly compliance report with Geo-Tagged photographs.
- IX. Keep vulnerable areas unmanned. Ensure rotation of duties. Records to be maintained and submitted with 6 monthly compliance report.
- X. Failing of any of terms & conditions mentioned in EC can lead to revocation / cancellation of EC.

11. Barmasia Stone Mine of M/s Tudu Stone Works (Prop. : Shri Patras Tudu), Village : Barmasia, Thana : Shikaripara, Distt. : Dumka, Jharkhand (2.246 Ha).

(Proposal no.: SIA/JH/MIN/ 565271 /2026)

Name of the consultant : Sathi Planners Pvt. Ltd., Ranchi, Jharkhand.

This is a new project which has been taken for appraisal on 17.01.2026.

Project Sector: 1(a) Mining of Minerals, Category: B1.

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Application for Environmental Clearance (EC) after Terms of Reference (ToR).

The State Expert Appraisal Committee, Jharkhand deliberated the project during its 119th meeting held on 17.12.2024 - 22.12.2024 and SEIAA, Jharkhand has approved the ToRs in 119th meeting held on 30th & 31st December, 2024. TOR for the project was issued by SEIAA, Jharkhand vide letter no. EC/SEIAA/2024-25/3383/2024/509, dated 13.01.2025. The final EIA / EMP submitted by PP to SEAC on 13.01.2026.

EC Application for: Proposed Capacity – 58,547 cum/annum or 1,58,076 TPA.

Project and Location Details:

Sl	Parameter	Details
1	Project Name	: Barmasia Stone Mine
2	Applicant	: M/s Tudu Stone Works Shri Patras Tudu
3	Lease Address	: Mouza– Barmasia, Thana No.- 02, Thana- Shikaripara, District- Dumka, State- Jharkhand
4	Lease Area	: 2.246 Ha Acres- 5.55 Acres
5	Cluster Details	: 4 nos of mines including project site having total cluster area 20.82 Acres/8.42 Ha.
6	Type of Land	: Non-Forest Raiyati Land
7	Project Cost	: Rs. 103.79 Lakhs Recurring: Rs. 12.39 Lakh / year
8	EMP Budget	: Capital: Rs. 31.16 lakhs Recurring: Rs. 7.16 Lakh / year
9	New or Expansion	: New
10	Mineable Reserves	: cum.: 2,33,244 cum Tonnes: 6,29,759 tones
11	Mine Life	: 5 years
12	Man power	: 20
13	Water Requirement	: 8.372 KLD {Manpower (20 nos.)- 0.900 KLD, Plantation (1979 nos.)- 5.937 KLD, Dust Suppression- 1.535 KLD.}
14	Water Source	: By authorised hired water tankers
15	DG Set / power	: 60 KVA D.G. Set
16	Crusher	: No crusher
17	Nearest Water Body	: Brahmani River- 6 km. in North direction of mine site.
18	Nearest Habitation	: Barmasia Village (0. 673 Km) in NW Direction
19	Nearest Rail Station	: Pinargaria Railway station, approx. 2.7 km in NE direction.
20	Nearest Air Port	: Deoghar Airport, approx. 92 km towards West direction
21	Nearest Forest	: More than 250 m, as per the letter No. 2043 dated 03/09/2024 issued by the Divisional Forest Officer, Dumka.
22	Road & Highways	: The length of the approach road is 182 m. Thereafter, it connects to the village road, which continues for about 2.76 km, after which it connects to NH-114A (Dumka–Rampurhat Road).
23	Approach Road	: The distance of Approach Road is 182m.
24	SE Budget	: Rs. 6.2 Lakh (Need Based Survey)

CO-ORDINATES

Pillar No.	Latitude	Longitude
1	87° 01' 08.76112158" E	24° 11' 08.45702444" N
2	87° 01' 09.06234310" E	24° 11' 08.96736762" N
3	87° 01' 09.44780650" E	24° 11' 09.62043639" N
4	87° 01' 09.89714290" E	24° 11' 10.38172039" N
5	87° 01' 10.26146350" E	24° 11' 10.99896623" N
6	87° 01' 10.62578410" E	24° 11' 11.61621125" N
7	87° 01' 10.11369002" E	24° 11' 11.92735479" N
8	87° 01' 10.40212330" E	24° 11' 12.40801769" N
9	87° 01' 10.69055658" E	24° 11' 12.88868009" N
10	87° 01' 11.22624925" E	24° 11' 12.58712964" N
11	87° 01' 11.76194193" E	24° 11' 12.28557900" N
12	87° 01' 12.33847744" E	24° 11' 11.96103699" N
13	87° 01' 12.74762742" E	24° 11' 12.51822043" N
14	87° 01' 13.15677739" E	24° 11' 13.07540320" N
15	87° 01' 13.93936884" E	24° 11' 12.68835404" N
16	87° 01' 14.03850020" E	24° 11' 12.21765988" N
17	87° 01' 14.13763156" E	24° 11' 11.74696523" N
18	87° 01' 14.28119021" E	24° 11' 11.19654084" N
19	87° 01' 14.42474887" E	24° 11' 10.64611579" N
20	87° 01' 14.12518826" E	24° 11' 10.03072633" N
21	87° 01' 13.82562765" E	24° 11' 09.41533605" N
22	87° 01' 13.54488048" E	24° 11' 08.83859363" N
23	87° 01' 13.19161271" E	24° 11' 08.21163998" N
24	87° 01' 12.83834495" E	24° 11' 07.58468546" N
25	87° 01' 12.55998801" E	24° 11' 07.09067675" N
26	87° 01' 12.23149603" E	24° 11' 07.67522369" N
27	87° 01' 12.16334487" E	24° 11' 08.10619593" N
28	87° 01' 12.34586775" E	24° 11' 08.81501652" N
29	87° 01' 12.23149603" E	24° 11' 10.08366101" N
30	87° 01' 11.84728556" E	24° 11' 10.33573304" N
31	87° 01' 11.18125525" E	24° 11' 09.93063912" N
32	87° 01' 10.81906800" E	24° 11' 09.40405931" N
33	87° 01' 10.49964363" E	24° 11' 08.93965146" N
34	87° 01' 10.15883783" E	24° 11' 08.44415683" N
35	87° 01' 09.81803202" E	24° 11' 07.94866166" N
36	87° 01' 09.28957680" E	24° 11' 08.20284312" N

LAND DETAILS

Khata no.	Plot no.
58, 25, 49, 57, 15, 52, 30, 06, 59, 48, 33 & 20	1862, 1863, 1864, 1871, 1872, 1874, 1875, 1877, 1878, 1879, 1880, 1881, 1882, 1883, 1884

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STATUTORY CLEARANCES

1	LOI / Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Officer, Dumka vide letter no. 1088/M, dated 21.09.2024.
2	CO	:	The CO, Shikaripara vide letter no. 785/Ra., dated 02.09.2024 has mentioned the plot no. of the project is not recorded as "Jungle-Jhari" in R.S. Khatiyani & Register II.
3	DMO Cluster	:	DMO, Dumka vide memo no. 1154/M, dated 09.10.2024 certified that 03 other mining lease area (4.66 Acre, 6.90 Acre & 3.71 Acre) exists within 500 meters radius from proposed project site and total area is 20.82 Acre.
4	DFO Wild Life	:	DFO, Wildlife Division, Hazaribag vide letter no. 2004, dated 13.09.2024 certified that the proposed project site is outside Eco Sensitive Zone of Parasnath & Topchanchi Wildlife Sanctuary.
5	DFO Territorial	:	Divisional Forest Officer, Dumka Forest Division vide letter no. 2043, dated 03.09.2024 certified that the distance of reserved / protected forest is more than 250 meters from proposed project site.
6	DSR	:	This project is mentioned in approved DSR of Dumka District (Sl. no. 70, Page no. 163).
7	Gram Sabha	:	Gram Sabha conducted on 17.06.2024.
8	Mine Plan Approval	:	Approved by District Mining Officer, Dumka vide Letter No. 1271/M, dated 12.11.2024.
9	Qualified Person	:	Shri Malay Kumar Mukhopadhyay was present in the meeting and affirmed that the mine plan has been prepared by him.
10	Baseline monitoring period	:	December, 2024 to February, 2025.
11	Public Hearing	:	Public hearing conducted on 23.09.2025.

Working Details

1	Mining Method	:	Opencast Fully mechanised method
2	Quarry Area	:	2.246 ha.
3	Waste Generation	:	13,392 cum.
4	Stripping Ratio	:	01:05
5	Working Days	:	300

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6	Benches: size & No	:	2m x 3m
7	Elevation of Mine	:	94 m AMSL to 83 m AMSL
8	Ground Level Elevation	:	83 m AMSL
9	Ultimate Working Depth	:	53 m AMSL
10	Water Table	:	28 m AMSL (Source: JSAC Ground water Prospect Map)
11	Topography of Mine	:	The area represents a hillock land with rock mass of Basalt
12	Explosive Requirement	:	52.7 kg/day Slurry explosives
13	Diesel/Fuel requirement	:	HSD - 288 litre/day (86.4 KL/year)

Production Details

Year	Production of Stone		Removal of O.B
	In cum	In tonnes	Cum
1 st	58,547	1,58,076	13,392
2 nd	54,070	1,45,990	0
3 rd	45,000	1,21,499	0
4 th	36,400	98,281	0
5 th	39,110	1,05,596	0
Total	2,33,126	6,29,441	13,392

Land Use

Si. No.	Pattern of Utilization	Present/Existing land use pattern in (Ha.)	Proposed Land use for current plan period (Ha.)	Land used at the conceptual stage i.e. end of mine life in (Ha.)	Area to be converted in the conceptual period.
1	Mining Activities	0	1.463	1.463	Water Body
2	Office Store	0	0.001	0.001	Plantation
3	Dumping	0	0.150	0.150	Plantation
4	Garland drain	0	0.036	0.036	-
5	Settling Tank	0	0.012	0.012	-
6	Safety Zone	0	0.534	0.534	Plantation

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7	Unutilized	2.246	0.050	0.050	Plantation
Total		2.246	2.246	2.246	-

Green Belt Development

Year	Location	No. of Plants	Area to be Covered (Ha)	Species of Plant
1 st Year	Within 7.5m in Safety Zone Area	1355	0.534	Mixed plants i.e. Mango, Guava, Saguan, Jackfruit, Gulmohar, Teak, Gamhar, etc. as available in the locality
Conceptual	Dumping	375	0.150	
Conceptual	Office	3	0.001	
Conceptual	Unutilized	125	0.050	
1 st Year	Approach Road	121	182 m	
Total		1,979	1.498	

Note- 1979 tree proposed to be planted out of which 10% plantation will be carried out i.e. (197 trees) as per MoEF&CC, Govt. of India Scheme "Ek Ped Ma Ke Naam".

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

BUDGETARY PROVISION (IN LAKHS)

PROJECT COST

Sl. No.	Head	Capital Cost Rs. in Lakhs	Recurring Cost Rs. in Lakhs
1.	Government Revenue (Dead Rent& Royalty)	28.00	--
2.	Cost of Infrastructure	5.0	0.5
3.	Mining Machineries owned by applicant <ul style="list-style-type: none"> • Wagon Drill -01 • Compressor-01 • Tippers 25 tons-03 • Diesel Pump-01 • D.G. Set-01 	52.35	--
	Mining Machineries on hired basis (Excavator- 01, Tipper-3)	--	38
4.	Lease Agreement (lump-sum)	--	1.39
5.	Statutory Clearance & Others	9.0	
6.	Contingency	9.44	
Total		103.79	12.39

ENVIRONMENT MANAGEMENT PLAN (EMP)

S. No.	EMP Activity	Capital Cost (₹ in Lakhs)	Recurring Cost / Year (₹ in Lakhs)
1.	Air Pollution Control (Water sprinkling, greenbelt, dust suppression)	-	3.00
2.	Water Pollution Control (Garland drains, settling tank, rainwater harvesting)	4.00	1.00
3.	Noise & Vibration Control (acoustic enclosures, monitoring)	1.50	0.50
4.	Occupational Health & Safety (PPE, health camps, first aid, training)	1.50	1.00
5.	Greenbelt Development (plantation, maintenance)	6.66	0.66
6.	Environmental Monitoring (air, water, noise, soil)	-	1.00
7.	PH Compliance Budget	17.50	-
	Total	31.16	7.16

Environment Monitoring Plan**Monitoring Parameters and Frequency of Monitoring**

S. no	Monitoring Parameters	No. of Locations	Frequency of Monitoring
1	Ambient Air: Ambient Air Quality at appropriate location for PM10, PM2.5, SO2, NOx in the vicinity of the mine area. In the surrounding area covering project site only.	4 Stations	Six Monthly
2	Water: Surface water sample in the vicinity of the Project area.	2 Surface water 2 Ground water	Six Monthly
3	Noise: Day & Night level Noise Monitoring.	4 stations	Six Monthly
4	Soil: Soil Monitoring, Qualitative and quantitative testing/analysis to check the soil fertility, porosity, texture, water holding capacity, etc.	2 stations	Six Monthly

Summary of Baseline Data:

Monitoring season - December 2024 - February 2025 for Winter season.

Type	Parameter
AAQ Parameter at 7 locations	PM ₁₀ = 77.2 µg/m ³ to 20.2 µg/m ³ PM _{2.5} = 39.5 µg/m ³ to 20.2 µg/m ³ SO ₂ = 12.6 µg/m ³ to 5.51 µg/m ³ NO _x = 30.5 µg/m ³ to 15.3 µg/m ³
Noise quality at 7 locations	Daytime 44.6 to 42.7 dB(A) Nighttime 32.4 to 30.8 dB(A)
Surface water at 2 locations	pH – 6.72 to 6.86 TDS – 222 to 239 mg/l Sulphate – 26.8 to 27.5 mg/l Chloride – 17.3 mg/l to 17.6 mg/l
Ground water at 6 locations	pH – 6.81 to 7.12 Chloride – 25.7 to 28.4 mg/l Total Hardness – 132 to 144 mg/l TDS – 222 to 249 mg/l
Soil at 5 locations	pH – 6.29 to 7.18 Conductivity – 0.72 to 0.85 µS/cm Organic Matter – 0.49 to 0.56 % Sodium – 6.29 to 7.81 mg/kg Nitrogen – 263 to 364kg/ha

Public Hearing (Action Plan) –

Sl. No.	Issue Raised	Commitment by Project Proponent (Brief)	Time Frame	Funds to be Spent
				Capital (in Lakhs)
1	Local villagers should be given priority in employment, and financial support should be provided for organizing football matches.	The project proponent assured that villagers would be given priority in employment according to their qualifications and needs, and financial support would also be provided for organizing football matches.	Initial Recruitment-Skill Development & Training 0-6 Months.	Rs. 1.00 Lakh
			Continued Employment- Wages & Salary (Throughout the life cycle of the mining project)	Rs. 4.00 Lakhs
			Support for Football matches- Within 6 months	Rs. 1.00 Lakh
2	Primary healthcare facilities/medical camps should be provided.	A vehicle or ambulance would be provided to transport villagers to the hospital during illness, and health	Transport facilities for medical emergencies- Continued throughout project life. Medical Camps-	Rs. 6.00 Lakhs

		check-up camps would be organized every three months.	Within 6 months	
3	Deep boring should be done to solve the water problem.	The project proponent assured that deep boring would be done at the location identified by the villagers.	Drinking Water Problem- Deep Boring- Within 6 months	Rs. 3.00 Lakhs
	To solve the water problem, deep boring should be done, and water should be provided through tankers for weddings and other functions. Also, arrangements should be made to provide electricity to Rangda Tola in Barmasia.	The project proposer assured that: Deep boring will be done at the location identified by the villagers. Water tankers will be arranged for weddings and other functions, and the relevant department will be contacted to find a suitable solution for the electricity problem.	Drinking Water Problem- Deep Boring- Within 6 months. Water requirement during weddings- Water tankers- As and when required. Electricity supply to Rangda Tola, Barmasia-	As per above Rs. 0.50 Lakhs As per requirement under CSR/
4				
5	Appropriate arrangements should be made to pump out water from the closed mine so that the water can be used for agricultural purposes.	The project proponent assured that under CSR, a machine would be installed to pump out water from the closed mine so that this water can be used for agricultural purposes.	Utilization of water from closed mine for agriculture- within 6 months	Rs. 2.00 Lakhs
Total				17.50

SE Need based Survey detail (included in CSR)

Zone	Coverage & Survey Details	Key Socio-Economic Observations	Workforce Characteristics	Priority Needs (Focused)	Proposed Budget (₹ Lakhs)	Implementation Timeline
0-2 km	Villages: 5 Households surveyed: 18 Population covered: 90 FGDs Conducted: 1	Balanced gender composition with presence of children and vulnerable groups.	Low workforce participation (~35%); dominance of informal and "other" occupations	<ul style="list-style-type: none"> Preventive healthcare & health check-ups Local skill development linked to mine 	3.1	Short-term & ongoing (Year 1-2)

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		Proximity to mine increases sensitivity to dust, traffic and occupational health issues.	indicating livelihood instability.	& allied activities		
2–5 km	Villages: 12 Households surveyed: 22 Population covered: 110 FGDs Conducted: 0	Moderate literacy levels with gender disparity; limited access to secondary education and structured training facilities.	Mixed workforce pattern; dependence on agriculture and daily wage labour.	<ul style="list-style-type: none"> • Education support (secondary level / scholarships) • Agricultural productivity support (inputs, awareness) 	3.1	Medium-term (Year 2–3)
Total (0–5 km)					6.2	

Environment Management Practices to be followed:

Aspect	Mitigation Measures / Control Measures
Solid Waste Management	<ul style="list-style-type: none"> • Solid waste management is important from both aesthetic and environmental points of view and will be managed as per the Solid Waste Management Rules, 2016. • An O.B. (Overburden) dump area of 0.150 ha has been provided within the lease area. • The O.B. dump area will accommodate 13,392 cum of overburden during the working plan period. • After completion of the working plan, the generated O.B. will be backfilled into the stone quarry faces. • Part of the O.B. will be used for haul road and village road maintenance. • The remaining O.B. will be utilized for plantation activities. <p>No hazardous or other solid waste generation is envisaged from the stone mining activities.</p>
Air Quality Management	<ul style="list-style-type: none"> • Wet drilling and use of sharp drill bits to minimize dust generation. • Controlled blasting using optimum explosive charge during favorable weather conditions. • Regular maintenance of diesel equipment and vehicles to reduce emissions. • Water sprinkling on haul roads, loading/unloading points, and working areas. • All transport vehicles will have valid PUC certificates. • Greenbelt and roadside plantation to act as dust and noise barriers.

Water Quality Management	<ul style="list-style-type: none"> • Mining will be confined only above the Ground Water Table (GWT). • Rainwater accumulated in the pit will be collected and pumped out regularly during monsoon. • Settling sump will be provided to desilt pumped out of mine-pit and collected through garland drain before discharge into natural drainage. • Garland and foot drains will be constructed around the quarry to control surface runoff. • Sewage from rest shelters will be treated through septic tank–soak pit systems. • Foot drain would be provided around the external dump, if any.
Noise Quality Management	<ul style="list-style-type: none"> • Mining activities will be restricted to daytime and carried out with controlled blasting techniques. • Acoustic enclosures and mufflers will be provided for drilling and DG set operations. • Regular maintenance of mining machinery to minimize vibration and noise. • Greenbelt development around the lease boundary to attenuate noise propagation. • Use of delayed blasting technique to minimize the adverse impact of vibration.
Soil Quality Management	<ul style="list-style-type: none"> • Topsoil will be carefully removed and stored separately for future use in plantation and reclamation. • Garland drains and retaining walls will prevent soil erosion and siltation. • Spillage of oil or fuel will be avoided; impervious flooring and oil traps provided near storage areas • Post-mining, the area will be rehabilitated using stored topsoil and native vegetation
Flora & Fauna management	<ul style="list-style-type: none"> • No tree felling will be undertaken without obtaining permission from the competent authority. • Greenbelt and plantation will be developed using native species along approach roads and lease periphery (7.5m Safety Zone). • Dust suppression measures will minimize impact on surrounding vegetation
Socio Economy:	<ul style="list-style-type: none"> • Priority employment to local people in mining and ancillary activities. • Community development initiatives such as tree plantation drives, road maintenance, and local infrastructure support. • Awareness programs on safety, hygiene, and environmental protection
Monitoring & Reporting:	<ul style="list-style-type: none"> • Periodic monitoring of air, water (ground & surface), noise, and soil quality as per CPCB and SPCB guidelines. • All monitoring reports will be submitted to statutory authorities as

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		<p>per the compliance schedule.</p> <ul style="list-style-type: none"> • Corrective measures will be taken immediately if any deviation from standards is observed.
Risk & Hazard		<p>Activities which are likely to create risk are: Temporary Storage of Explosives, Charging of Explosives, Blasting, Drilling, Bench Formation, Loading / Unloading, Transportation</p> <p>Proposed Preventive measures:</p> <ul style="list-style-type: none"> ▪ Overall slope angles of benches will be maintained at 45°. ▪ Unmanageable heights are not created. ▪ Loose sides are properly dressed. ▪ No loose stone or debris will be permitted to remain on the top of the bench or side of any excavation (Regulation 106(4) of MMR 1961). ▪ No undercutting of any face or sides will be permitted so as to cause any overhanging (Regulation 106(5) of MMR 1961) ▪ It will be ensured that the drilling equipment is suitable for the job. ▪ The person in charge of the drilling machine is competent to carry out the drilling operation; part of the training includes instructions to always face towards the open edge of the bench so that any inadvertent backward step is away from the edge. ▪ Provision of portable rail fencing between the drilling operations and the edge of the bench ▪ Provision to attach a safety line to the drilling rig and provide a harness for the driller to wear. ▪ Restricted access to the area to all persons except those necessary for the drilling operation. ▪ Wet drilling will be carried out by constantly injecting a jet of water at the drill bit inside the hole, which prevents dust generation. ▪ In case due to any reason, wet drilling is not possible (due to non-availability of water), exhaust/ vacuum system will be provided which removes the dust from the drill hole continuously and discharges the same in a dust collector specially provided for the purpose. ▪ Drilling machine shall be fitted with dust suppression, collection and disposal arrangement.
Blasting & Handling of Explosives		<ul style="list-style-type: none"> ▪ Blast hole geometry shall be properly designed. ▪ Blast site shall be wetted before and after blasting operations are completed. ▪ Only optimum quantity of permissible explosives shall be used so that the vibrations do not damage the structures/houses if the quarrying operations are close to human habitation. ▪ Blasting shall be conducted only during favourable weather

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	<p>conditions and only during the day time and permissible hours.</p> <ul style="list-style-type: none"> ▪ While carrying out blasting operations near habitations, wide publicity will be given in the local area through announcement and other available media so that local people become aware of the blasting activities being undertaken in the area and take appropriate precautions. ▪ The vibrations should be monitored periodically in consultation with the local Mining authorities. ▪ Use of explosives is specialist work. Planning for a round of shots is necessary to ensure that the face is properly surveyed, holes correctly drilled, direction logged, the weight of explosive suitable for good fragmentation and the continuity of the initiator are but a few of the steps necessary to ensure its safe use. ▪ Proper and safe storage of explosives in approved and Licensed Magazine. ▪ Proper security system to prevent theft/ pilferage, unauthorized entry into Magazine area and checking authorized persons to prevent carrying of match box, lights, mobile phones, cigarette or Bidi etc. will be put in place. ▪ Explosives shall be conveyed in special containers. ▪ Explosives and detonators shall not be carried in the same container. ▪ The holes which have been charged with explosives will not be left unattended till blasting is completed.
Health Hazards	<p>Health hazards should be interpreted as being harmful dust and noise which is emitted during surface mining operations. All suitable steps and precautions will be undertaken to ensure minimum health hazard. Provision of use of Personal Protective Equipment (PPE) will be kept. The PPE shall be of good make and quality, wherever possible ISI certified, suitable for the hazard e.g. a dust respirator fitted with the correct filter to capture the particulate hazardous dust and maintained to recommended standards. As personal protective equipment only affords limited protection it will only be used as a last resort and as an interim arrangement until other steps are taken to reduce the risk of personal injury to an acceptable level</p>
Accident Prevention	<ul style="list-style-type: none"> ▪ Mine road shall be made smooth regularly with a road roller. ▪ Mine road will be made sufficiently wide to keep two-way traffic. Regular water sprinkling will be done on mine road and haul road to avoid suspension of dust. ▪ All transportation within the mine lease area should be carried out directly under the supervision and control of management. ▪ The vehicles will be maintained in good working condition and checked thoroughly at least once a month by the competent person authorized for the purpose by the management.

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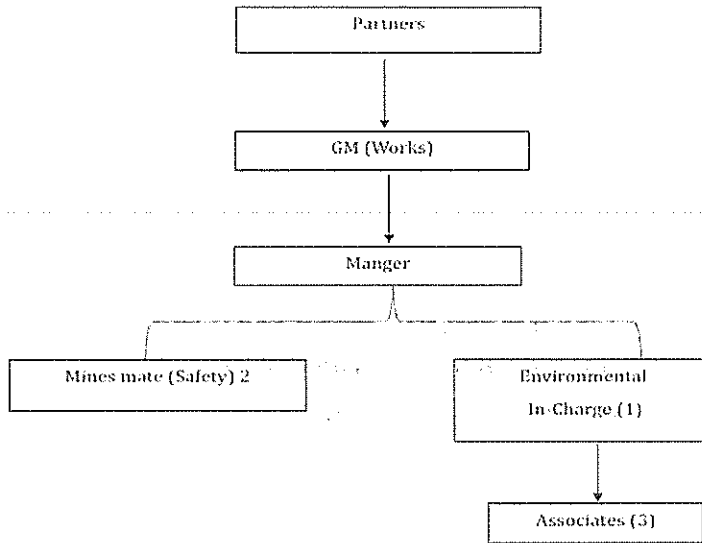
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	<ul style="list-style-type: none"> ▪ Navigation signs will be provided at each and every turning point up to the main road (wherever required). ▪ To avoid danger while reversing the vehicles especially at working place/loading points, stopper should be posted to properly guide reversing/spotting operating.

Organizational Structure of Environment Management Cell:

ORGANIZATION CHART OF ENVIRONMENTAL MONITORING CELL



EMP Cell structure

The EMP Cell is committed to ensuring environmental sustainability and compliance with regulatory requirements for the Stone Mining Project. With a clear structure, roles, and responsibilities, the EMP Cell is equipped to manage environmental impacts and promote sustainable practices.

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District Survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.



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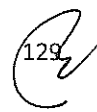
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- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- i. If any tree felling than necessary permission shall be taken from the competent authority.
- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.
- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.
- l. Personal protective equipments such as clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Barmasia Stone Mine of M/s Tudu Stone Works (Prop. : Shri Patras Tudu), Village : Barmasia, Thana : Shikaripara, Distt. : Dumka, Jharkhand (2.246 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I along with following specific conditions :

- I. In compliance of Office Memorandum no. IA-J-11013/20/2025-IA-P, dated 25.11.2025 of MoEF&CC, Govt. of India, the PAs will mandatorily obtain the Environmental Safeguard to be implemented from Jharkhand State Pollution Control Board within 30 days of issuance of EC or 31.01.2026 which ever is earlier.
- II. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "Ek Ped Ma Ke Naam" and the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.
- III. The Deputy Commissioner through District Mining Officer will ensure that the mines owner of the respective leases to complete the plantation and maintenance in a time bound manner.
- IV. Suitable plant species of not less than 2 M height to be planted equal to twice the area of saplings proposed in Safety zone. This is to be planted in land available near mines and outside safety zone. This will be in addition to plantation in safety zone. Newly planted saplings to be maintained for minimum 3 years with Geo-Tagged photographs.
- V. Dedicated water tanker to be provided for mine. The tanker to be used for spraying water on haul road and for irrigating newly planted saplings only. Sprinkling to be done such that the haul road is kept moistened all the time with Geo-Tagged photographs.
- VI. Pre employment Occupational health check up for employees to be done and thereafter at annual interval for PLFT, Audiometry and other required tests .Summary findings of same to submitted along with 6 monthly compliance.


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- VII. Ensure use of Quality PPEs equivalent not less than 3M make. Records of same to be maintained and submitted with 6 monthly compliance report with Geo-Tagged photographs.
- VIII. Keep vulnerable areas unmanned. Ensure rotation of duties. Records to be maintained and submitted with 6 monthly compliance report.
- IX. Failing of any of terms & conditions mentioned in EC can lead to revocation / cancellation of EC.

12. Aamchuwan Stone Mine of Partners : Shri Mihir Kumar Mandal & Shri Bablu Mondal, Village : Aamchuwan, Thana : Shikaripara, Distt. : Dumka, Jharkhand (2.869 Ha).

(Proposal no.: SIA/JH/MIN/ 565139 /2026)

Name of the consultant : Sathi Planners Pvt. Ltd., Ranchi, Jharkhand.

This is a new project which has been taken for appraisal on 17.01.2026.

Project Sector: 1(a) Mining of Minerals, Category: B1.

Application for Environmental Clearance (EC) after Terms of Reference (ToR).

The State Expert Appraisal Committee, Jharkhand deliberated the project during its 119th meeting held on 17.12.2024 - 22.12.2024 and SEIAA, Jharkhand has approved the ToRs in 119th meeting held on 30th & 31st December, 2024. TOR for the project was issued by SEIAA, Jharkhand vide letter no. EC/SEIAA/2024-25/3378/2024/507, dated 13.01.2025. The final EIA / EMP submitted by PP to SEAC on 13.01.2026.

EC Application for: Proposed Capacity – 69,576 cum/annum or 1,87,855 TPA.

Project and Location Details:

Sl	Parameter	Details	
1	Project Name	: Aamchuwan Stone Mine	
2	Lessee	: Shri Mihir Kumar Mondal & Shri Bablu Mondal (Partners)	
3	Lease Address	: Mouza– Aamchuwan, Thana- Shikaripara, District- Dumka, State- Jharkhand	
4	Lease Area	: 2.869 Ha	Acres- 7.09 Acres
5	Cluster Details	: 3 no of mines including project site having total cluster area 19.23 Acres/7.78 Ha.	
6	Type of Land	: Non-Forest Raiyati Land	
7	Project Cost	: Rs. 134.58 Lakhs	Recurring: Rs. 14322 Lakh/year
8	EMP Budget	: Capital: Rs. 53.35 lakhs	Recurring: Rs. 9.68 Lakh / year

9	New or Expansion	:	New
10	Mineable Reserves	:	cum.: 3,18,073 cum Tonnes: 8,58,798 tones
11	Mine Life	:	5 years
12	Man power	:	21
13	Water Requirement	:	14.38 KLD {Manpower (21 nos.)- 0.945 KLD, Plantation (3887 nos.)- 11.661 KLD, Dust Suppression- 2.28 KLD.}
14	Water Source	:	By authorised hired water tankers
15	DG Set / power	:	60 KVA DG Set
16	Crusher	:	No crusher
17	Nearest Water Body	:	Brahmani River- 4.16 km. in North direction of mine site.
18	Nearest Habitation	:	Aamchuwan Village (0. 100 Km) in NW Direction (EMP Prepared)
19	Nearest Rail Station	:	Pinargaria Railway station, approx. 4.30 km in NE direction.
20	Nearest Air Port	:	Deoghar Airport, approx. 98 km towards West direction
21	Nearest Forest	:	More Than 250m, as per Division Forest Officer NOC, letter no.- 1993 Dated-31/08/2024.
22	Road & Highways	:	The distance of Approach Road is 0.28 Km, after that this road connects to village road. The village road continues for 1.81 km and after this road connects to MDR.
23	Approach Road	:	The distance of Approach Road is 280m.
24	SE Budget	:	Rs. 6.0 Lakh (Need Based Survey)

CO-ORDINATES

Point ID	Latitude	Longitude
1	24° 10' 42.42296724" N	087° 37' 23.08087618" E
2	24° 10' 41.96001143" N	087° 37' 24.01622477" E
3	24° 10' 41.75457353" N	087° 37' 24.51253084" E
4	24° 10' 41.37145473" N	087° 37' 25.82520380" E
5	24° 10' 41.15946597" N	087° 37' 25.79249529" E
6	24° 10' 40.96587629" N	087° 37' 25.52231271" E
7	24° 10' 41.17317239" N	087° 37' 25.27941962" E
8	24° 10' 40.89620114" N	087° 37' 24.79027250" E
9	24° 10' 40.49641612" N	087° 37' 24.49374777" E
10	24° 10' 40.35912730" N	087° 37' 24.66413029" E
11	24° 10' 40.25202608" N	087° 37' 24.56858323" E
12	24° 10' 39.91656954" N	087° 37' 24.88053916" E
13	24° 10' 40.13358811" N	087° 37' 25.10648988" E
14	24° 10' 39.87122001" N	087° 37' 25.30793500" E
15	24° 10' 40.37124923" N	087° 37' 25.96921513" E
16	24° 10' 40.28369798" N	087° 37' 26.05413424" E
17	24° 10' 40.36322589" N	087° 37' 26.50768444" E
18	24° 10' 40.19672040" N	087° 37' 26.22239500" E

19	24° 10' 40.06918169" N	087° 37' 26.63926308" E
20	24° 10' 39.83900083" N	087° 37' 26.79354008" E
21	24° 10' 39.83246784" N	087° 37' 26.96753655" E
22	24° 10' 39.94797223" N	087° 37' 27.23417427" E
23	24° 10' 39.81415031" N	087° 37' 27.66937163" E
24	24° 10' 39.78311446" N	087° 37' 27.97533605" E
25	24° 10' 39.35366245" N	087° 37' 27.93675558" E
26	24° 10' 39.14812522" N	087° 37' 28.63109097" E
27	24° 10' 38.10556817" N	087° 37' 28.58091008" E
28	24° 10' 37.93524684" N	087° 37' 29.02036942" E
29	24° 10' 37.90758113" N	087° 37' 29.24162820" E
30	24° 10' 37.36931426" N	087° 37' 29.47832018" E
31	24° 10' 36.83104728" N	087° 37' 29.71501516" E
32	24° 10' 36.89592182" N	087° 37' 30.19679438" E
33	24° 10' 36.57488973" N	087° 37' 30.28362756" E
34	24° 10' 35.87746601" N	087° 37' 30.31208217" E
35	24° 10' 35.46413838" N	087° 37' 30.35377389" E
36	24° 10' 35.35059295" N	087° 37' 30.09195057" E
37	24° 10' 35.33666981" N	087° 37' 29.90412328" E
38	24° 10' 35.31305145" N	087° 37' 29.28008111" E
39	24° 10' 35.11003620" N	087° 37' 29.22365299" E
40	24° 10' 34.91475218" N	087° 37' 29.21662071" E
41	24° 10' 34.77302133" N	087° 37' 29.08207202" E
42	24° 10' 34.86810273" N	087° 37' 28.57168246" E
43	24° 10' 34.40169137" N	087° 37' 28.13887991" E
44	24° 10' 34.48261632" N	087° 37' 27.80904563" E
45	24° 10' 34.26709001" N	087° 37' 27.21884071" E
46	24° 10' 34.42986809" N	087° 37' 27.20457250" E
47	24° 10' 34.25747544" N	087° 37' 26.68426094" E
48	24° 10' 34.63709035" N	087° 37' 26.61425123" E
49	24° 10' 34.54592446" N	087° 37' 26.19577713" E
50	24° 10' 35.46117444" N	087° 37' 25.86058038" E
51	24° 10' 36.37642020" N	087° 37' 25.25238589" E
52	24° 10' 37.32459509" N	087° 37' 25.12038639" E
53	24° 10' 38.27046598" N	087° 37' 24.71538685" E
54	24° 10' 39.14140238" N	087° 37' 24.14850425" E
55	24° 10' 39.67186916" N	087° 37' 23.72704113" E
56	24° 10' 40.43852809" N	087° 37' 23.43230239" E
57	24° 10' 41.30614269" N	087° 37' 22.28370210" E
58	24° 10' 42.15378884" N	087° 37' 21.53509004" E
59	24° 10' 41.94215342" N	087° 37' 21.35207760" E
60	24° 10' 42.05639669" N	087° 37' 21.15599259" E

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61	24° 10' 42.17293263" N	087° 37' 20.83602400" E
62	24° 10' 42.96602287" N	087° 37' 20.13310718" E
63	24° 10' 43.78643191" N	087° 37' 20.80051526" E
64	24° 10' 44.88568613" N	087° 37' 21.80033440" E
65	24° 10' 44.35936192" N	087° 37' 22.53575451" E
66	24° 10' 43.83303719" N	087° 37' 22.90716982" E
67	24° 10' 42.98356567" N	087° 37' 22.43108137" E

LAND DETAILS

Khata no.	Plot no.
34, 23, 08, 22, 21, 37, 16, 52, 51, 39, 62 & 33	34, 577/P, 578, 579, 586, 587, 588, 589, 590, 591, 592, 593/P, 594, 595, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606/P, 607/P, 608/P, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 637

STATUTORY CLEARANCES

1	LOI / Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Officer, Dumka vide letter no. 1145/M, dated 08.10.2024.
2	CO	:	The CO, Shikaripara vide letter no. 719/Ra., dated 12.08.2024 has mentioned the plot no. of the project is not recorded as "Jungle-Jhari" in R.S. Khatiyani & Register II. During the appraisal it was seen from the KML that few houses at a distance of 100 meters from mining lease area. For which detailed Environmental Management Plan has been prepared and submitted.
3	DMO Cluster	:	DMO, Dumka vide memo no. 1290/M, dated 19.11.2024 certified that 02 other mining lease area (5.30 Acre & 6.84 Acre) exists within 500 meters radius from proposed project site and total area is 19.23 Acre.
4	DFO Wild Life	:	DFO, Wildlife Division, Hazaribag vide letter no. 2259, dated 30.10.2024 certified that the proposed project site is outside Eco Sensitive Zone of Parasnath & Topchanchi Wildlife Sanctuary.
5	DFO Territorial	:	Divisional Forest Officer, Dumka Forest Division vide letter no. 1993, dated 31.08.2024 certified that the distance of reserved / protected forest is more than 250 meters from proposed project site.

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6	DSR	:	This project is mentioned in approved DSR of Dumka District (Sl. no. 06).
7	Gram Sabha	:	Gram Sabha conducted on 30.05.2024.
8	Mine Plan Approval	:	Approved by District Mining Officer, Dumka vide Letter No. 1261/M, dated 05.11.2024.
9	Qualified Person	:	Shri Malay Kumar Mukhopadhyay was present in the meeting and affirmed that the mine plan has been prepared by him.
10	Baseline monitoring period	:	October, 2024 to December, 2024.
11	Public Hearing	:	Public hearing conducted on 09.09.2025.

Working Details

1	Mining Method	:	Opencast Fully mechanised method
2	Quarry Area	:	2.869 ha.
3	Waste Generation	:	31,350 cum.
4	Stripping Ratio	:	09:20
5	Working Days	:	300
6	Benches: size & No	:	6m x 6m
7	Elevation of Mine	:	88 m AMSL to 81 m AMSL
8	Ground Level Elevation	:	81 m AMSL
9	Ultimate Working Depth	:	50 m AMSL
10	Water Table	:	25 m AMSL (Source: JSAC Ground water Prospect Map)
11	Topography of Mine	:	The area represents a hillock land with rock mass of Basalt
12	Explosive Requirement	:	64.15 kg/day Slurry explosives
13	Diesel/Fuel requirement	:	HSD – 301.2 litre/day (90.36 KL/year)

Production Details

Year	Production of Stone / Year (Cum)	Production of Stone / Year (Tonnes)	Removal of O.B. (Cum)
1st	69576	187855	31350
2nd	62130	167751	0
3rd	61830	166940	0
4th	62430	168562	0

5th	62107	167689	0
Total	318073	858798	31350

Land Use

Si. No.	Pattern of Utilization	Present/Existing land use pattern in (Ha.)	Proposed Land use for current plan period (Ha.)	Land used at the conceptual stage i.e. end of mine life in (Ha.)	Area to be converted in the conceptual period.
1	Mining Activities	0	1.832	1.325	Water Body
2	Dead Benches	0	0.000	0.507	Backfill & Plantation
3	Office Store	0	0.001	0.001	Plantation
4	Dumping	0	0.097	0.097	Plantation
5	Garland drain	0	0.055	0.055	-
6	Settling Tank	0	0.010	0.010	-
7	Safety Zone	0	0.755	0.755	Plantation
8	Unutilized	2.869	0.119	0.119	Plantation
Total		2.869	2.869	2.869	-

Green Belt Development

Year	Location	No. of Plants	Area to be Covered (Ha)	Species of Plant
1 st Year	Within 7.5m in Safety Zone Area	1888	0.755	Mixed plants i.e. Mango, Guava, Saguan, Jackfruit, Gulmohar, Teak, Gamhar, etc. as available in the locality
Conceptual	Dead Benches	1268	0.507	
Conceptual	Dumping	243	0.097	
Conceptual	Office	3	0.001	
Conceptual	Unutilized	298	0.119	
1 st Year	Approach Road	187	280 m	
Total		3,887	1.479	

Note- 3887 tree proposed to be planted out of which 10% plantation will be carried out i.e. (388 trees) as per MoEF&CC, Govt. of India Scheme "Ek Ped Ma Ke Naam".

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development,

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Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

**BUDGETARY PROVISION (IN LAKHS)
PROJECT COST**

Sl. No.	Head	Capital Cost Rs. in Lakhs	Recurring Cost Rs. in Lakhs
1.	Government Revenue (Dead Rent & Royalty)	25.00	-
2.	Cost of Infrastructure	5.0	0.5
3.	Mining Machineries owned by applicant <ul style="list-style-type: none"> • Wagon Drill - 01 • Compressor - 01 • Tippers 25 tonnes - 3 • Diesel Pump - 01 • D.G. Set - 01 	87.35	-
	Mining Machineries on hired basis (Excavator - 01, Tipper - 04)	-	13.0
4.	Lease Agreement (lump-sum)	-	0.72
5.	Statutory Clearance & Others	5.0	-
6.	Contingency	12.23	-
Total		134.58	14.22

ENVIRONMENT MANAGEMENT PLAN (EMP)

S. No.	EMP Activity	Capital Cost (₹ in Lakhs)	Recurring Cost / Year (₹ in Lakhs)
1.	Air Pollution Control (Water sprinkling, greenbelt, dust suppression)	-	3.00
2.	Water Pollution Control (Garland drains, settling tank, rainwater harvesting)	3.00	1.50
3.	Noise & Vibration Control (acoustic enclosures, monitoring)	1.50	0.50
4.	Occupational Health & Safety (PPE, health camps, first aid, training)	1.50	1.00
5.	Greenbelt Development (plantation, maintenance)	16.85	1.68

6.	Environmental Monitoring (air, water, noise, soil)	-	1.00
7.	PH Compliance Budget	20.50	-
8.	Environmental Management Plan (For Habitation)	10.00	1.00
	Total	53.35	9.68

Environment Monitoring Plan

Monitoring Parameters and Frequency of Monitoring

S. no	Monitoring Parameters	No. of Locations	Frequency of Monitoring
1	Ambient Air: Ambient Air Quality at appropriate location for PM10, PM2.5, SO2, NOx in the vicinity of the mine area. In the surrounding area covering project site only.	4 Stations	Six Monthly
2	Water: Surface water sample in the vicinity of the Project area.	2 Surface water 2 Ground water	Six Monthly
3	Noise: Day & Night level Noise Monitoring.	4 stations	Six Monthly
4	Soil: Soil Monitoring, Qualitative and quantitative testing/analysis to check the soil fertility, porosity, texture, water holding capacity, etc.	2 stations	Six Monthly

Summary of Baseline Data:

Monitoring season - October 2024 - December 2024 for Winter season.

Type	Parameter
AAQ Parameter at 7 locations	PM10 = 48.5 $\mu\text{g}/\text{m}^3$ to 79.6 $\mu\text{g}/\text{m}^3$ PM2.5 = 18.2 $\mu\text{g}/\text{m}^3$ to 39.6 $\mu\text{g}/\text{m}^3$ SO2 = 5.2 $\mu\text{g}/\text{m}^3$ to 37.8 $\mu\text{g}/\text{m}^3$ NO2 = 6.6 $\mu\text{g}/\text{m}^3$ to 20.6 $\mu\text{g}/\text{m}^3$
Noise quality at 7 locations	Daytime 50.2 to 55.8 dB(A) Nighttime 39.2 to 42.4 dB(A)
Surface water at 2 locations	pH – 7.27 to 7.35 TDS – 281.7 to 302.5 mg/l Sulphate – 14.2 to 20.1 mg/l Fluoride – 0.37 to 0.41 mg/l Total Hardness – 136.68 to 118.32 mg/l

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Ground water at 6 locations	Turbidity – 1.6 to 3.8 NTU pH – 6.57 to 7.39 Total Hardness – 140.76 to 230.52 mg/l TDS – 337.9 to 481.2 mg/l Sulphate – 12.82 to 36.54 µS/cm
Soil at 5 locations	pH – 4.71 to 6.46 Arsenic – <0.35 mg/kg Magnesium- 1333.8 to 1770.35 mg/kg Calcium- 1240 to 2440 mg/kg

Public Hearing (Action Plan) –

Sl. No.	Issue Raised	Commitment by Project Proponent (Brief)	Time Frame	Funds to be Spent
				Capital (in Lakhs)
1	A health camp should be organized, and an ambulance should be provided, along with financial assistance for education.	The project proponent assured that a health camp would be organized, an ambulance would be provided, and financial assistance would be given for education.	Organization of Health Camp- Within 3 months of Project commencement.	Rs. 1.00 Lakhs
			Ambulance Facility- Within 6 months	Rs. 6.00 Lakhs
			Financial Assistance for Education- Within 6 months	Rs. 1.50 Lakhs
2	The rural roads repaired.	The project proponent assured that the rural roads would be repaired.	Rural Road Repair- Within 6 Months	Rs. 6.00 Lakhs
3	financial assistance should be provided for football equipment, a deep borewell should be dug, and the village's Shiva temple should be renovated.	financial assistance would be provided for football equipment, a deep borewell would be dug at a location identified by the villagers, and the village's Shiva temple would be renovated.	Financial Assistance for Football Equipment- One year of operation Renovation of Village Shiva Temple- Within 1 years.	Rs. 3.00 Lakhs
4	The Anganwadi building should be repaired, blasting should be done according to the rules, and the	The project proponent assured that under CSR, the Anganwadi	Anganwadi repair building- Within 6 months.	Under CSR Fund
			Fencing with wire- within	Rs. 3.00 Lakhs

	mine area should be fenced with wire.	building will be repaired, blasting will be done according to the rules, and the mine area will be fenced with wire.	3 months	
Total				20.50

SE Need based Survey detail (included in CSR)

Zone	Coverage & Survey Details	Key Socio-Economic Observations	Workforce Characteristics	Priority Needs (Focused)	Proposed Budget (₹ Lakhs)	Implementation Timeline
0-2 km	Villages: 5 Households surveyed: 15 Population covered: 90 FGDs Conducted: 1	Balanced gender composition with presence of children and vulnerable groups. Proximity to mine increases sensitivity to dust, traffic and occupational health issues.	Low workforce participation (~35%); dominance of informal and "other" occupations indicating livelihood instability.	<ul style="list-style-type: none"> Preventive healthcare & health check-ups Local skill development linked to mine & allied activities 	3.0	Short-term & ongoing (Year 1-2)
2-5 km	Villages: 20 Households surveyed: 25 Population covered: 125 FGDs Conducted: 0	Moderate literacy levels with gender disparity; limited access to secondary education and structured training facilities.	Mixed workforce pattern; dependence on agriculture and daily wage labour.	<ul style="list-style-type: none"> Education support (secondary level / scholarships) Agricultural productivity support (inputs, awareness) 	3.0	Medium-term (Year 2-3)
Total (0-5 km)					6.0	

Environment Management Practices to be followed:

Aspect	Mitigation Measures / Control Measures
Solid Waste Management	<ul style="list-style-type: none"> Solid waste management is important from both aesthetic and environmental points of view and will be managed as per the Solid Waste Management Rules, 2016. An O.B. (Overburden) dump area of 0.097 ha has been provided within the lease area.

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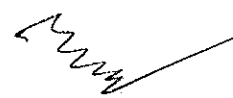
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	<ul style="list-style-type: none"> • The O.B. dump area will accommodate 31,350 cum of overburden during the working plan period. • After completion of the working plan, the generated O.B. will be backfilled into the stone quarry faces. <p>Part of the O.B. will be used for haul road and village road maintenance.</p> <ul style="list-style-type: none"> • The remaining O.B. will be utilized for plantation activities. <p>No hazardous or other solid waste generation is envisaged from the stone mining activities.</p>
Air Quality Management	<ul style="list-style-type: none"> • Wet drilling and use of sharp drill bits to minimize dust generation. • Controlled blasting using optimum explosive charge during favorable weather conditions. • Regular maintenance of diesel equipment and vehicles to reduce emissions. • Water sprinkling on haul roads, loading/unloading points, and working areas. • All transport vehicles will have valid PUC certificates. • Greenbelt and roadside plantation to act as dust and noise barriers.
Water Quality Management	<ul style="list-style-type: none"> • Mining will be confined only above the Ground Water Table (GWT). • Rainwater accumulated in the pit will be collected and pumped out regularly during monsoon. • Settling sump will be provided to desilt pumped out of mine-pit and collected through garland drain before discharge into natural drainage. • Garland and foot drains will be constructed around the quarry to control surface runoff. • Sewage from rest shelters will be treated through septic tank-soak pit systems. • Foot drain would be provided around the external dump, if any.
Noise Quality Management	<ul style="list-style-type: none"> • Mining activities will be restricted to daytime and carried out with controlled blasting techniques. • Acoustic enclosures and mufflers will be provided for drilling and DG set operations. • Regular maintenance of mining machinery to minimize vibration and noise. • Greenbelt development around the lease boundary to attenuate noise propagation. • Use of delayed blasting technique to minimize the adverse impact of vibration.
Soil Quality Management	<ul style="list-style-type: none"> • Topsoil will be carefully removed and stored separately for future use in plantation and reclamation. • Garland drains and retaining walls will prevent soil erosion and siltation. • Spillage of oil or fuel will be avoided; impervious flooring and oil traps provided near storage areas • Post-mining, the area will be rehabilitated using stored topsoil and native vegetation
Flora & Fauna management	<ul style="list-style-type: none"> • No tree felling will be undertaken without obtaining permission from the competent authority. • Greenbelt and plantation will be developed using native species along

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		<p>approach roads and lease periphery (7.5m Safety Zone).</p> <ul style="list-style-type: none"> • Dust suppression measures will minimize impact on surrounding vegetation
Socio Economy:		<ul style="list-style-type: none"> • Priority employment to local people in mining and ancillary activities. • Community development initiatives such as tree plantation drives, road maintenance, and local infrastructure support. • Awareness programs on safety, hygiene, and environmental protection
Monitoring & Reporting:		<ul style="list-style-type: none"> • Periodic monitoring of air, water (ground & surface), noise, and soil quality as per CPCB and SPCB guidelines. • All monitoring reports will be submitted to statutory authorities as per the compliance schedule. • Corrective measures will be taken immediately if any deviation from standards is observed.
Risk & Hazard		<p>Activities which are likely to create risk are: Temporary Storage of Explosives, Charging of Explosives, Blasting, Drilling, Bench Formation, Loading / Unloading, Transportation</p> <p>Proposed Preventive measures:</p> <ul style="list-style-type: none"> ▪ Overall slope angles of benches will be maintained at 45°. ▪ Unmanageable heights are not created. ▪ Loose sides are properly dressed. ▪ No loose stone or debris will be permitted to remain on the top of the bench or side of any excavation (Regulation 106(4) of MMR 1961). ▪ No undercutting of any face or sides will be permitted so as to cause any overhanging (Regulation 106(5) of MMR 1961) ▪ It will be ensured that the drilling equipment is suitable for the job. ▪ The person in charge of the drilling machine is competent to carry out the drilling operation; part of the training includes instructions to always face towards the open edge of the bench so that any inadvertent backward step is away from the edge. ▪ Provision of portable rail fencing between the drilling operations and the edge of the bench ▪ Provision to attach a safety line to the drilling rig and provide a harness for the driller to wear. ▪ Restricted access to the area to all persons except those necessary for the drilling operation. ▪ Wet drilling will be carried out by constantly injecting a jet of water at the drill bit inside the hole, which prevents dust generation. ▪ In case due to any reason, wet drilling is not possible (due to non-availability of water), exhaust/ vacuum system will be provided which removes the dust from the drill hole continuously and discharges the same in a dust collector specially provided for the purpose. ▪ Drilling machine shall be fitted with dust suppression, collection and disposal arrangement.
Blasting & Handling of Explosives		<ul style="list-style-type: none"> ▪ Blast hole geometry shall be properly designed. ▪ Blast site shall be wetted before and after blasting operations are completed.

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	<ul style="list-style-type: none"> ▪ Only optimum quantity of permissible explosives shall be used so that the vibrations do not damage the structures/houses if the quarrying operations are close to human habitation. ▪ Blasting shall be conducted only during favourable weather conditions and only during the day time and permissible hours. ▪ While carrying out blasting operations near habitations, wide publicity will be given in the local area through announcement and other available media so that local people become aware of the blasting activities being undertaken in the area and take appropriate precautions. ▪ The vibrations should be monitored periodically in consultation with the local Mining authorities. ▪ Use of explosives is specialist work. Planning for a round of shots is necessary to ensure that the face is properly surveyed, holes correctly drilled, direction logged, the weight of explosive suitable for good fragmentation and the continuity of the initiator are but a few of the steps necessary to ensure its safe use. ▪ Proper and safe storage of explosives in approved and Licensed Magazine. ▪ Proper security system to prevent theft/ pilferage, unauthorized entry into Magazine area and checking authorized persons to prevent carrying of match box, lights, mobile phones, cigarette or Bidi etc. will be put in place. ▪ Explosives shall be conveyed in special containers. ▪ Explosives and detonators shall not be carried in the same container. ▪ The holes which have been charged with explosives will not be left unattended till blasting is completed.
Health Hazards	<p>Health hazards should be interpreted as being harmful dust and noise which is emitted during surface mining operations. All suitable steps and precautions will be undertaken to ensure minimum health hazard. Provision of use of Personal Protective Equipment (PPE) will be kept. The PPE shall be of good make and quality, wherever possible ISI certified, suitable for the hazard e.g. a dust respirator fitted with the correct filter to capture the particulate hazardous dust and maintained to recommended standards. As personal protective equipment only affords limited protection it will only be used as a last resort and as an interim arrangement until other steps are taken to reduce the risk of personal injury to an acceptable level</p>
Accident Prevention	<ul style="list-style-type: none"> ▪ Mine road shall be made smooth regularly with a road roller. ▪ Mine road will be made sufficiently wide to keep two-way traffic. Regular water sprinkling will be done on mine road and haul road to avoid suspension of dust. ▪ All transportation within the mine lease area should be carried out directly under the supervision and control of management. ▪ The vehicles will be maintained in good working condition and checked thoroughly at least once a month by the competent person authorized for the purpose by the management. ▪ Navigation signs will be provided at each and every turning point up to the main road (wherever required). ▪ To avoid danger while reversing the vehicles especially at working

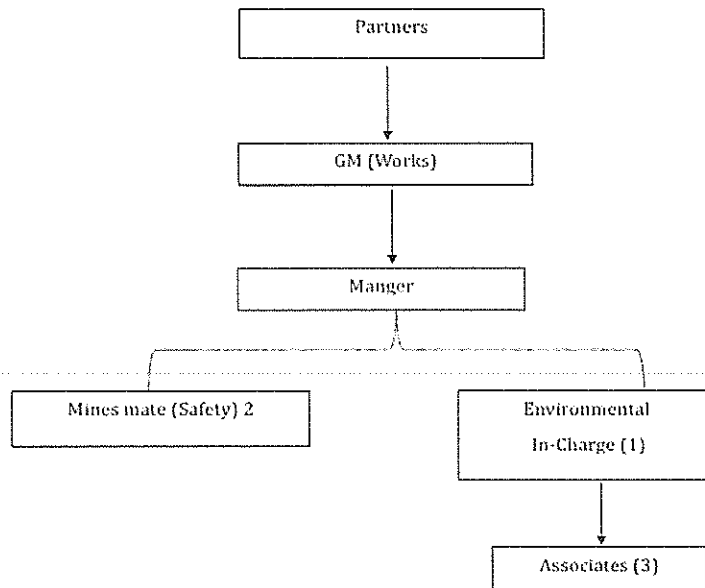
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place/loading points, stopper should be posted to properly guide reversing/spotting operating.

Organizational Structure of Environment Management Cell:

ORGANIZATION CHART OF ENVIRONMENTAL MONITORING CELL



EMP Cell structure

The EMP Cell is committed to ensuring environmental sustainability and compliance with regulatory requirements for the Stone Mining Project. With a clear structure, roles, and responsibilities, the EMP Cell is equipped to manage environmental impacts and promote sustainable practices.

Undertaking submitted affirming:

- Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- The District Survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- The Boundary Pillars of the proposed mine lease area will be maintained properly.
- One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.

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- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- i. If any tree felling than necessary permission shall be taken from the competent authority.
- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.
- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.
- l. Personal protective equipments such as clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Aamchuwan Stone Mine of Partners : Shri Mihir Kumar Mandal & Shri Bablu Mondal, Village : Aamchuwan, Thana : Shikaripara, Distt. : Dumka, Jharkhand (2.869 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I along with following specific conditions :

- I. The mine will come in operation only after obtaining permission from DGMS for controlled and delayed blasting.
- II. In compliance of Office Memorandum no. IA-J-11013/20/2025-IA-P, dated 25.11.2025 of MoEF&CC, Govt. of India, the PAs will mandatorily obtain the Environmental Safeguard to be implemented from Jharkhand State Pollution Control Board within 30 days of issuance of EC or 31.01.2026 which ever is earlier.
- III. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "Ek Ped Ma Ke Naam" and the details of the same shall be uploaded in the MeriLIFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.
- IV. The Deputy Commissioner through District Mining Officer will ensure that the mines owner of the respective leases to complete the plantation and maintenance in a time bound manner.
- V. Suitable plant species of not less than 2 M height to be planted equal to twice the area of saplings proposed in Safety zone. This is to be planted in land available near mines and outside safety zone. This will be in addition to plantation in safety zone. Newly planted saplings to be maintained for minimum 3 years with Geo-Tagged photographs.
- VI. Dedicated water tanker to be provided for mine. The tanker to be used for spraying water on haul road and for irrigating newly planted saplings only. Sprinkling to be done such that the haul road is kept moistened all the time with Geo-Tagged photographs.

- VII. Pre employment Occupational health check up for employees to be done and thereafter at annual interval for PLFT, Audiometry and other required tests .Summary findings of same to submitted along with 6 monthly compliance.
- VIII. Ensure use of Quality PPEs equivalent not less than 3M make. Records of same to be maintained and submitted with 6 monthly compliance report with Geo-Tagged photographs.
- IX. Keep vulnerable areas unmanned. Ensure rotation of duties. Records to be maintained and submitted with 6 monthly compliance report.
- X. Failing of any of terms & conditions mentioned in EC can lead to revocation / cancellation of EC.

13. Siyalpahari Stone Mine of M/s Gaurinath Enterprises (Partners : Smt. Sandhya Rani & Smt. Punam Rashmi), Village : Siyalpahari, Thana : Shikaripara, Distt. : Dumka, Jharkhand (2.897 Ha).

(Proposal no.: SIA/JH/MIN/ 565101 /2026)

Name of the consultant : Sathi Planners Pvt. Ltd., Ranchi, Jharkhand.

This is a new project which has been taken for appraisal on 17.01.2026.

Project Sector: 1(a) Mining of Minerals, Category: B1.

Application for Environmental Clearance (EC) after Terms of Reference (ToR).

The State Expert Appraisal Committee, Jharkhand deliberated the project during its 119th meeting held on 17.12.2024 - 22.12.2024 and SEIAA, Jharkhand has approved the ToRs in 119th meeting held on 30th & 31st December, 2024. TOR for the project was issued by SEIAA, Jharkhand vide letter no. EC/SEIAA/2024-25/3430/2024/508, dated 13.01.2025. The final EIA / EMP submitted by PP to SEAC on 13.01.2026.

EC Application for: Proposed Capacity – 1,03,640 cum/annum or 2,79,829 TPA.

Project and Location Details:

Sl	Parameter	Details
1	Project Name	: Siyalpahari Stone Mine
2	Applicant	: M/s Gaurinath Enterprises Partners: Smt. Sandhya Rani
3	Lease Address	: Mouza– Siyalpahari, Thana No.- 10, Thanna- Shikaripara,

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		District- Dumka, State- Jharkhand	
4	Lease Area	: 2.897 Ha	Acres- 7.16 Acres
5	Cluster Details	: 3 no of mines including project site having total cluster area 19.05 Acres/7.71 Ha.	
6	Type of Land	: Non-Forest Raiyati Land	
7	Project Cost	: Rs. 136.79 Lakhs	Recurring: Rs. 47.79
8	EMP Budget	: Capital: Rs. 36.53 Lakhs	Recurring: Rs. 7.83 Lakh / year
9	New or Expansion	: New	
10	Mineable Reserves	: cum.: 3,91,070 cum	Tonnes: 10,55,890 tones
11	Mine Life	: 5 years	
12	Man power	: 28	
13	Water Requirement	: 11.35 KLD {Manpower (28 nos.)- 0.560 KLD, Plantation (1975 nos.)- 7.485 KLD, Dust Suppression- 3.31 KLD.}	
14	Water Source	: By authorised hired water tankers	
15	DG Set / power	: 60 KVA D.G. Set	
16	Crusher	: No crusher	
17	Nearest Water Body	: Brahmani River- 6 km. in NW direction of mine site.	
18	Nearest Habitation	: Few houses (240 m) in SE Direction (EMP prepared)	
19	Nearest Rail Station	: Pinargaria Railway station, approx. 5 km in NW direction.	
20	Nearest Air Port	: Deoghar Airport, approx. 101 km towards NW direction	
21	Nearest Forest	: More than 250 m, as per the Division Forest Officer, Dumka, letter no. 1790 dated 05/08/2024.	
22	Road & Highways	: The length of the approach road is 0.37 km. Thereafter, it connects to a village road, which continues for 4.74 km, after which the road connects to NH-114A.	
23	Approach Road	: The distance of Approach Road is 370 m.	
24	SE Budget	: Rs. 6.7 Lakh (Need Based Survey)	

CO-ORDINATES

Pillar No.	Longitude	Latitude
1	087° 39' 14.29959786" E	24° 10' 01.59111771" N
2	087° 39' 14.49926579" E	24° 10' 01.56014334" N
3	087° 39' 14.75327801" E	24° 10' 01.52073848" N
4	087° 39' 15.05519295" E	24° 10' 01.47390231" N
5	087° 39' 15.34959184" E	24° 10' 01.44951942" N
6	087° 39' 15.41357595" E	24° 10' 01.33364400" N
7	087° 39' 15.46815448" E	24° 10' 01.22647900" N
8	087° 39' 15.80190496" E	24° 10' 01.19759204" N
9	087° 39' 16.12930401" E	24° 10' 01.15861704" N
10	087° 39' 16.43311553" E	24° 10' 01.12696812" N
11	087° 39' 16.37821904" E	24° 10' 00.86276650" N
12	087° 39' 16.31230532" E	24° 10' 00.60005716" N

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13	087° 39' 16.20285151" E	24° 10' 00.13812297" N
14	087° 39' 16.07642702" E	24° 09' 59.74562215" N
15	087° 39' 15.93744736" E	24° 09' 59.36184522" N
16	087° 39' 15.79150536" E	24° 09' 58.84804702" N
17	087° 39' 15.70320430" E	24° 09' 58.51896306" N
18	087° 39' 15.59615131" E	24° 09' 58.21885976" N
19	087° 39' 15.47499025" E	24° 09' 57.93182206" N
20	087° 39' 14.29959786" E	24° 10' 01.59111771" N
21	087° 39' 15.78457662" E	24° 09' 57.79755291" N
22	087° 39' 16.09254367" E	24° 09' 57.65462045" N
23	087° 39' 16.50416205" E	24° 09' 57.45344255" N
24	087° 39' 16.72879673" E	24° 09' 57.33832257" N
25	087° 39' 16.94736730" E	24° 09' 57.26946892" N
26	087° 39' 16.95791475" E	24° 09' 57.48473046" N
27	087° 39' 16.98104701" E	24° 09' 57.69704796" N
28	087° 39' 17.07781849" E	24° 09' 57.83390874" N
29	087° 39' 17.19519693" E	24° 09' 57.99669127" N
30	087° 39' 17.26610623" E	24° 09' 58.00361194" N
31	087° 39' 17.37452679" E	24° 09' 57.95401610" N
32	087° 39' 17.62446375" E	24° 09' 57.85901731" N
33	087° 39' 17.88083305" E	24° 09' 57.79000100" N
34	087° 39' 18.12578104" E	24° 09' 57.73136211" N
35	087° 39' 18.19360534" E	24° 09' 57.66294188" N
36	087° 39' 18.17736202" E	24° 09' 57.56619583" N
37	087° 39' 18.55973569" E	24° 09' 57.30553524" N
38	087° 39' 18.93340399" E	24° 09' 57.22942176" N
39	087° 39' 19.34882584" E	24° 09' 57.13732383" N
40	087° 39' 19.19143042" E	24° 09' 56.67514462" N
41	087° 39' 19.03383944" E	24° 09' 56.17458307" N
42	087° 39' 18.94571681" E	24° 09' 55.78435679" N
43	087° 39' 18.82718871" E	24° 09' 55.22266589" N
44	087° 39' 18.14368931" E	24° 09' 55.25523543" N
45	087° 39' 17.40565478" E	24° 09' 55.30073854" N
46	087° 39' 16.55995853" E	24° 09' 55.34670268" N
47	087° 39' 15.76338011" E	24° 09' 55.35076465" N
48	087° 39' 15.84305228" E	24° 09' 55.01110392" N
49	087° 39' 15.96467166" E	24° 09' 54.45548214" N
50	087° 39' 15.43366087" E	24° 09' 54.42575060" N
51	087° 39' 14.86759745" E	24° 09' 54.39450705" N
52	087° 39' 14.24540778" E	24° 09' 54.38809700" N
53	087° 39' 13.62474081" E	24° 09' 54.39993751" N
54	087° 39' 13.03459045" E	24° 09' 54.42384810" N
55	087° 39' 12.43186015" E	24° 09' 54.47394702" N
56	087° 39' 11.81004310" E	24° 09' 54.50985209" N

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57	087° 39' 11.21902630" E	24° 09' 54.57485880" N
58	087° 39' 11.34689896" E	24° 09' 54.82106164" N
59	087° 39' 11.22401570" E	24° 09' 54.93014436" N
60	087° 39' 11.29068790" E	24° 09' 54.97501554" N
61	087° 39' 11.39216782" E	24° 09' 55.08973046" N
62	087° 39' 11.42833075" E	24° 09' 55.42599260" N
63	087° 39' 11.51128412" E	24° 09' 55.76882786" N
64	087° 39' 11.66426678" E	24° 09' 56.33263076" N
65	087° 39' 11.79483804" E	24° 09' 56.84459944" N
66	087° 39' 11.95545672" E	24° 09' 57.45804182" N
67	087° 39' 12.12548267" E	24° 09' 57.98564622" N
68	087° 39' 12.28798858" E	24° 09' 58.48618879" N
69	087° 39' 12.45023059" E	24° 09' 58.93480230" N
70	087° 39' 12.56803959" E	24° 09' 59.35651213" N
71	087° 39' 12.68566495" E	24° 09' 59.74209740" N
72	087° 39' 12.82613931" E	24° 10' 00.26531246" N
73	087° 39' 12.90153878" E	24° 10' 00.72883831" N
74	087° 39' 12.95847152" E	24° 10' 01.12272143" N
75	087° 39' 13.55167832" E	24° 10' 01.14727322" N
76	087° 39' 13.66962747" E	24° 10' 01.11290020" N
77	087° 39' 14.01605771" E	24° 10' 01.00303929" N
78	087° 39' 14.10474087" E	24° 10' 01.02072176" N
79	087° 39' 14.14709305" E	24° 10' 01.12214261" N
80	087° 39' 14.22196549" E	24° 10' 01.32728427" N

LAND DETAILS

Khata No.	Plot No.
14	124, 125/P
8	126/P

STATUTORY CLEARANCES

1	LOI / Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Officer, Dumka vide letter no. 1151/M, dated 09.10.2024.
2	CO	:	The CO, Shikaripara vide letter no. 811/Ra., dated 10.09.2024 has mentioned the plot no. of the project is not recorded as "Jungle-Jhari" in R.S. Khatiyani & Register II. During the appraisal it was seen from the KML that few houses at a distance of 290 meters from mining lease area. For which detailed Environmental Management Plan has been prepared and submitted.
3	DMO Cluster	:	DMO, Dumka vide memo no. 1304/M, dated 27.11.2024 certified that 02 other mining lease area (6.01 Acre & 5.88 Acre) exists

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			within 500 meters radius from proposed project site and total area is 19.05 Acre.
4	DFO Wild Life	:	DFO, Wildlife Division, Hazaribag vide letter no. 1831, dated 22.08.2024 certified that the proposed project site is outside Eco Sensitive Zone of Parasnath & Topchanchi Wildlife Sanctuary.
5	DFO Territorial	:	Divisional Forest Officer, Dumka Forest Division vide letter no. 1790, dated 05.08.2024 certified that the distance of reserved / protected forest is more than 250 meters from proposed project site.
6	DSR	:	This project is mentioned in approved DSR of Dumka District (Sl. no. 05).
7	Gram Sabha	:	Gram Sabha conducted on 07.06.2024.
8	Mine Plan Approval	:	Approved by District Mining Officer, Dumka vide Letter No. 1312/M, dated 02.12.2024.
9	Qualified Person	:	Shri Malay Kumar Mukhopadhyay was present in the meeting and affirmed that the mine plan has been prepared by him.
10	Baseline monitoring period	:	December, 2024 to February, 2025.
11	Public Hearing	:	Public hearing conducted on 25.09.2025.

Working Details

1	Mining Method	:	Opencast Fully mechanised method
2	Quarry Area	:	2.897 ha.
3	Waste Generation	:	40,731 cum.
4	Stripping Ratio	:	01:0.10
5	Working Days	:	300
6	Benches: size & No	:	6m x 6m
7	Elevation of Mine	:	65 m AMSL to 62 m AMSL
8	Ground Level Elevation	:	62 m AMSL
9	Ultimate Working Depth	:	27 m AMSL
10	Water Table	:	15 m AMSL (Source: JSAC Ground water Prospect Map)
11	Topography of Mine	:	The area represents a hillock land with rock mass of Basalt
12	Explosive Requirement	:	96.22 kg/day Slurry Explosives
13	Diesel/Fuel	:	232 litre/day

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Production Details

Year	Production of Stone		Removal of O.B
	In cum	In tonnes	Cum
1 st	103,640	279,829	40,731
2 nd	97,723	263,851	0
3 rd	79,148	213,700	0
4 th	52,802	142,565	0
5 th	57,757	155,944	0
Total	3,91,070	10,55,889	40,731

Land Use

Si. No.	Pattern of Utilization	Present/Existing land use pattern in (Ha.)	Proposed Land use for current plan period (Ha.)	Land used at the conceptual stage i.e. end of mine life in (Ha.)	Area to be converted in the conceptual period.
1	Mining Activities	0	1.930	1.930	Water Body
3	Office Store	0	0.015	0.015	Plantation
4	Dumping	0	0.030	0.030	Plantation
5	Garland drain	0	0.040	0.040	-
7	Safety Zone	0	0.641	0.641	Plantation
8	Unutilized	2.829	0.213	0.213	Plantation
9	Excavated	0.068	0.028	0.028	-
Total		2.897	2.897	2.897	-

Green Belt Development

Year	Location	No. of Plants	Area to be Covered (Ha)	Species of Plant
1 st Year	Within 7.5m in Safety Zone Area	1602	0.641	Mixed plants i.e. Mango, Guava, Saguana, Jackfruit, Gulmohar, Teak, Gamhar, etc. as available in the
Conceptual	Dumping	75	0.030	
Conceptual	Office	38	0.015	
Conceptual	Unutilized	533	0.213	

1 st Year	Approach Road	247	370 m	locality
Total		2,495	1.134	

Note- 2,495 tree proposed to be planted out of which 10% plantation will be carried out i.e. (249 trees) as per MoEF&CC, Govt. of India Scheme "Ek Ped Ma Ke Naam".

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

BUDGETARY PROVISION (IN LAKHS)

PROJECT COST

Sl. No.	Particular	Capital cost (Rs. In Lakhs)	Recurring Cost (Rs. In Lakhs)
1	Government Revenue (Dead Rent & Royalty)	28	-
2	Cost of Infrastructure	5.0	0.5
3	Mining Machineries owned by applicant <ul style="list-style-type: none"> Wagon Drill-02 Compressor-01 Tippers 25 tons-03 Diesel Pump-01 D.G. Set-01 	86.35	-
	Mining Machineries on hired basis (Excavator-01, Tipper-10)	-	45.5
4	Lease Agreement (lump-sum)	-	1.79
5	Statutory Clearance & Others	5.0	-
6	Contingency	12.44	-
Total Project Cost		136.79	47.79

ENVIRONMENT MANAGEMENT PLAN (EMP)

Sl. No.	Category	Capital Cost (Lakhs)	Recurring Cost (Lakhs)
1	Water Pollution Equipment	-	3.00
2	Green Belt Development	8.03	0.80
3	Environmental Monitoring	-	2.03

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4	PH Compliance Budget	17.50	0.00
5	R&R	-	-
6	Safety & Disaster Management Plan	1.00	1.00
7	Environmental Management Plan (For Habitation)	10.00	1.00
Total		36.53	7.83

Environment Monitoring Plan

Monitoring Parameters and Frequency of Monitoring

S. no	Monitoring Parameters	No. of Locations	Frequency of Monitoring
1	Ambient Air: Ambient Air Quality at appropriate location for PM10, PM2.5, SO2, NOx in the vicinity of the mine area. In the surrounding area covering project site only.	4 Stations	Six Monthly
2	Water: Surface water sample in the vicinity of the Project area.	2 Surface water 2 Ground water	Six Monthly
3	Noise: Day & Night level Noise Monitoring.	4 stations	Six Monthly
4	Soil: Soil Monitoring, Qualitative and quantitative testing/analysis to check the soil fertility, porosity, texture, water holding capacity, etc.	2 stations	Six Monthly

Summary of Baseline Data:

Monitoring season - October 2024 - December 2024 for Winter season.

Type	Parameter
AAQ Parameter at 7 locations	PM ₁₀ = 42 µg/m ³ to 76 µg/m ³ PM _{2.5} = 31 µg/m ³ to 56 µg/m ³ SO ₂ = 6.0 µg/m ³ to 11.6 µg/m ³ NO _x = 14.6 µg/m ³ to 22.7 µg/m ³
Noise quality at 7 locations	Daytime 64.4 to 68.2 dB(A) Nighttime 38.6 to 42.3 dB(A)

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Surface water at 2 locations	pH – 7.21 to 7.70 TDS – 287 to 322 mg/l Sulphate – 12.44 to 17.41 mg/l Fluoride – 0.503 to 0.612 mg/l Total Hardness – 128.6 to 152.8 mg/l
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Public Hearing (Action Plan) –

Sl. No.	Issue Raised	Commitment by Project Proponent (Brief)	Time Frame	Funds to be Spent
				Capital (in Lakhs)
1	Employment should be provided to the villagers.	Project proponent assured that villagers according to their capability and subject to the requirement employment will be provided.	Continued Employment- Wages & Salary (Throughout the life cycle of the mining project)	Rs. 4.00 Lakhs
2	Villagers should be given employment, and work should be provided to tractors owned by local residents.	Project proponent assured that villagers according to their capability and subject to the requirement	As mentioned above Will be provided as per the requirement.	<input type="checkbox"/> As mentioned above Rs. 0.50 Lakhs
3	Agricultural land has been proposed for mining by claiming that it is barren. Arrangement of an ambulance, construction of club house and repairing and maintenance of road	Project proponent assured that according to the mining lease rule proposed land will only be used for mining. Under CSR arrangement of an ambulance, construction of club house and repairing and maintenance of roads will be done.	Club house construction – Within 12 months from the date of EC. Rural road repair and maintenance– Immediate and continuous. Arrangement of ambulance- Within 3 months of project commencement	<input type="checkbox"/> Rs. 8.00 Lakhs <input type="checkbox"/> Rs. 3.00 Lakhs per year. <input type="checkbox"/> Rs. 2.00 Lakhs
Total				17.50 Lakhs

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SE Need based Survey detail (included in CSR)

Zone	Coverage & Survey Details	Key Socio-Economic Observations	Workforce Characteristics	Priority Needs (Focused)	Proposed Budget (₹ Lakhs)	Implementation Timeline
0-2 km	Villages: 5 Households surveyed: 18 Population covered: 98 FGDs Conducted: 1	Balanced gender composition with presence of children and vulnerable groups. Proximity to mine increases sensitivity to dust, traffic and occupational health issues.	Low workforce participation (~35%); dominance of informal and "other" occupations indicating livelihood instability.	<ul style="list-style-type: none"> Preventive healthcare & health check-ups Local skill development linked to mine & allied activities 	2.9	Short-term & ongoing (Year 1-2)
2-5 km	Villages: 19 Households surveyed: 31 Population covered: 146 FGDs Conducted: 0	Moderate literacy levels with gender disparity; limited access to secondary education and structured training facilities.	Mixed workforce pattern; dependence on agriculture and daily wage labour.	<ul style="list-style-type: none"> Education support (secondary level / scholarships) Agricultural productivity support (inputs, awareness) 	3.8	Medium-term (Year 2-3)
Total (0-5 km)					6.7	

Environment Management Practices to be followed:

Aspect	Mitigation Measures / Control Measures
Solid Waste Management	<ul style="list-style-type: none"> Solid waste management is important from both aesthetic and environmental points of view and will be managed as per the Solid Waste Management Rules, 2016. An O.B. (Overburden) dump area of 0.030 ha has been provided within the lease area. The O.B. dump area will accommodate 40,731 cum of overburden during the working plan period. After completion of the working plan, the generated O.B. will be backfilled into the stone quarry faces. Part of the O.B. will be used for haul road and village road maintenance. The remaining O.B. will be utilized for plantation activities. No hazardous or other solid waste generation is envisaged from the stone mining activities.

Air Quality Management	<ul style="list-style-type: none"> • Wet drilling and use of sharp drill bits to minimize dust generation. • Controlled blasting using optimum explosive charge during favorable weather conditions. • Regular maintenance of diesel equipment and vehicles to reduce emissions. • Water sprinkling on haul roads, loading/unloading points, and working areas. • All transport vehicles will have valid PUC certificates. • Greenbelt and roadside plantation to act as dust and noise barriers.
Water Quality Management	<ul style="list-style-type: none"> • Mining will be confined only above the Ground Water Table (GWT). • Rainwater accumulated in the pit will be collected and pumped out regularly during monsoon. • Settling sump will be provided to desilt pumped out of mine-pit and collected through garland drain before discharge into natural drainage. • Garland and foot drains will be constructed around the quarry to control surface runoff. • Sewage from rest shelters will be treated through septic tank-soak pit systems. • Foot drain would be provided around the external dump, if any.
Noise Quality Management	<ul style="list-style-type: none"> • Mining activities will be restricted to daytime and carried out with controlled blasting techniques. • Acoustic enclosures and mufflers will be provided for drilling and DG set operations. • Regular maintenance of mining machinery to minimize vibration and noise. • Greenbelt development around the lease boundary to attenuate noise propagation. • Use of delayed blasting technique to minimize the adverse impact of vibration.
Soil Quality Management	<ul style="list-style-type: none"> • Topsoil will be carefully removed and stored separately for future use in plantation and reclamation. • Garland drains and retaining walls will prevent soil erosion and siltation. • Spillage of oil or fuel will be avoided; impervious flooring and oil traps provided near storage areas • Post-mining, the area will be rehabilitated using stored topsoil and native vegetation
Flora & Fauna management	<ul style="list-style-type: none"> • No tree felling will be undertaken without obtaining permission from the competent authority. • Greenbelt and plantation will be developed using native species along approach roads and lease periphery (7.5m Safety Zone). • Dust suppression measures will minimize impact on surrounding

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	vegetation
Socio Economy:	<ul style="list-style-type: none"> • Priority employment to local people in mining and ancillary activities. • Community development initiatives such as tree plantation drives, road maintenance, and local infrastructure support. • Awareness programs on safety, hygiene, and environmental protection
Monitoring & Reporting:	<ul style="list-style-type: none"> • Periodic monitoring of air, water (ground & surface), noise, and soil quality as per CPCB and SPCB guidelines. • All monitoring reports will be submitted to statutory authorities as per the compliance schedule. • Corrective measures will be taken immediately if any deviation from standards is observed.
Risk & Hazard	<p>Activities which are likely to create risk are: Temporary Storage of Explosives, Charging of Explosives, Blasting, Drilling, Bench Formation, Loading / Unloading, Transportation</p> <p>Proposed Preventive measures:</p> <ul style="list-style-type: none"> ▪ Overall slope angles of benches will be maintained at 45°. ▪ Unmanageable heights are not created. ▪ Loose sides are properly dressed. ▪ No loose stone or debris will be permitted to remain on the top of the bench or side of any excavation (Regulation 106(4) of MMR 1961). ▪ No undercutting of any face or sides will be permitted so as to cause any overhanging (Regulation 106(5) of MMR 1961) ▪ It will be ensured that the drilling equipment is suitable for the job. ▪ The person in charge of the drilling machine is competent to carry out the drilling operation; part of the training includes instructions to always face towards the open edge of the bench so that any inadvertent backward step is away from the edge. ▪ Provision of portable rail fencing between the drilling operations and the edge of the bench ▪ Provision to attach a safety line to the drilling rig and provide a harness for the driller to wear. ▪ Restricted access to the area to all persons except those necessary for the drilling operation. ▪ Wet drilling will be carried out by constantly injecting a jet of water at the drill bit inside the hole, which prevents dust generation. ▪ In case due to any reason, wet drilling is not possible (due to non-availability of water), exhaust/ vacuum system will be provided which removes the dust from the drill hole continuously and discharges the same in a dust collector specially provided for the purpose.

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		<ul style="list-style-type: none"> ▪ Drilling machine shall be fitted with dust suppression, collection and disposal arrangement.
Blasting & Handling of Explosives		<ul style="list-style-type: none"> ▪ Blast hole geometry shall be properly designed. ▪ Blast site shall be wetted before and after blasting operations are completed. ▪ Only optimum quantity of permissible explosives shall be used so that the vibrations do not damage the structures/houses if the quarrying operations are close to human habitation. ▪ Blasting shall be conducted only during favourable weather conditions and only during the day time and permissible hours. ▪ While carrying out blasting operations near habitations, wide publicity will be given in the local area through announcement and other available media so that local people become aware of the blasting activities being undertaken in the area and take appropriate precautions. ▪ The vibrations should be monitored periodically in consultation with the local Mining authorities. ▪ Use of explosives is specialist work. Planning for a round of shots is necessary to ensure that the face is properly surveyed, holes correctly drilled, direction logged, the weight of explosive suitable for good fragmentation and the continuity of the initiator are but a few of the steps necessary to ensure its safe use. ▪ Proper and safe storage of explosives in approved and Licensed Magazine. ▪ Proper security system to prevent theft/ pilferage, unauthorized entry into Magazine area and checking authorized persons to prevent carrying of match box, lights, mobile phones, cigarette or Bidi etc. will be put in place. ▪ Explosives shall be conveyed in special containers. ▪ Explosives and detonators shall not be carried in the same container. ▪ The holes which have been charged with explosives will not be left unattended till blasting is completed.
Health Hazards		<p>Health hazards should be interpreted as being harmful dust and noise which is emitted during surface mining operations. All suitable steps and precautions will be undertaken to ensure minimum health hazard. Provision of use of Personal Protective Equipment (PPE) will be kept. The PPE shall be of good make and quality, wherever possible ISI certified, suitable for the hazard e.g. a dust respirator fitted with the correct filter to capture the particulate hazardous dust and maintained to recommended standards. As personal protective equipment only affords limited protection it will only be used as a last resort and as an interim arrangement until other steps are taken to reduce the risk of personal injury to an acceptable level</p>

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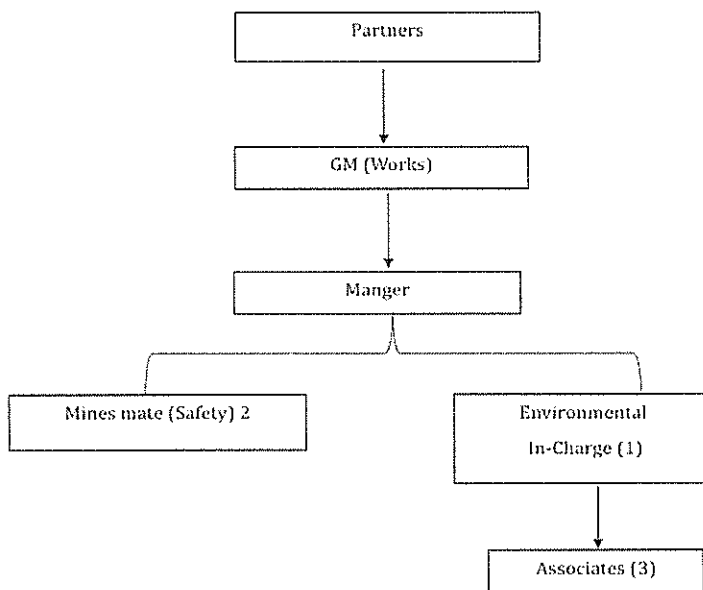
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Accident Prevention	<ul style="list-style-type: none"> ▪ Mine road shall be made smooth regularly with a road roller. ▪ Mine road will be made sufficiently wide to keep two-way traffic. Regular water sprinkling will be done on mine road and haul road to avoid suspension of dust. ▪ All transportation within the mine lease area should be carried out directly under the supervision and control of management. ▪ The vehicles will be maintained in good working condition and checked thoroughly at least once a month by the competent person authorized for the purpose by the management. ▪ Navigation signs will be provided at each and every turning point up to the main road (wherever required). ▪ To avoid danger while reversing the vehicles especially at working place/loading points, stopper should be posted to properly guide reversing/spotting operating.
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Organizational Structure of Environment Management Cell:

ORGANIZATION CHART OF ENVIRONMENTAL MONITORING CELL



EMP Cell structure

The EMP Cell is committed to ensuring environmental sustainability and compliance with regulatory requirements for the Stone Mining Project. With a clear structure, roles, and responsibilities, the EMP Cell is equipped to manage environmental impacts and promote sustainable practices.

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District Survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.

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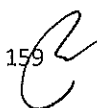
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- i. If any tree felling than necessary permission shall be taken from the competent authority.
- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.
- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.
- l. Personal protective equipments such as clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Siyalpahari Stone Mine of M/s Gaurinath Enterprises (Partners : Smt. Sandhya Rani & Smt. Punam Rashmi), Village : Siyalpahari, Thana : Shikaripara, Distt. : Dumka, Jharkhand (2.897 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I along with following specific conditions :

- I. The mine will come in operation only after obtaining permission from DGMS for controlled and delayed blasting.
- II. In compliance of Office Memorandum no. IA-J-11013/20/2025-IA-P, dated 25.11.2025 of MoEF&CC, Govt. of India, the PAs will mandatorily obtain the Environmental Safeguard to be implemented from Jharkhand State Pollution Control Board within 30 days of issuance of EC or 31.01.2026 which ever is earlier.
- III. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "Ek Ped Ma Ke Naam" and the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.

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- IV. The Deputy Commissioner through District Mining Officer will ensure that the mines owner of the respective leases to complete the plantation and maintenance in a time bound manner.
- V. Suitable plant species of not less than 2 M height to be planted equal to twice the area of saplings proposed in Safety zone. This is to be planted in land available near mines and outside safety zone. This will be in addition to plantation in safety zone. Newly planted saplings to be maintained for minimum 3 years with Geo-Tagged photographs.
- VI. Dedicated water tanker to be provided for mine. The tanker to be used for spraying water on haul road and for irrigating newly planted saplings only. Sprinkling to be done such that the haul road is kept moistened all the time with Geo-Tagged photographs.
- VII. Pre employment Occupational health check up for employees to be done and thereafter at annual interval for PLFT, Audiometry and other required tests. Summary findings of same to be submitted along with 6 monthly compliance.
- VIII. Ensure use of Quality PPEs equivalent not less than 3M make. Records of same to be maintained and submitted with 6 monthly compliance report with Geo-Tagged photographs.
- IX. Keep vulnerable areas unmanned. Ensure rotation of duties. Records to be maintained and submitted with 6 monthly compliance report.
- X. Failing of any of terms & conditions mentioned in EC can lead to revocation / cancellation of EC.

14. Salbonapahar Stone Mine of Shri Hanuman Singh, Village : Salbonapahar, Thana : Shikaripara, Distt. : Dumka, Jharkhand (1.49 Ha).

(Proposal no.: SIA/JH/MIN/ 565286 /2026)

Name of the consultant : Sathi Planners Pvt. Ltd., Ranchi, Jharkhand.

This is a new project which has been taken for appraisal on 17.01.2026.

Project Sector: 1(a) Mining of Minerals, Category: B1.

Application for Environmental Clearance (EC) after Terms of Reference (ToR).

The State Expert Appraisal Committee, Jharkhand deliberated the project during its 118th meeting held on 22.10.2024 - 26.10.2024 and SEIAA, Jharkhand has approved the ToRs in 118th meeting held on 28th & 29th November, 2024. TOR for the project was issued by SEIAA,

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Jharkhand vide letter no. EC/SEIAA/2024-25/3348/2024/369, dated 03.12.2024. The final EIA / EMP submitted by PP to SEAC on 13.01.2026.

EC Application for: Proposed Capacity – 16,169 cum/annum or 43,656 TPA.

Project and Location Details:

Sl	Parameter	Details
1	Project Name	: Salbonapahar Stone Mine
2	Applicant	: Shri Hanuman Singh
3	Lease Address	: Mouza– Salbonapahar, Thana No.- 07, Thana- Shikaripara, District- Dumka, State- Jharkhand
4	Lease Area	: 1.49 Ha Acres- 3.69 Acres
5	Cluster Details	: 10 no of mines including project site having total cluster area 52.30 Acres/21.165 Ha.
6	Type of Land	: Non-Forest Raiyati Land
7	Project Cost	: Rs. 105.99 Lakhs
8	EMP Budget	: Capital: Rs. 34.20 lakhs Recurring: Rs. 6.90 Lakh / year
9	New or Expansion	: New
10	Mineable Reserves	: cum.: 64,606 cum Tonnes: 1,74,435 tones
11	Mine Life	: 5 years
12	Man power	: 25
13	Water Requirement	: 10.99 KLD {Manpower (25 nos.)- 0.500 KLD, Plantation (3040 nos.)- 9.120 KLD, Dust Suppression- 1.37 KLD.}
14	Water Source	: By authorised hired water tankers
15	DG Set / power	: 60 KVA D.G. Set
16	Crusher	: No crusher
17	Nearest Water Body	: Brahmani River- 7.95 km. in North direction of mine site.
18	Nearest Habitation	: Few houses (150 m) in SW Direction
19	Nearest Rail Station	: Pinargaria Railway station, approx. 5.26 km in N direction.
20	Nearest Air Port	: Deoghar Airport, approx. 91.52 km towards NW direction
21	Nearest Forest	: More than 250 m, as per the Divisional Forest Officer NOC, Letter No. 1172 dated 26.04.2023.
22	Road & Highways	: The length of the approach road is 0.19 km, after which it connects to NH-114A (Dumka–Rampurhat).
23	Approach Road	: The distance of Approach Road is 190 m.
24	SE Budget	: Rs. 6.7 Lakh (Need Based Survey)

CO-ORDINATES

Point ID	Latitude	Longitude
1	24° 11' 33.18307221" N	087° 34' 04.88944951" E
2	24° 11' 33.11081489" N	087° 34' 04.60432677" E
3	24° 11' 33.03793043" N	087° 34' 03.91147499" E
4	24° 11' 32.92743596" N	087° 34' 03.11989900" E
5	24° 11' 32.71167141" N	087° 34' 02.57825970" E

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6	24° 11' 32.37905633" N	087° 34' 01.99989943" E
7	24° 11' 32.02093067" N	087° 34' 01.39160996" E
8	24° 11' 31.59720866" N	087° 34' 00.75216861" E
9	24° 11' 31.33833103" N	087° 34' 00.34953794" E
10	24° 11' 30.96928715" N	087° 33' 59.72147008" E
11	24° 11' 30.73922205" N	087° 33' 58.95862051" E
12	24° 11' 30.56126798" N	087° 33' 58.40810326" E
13	24° 11' 30.45022973" N	087° 33' 57.83958458" E
14	24° 11' 30.39350804" N	087° 33' 57.14356574" E
15	24° 11' 30.27322280" N	087° 33' 56.78840548" E
16	24° 11' 30.21210275" N	087° 33' 56.28719265" E
17	24° 11' 30.22230287" N	087° 33' 55.53609928" E
18	24° 11' 30.20498975" N	087° 33' 54.58470014" E
19	24° 11' 30.14673112" N	087° 33' 53.85484209" E
20	24° 11' 30.20095354" N	087° 33' 53.32279996" E
21	24° 11' 30.85006890" N	087° 33' 53.33196099" E
22	24° 11' 31.64380057" N	087° 33' 53.34316263" E
23	24° 11' 32.35088596" N	087° 33' 53.35314267" E
24	24° 11' 33.09831956" N	087° 33' 53.36369037" E
25	24° 11' 33.84575314" N	087° 33' 53.37423813" E
26	24° 11' 33.37430022" N	087° 33' 54.38153419" E
27	24° 11' 33.05656084" N	087° 33' 55.20813143" E
28	24° 11' 32.84748772" N	087° 33' 55.41129446" E
29	24° 11' 32.86534661" N	087° 33' 55.59305946" E
30	24° 11' 32.99397307" N	087° 33' 55.85606278" E
31	24° 11' 32.01359201" N	087° 33' 56.19996896" E
32	24° 11' 31.30437924" N	087° 33' 56.43908982" E
33	24° 11' 31.05761560" N	087° 33' 56.81903878" E
34	24° 11' 30.91462316" N	087° 33' 57.30794893" E
35	24° 11' 30.97964208" N	087° 33' 57.87095867" E
36	24° 11' 31.09094576" N	087° 33' 58.44678815" E
37	24° 11' 31.25825627" N	087° 33' 58.88660015" E
38	24° 11' 31.46830517" N	087° 33' 59.67230988" E
39	24° 11' 31.61639125" N	087° 33' 59.68558289" E
40	24° 11' 31.91669695" N	087° 33' 59.85092916" E
41	24° 11' 32.26789109" N	087° 34' 00.02407534" E
42	24° 11' 32.54498115" N	087° 34' 00.20698583" E
43	24° 11' 32.79909020" N	087° 34' 00.34437431" E
44	24° 11' 32.79271400" N	087° 34' 00.80865495" E
45	24° 11' 32.67183511" N	087° 34' 01.57524194" E
46	24° 11' 32.96314439" N	087° 34' 02.28813617" E
47	24° 11' 33.08548781" N	087° 34' 02.99775982" E
48	24° 11' 33.51205275" N	087° 34' 03.05642513" E
49	24° 11' 34.40315266" N	087° 34' 03.65573789" E
50	24° 11' 35.21674684" N	087° 34' 03.70271151" E
51	24° 11' 35.79517486" N	087° 34' 03.76441789" E
52	24° 11' 35.93110479" N	087° 34' 04.64049521" E

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53	24° 11' 35.75485285" N	087° 34' 04.72550896" E
54	24° 11' 35.53434127" N	087° 34' 04.89108045" E
55	24° 11' 35.24920831" N	087° 34' 05.00842084" E
56	24° 11' 35.00974562" N	087° 34' 04.66669643" E
57	24° 11' 34.57601468" N	087° 34' 04.89945455" E
58	24° 11' 34.13135257" N	087° 34' 04.96813995" E
59	24° 11' 34.05336077" N	087° 34' 04.77348895" E
60	24° 11' 33.56019395" N	087° 34' 04.81420521" E
61	24° 11' 33.18307221" N	087° 34' 04.88944951" E

LAND DETAILS

Khata no.	Plot no.
33	123 (P)

STATUTORY CLEARANCES

1	LOI / Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Officer, Dumka vide letter no. 960/M, dated 16.08.2024.
2	CO	:	The CO, Shikaripara vide letter no. 131/Ra., dated 26.02.2024 has mentioned the plot no. of the project is not recorded as "Jungle-Jhari" in R.S. Khatiyon & Register II. During the appraisal it was seen from the KML that few houses at a distance of 150 meters from mining lease area. For which detailed Environmental Management Plan has been prepared and submitted.
3	DMO Cluster	:	DMO, Dumka vide memo no. 1118/M, dated 01.10.2024 certified that 09 other mining lease area (3.45 Acre, 5.40 Acre, 7.27 Acre, 6.94 Acre, 3.40 Acre, 7.39 Acre, 4.01 Acre, 6.12 Acre & 4.63 Acre) exists within 500 meters radius from proposed project site and total area is 52.30 Acre.
4	DFO Wild Life	:	DFO, Wildlife Division, Hazaribag vide letter no. 1190, dated 23.06.2024 certified that the proposed project site is outside Eco Sensitive Zone of Parasnath & Topchanchi Wildlife Sanctuary.
5	DFO Territorial	:	Divisional Forest Officer, Dumka Forest Division vide letter no. 1172, dated 26.04.2023 certified that the distance of reserved / protected forest is more than 250 meters from proposed project site.
6	DSR	:	This project is mentioned in approved DSR of Dumka District (Sl. no. 48, Page no. 290).

7	Gram Sabha	:	Gram Sabha conducted on 19.04.2023.
8	Mine Plan Approval	:	Approved by District Mining Officer, Dumka vide Letter No. 1195/M, dated 19.10.2024.
9	Qualified Person	:	Shri Malay Kumar Mukhopadhyay was present in the meeting and affirmed that the mine plan has been prepared by him.
10	Baseline monitoring period	:	March, 2025 to May, 2025.
11	Public Hearing	:	Public hearing conducted on 22.11.2025.

Working Details

1	Mining Method	:	Opencast Fully mechanised method
2	Quarry Area	:	1.49 ha.
3	Waste Generation	:	23,088 cum.
4	Stripping Ratio	:	01:06
5	Working Days	:	300
6	Benches: size & No	:	6m x 6m
7	Elevation of Mine	:	258 m AMSL to 239 m AMSL
8	Ground Level Elevation	:	239 m AMSL
9	Ultimate Working Depth	:	217 m AMSL
10	Water Table	:	207 m AMSL (Source: JSAC Ground water Prospect Map)
11	Topography of Mine	:	The area represents a hillock land with rock mass of Basalt
12	Explosive Requirement	:	16 kg/day Slurry explosives
13	Diesel/Fuel requirement	:	HSD - 246 litre/day (73.8 KL/year)

Production Details

Year	Production of Stone		Removal of O.B
	In cum	In tonnes	Cum
1st	7452	20120	10360

2nd	9701	26194	12728
3rd	15818	42707	0
4th	16169	43656	0
5th	15466	41758	0
Total	64606	174435	23088

Land Use

Si. No.	Pattern of Utilization	Present/Existing land use pattern in (Ha.)	Proposed Land use for current plan period (Ha.)	Land used at the conceptual stage i.e. end of mine life in (Ha.)	Area to be converted in the conceptual period.
1	Mining Activities	0	0.590	0.235	Water Body
2	Dead Benches	0	0.000	0.355	Backfill & Plantation
3	Dumping	0	0.030	0.030	Plantation
4	Garland drain	0	0.040	0.040	-
5	Safety Zone	0	0.780	0.780	Plantation
6	Unutilized	1.44	0.000	0.000	-
7	Excavated	0.05	0.050	0.050	Backfill & Plantation
Total		1.49	1.49	1.49	-

Green Belt Development

Year	Location	No. of Plants	Area to be Covered (Ha)	Species of Plant
1 st Year	Within 7.5m in Safety Zone Area	1950	0.780	Mixed plants i.e. Mango, Guava, Saguana, Jackfruit, Gulmohar, Teak, Gamhar, etc. as available in the locality
Conceptual	Dead Benches	888	0.355	
Conceptual	Dumping	75	0.030	
1 st Year	Approach Road	127	190 m	
Total		3,040	0.805	

Note- 3040 tree proposed to be planted out of which 10% plantation will be carried out i.e. (304 trees) as per MoEF&CC, Govt. of India Scheme "Ek Ped Ma Ke Naam".

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

**BUDGETARY PROVISION (IN LAKHS)
PROJECT COST**

Sl. No.	Particular	Project Cost (in Rs. Lakhs)
1	Government Revenue (Deed Rent & Royalty)	25.00
2	Cost of Infrastructure	5.00
3	Machinery & Equipment	57.35
4	Miscellaneous	9.00
5	Contingency	9.64
Total Project Cost		105.99

ENVIRONMENT MANAGEMENT PLAN (EMP)

Sl. No.	Category	Capital Cost In lakhs	Recurring Cost In lakhs
1	Air Pollution Control (Water Sprinkling, Greenbelt, Dust Suppression)	3.00	1.60
2	Water Pollution Control (Garland Drains, Settling Tank, Rainwater Harvesting)	2.00	1.00
3	Noise & Vibration Control (Acoustic enclosures, Monitoring)	1.00	0.50
4	Occupational Health & Safety (PPE, Health Camps, First Air, Training)	0.60	0.30
5	Greenbelt Development (Plantation and Maintenance)	4.00	1.50
6	Environmental Monitoring (Air, Water, Noise, Soil)	1.30	1.00
7	PH Compliance Budget	12.30	-
8.	Environment Management Plan (For Habitation)	10.00	1.00
Total		34.20	6.90

Environment Monitoring Plan

Monitoring Parameters and Frequency of Monitoring

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S. no	Monitoring Parameters	No. of Locations	Frequency of Monitoring
1	Ambient Air: Ambient Air Quality at appropriate location for PM10, PM2.5, SO2, NOx in the vicinity of the mine area. In the surrounding area covering project site only.	4 Stations	Six Monthly
2	Water: Surface water sample in the vicinity of the Project area.	2 Surface water 2 Ground water	Six Monthly
3	Noise: Day & Night level Noise Monitoring.	4 stations	Six Monthly
4	Soil: Soil Monitoring, Qualitative and quantitative testing/analysis to check the soil fertility, porosity, texture, water holding capacity, etc.	2 stations	Six Monthly

Summary of Baseline Data:

Monitoring season - October 2024 - December 2024 for Winter season.

Type	Parameter
AAQ Parameter at 7 locations	PM ₁₀ = 79.80 µg/m ³ to 58.20 µg/m ³ PM _{2.5} = 33.40 µg/m ³ to 20.60 µg/m ³ SO ₂ = 7.80 µg/m ³ to 4.80 µg/m ³ NO _x = 30.60 µg/m ³ to 22.10 µg/m ³
Noise quality at 7 locations	Daytime 53.3 to 49.6 dB(A) Nighttime 40.2 to 34.2 dB(A)
Surface water at 2 locations	pH – 7.19 to 7.28 TDS – 275.7 to 269.3 mg/l Sulphate – 14.16 to 12.98 mg/l Fluoride – 0.31 to 0.4 mg/l Total Hardness – 116.28 to 122.4 mg/l
Ground water at 6 locations	Turbidity – 3.1 to <1.00 NTU pH – 7.41 to 6.74 Total Hardness – 188.64 to 134.64 mg/l TDS – 464.7 to 320.1 mg/l Sulphate – 30.16 to 12.82 µS/cm
Soil at 5 locations	pH – 6.92 to 7.52 Iron – <2.50 to 3.5 mg/kg Calcium – 2700 to 2200 mg/kg

Public Hearing (Action Plan) –

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Sl. No.	Issue Raised	Commitment by Project Proponent (Brief)	Time Frame	Funds to be Spent
				Capital (in Lakhs)
1	Employment should be provided to the villagers.	Project proponent assured that villagers according to their capability and subject to the requirement employment will be provided.	Continued Employment- Wages & Salary (Throughout the life cycle of the mining project)	Rs. 4.00 Lakhs
2	Repair and maintenance of 60- 70 feet of Road.	Project proponent assured that 60-70 feet of road will be repaired.	Rural road repair & maintenance - Immediate.	Rs 1.00 Lakhs
3	Arrangements of Hospital, Ambulance and there should be provision of jerseys for players, levelling of playground, Water sprinkling, and tree plantation should be done.	Project proponent assured that hospital for the patients, arrangement of a vehicle for taking patient to the hospital, provision of jerseys for players, levelling of playground, sprinkling of water and tree plantation will be done.	<ul style="list-style-type: none"> - Hospital and ambulance - Within 6 months - Provision of jerseys - Within 6 months - Levelling of Playground - within 6 months - Sprinkling of water and tree plantation - within 6 months. 	<ul style="list-style-type: none"> - Rs 3.00 Lakhs - Rs. 1.80 Lakhs - Under CSR activities. <p>Under EMP</p>
4	Blanket should be provided during winter season.	Project proponent assured that blankets will be provided during winter season.	Provision of Blankets- During winter season	Rs 2.50 Lakhs

				As mentioned above
Total				12.30

SE Need based Survey detail (included in CSR)

Zone	Coverage & Survey Details	Key Socio-Economic Observations	Workforce Characteristics	Priority Needs (Focused)	Proposed Budget (₹ Lakhs)	Implementation Timeline
0–2 km	Villages: 5 Households surveyed: 18 Population covered: 98 FGDs Conducted: 1	Balanced gender composition with presence of children and vulnerable groups. Proximity to mine increases sensitivity to dust, traffic and occupational health issues.	Low workforce participation (~35%); dominance of informal and “other” occupations indicating livelihood instability.	<ul style="list-style-type: none"> Preventive healthcare & health check-ups Local skill development linked to mine & allied activities 	2.9	Short-term & ongoing (Year 1–2)
2–5 km	Villages: 19 Households surveyed: 31 Population covered: 146 FGDs Conducted: 0	Moderate literacy levels with gender disparity; limited access to secondary education and structured training facilities.	Mixed workforce pattern; dependence on agriculture and daily wage labour.	<ul style="list-style-type: none"> Education support (secondary level / scholarships) Agricultural productivity support (inputs, awareness) 	3.8	Medium-term (Year 2–3)
Total (0–5 km)					6.7	

Environment Management Practices to be followed:

Aspect	Mitigation Measures / Control Measures
Solid Waste Management	<ul style="list-style-type: none"> Solid waste management is important from both aesthetic and environmental points of view and will be managed as per the Solid Waste Management Rules, 2016. An O.B. (Overburden) dump area of 0.030 ha has been provided within the lease area.

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	<ul style="list-style-type: none"> • The O.B. dump area will accommodate 23,088 cum of overburden during the working plan period. • After completion of the working plan, the generated O.B. will be backfilled into the stone quarry faces. • Part of the O.B. will be used for haul road and village road maintenance. • The remaining O.B. will be utilized for plantation activities. • No hazardous or other solid waste generation is envisaged from the stone mining activities.
Air Quality Management	<ul style="list-style-type: none"> • Wet drilling and use of sharp drill bits to minimize dust generation. • Controlled blasting using optimum explosive charge during favorable weather conditions. • Regular maintenance of diesel equipment and vehicles to reduce emissions. • Water sprinkling on haul roads, loading/unloading points, and working areas. • All transport vehicles will have valid PUC certificates. • Greenbelt and roadside plantation to act as dust and noise barriers.
Water Quality Management	<ul style="list-style-type: none"> • Mining will be confined only above the Ground Water Table (GWT). • Rainwater accumulated in the pit will be collected and pumped out regularly during monsoon. • Settling sump will be provided to desilt pumped out of mine-pit and collected through garland drain before discharge into natural drainage. • Garland and foot drains will be constructed around the quarry to control surface runoff. • Sewage from rest shelters will be treated through septic tank-soak pit systems. • Foot drain would be provided around the external dump, if any.
Noise Quality Management	<ul style="list-style-type: none"> • Mining activities will be restricted to daytime and carried out with controlled blasting techniques. • Acoustic enclosures and mufflers will be provided for drilling and DG set operations. • Regular maintenance of mining machinery to minimize vibration and noise. • Greenbelt development around the lease boundary to attenuate noise propagation. • Use of delayed blasting technique to minimize the adverse impact of vibration.
Soil Quality Management	<ul style="list-style-type: none"> • Topsoil will be carefully removed and stored separately for future use in plantation and reclamation. • Garland drains and retaining walls will prevent soil erosion and siltation.

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	<ul style="list-style-type: none"> Spillage of oil or fuel will be avoided; impervious flooring and oil traps provided near storage areas Post-mining, the area will be rehabilitated using stored topsoil and native vegetation
Flora & Fauna management	<ul style="list-style-type: none"> No tree felling will be undertaken without obtaining permission from the competent authority. Greenbelt and plantation will be developed using native species along approach roads and lease periphery (7.5m Safety Zone). Dust suppression measures will minimize impact on surrounding vegetation
Socio Economy:	<ul style="list-style-type: none"> Priority employment to local people in mining and ancillary activities. Community development initiatives such as tree plantation drives, road maintenance, and local infrastructure support. Awareness programs on safety, hygiene, and environmental protection
Monitoring & Reporting:	<ul style="list-style-type: none"> Periodic monitoring of air, water (ground & surface), noise, and soil quality as per CPCB and SPCB guidelines. All monitoring reports will be submitted to statutory authorities as per the compliance schedule. Corrective measures will be taken immediately if any deviation from standards is observed.
Risk & Hazard	<p>Activities which are likely to create risk are: Temporary Storage of Explosives, Charging of Explosives, Blasting, Drilling, Bench Formation, Loading / Unloading, Transportation</p> <p>Proposed Preventive measures:</p> <ul style="list-style-type: none"> Overall slope angles of benches will be maintained at 45°. Unmanageable heights are not created. Loose sides are properly dressed. No loose stone or debris will be permitted to remain on the top of the bench or side of any excavation (Regulation 106(4) of MMR 1961). No undercutting of any face or sides will be permitted so as to cause any overhanging (Regulation 106(5) of MMR 1961) It will be ensured that the drilling equipment is suitable for the job. The person in charge of the drilling machine is competent to carry out the drilling operation; part of the training includes instructions to always face towards the open edge of the bench so that any inadvertent backward step is away from the edge. Provision of portable rail fencing between the drilling operations and the edge of the bench

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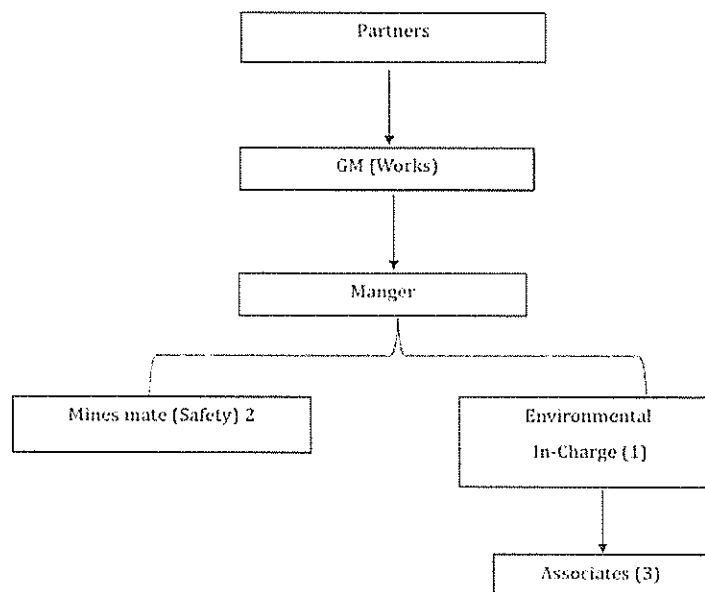
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	<ul style="list-style-type: none"> ▪ Provision to attach a safety line to the drilling rig and provide a harness for the driller to wear. ▪ Restricted access to the area to all persons except those necessary for the drilling operation. ▪ Wet drilling will be carried out by constantly injecting a jet of water at the drill bit inside the hole, which prevents dust generation. ▪ In case due to any reason, wet drilling is not possible (due to non-availability of water), exhaust/ vacuum system will be provided which removes the dust from the drill hole continuously and discharges the same in a dust collector specially provided for the purpose. ▪ Drilling machine shall be fitted with dust suppression, collection and disposal arrangement.
<p>Blasting & Handling of Explosives</p>	<ul style="list-style-type: none"> ▪ Blast hole geometry shall be properly designed. ▪ Blast site shall be wetted before and after blasting operations are completed. ▪ Only optimum quantity of permissible explosives shall be used so that the vibrations do not damage the structures/houses if the quarrying operations are close to human habitation. ▪ Blasting shall be conducted only during favourable weather conditions and only during the day time and permissible hours. ▪ While carrying out blasting operations near habitations, wide publicity will be given in the local area through announcement and other available media so that local people become aware of the blasting activities being undertaken in the area and take appropriate precautions. ▪ The vibrations should be monitored periodically in consultation with the local Mining authorities. ▪ Use of explosives is specialist work. Planning for a round of shots is necessary to ensure that the face is properly surveyed, holes correctly drilled, direction logged, the weight of explosive suitable for good fragmentation and the continuity of the initiator are but a few of the steps necessary to ensure its safe use. ▪ Proper and safe storage of explosives in approved and Licensed Magazine. ▪ Proper security system to prevent theft/ pilferage, unauthorized entry into Magazine area and checking authorized persons to prevent carrying of match box, lights, mobile phones, cigarette or Bidi etc. will be put in place. ▪ Explosives shall be conveyed in special containers. ▪ Explosives and detonators shall not be carried in the same container. ▪ The holes which have been charged with explosives will not be left unattended till blasting is completed.

Health Hazards	<p>Health hazards should be interpreted as being harmful dust and noise which is emitted during surface mining operations. All suitable steps and precautions will be undertaken to ensure minimum health hazard. Provision of use of Personal Protective Equipment (PPE) will be kept. The PPE shall be of good make and quality, wherever possible ISI certified, suitable for the hazard e.g. a dust respirator fitted with the correct filter to capture the particulate hazardous dust and maintained to recommended standards. As personal protective equipment only affords limited protection it will only be used as a last resort and as an interim arrangement until other steps are taken to reduce the risk of personal injury to an acceptable level</p>
Accident Prevention	<ul style="list-style-type: none"> ▪ Mine road shall be made smooth regularly with a road roller. ▪ Mine road will be made sufficiently wide to keep two-way traffic. Regular water sprinkling will be done on mine road and haul road to avoid suspension of dust. ▪ All transportation within the mine lease area should be carried out directly under the supervision and control of management. ▪ The vehicles will be maintained in good working condition and checked thoroughly at least once a month by the competent person authorized for the purpose by the management. ▪ Navigation signs will be provided at each and every turning point up to the main road (wherever required). ▪ To avoid danger while reversing the vehicles especially at working place/loading points, stopper should be posted to properly guide reversing/spotting operating.

Organizational Structure of Environment Management Cell:

ORGANIZATION CHART OF ENVIRONMENTAL MONITORING CELL



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EMP Cell structure

The EMP Cell is committed to ensuring environmental sustainability and compliance with regulatory requirements for the Stone Mining Project. With a clear structure, roles, and responsibilities, the EMP Cell is equipped to manage environmental impacts and promote sustainable practices.

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District Survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- i. If any tree felling than necessary permission shall be taken from the competent authority.
- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.
- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.
- l. Personal protective equipments such as clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Salbonapahar Stone Mine of Shri Hanuman Singh, Village : Salbonapahar, Thana : Shikaripara, Distt. : Dumka, Jharkhand (1.49 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I along with following specific conditions :

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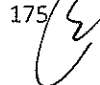






- I. The mine will come in operation only after obtaining permission from DGMS for controlled and delayed blasting.
- II. In compliance of Office Memorandum no. IA-J-11013/20/2025-IA-P, dated 25.11.2025 of MoEF&CC, Govt. of India, the PAs will mandatorily obtain the Environmental Safeguard to be implemented from Jharkhand State Pollution Control Board within 30 days of issuance of EC or 31.01.2026 whichever is earlier.
- III. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "Ek Ped Ma Ke Naam" and the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.
- IV. The Deputy Commissioner through District Mining Officer will ensure that the mines owner of the respective leases to complete the plantation and maintenance in a time bound manner.
- V. Suitable plant species of not less than 2 M height to be planted equal to twice the area of saplings proposed in Safety zone. This is to be planted in land available near mines and outside safety zone. This will be in addition to plantation in safety zone. Newly planted saplings to be maintained for minimum 3 years with Geo-Tagged photographs.
- VI. Dedicated water tanker to be provided for mine. The tanker to be used for spraying water on haul road and for irrigating newly planted saplings only. Sprinkling to be done such that the haul road is kept moistened all the time with Geo-Tagged photographs.
- VII. Pre employment Occupational health check up for employees to be done and thereafter at annual interval for PLFT, Audiometry and other required tests .Summary findings of same to submitted along with 6 monthly compliance.
- VIII. Ensure use of Quality PPEs equivalent not less than 3M make. Records of same to be maintained and submitted with 6 monthly compliance report with Geo-Tagged photographs.
- IX. Keep vulnerable areas unmanned. Ensure rotation of duties. Records to be maintained and submitted with 6 monthly compliance report.
- X. Failing of any of terms & conditions mentioned in EC can lead to revocation / cancellation of EC.

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15. Chandipur Stone Mine of Shri Ajit Kumar Singh, Village : Chandipur, Thana : Shikaripara, Distt. : Dumka, Jharkhand (2.10 Ha).

(Proposal no.: SIA/JH/MIN/ 561662 /2025)

Name of the consultant : Sathi Planners Pvt. Ltd., Ranchi, Jharkhand.

This is a new project which has been taken for appraisal on 17.01.2026.

Project Sector: 1(a) Mining of Minerals, Category: B1.

Application for Environmental Clearance (EC) after Terms of Reference (ToR).

The State Expert Appraisal Committee, Jharkhand deliberated the project during its 119th meeting held on 17.12.2024 - 22.12.2024 and SEIAA, Jharkhand has approved the ToRs in 119th meeting held on 30th & 31st December, 2024. TOR for the project was issued by SEIAA, Jharkhand vide letter no. EC/SEIAA/2024-25/3374/2024/511, dated 13.01.2025. The final EIA / EMP submitted by PP to SEAC on 12.01.2026.

EC Application for: Proposed Capacity – 27,598 cum/annum or 74,513 TPA.

Project and Location Details:

Sl	Parameter	Details	
1	Project Name	: Chandipur Stone Mine	
2	Applicant	: Shri Ajit Kumar Singh (Individual Proprietorship)	
3	Lease Address	: Village – Chandipur, Thana – Shikaripara, Thana No. 24, District- Dumka, State- Jharkhand	
4	Lease Area	: 2.10 Ha	Acres- 5.19 Acres
5	Cluster Details	: 4 no of mines including project site having total cluster area 23.64 Acres/9.56 Ha.	
6	Type of Land	: Non-Forest Raiyati Land	
7	Project Cost	: Rs. 102.69 Lakhs	Recurring: Rs. 7.30 Lakh/year
8	EMP Budget	: Capital: Rs. 61.93 lakhs	Recurring: Rs. 6.50 Lakh / year
9	New or Expansion	: New	
10	Mineable Reserves	: cum.: 1,28,022 cum	Tonnes: 3,45,659 tones
11	Mine Life	: 5 years	
12	Man power	: 17	
13	Water Requirement	: 10.87 KLD {Manpower (17 nos.)- 0.765 KLD, Plantation (2577 nos.)- 7.731 KLD, Dust Suppression- 2.381 KLD.}	
14	Water Source	: By authorised hired water tankers	
15	DG Set / power	: 20 KVA D.G. Set proposed	
16	Crusher	: No crusher	
17	Nearest Water Body	: Brahmani River- 6.8 km. in North direction of mine site.	
18	Nearest Habitation	: Ghatakpur Village (0.55 Km) in East Direction Village pond (470 m) (EMP prepared)	
19	Nearest Rail Station	: Pinargaria Railway station, approx. 4.84 km in NE direction.	

20	Nearest Air Port	:	Deoghar Airport, approx. 104 km towards NW direction
21	Nearest Forest	:	More than 250 m, as per the Division Forest Officer NOC, Letter No. 2049, dated 04.09.2024.
22	Road & Highways	:	The length of the approach road is 381 m. Thereafter, the road continues as a village road for approximately 2.5 km in the north direction, after which it connects to NH-114A.
23	Approach Road	:	The distance of Approach Road is 381m.
24	SE Budget	:	Rs. 5.9 Lakh (Need Based Survey)

CO-ORDINATES

Pillar No.	Latitude	Longitude
1	24° 10' 30.56794589" N	087° 40' 09.38703898" E
2	24° 10' 30.50684075" N	087° 40' 09.70854004" E
3	24° 10' 30.50771689" N	087° 40' 10.03828758" E
4	24° 10' 30.43416382" N	087° 40' 10.29975469" E
5	24° 10' 30.29900896" N	087° 40' 10.57796507" E
6	24° 10' 30.08051853" N	087° 40' 10.80762691" E
7	24° 10' 29.90255447" N	087° 40' 11.39056062" E
8	24° 10' 29.86929785" N	087° 40' 12.00268134" E
9	24° 10' 30.09061816" N	087° 40' 12.08896962" E
10	24° 10' 30.02586774" N	087° 40' 12.63600989" E
11	24° 10' 29.96837995" N	087° 40' 13.13328495" E
12	24° 10' 29.93044165" N	087° 40' 13.82679903" E
13	24° 10' 29.79005043" N	087° 40' 13.79000444" E
14	24° 10' 29.29543964" N	087° 40' 13.80362781" E
15	24° 10' 29.25222638" N	087° 40' 13.72699852" E
16	24° 10' 28.95940938" N	087° 40' 13.62711058" E
17	24° 10' 28.78106249" N	087° 40' 13.61601591" E
18	24° 10' 28.72340514" N	087° 40' 13.50638123" E
19	24° 10' 28.46717659" N	087° 40' 13.42689298" E
20	24° 10' 28.01950469" N	087° 40' 13.44018457" E
21	24° 10' 27.58549965" N	087° 40' 13.44957114" E
22	24° 10' 27.13621740" N	087° 40' 13.53235484" E
23	24° 10' 26.94002772" N	087° 40' 13.66086954" E
24	24° 10' 26.64377341" N	087° 40' 13.58238081" E
25	24° 10' 26.61591069" N	087° 40' 13.51620813" E
26	24° 10' 26.23290784" N	087° 40' 13.51942744" E
27	24° 10' 25.87616930" N	087° 40' 13.52423024" E
28	24° 10' 25.82062060" N	087° 40' 14.13852488" E
29	24° 10' 25.49478369" N	087° 40' 14.13470145" E
30	24° 10' 25.63526585" N	087° 40' 14.58389772" E
31	24° 10' 24.90727482" N	087° 40' 14.66338029" E
32	24° 10' 24.45753519" N	087° 40' 14.52674234" E
33	24° 10' 24.42859580" N	087° 40' 14.48999931" E
34	24° 10' 24.49566570" N	087° 40' 14.37768828" E
35	24° 10' 24.46635093" N	087° 40' 13.78234422" E
36	24° 10' 24.48834908" N	087° 40' 13.30009264" E

37	24° 10' 24.62169060" N	087° 40' 12.80211877" E
38	24° 10' 24.58248503" N	087° 40' 12.51257358" E
39	24° 10' 24.61689989" N	087° 40' 12.38397316" E
40	24° 10' 24.47924042" N	087° 40' 12.19535921" E
41	24° 10' 24.49788262" N	087° 40' 12.08432366" E
42	24° 10' 24.15837155" N	087° 40' 11.92050866" E
43	24° 10' 23.81459187" N	087° 40' 11.83921035" E
44	24° 10' 23.40455652" N	087° 40' 11.80441392" E
45	24° 10' 23.48543949" N	087° 40' 11.50238916" E
46	24° 10' 23.81665977" N	087° 40' 11.53596483" E
47	24° 10' 24.15004639" N	087° 40' 11.57217871" E
48	24° 10' 24.15639751" N	087° 40' 11.61205904" E
49	24° 10' 24.63917950" N	087° 40' 11.63494928" E
50	24° 10' 25.26139597" N	087° 40' 11.66381080" E
51	24° 10' 25.91713460" N	087° 40' 11.65727361" E
52	24° 10' 26.39151453" N	087° 40' 11.62320736" E
53	24° 10' 26.88220815" N	087° 40' 11.64674431" E
54	24° 10' 27.35821557" N	087° 40' 11.70408142" E
55	24° 10' 27.86954090" N	087° 40' 11.85751314" E
56	24° 10' 28.11450041" N	087° 40' 11.80208197" E
57	24° 10' 28.20824492" N	087° 40' 11.54137942" E
58	24° 10' 28.76073987" N	087° 40' 11.55672696" E
59	24° 10' 28.90626284" N	087° 40' 11.35095255" E
60	24° 10' 29.23472560" N	087° 40' 10.62814873" E
61	24° 10' 29.42244111" N	087° 40' 10.07602425" E
62	24° 10' 28.70417858" N	087° 40' 09.79495517" E
63	24° 10' 28.78712000" N	087° 40' 09.45595194" E
64	24° 10' 28.26801062" N	087° 40' 09.26648854" E
65	24° 10' 27.66090109" N	087° 40' 09.00071358" E
66	24° 10' 27.76792627" N	087° 40' 08.46289420" E
67	24° 10' 28.00770557" N	087° 40' 07.83868068" E
68	24° 10' 28.19603172" N	087° 40' 07.39942079" E
69	24° 10' 28.29488543" N	087° 40' 07.03048770" E
70	24° 10' 27.94883046" N	087° 40' 06.83152610" E
71	24° 10' 28.11998950" N	087° 40' 06.41097756" E
72	24° 10' 28.25703941" N	087° 40' 05.97452812" E
73	24° 10' 28.18570184" N	087° 40' 05.83721367" E
74	24° 10' 28.20479730" N	087° 40' 05.71999975" E
75	24° 10' 28.06342852" N	087° 40' 05.66468868" E
76	24° 10' 28.04299918" N	087° 40' 05.47122491" E
77	24° 10' 27.63525816" N	087° 40' 05.37855723" E
78	24° 10' 27.55307007" N	087° 40' 05.10948155" E
79	24° 10' 28.06576319" N	087° 40' 04.87531456" E
80	24° 10' 28.37680217" N	087° 40' 04.70306431" E
81	24° 10' 28.61504886" N	087° 40' 04.56634527" E
82	24° 10' 28.79437600" N	087° 40' 04.66235505" E
83	24° 10' 28.69786004" N	087° 40' 05.01218168" E

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84	24° 10' 29.07594950" N	087° 40' 05.19218879" E
85	24° 10' 29.27483416" N	087° 40' 05.76972766" E
86	24° 10' 29.47562716" N	087° 40' 06.19229150" E
87	24° 10' 29.68570021" N	087° 40' 06.62866542" E
88	24° 10' 29.90523013" N	087° 40' 07.14268712" E
89	24° 10' 30.09821632" N	087° 40' 07.57603204" E
90	24° 10' 30.37353185" N	087° 40' 07.79208075" E
91	24° 10' 30.65787291" N	087° 40' 07.96374721" E
92	24° 10' 30.94739504" N	087° 40' 08.11999673" E
93	24° 10' 31.05976685" N	087° 40' 08.49048821" E
94	24° 10' 31.20050642" N	087° 40' 08.91499620" E
95	24° 10' 31.43111021" N	087° 40' 09.03458414" E
96	24° 10' 31.25477441" N	087° 40' 09.40549489" E
97	24° 10' 30.68423088" N	087° 40' 09.08084030" E

LAND DETAILS

Khata no.	Plot no.
1, 6, 7, 8, 11 & 14	29, 30, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 70 & 71

STATUTORY CLEARANCES

1	LOI / Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Officer, Dumka vide letter no. 1087/M, dated 21.09.2024.
2	CO	:	The CO, Shikaripara vide letter no. 740/Ra., dated 22.08.2024 has mentioned the plot no. of the project is not recorded as "Jungle-Jhari" in R.S. Khatyan & Register II. During the appraisal it was seen from the KML that pond at a distance of 470 meters from mining lease area. For which detailed Environmental Management Plan has been prepared and submitted.
3	DMO cluster	:	DMO, Dumka vide memo no. 1269/M, dated 12.11.2024 certified that 03 other mining lease area (4.57 Acre, 6.51 Acre & 7.37 Acre) exists within 500 meters radius from proposed project site and total area is 23.64 Acre.
4	DFO Wild Life	:	DFO, Wildlife Division, Hazaribag vide letter no. 2005, dated 13.09.2024 certified that the proposed project site is outside Eco Sensitive Zone of Parasnath & Topchanchi Wildlife Sanctuary.
5	DFO Territorial	:	Divisional Forest Officer, Dumka Forest Division vide letter no. 2049, dated 04.09.2024 certified that the distance of reserved / protected forest is more than 250 meters from proposed project

		site.
6	DSR	: This project is mentioned in approved DSR of Dumka District (Sl. no. 69, Page no. 163).
7	Gram Sabha	: Gram Sabha conducted on 27.06.2024.
8	Mine Plan Approval	: Approved by District Mining Officer, Dumka vide Letter No. 1285/M, dated 14.11.2024.
9	Qualified Person	: Shri Malay Kumar Mukhopadhyay was present in the meeting and affirmed that the mine plan has been prepared by him.
10	Baseline monitoring period	: December, 2024 to February, 2025.
11	Public Hearing	: Public hearing conducted on 10.09.2025.

Working Details

1	Mining Method	: Opencast Fully mechanised method
2	Quarry Area	: 2.10 ha.
3	Waste Generation	: 21,782 cum.
4	Stripping Ratio	: 37:17
5	Working Days	: 300
6	Benches: size & No	: 6m x 6m
7	Elevation of Mine	: 59 m AMSL to 56 m AMSL
8	Ground Level Elevation	: 56 m AMSL
9	Ultimate Working Depth	: 33 m AMSL
10	Water Table	: 25 m AMSL (Source: JSAC Ground water Prospect Map)
11	Topography of Mine	: The area represents a hillock land with rock mass of Basalt
12	Explosive Requirement	: 11.16 kg/day Slurry explosives
13	Diesel/Fuel requirement	: HSD - 246 litre/day (78KL/year)

Production Details

Year	Production of Stone		Removal of O. B
	In cum	In tonnes	Cum
1st	26,572	71,746	10,043
2nd	27,598	74,513	0

3rd	27,497	74,241	4,823
4th	20,420	55,135	3,458
5th	26,021	70,258	3,458
Total	1,28,108	3,45,893	21,782

Land Use

Si. No.	Pattern of Utilization	Present/Existing land use pattern in (Ha.)	Proposed Land use for current plan period (Ha.)	Land used at the conceptual stage i.e. end of mine life in (Ha.)	Area to be converted in the conceptual period.
1	Mining Activities	0	1.185	1.103	Water Body
2	Dead Benches	0	0.000	0.082	Plantation
3	Dumping	0	0.000	0.000	Plantation
4	Garland drain	0	0.055	0.055	-
5	Settling Tank	0	0.013	0.013	-
6	Safety Zone	0	0.744	0.744	Plantation
7	Unutilized	2.10	0.103	0.103	Plantation
Total		2.10	2.10	2.10	-

Green Belt Development

Year	Location	No. of Plants	Area to be Covered (Ha)	Species of Plant
1 st Year	Within 7.5m in Safety Zone Area	1,860	0.744	Mixed plants i.e. Mango, Guava, Saguan, Jackfruit, Gulmohar, Teak, Gamhar, etc. as available in the locality
Conceptual	Dead Benches	205	0.082	
Conceptual	Unutilized	258	0.103	
1 st Year	Approach Road	254	381 m	
Total		2,577	0.929	

Note- 2,577 tree proposed to be planted out of which 10% plantation will be carried out i.e. (257 trees) as per MoEF&CC, Govt. of India Scheme "Ek Ped Ma Ke Naam".

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

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BUDGETARY PROVISION (IN LAKHS)
PROJECT COST

Sl. No.	Head	Capital Cost (Rs. in Lakhs)	Recurring Cost (Rs. in Lakhs)
1	Government Revenue (Dead Rent & Royalty)	26	-
2	Cost of Infrastructure	5.0	0.5
3	Mining Machineries owned by applicant	57.35	-
	a. Wagon Drill – 01		
	b. Tippers (25 tons) – 02		
	c. Rock Breakers – 01		
	d. Portable Water Pump – 02		
	Mining Machineries on hired basis (Excavator – 02, Tipper – 01)	-	5.5
4	Lease Agreement (lump-sum)	-	1.30
5	Statutory Clearance & Others	5.0	-
6	Contingency	9.34	-
Total		102.69	7.30

ENVIRONMENT MANAGEMENT PLAN (EMP)

S. No.	EMP Activity	Capital Cost (₹ in Lakhs)	Recurring Cost / Year (₹ in Lakhs)
1	Air Pollution Control (Water sprinkling, greenbelt, dust suppression)	3.00	2.00
2	Water Pollution Control (Garland drains, settling tank, rainwater harvesting)	3.00	1.00
3	Noise & Vibration Control (acoustic enclosures, monitoring)	1.50	0.50
4	Occupational Health & Safety (PPE, health camps, first aid, training)	1.00	1.00
5	Greenbelt Development (plantation, maintenance)	11.87	2.00
6	Environmental Monitoring (air,	1.24	1.00

	water, noise, soil)		
7	PH Compliance Budget	10.50	-
8	Environment Management Plan (For Pond)	29.82	0.00
Total		61.93	6.50

Environment Monitoring Plan
Monitoring Parameters and Frequency of Monitoring

S. no	Monitoring Parameters	No. of Locations	Frequency of Monitoring
1	Ambient Air: Ambient Air Quality at appropriate location for PM10, PM2.5, SO2, NOx in the vicinity of the mine area. In the surrounding area covering project site only.	4 Stations	Six Monthly
2	Water: Surface water sample in the vicinity of the Project area.	2 Surface water 2 Ground water	Six Monthly
3	Noise: Day & Night level Noise Monitoring.	4 stations	Six Monthly
4	Soil: Soil Monitoring, Qualitative and quantitative testing/analysis to check the soil fertility, porosity, texture, water holding capacity, etc.	25 stations	Six Monthly

Summary of Baseline Data:

Monitoring season - December 2024 - February 2025 for Winter season.

Type	Parameter
AAQ Parameter at 7 locations	PM ₁₀ = 51 µg/m ³ to 76 µg/m ³ PM _{2.5} = 31 µg/m ³ to 46 µg/m ³ SO ₂ = 6.0 µg/m ³ to 10.6 µg/m ³ NO _x = 14.6 µg/m ³ to 23.6 µg/m ³
Noise quality at 7 locations	Day-time 53.8 to 55.0 dB(A) Night-time 40.0 to 41.4 dB(A)
Surface water at 2 locations	pH – 7.09 to 7.27 TDS – 324 to 385 mg/l Sulphate – 15.85 to 21.06 mg/l Fluoride – 0.468 to 0.562 mg/l Total Hardness – 162.9 to 174.6 mg/l

Ground water at 6 locations	Turbidity – 0.63 to 2.11 NTU pH – 6.99 to 7.81 Total Hardness – 106.7 to 272.4 mg/l TDS – 300 to 675 mg/l Sulphate – 7.84 to 14.58 µS/cm
Soil at 5 locations	pH – 5.37 to 6.61 Potassium – 345 to 401 mg/kg Nitrogen – 316 to 407 mg/kg

Public Hearing (Action Plan) –

Sl. No.	Issue Raised	Commitment by Project Proponent (Brief)	Time Frame	Funds to be Spent
				Capital (in Lakhs)
1	A deep bore should be dug in the village for drinking water and a teacher should be provided for primary education.	The project proponent assured that a deep bore would be dug at a place identified by the villagers for drinking water and a teacher would be provided for primary education.	Deep boring will be dug withing 6 months of project commencement. Teacher for the primary education in the village will be arranged under CSR activity. – 12-18 months of project commencement.	Rs. 2.00 Lakhs Under CSR Fund
2	The rural road Lori Pahadi should be repaired, and a deep boring should be done in the village for drinking water, and the villagers should be given employment.	The project proponent assured that the rural road Lori Pahadi will be repaired and a deep boring will be done at a place identified by the villagers for drinking water and the villagers will be given priority in employment.	Road maintenance will be done during the project commencement. Deep boring will be done at the identified location within 6 months of project commencement.	Rs. 8.00 Lakhs As per above
3	Drinking water facilities, rural roads, and electricity should be repaired.	The project proponent assured that drinking water facilities, rural roads, and electricity will be repaired.	Drinking Water Facility - 6 months of project commencement. Rural Road maintenance - 3 months of project commencement. Electricity maintenance - 6 months of project commencement.	As per above 0.50
Total				10.50

SE Need based Survey detail (included in CSR)

Zone	Coverage & Survey Details	Key Socio-Economic Observations	Workforce Characteristics	Priority Needs (Focused)	Proposed Budget (₹ Lakhs)	Implementation Timeline
0-2 km	Villages: 8 Households surveyed: 20 Population covered: 100 FGDs Conducted: 1	Balanced gender composition with presence of children and vulnerable groups. Proximity to mine increases sensitivity to dust, traffic and occupational health issues.	Low workforce participation (~35%); dominance of informal and "other" occupations indicating livelihood instability.	<ul style="list-style-type: none"> Preventive healthcare & health check-ups Local skill development linked to mine & allied activities 	2.9	Short-term & ongoing (Year 1-2)
2-5 km	Villages: 13 Households surveyed: 22 Population covered: 105 FGDs Conducted: 0	Moderate literacy levels with gender disparity; limited access to secondary education and structured training facilities.	Mixed workforce pattern; dependence on agriculture and daily wage labour.	<ul style="list-style-type: none"> Education support (secondary level / scholarships) Agricultural productivity support (inputs, awareness) 	3.0	Medium-term (Year 2-3)
Total (0-5 km)					5.9	

Environment Management Practices to be followed:

Aspect	Mitigation Measures / Control Measures
Solid Waste Management	<ul style="list-style-type: none"> Solid waste management is important from both aesthetic and environmental points of view and will be managed as per the Solid Waste Management Rules, 2016. An O.B. (Overburden) dump area which is included in mining activities has been provided within the lease area. The O.B. dump area will accommodate 21,782 cum of overburden during the working plan period. After completion of the working plan, the generated O.B. will be backfilled into the stone quarry faces. Part of the O.B. will be used for haul road and village road maintenance. The remaining O.B. will be utilized for plantation activities. No hazardous or other solid waste generation is envisaged from the stone mining activities.
Air Quality Management	<ul style="list-style-type: none"> Wet drilling and use of sharp drill bits to minimize dust generation. Controlled blasting using optimum explosive charge during favorable weather conditions.

	<ul style="list-style-type: none"> • Regular maintenance of diesel equipment and vehicles to reduce emissions. • Water sprinkling on haul roads, loading/unloading points, and working areas. • All transport vehicles will have valid PUC certificates. • Greenbelt and roadside plantation to act as dust and noise barriers.
Water Quality Management	<ul style="list-style-type: none"> • Mining will be confined only above the Ground Water Table (GWT). • Rainwater accumulated in the pit will be collected and pumped out regularly during monsoon. • Settling sump will be provided to desilt pumped out of mine-pit and collected through garland drain before discharge into natural drainage. • Garland and foot drains will be constructed around the quarry to control surface runoff. • Sewage from rest shelters will be treated through septic tank-soak pit systems. • Foot drain would be provided around the external dump, if any.
Noise Quality Management	<ul style="list-style-type: none"> • Mining activities will be restricted to daytime and carried out with controlled blasting techniques. • Acoustic enclosures and mufflers will be provided for drilling and DG set operations. • Regular maintenance of mining machinery to minimize vibration and noise. • Greenbelt development around the lease boundary to attenuate noise propagation. • Use of delayed blasting technique to minimize the adverse impact of vibration.
Soil Quality Management	<ul style="list-style-type: none"> • Topsoil will be carefully removed and stored separately for future use in plantation and reclamation. • Garland drains and retaining walls will prevent soil erosion and siltation. • Spillage of oil or fuel will be avoided; impervious flooring and oil traps provided near storage areas • Post-mining, the area will be rehabilitated using stored topsoil and native vegetation
Flora & Fauna management	<ul style="list-style-type: none"> • No tree felling will be undertaken without obtaining permission from the competent authority. • Greenbelt and plantation will be developed using native species along approach roads and lease periphery (7.5m Safety Zone). • Dust suppression measures will minimize impact on surrounding vegetation
Socio Economy:	<ul style="list-style-type: none"> • Priority employment to local people in mining and ancillary activities. • Community development initiatives such as tree plantation drives, road maintenance, and local infrastructure support. • Awareness programs on safety, hygiene, and environmental protection
Monitoring & Reporting:	<ul style="list-style-type: none"> • Periodic monitoring of air, water (ground & surface), noise, and soil quality as per CPCB and SPCB guidelines. • All monitoring reports will be submitted to statutory authorities as

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		<p>per the compliance schedule.</p> <ul style="list-style-type: none"> • Corrective measures will be taken immediately if any deviation from standards is observed.
Risk & Hazard		<p>Activities which are likely to create risk are: Temporary Storage of Explosives, Charging of Explosives, Blasting, Drilling, Bench Formation, Loading / Unloading, Transportation</p> <p>Proposed Preventive measures:</p> <ul style="list-style-type: none"> ▪ Overall slope angles of benches will be maintained at 45°. ▪ Unmanageable heights are not created. ▪ Loose sides are properly dressed. ▪ No loose stone or debris will be permitted to remain on the top of the bench or side of any excavation (Regulation 106(4) of MMR 1961). ▪ No undercutting of any face or sides will be permitted so as to cause any overhanging (Regulation 106(5) of MMR 1961) ▪ It will be ensured that the drilling equipment is suitable for the job. ▪ The person in charge of the drilling machine is competent to carry out the drilling operation; part of the training includes instructions to always face towards the open edge of the bench so that any inadvertent backward step is away from the edge. ▪ Provision of portable rail fencing between the drilling operations and the edge of the bench ▪ Provision to attach a safety line to the drilling rig and provide a harness for the driller to wear. ▪ Restricted access to the area to all persons except those necessary for the drilling operation. ▪ Wet drilling will be carried out by constantly injecting a jet of water at the drill bit inside the hole, which prevents dust generation. ▪ In case due to any reason, wet drilling is not possible (due to non-availability of water), exhaust/ vacuum system will be provided which removes the dust from the drill hole continuously and discharges the same in a dust collector specially provided for the purpose. ▪ Drilling machine shall be fitted with dust suppression, collection and disposal arrangement.
Blasting & Handling of Explosives		<ul style="list-style-type: none"> ▪ Blast hole geometry shall be properly designed. ▪ Blast site shall be wetted before and after blasting operations are completed. ▪ Only optimum quantity of permissible explosives shall be used so that the vibrations do not damage the structures/houses if the quarrying operations are close to human habitation. ▪ Blasting shall be conducted only during favourable weather conditions and only during the day time and permissible hours. ▪ While carrying out blasting operations near habitations, wide publicity will be given in the local area through announcement and other available media so that local people become aware of the blasting activities being undertaken in the area and take appropriate precautions.

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	<ul style="list-style-type: none"> ▪ The vibrations should be monitored periodically in consultation with the local Mining authorities. ▪ Use of explosives is specialist work. Planning for a round of shots is necessary to ensure that the face is properly surveyed, holes correctly drilled, direction logged, the weight of explosive suitable for good fragmentation and the continuity of the initiator are but a few of the steps necessary to ensure its safe use. ▪ Proper and safe storage of explosives in approved and Licensed Magazine. ▪ Proper security system to prevent theft/ pilferage, unauthorized entry into Magazine area and checking authorized persons to prevent carrying of match box, lights, mobile phones, cigarette or Bidi etc. will be put in place. ▪ Explosives shall be conveyed in special containers. ▪ Explosives and detonators shall not be carried in the same container. ▪ The holes which have been charged with explosives will not be left unattended till blasting is completed.
Health Hazards	<p>Health hazards should be interpreted as being harmful dust and noise which is emitted during surface mining operations. All suitable steps and precautions will be undertaken to ensure minimum health hazard. Provision of use of Personal Protective Equipment (PPE) will be kept. The PPE shall be of good make and quality, wherever possible ISI certified, suitable for the hazard e.g. a dust respirator fitted with the correct filter to capture the particulate hazardous dust and maintained to recommended standards. As personal protective equipment only affords limited protection it will only be used as a last resort and as an interim arrangement until other steps are taken to reduce the risk of personal injury to an acceptable level</p>
Accident Prevention	<ul style="list-style-type: none"> ▪ Mine road shall be made smooth regularly with a road roller. ▪ Mine road will be made sufficiently wide to keep two-way traffic. Regular water sprinkling will be done on mine road and haul road to avoid suspension of dust. ▪ All transportation within the mine lease area should be carried out directly under the supervision and control of management. ▪ The vehicles will be maintained in good working condition and checked thoroughly at least once a month by the competent person authorized for the purpose by the management. ▪ Navigation signs will be provided at each and every turning point up to the main road (wherever required). ▪ To avoid danger while reversing the vehicles especially at working place/loading points, stopper should be posted to properly guide reversing/spotting operating.

Organizational Structure of Environment Management Cell:

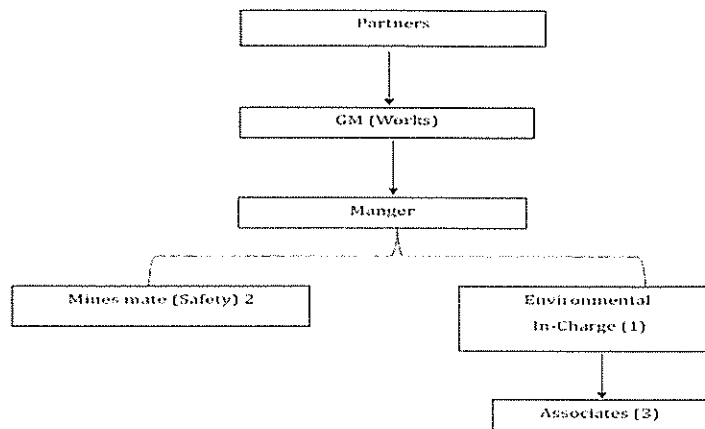
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ORGANIZATION CHART OF ENVIRONMENTAL MONITORING CELL



EMP Cell structure

The EMP Cell is committed to ensuring environmental sustainability and compliance with regulatory requirements for the Stone Mining Project. With a clear structure, roles, and responsibilities, the EMP Cell is equipped to manage environmental impacts and promote sustainable practices.

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District Survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- i. If any tree felling than necessary permission shall be taken from the competent authority.
- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.
- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.

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- I. Personal protective equipments such as clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Chandipur Stone Mine of Shri Ajit Kumar Singh, Village : Chandipur, Thana : Shikaripara, Distt. : Dumka, Jharkhand (2.10 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I along with following specific conditions :

- I. The mine will come in operation only after obtaining permission from DGMS for controlled and delayed blasting.
- II. In compliance of Office Memorandum no. IA-J-11013/20/2025-IA-P, dated 25.11.2025 of MoEF&CC, Govt. of India, the PAs will mandatorily obtain the Environmental Safeguard to be implemented from Jharkhand State Pollution Control Board within 30 days of issuance of EC or 31.01.2026 which ever is earlier.
- III. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "Ek Ped Ma Ke Naam" and the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.
- IV. The Deputy Commissioner through District Mining Officer will ensure that the mines owner of the respective leases to complete the plantation and maintenance in a time bound manner.
- V. Suitable plant species of not less than 2 M height to be planted equal to twice the area of saplings proposed in Safety zone. This is to be planted in land available near mines and outside safety zone. This will be in addition to plantation in safety zone. Newly planted saplings to be maintained for minimum 3 years with Geo-Tagged photographs.
- VI. Dedicated water tanker to be provided for mine. The tanker to be used for spraying water on haul road and for irrigating newly planted saplings only. Sprinkling to be done such that the haul road is kept moistened all the time with Geo-Tagged photographs.
- VII. Pre employment Occupational health check up for employees to be done and thereafter at annual interval for PLFT, Audiometry and other required tests .Summary findings of same to submitted along with 6 monthly compliance.
- VIII. Ensure use of Quality PPEs equivalent not less than 3M make. Records of same to be maintained and submitted with 6 monthly compliance report with Geo-Tagged photographs.
- IX. Keep vulnerable areas unmanned. Ensure rotation of duties. Records to be maintained and submitted with 6 monthly compliance report.
- X. Failing of any of terms & conditions mentioned in EC can lead to revocation / cancellation of EC.

Day 2 : 18th January, 2026 [Sunday]

Consideration of proposals :

1. Saharpur Stone Mine of Md. Kalim Ansari and Md. Wahid Alam, Village : Saharpur, Thana : Shikaripara (No. 12), Distt. : Dumka, Jharkhand (1.88 Ha).

(Proposal no.: SIA/JH/MIN/ 565348 /2026)

Name of the consultant : Sathi Planners Pvt. Ltd., Ranchi, Jharkhand.

This is a new project which has been taken for appraisal on 18.01.2026.

Project Sector: 1(a) Mining of Minerals, Category: B1.

Application for Environmental Clearance (EC) after Terms of Reference (ToR).

The State Expert Appraisal Committee, Jharkhand deliberated the project during its 121st meeting held on 08.03.2025 - 12.03.2025 and SEIAA, Jharkhand has approved the ToRs in 121st meeting held on 19th & 20th March, 2025. TOR for the project was issued by SEIAA, Jharkhand vide letter no. EC/SEIAA/2024-25/3504/2024/648, dated 20.03.2025. The final EIA / EMP submitted by PP to SEAC on 13.01.2026.

EC Application for: Proposed Capacity – 20,919 cum/annum or 56,481 TPA.

Project and Location Details:

Sl	Parameter	Details	
1	Project Name	: Saharpur Stone Mine	
2	Applicant	: Md. Kalim Ansari & Md. Wahid Alam	
3	Lease Address	: Md. Kalim Ansari & Md. Wahid Alam (Partner) S/o Hasil Miyan, Village: Thakarpur, P.O.: Kolha, Thana: Kathikand, District- Dumka, Jharkhand	
4	Lease Area	: 1.88 Ha	Acres- 4.66 Acres
5	Cluster Details	: 4 no of mines including project site having total cluster area 26.16 Acres	
6	Type of Land	: Non-Forest Raiyati Land	
7	Project Cost	: Rs. 162.80 Lakhs Recurring: Rs. 4.16 Lakhs	
8	EMP Budget	: Capital: Rs. 29.37 lakhs	Recurring: Rs. 17.53 Lakh / year
9	New or Expansion	: New	
10	Mineable Reserves	: cum.: 2,39,725 cum	Tonnes: 5,64,320 tones
11	Mine Life	: 5 years	
12	Man power	: 24	
13	Water Requirement	: 13.69 KLD {Manpower (24 nos.)- 1.08 KLD, Plantation (3244 nos.)- 9.732 KLD, Dust Suppression- 2.884 KLD.}	
14	Water Source	: By authorised hired water tankers	
15	DG Set / power	: 60 KVA D. G. Set proposed	
16	Crusher	: No crusher	

17	Nearest Water Body	:	Bansoli River flowing 8 km in NE direction
18	Nearest Habitation	:	Saharpur Village (650 m) in NW Direction
19	Nearest Rail Station	:	Pakdaha Railway station, approx. 6.1 km in N direction.
20	Nearest Air Port	:	Deoghar Airport, approx. 92.4 km towards N direction
21	Nearest Forest	:	More than 250 m, as per the Division Forest Officer NOC, Letter No. 1874, dated 14.08.2024.
22	Road & Highways	:	The length of the approach road is 68 m that continues as a village road for approximately 3.2 km after which it connects to NH-39.
23	Approach Road	:	The distance of Approach Road is 68m.
24	SE Budget		Rs. 7.0 Lakh (Need Based Survey)

CO-ORDINATES

Point ID	Longi	Lati
1	24° 11' 07.64301802" N	87° 34' 24.24187935" E
2	24° 11' 06.60948514" N	87° 34' 24.18004752" E
3	24° 11' 06.22718785" N	87° 34' 24.53238078" E
4	24° 11' 06.18608999" N	87° 34' 24.51966450" E
5	24° 11' 06.10498787" N	87° 34' 24.74736441" E
6	24° 11' 05.89428468" N	87° 34' 25.75302088" E
7	24° 11' 05.78725070" N	87° 34' 27.05618364" E
8	24° 11' 05.70619211" N	87° 34' 27.69564477" E
9	24° 11' 05.60617015" N	87° 34' 27.83178434" E
10	24° 11' 05.42623808" N	87° 34' 28.42768914" E
11	24° 11' 05.22389667" N	87° 34' 28.88603104" E
12	24° 11' 04.60996937" N	87° 34' 29.81114829" E
13	24° 11' 04.06727456" N	87° 34' 30.84592696" E
14	24° 11' 03.46249686" N	87° 34' 31.98839441" E
15	24° 11' 02.82031596" N	87° 34' 33.26002953" E
16	24° 11' 02.31477722" N	87° 34' 34.13469585" E
17	24° 11' 02.03632638" N	87° 34' 33.22726856" E
18	24° 11' 01.76466387" N	87° 34' 32.79930310" E
19	24° 11' 02.43347204" N	87° 34' 31.99921116" E
20	24° 11' 02.98437700" N	87° 34' 31.61962379" E
21	24° 11' 03.15871208" N	87° 34' 31.31150203" E
22	24° 11' 03.02922377" N	87° 34' 31.20795343" E
23	24° 11' 03.32431535" N	87° 34' 30.18817797" E
24	24° 11' 03.58568729" N	87° 34' 29.76031615" E
25	24° 11' 04.28206841" N	87° 34' 28.78094902" E
26	24° 11' 04.52829484" N	87° 34' 28.19427501" E
27	24° 11' 04.63246498" N	87° 34' 27.70564232" E
28	24° 11' 04.67759972" N	87° 34' 27.21674515" E
29	24° 11' 05.02131136" N	87° 34' 26.87076545" E
30	24° 11' 05.26941979" N	87° 34' 26.82897230" E
31	24° 11' 05.58372358" N	87° 34' 26.97625085" E

32	24° 11' 05.70757374" N	87° 34' 25.69116717" E
33	24° 11' 05.97812620" N	87° 34' 24.43175873" E
34	24° 11' 05.61376835" N	87° 34' 24.30572632" E
35	24° 11' 05.41015659" N	87° 34' 24.19498324" E
36	24° 11' 05.24197359" N	87° 34' 24.04046542" E
37	24° 11' 04.54480641" N	87° 34' 23.22184124" E
38	24° 11' 04.26611474" N	87° 34' 22.98171006" E
39	24° 11' 04.46193221" N	87° 34' 22.48559142" E
40	24° 11' 04.98749878" N	87° 34' 22.04860684" E
41	24° 11' 03.74246450" N	87° 34' 21.56802206" E
42	24° 11' 03.97404951" N	87° 34' 20.93751796" E
43	24° 11' 03.55916493" N	87° 34' 20.74345963" E
44	24° 11' 03.62603580" N	87° 34' 20.37581884" E
45	24° 11' 03.74842366" N	87° 34' 19.98096741" E
46	24° 11' 03.97487125" N	87° 34' 19.54516410" E
47	24° 11' 04.45586399" N	87° 34' 18.73477483" E
48	24° 11' 04.91080329" N	87° 34' 18.99491007" E
49	24° 11' 05.60673580" N	87° 34' 19.47304065" E
50	24° 11' 06.44318617" N	87° 34' 20.09458268" E
51	24° 11' 06.70317519" N	87° 34' 20.62019648" E
52	24° 11' 06.67518224" N	87° 34' 21.36693808" E
53	24° 11' 06.77431592" N	87° 34' 21.79847637" E
54	24° 11' 06.90686460" N	87° 34' 22.05168484" E
55	24° 11' 06.80042488" N	87° 34' 22.89418043" E
56	24° 11' 06.68502360" N	87° 34' 23.44008565" E
57	24° 11' 07.15028359" N	87° 34' 22.96438904" E
58	24° 11' 07.26687202" N	87° 34' 22.77270130" E
59	24° 11' 07.74528373" N	87° 34' 22.81877155" E
60	24° 11' 08.04036816" N	87° 34' 22.71849347" E
61	24° 11' 08.33363546" N	87° 34' 22.43148987" E
62	24° 11' 08.46550174" N	87° 34' 22.19593624" E
63	24° 11' 09.03512587" N	87° 34' 21.42964273" E
64	24° 11' 09.16508055" N	87° 34' 21.30484522" E

LAND DETAILS

Khata no.	Plot no.
19, 26, 07, 16 & 18	136, 138 (P), 139, 140, 146 (P), 147, 148, 149 & 150

STATUTORY CLEARANCES

1	LOI / Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Officer, Dumka vide letter no. 1045/M, dated 12.09.2024.
2	CO	:	The CO, Shikaripara vide letter no. 780/Ra., dated 30.08.2024 has mentioned the plot no. of the project is not recorded as "Jungle-

		Jhari" in R.S. Khatiyani & Register II.
3	DMO Cluster	: DMO, Dumka vide memo no. 991/M, dated 24.08.2024 certified that 04 other mining lease area (2.81 Acre, 6.73 Acre, 7.34 Acre & 4.62 Acre) exists within 500 meters radius from proposed project site and total area is 26.16 Acre.
4	DFO Wild Life	: DFO, Wildlife Division, Hazaribag vide letter no. 1801, dated 13.08.2024 certified that the proposed project site is outside Eco Sensitive Zone of Parasnath & Topchanchi Wildlife Sanctuary.
5	DFO Territorial	: Divisional Forest Officer, Dumka Forest Division vide letter no. 1874, dated 14.08.2024 certified that the distance of reserved / protected forest is more than 250 meters from proposed project site.
6	DSR	: This project is mentioned in approved DSR of Dumka District (Sl. no. 63, Page no. 161).
7	Gram Sabha	: Gram Sabha conducted on 01.01.2024.
8	Mine Plan Approval	: Approved by District Mining Officer, Dumka vide Letter No. 210/M, dated 27.01.2025.
9	Qualified Person	: Shri Malay Kumar Mukhopadhyay was present in the meeting and affirmed that the mine plan has been prepared by him.
10	Baseline monitoring period	: December, 2024 to February, 2025.
11	Public Hearing	: Public hearing conducted on 24.09.2025.

Working Details

1	Mining Method	: Opencast Fully mechanised method
2	Quarry Area	: 1.88 ha.
3	Waste Generation	: 15,004 cum.
4	Stripping Ratio	: 01:0.05
5	Working Days	: 300
6	Benches: size & No	: 5m x 5.5m
7	Elevation of Mine	: 171 m AMSL to 165 m AMSL
8	Ground Level Elevation	: 165 m AMSL
9	Ultimate Working Depth	: 26 m AMSL
10	Water Table	: 138 m RL (Source: JSAC Ground water Prospect Map)

11	Topography of Mine	:	The area represents gently sloping land
12	Explosive Requirement	:	21.38 kg/day Slurry explosives
13	Diesel/Fuel requirement	:	HSD – 231.72 litres/day (69.51 KL/year)

Production Details

Year	Production of Stone		Removal of O.B.
	In cum	In tonnes	Cum
1st	19262	52008	8,584
2nd	20919	56481	6,420
3rd	17434	47073	0
4th	19543	52767	0
5th	11628	31396	0
Total	88787	2,39,725	15,004

Land Use

Si. No.	Pattern of Utilization	Present/Existing land use pattern in (Ha.)	Proposed Land use for current plan period (Ha.)	Land used at the conceptual stage i.e. end of mine life in (Ha.)	Area to be converted in the conceptual period.
1	Mining Activities	0.0	0.712	0.712	Water Body
2	Office/Store etc.	0.0	0.00	0.0	Plantation
3	Dumping	0.0	0.085	0.085	Plantation
4	Mining Road	0.0	0.0	0.0	Water Body
5	Garland drain	0.0	0.0	0.0	-
6	Settling tank	0.0	0.0	0.0	-
7	Greenbelt	0.0	0.085	0.085	Greenbelt
8	Safety zone	0.0	0.924	0.924	Plantation
9	Pre mined area	0.074	0.074	0.074	Plantation
10	Unutilized	1.806	0.0	0.0	-
11	Crusher	0.0	0.0	0.0	-

Total	1.88	1.88	1.88	-
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Green Belt Development

Year	Location	No. of Plants	Area to be Covered (Ha)	Species of Plant
1 st Year	Within 7.5m in Safety Zone Area	2310	0.924	Mixed plants i.e. Mango, Guava, Saguana, Jackfruit, Gulmohar, Teak, Gamhar, etc. as available in the locality
Conceptual	Dumping	212	0.085	
Conceptual	Unutilized	212	0.085	
Conceptual	Pre-mined area	185	0.074	
1 st Year	Approach Road	325	488 m	
Total		3,244	1.168	

Note- 3,244 tree proposed to be planted out of which 10% plantation will be carried out i.e. (324 trees) as per MoEF&CC, Govt. of India Scheme "Ek Ped Ma Ke Naam".

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

BUDGETARY PROVISION (IN LAKHS)

PROJECT COST

Sl. No.	Head	Capital Cost Rs. in Lakhs	Recurring Cost Rs. in Lakhs
1.	Cost of Infrastructure	5.00	0.5
2.	Mining Machineries owned by applicants <ul style="list-style-type: none"> Wagon Drill -01 Compressor-01 Tippers -02 Excavator-01 D.G. Set-01 	109	--
	Mining Machineries on hired basis (Excavator- 01, Tipper-01)	--	2.5
3.	Lease Agreement (lump-sum)	--	1.16

4.	Government revenue (deed rent & royalty)	25	--
5.	Statutory Clearance & Others	9.0	--
6.	Contingency	14.8	--
	Total	162.8	4.16

ENVIRONMENT MANAGEMENT PLAN (EMP)

Sl. No.	Category	Capital Cost In lakhs	Recurring Cost In lakhs
1	Air Pollution Control (Water Sprinkling, Greenbelt, Dust Suppression)	-	4.00
2	Water Pollution Control (Garland Drains, Settling Tank, Rainwater Harvesting)	3.00	1.00
3	Noise & Vibration Control (Acoustic enclosures, Monitoring)	1.50	0.50
4	Occupational Health & Safety (PPE, Health Camps, First Air, Training)	1.50	1.00
5	Greenbelt Development (Plantation and Maintenance)	14.28	1.43
6	Environmental Monitoring (Air, Water, Noise, Soil)	-	1.00
7	PH Compliance Budget	22.00	-
	Total	29.37	17.53

Environment Monitoring Plan

Monitoring Parameters and Frequency of Monitoring

S. no	Monitoring Parameters	No. of Locations	Frequency of Monitoring
1	Ambient Air: Ambient Air Quality at appropriate location for PM10, PM2.5, SO2, NOx in the vicinity of the mine area. In the surrounding area covering project site only.	4 Stations	Six Monthly
2	Water: Surface water sample in the vicinity of the Project area.	2 Surface water 2 Ground water	Six Monthly
3	Noise: Day & Night level Noise Monitoring.	4 stations	Six Monthly
4	Soil: Soil Monitoring, Qualitative and quantitative testing/analysis to check the soil fertility, porosity, texture, water holding capacity, etc.	2 stations	Six Monthly

Summary of Baseline Data:

Monitoring season - December 2024 - February 2025 for Winter season.

Type	Parameter
AAQ Parameter at 7 locations	PM10 = 31.20 µg/m ³ to 76.50 µg/m ³ PM2.5 = 18.60 µg/m ³ to 48.50 µg/m ³ SO ₂ = 5.12 µg/m ³
Noise quality at 7 locations	Daytime 45.6 to 47.2.8 dB(A) Nighttime 34.1 to 35.3 dB(A)
Surface water at 2 locations	pH – 7.09 to 7.13 TDS – 293 to 336 mg/l Sulphate – 20.9 to 23.4 mg/l Fluoride – 0.23 mg/l to 0.27 mg/l
Ground water at 6 locations	pH – 6.88 - 7.12 Chloride – 28.1 to 22.9 mg/l Sulphates – 21.4 mg/l to 29.6 mg/l TDS – 232 to 218 mg/l
Soil at 5 locations	pH – 4.71 to 6.46 Conductivity-0.13 to 0.41 µS/cm Bulk Density-1.2 to 1.31 gm/cc

Public Hearing (Action Plan) –

Sl. no.	Issue Raised	Commitment by Project Proponent (Brief)	Time frame	Funds to Spend (In Lakh)
1.	The Saharpur Hasabthan and Saharpur Benagadia roads should be repaired.	The project proponent assured that the Saharpur Hasabthan and Saharpur Benagadiya roads would be repaired.	Road Repair- Saharpur Hasabthan Road Saharpur Benagadiya Road- Within 6 months.	Rs. 8.00 Lakhs
2.	Water from the abandoned mines should be used for agriculture.	Appropriate measures would be taken to use the water from the closed mine for agriculture.	Utilization of water from closed mine for agriculture- Within 6 months.	Rs. 5.00 Lakhs
3.	Proper arrangements should be made for this, including deep	A deep boring would be done at the place identified by the	Deep boring for drinking water– Within 3 months	Rs. 3.00 Lakhs

	boring	villagers for drinking water		
4.	The field should be leveled for football.	The football ground would be levelled.	Levelling and development of football ground- Within 3 months.	Rs. 1.00 Lakhs.
5.	The problems of employment.	The project proponent assured that the villagers would be given priority in employment as per their qualifications and needs	Initial Recruitment- Skill Development & Training (During mine development and Construction phase (0-6 months) Continued Employment- Wages & Salary (Throughout the life cycle of the mining project)	Rs. 1.00 Lakhs Rs. 4.00 Lakh
6.	The Saharpur to Benagadia road generates a lot of dust. Therefore, regular water sprinkling should be done to control dust.	The project proponent assured that regular water sprinkling will be done to control dust on the transport route and the road will also be regularly repaired and trees will be planted in the mines area and transport route.	Water sprinkling- Immediate and Continuous during operation. Repair and Maintenance- Within 3 months Tree plantation- within 6 months.	Included in the EMP Cost.
7.	A large water tank should be built to store water.	The project proponent assured that the construction of a water tank.	Construction of a large water storage tank- Within 6-9 months.	Under CSR Funds.
8.	Furthermore, the village school does not provide proper education. The teacher should be replaced.	The project proponent stated that since teacher changes within any school are beyond their purview, this is the responsibility of the relevant department. Therefore, this work is only possible through the relevant department.	-	-
9.	The Mine should	The project	Mine will be	Part of project

operate as per the government rules.	proponent assured that the mine would operate as per the government rules.	operated as per the government rule.	capital and operational cost.
Total			22.00

SE Need based Survey detail (included in CSR)

Zone	Coverage & Survey Details	Key Socio-Economic Observations	Workforce Characteristics	Priority Needs (Focused)	Proposed Budget (₹ Lakhs)	Implementation Timeline
0–2 km	Villages: 8 Households surveyed: 24 Population covered: 110 FGDs Conducted: 1	Balanced gender composition with presence of children and vulnerable groups. Proximity to mine increases sensitivity to dust, traffic and occupational health issues.	Low workforce participation (~35%); dominance of informal and “other” occupations indicating livelihood instability.	<ul style="list-style-type: none"> Preventive healthcare & health check-ups Local skill development linked to mine & allied activities 	3.8	Short-term & ongoing (Year 1–2)
2–5 km	Villages: 15 Households surveyed: 28 Population covered: 125 FGDs Conducted: 0	Moderate literacy levels with gender disparity; limited access to secondary education and structured training facilities.	Mixed workforce pattern; dependence on agriculture and daily wage labour.	<ul style="list-style-type: none"> Education support (secondary level / scholarships) Agricultural productivity support (inputs, awareness) 	3.2	Medium-term (Year 2–3)
Total (0–5 km)						7.0 Lakhs

Environment Management Practices to be followed:

Aspect	Mitigation Measures / Control Measures
Solid Waste Management	<p>Solid waste management is important from both aesthetic and environmental points of view and will be managed as per the Solid Waste Management Rules, 2016.</p> <ul style="list-style-type: none"> An O.B. (Overburden) dump area of 0.085 ha has been provided within the lease area. The O.B. dump area will accommodate 15,004 cum of overburden during the working plan period. After completion of the working plan, the generated O.B. will be backfilled into the stone quarry faces. Part of the O.B. will be used for haul road and village road maintenance. The remaining O.B. will be utilized for plantation activities. No hazardous or other solid waste generation is envisaged from the stone mining activities.

Air Quality Management	<ul style="list-style-type: none"> • Wet drilling and use of sharp drill bits to minimize dust generation. • Controlled blasting using optimum explosive charge during favorable weather conditions. • Regular maintenance of diesel equipment and vehicles to reduce emissions. • Water sprinkling on haul roads, loading/unloading points, and working areas. • All transport vehicles will have valid PUC certificates. • Greenbelt and roadside plantation to act as dust and noise barriers.
Water Quality Management	<ul style="list-style-type: none"> • Mining will be confined only above the Ground Water Table (GWT). • Rainwater accumulated in the pit will be collected and pumped out regularly during monsoon. • Settling sump will be provided to desilt pumped out of mine-pit and collected through garland drain before discharge into natural drainage. • Garland and foot drains will be constructed around the quarry to control surface runoff. • Sewage from rest shelters will be treated through septic tank-soak pit systems. • Foot drain would be provided around the external dump, if any.
Noise Quality Management	<ul style="list-style-type: none"> • Mining activities will be restricted to daytime and carried out with controlled blasting techniques. • Acoustic enclosures and mufflers will be provided for drilling and DG set operations. • Regular maintenance of mining machinery to minimize vibration and noise. • Greenbelt development around the lease boundary to attenuate noise propagation. • Use of delayed blasting technique to minimize the adverse impact of vibration.
Soil Quality Management	<ul style="list-style-type: none"> • Topsoil will be carefully removed and stored separately for future use in plantation and reclamation. • Garland drains and retaining walls will prevent soil erosion and siltation. • Spillage of oil or fuel will be avoided; impervious flooring and oil traps provided near storage areas • Post-mining, the area will be rehabilitated using stored topsoil and native vegetation
Flora & Fauna management	<ul style="list-style-type: none"> • No tree felling will be undertaken without obtaining permission from the competent authority. • Greenbelt and plantation will be developed using native species along approach roads and lease periphery (7.5m Safety Zone). • Dust suppression measures will minimize impact on surrounding vegetation
Socio Economy:	<ul style="list-style-type: none"> • Priority employment to local people in mining and ancillary activities. • Community development initiatives such as tree plantation drives, road maintenance, and local infrastructure support. • Awareness programs on safety, hygiene, and environmental protection

Monitoring & Reporting:	<ul style="list-style-type: none"> • Periodic monitoring of air, water (ground & surface), noise, and soil quality as per CPCB and SPCB guidelines. • All monitoring reports will be submitted to statutory authorities as per the compliance schedule. • Corrective measures will be taken immediately if any deviation from standards is observed.
Risk & Hazard	<p>Activities which are likely to create risk are: Temporary Storage of Explosives, Charging of Explosives, Blasting, Drilling, Bench Formation, Loading / Unloading, Transportation</p> <p>Proposed Preventive measures:</p> <ul style="list-style-type: none"> ▪ Overall slope angles of benches will be maintained at 45°. ▪ Unmanageable heights are not created. ▪ Loose sides are properly dressed. ▪ No loose stone or debris will be permitted to remain on the top of the bench or side of any excavation (Regulation 106(4) of MMR 1961). ▪ No undercutting of any face or sides will be permitted so as to cause any overhanging (Regulation 106(5) of MMR 1961) ▪ It will be ensured that the drilling equipment is suitable for the job. ▪ The person in charge of the drilling machine is competent to carry out the drilling operation; part of the training includes instructions to always face towards the open edge of the bench so that any inadvertent backward step is away from the edge. ▪ Provision of portable rail fencing between the drilling operations and the edge of the bench ▪ Provision to attach a safety line to the drilling rig and provide a harness for the driller to wear. ▪ Restricted access to the area to all persons except those necessary for the drilling operation. ▪ Wet drilling will be carried out by constantly injecting a jet of water at the drill bit inside the hole, which prevents dust generation. ▪ In case due to any reason, wet drilling is not possible (due to non-availability of water), exhaust/ vacuum system will be provided which removes the dust from the drill hole continuously and discharges the same in a dust collector specially provided for the purpose. ▪ Drilling machine shall be fitted with dust suppression, collection and disposal arrangement.
Blasting & Handling of Explosives	<ul style="list-style-type: none"> ▪ Blast hole geometry shall be properly designed. ▪ Blast site shall be wetted before and after blasting operations are completed. ▪ Only optimum quantity of permissible explosives shall be used so that the vibrations do not damage the structures/houses if the quarrying operations are close to human habitation. ▪ Blasting shall be conducted only during favourable weather conditions and only during the day time and permissible hours. ▪ While carrying out blasting operations near habitations, wide publicity will be given in the local area through announcement and other available media so that local people become aware of the

	<p>blasting activities being undertaken in the area and take appropriate precautions.</p> <ul style="list-style-type: none"> ▪ The vibrations should be monitored periodically in consultation with the local Mining authorities. ▪ Use of explosives is specialist work. Planning for a round of shots is necessary to ensure that the face is properly surveyed, holes correctly drilled, direction logged, the weight of explosive suitable for good fragmentation and the continuity of the initiator are but a few of the steps necessary to ensure its safe use. ▪ Proper and safe storage of explosives in approved and Licensed Magazine. ▪ Proper security system to prevent theft/ pilferage, unauthorized entry into Magazine area and checking authorized persons to prevent carrying of match box, lights, mobile phones, cigarette or Bidi etc. will be put in place. ▪ Explosives shall be conveyed in special containers. ▪ Explosives and detonators shall not be carried in the same container. ▪ The holes which have been charged with explosives will not be left unattended till blasting is completed.
Health Hazards	<p>Health hazards should be interpreted as being harmful dust and noise which is emitted during surface mining operations. All suitable steps and precautions will be undertaken to ensure minimum health hazard. Provision of use of Personal Protective Equipment (PPE) will be kept. The PPE shall be of good make and quality, wherever possible ISI certified, suitable for the hazard e.g. a dust respirator fitted with the correct filter to capture the particulate hazardous dust and maintained to recommended standards. As personal protective equipment only affords limited protection it will only be used as a last resort and as an interim arrangement until other steps are taken to reduce the risk of personal injury to an acceptable level</p>
Accident Prevention	<ul style="list-style-type: none"> ▪ Mine road shall be made smooth regularly with a road roller. ▪ Mine road will be made sufficiently wide to keep two-way traffic. Regular water sprinkling will be done on mine road and haul road to avoid suspension of dust. ▪ All transportation within the mine lease area should be carried out directly under the supervision and control of management. ▪ The vehicles will be maintained in good working condition and checked thoroughly at least once a month by the competent person authorized for the purpose by the management. ▪ Navigation signs will be provided at each and every turning point up to the main road (wherever required). ▪ To avoid danger while reversing the vehicles especially at working place/loading points, stopper should be posted to properly guide reversing/spotting operating.

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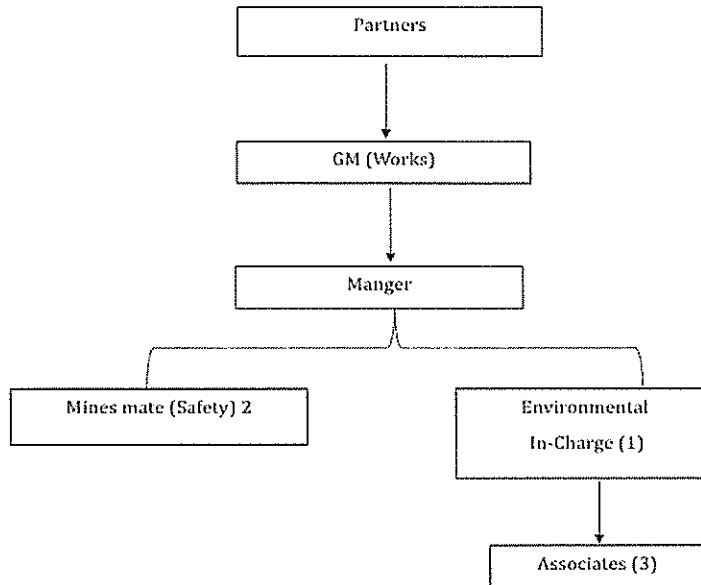
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Organizational Structure of Environment Management Cell:

ORGANIZATION CHART OF ENVIRONMENTAL MONITORING CELL



EMP Cell structure

The EMP Cell is committed to ensuring environmental sustainability and compliance with regulatory requirements for the Stone Mining Project. With a clear structure, roles, and responsibilities, the EMP Cell is equipped to manage environmental impacts and promote sustainable practices.

Undertaking submitted affirming:

- Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- The District Survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- The Boundary Pillars of the proposed mine lease area will be maintained properly.
- One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- If any tree felling than necessary permission shall be taken from the competent authority.
- Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.

- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.
- l. Personal protective equipments such as clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Saharpur Stone Mine of Md. Kalim Ansari and Md. Wahid Alam, Village : Saharpur, Thana : Shikaripara (No. 12), Distt. : Dumka, Jharkhand (1.88 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I along with following specific conditions :

- I. In compliance of Office Memorandum no. IA-J-11013/20/2025-IA-P, dated 25.11.2025 of MoEF&CC, Govt. of India, the PAs will mandatorily obtain the Environmental Safeguard to be implemented from Jharkhand State Pollution Control Board within 30 days of issuance of EC or 31.01.2026 which ever is earlier.
- II. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "Ek Ped Ma Ke Naam" and the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.
- III. The Deputy Commissioner through District Mining Officer will ensure that the mines owner of the respective leases to complete the plantation and maintenance in a time bound manner.
- IV. Suitable plant species of not less than 2 M height to be planted equal to twice the area of saplings proposed in Safety zone. This is to be planted in land available near mines and outside safety zone. This will be in addition to plantation in safety zone. Newly planted saplings to be maintained for minimum 3 years with Geo-Tagged photographs.
- V. Dedicated water tanker to be provided for mine. The tanker to be used for spraying water on haul road and for irrigating newly planted saplings only. Sprinkling to be done such that the haul road is kept moistened all the time with Geo-Tagged photographs.
- VI. Pre employment Occupational health check up for employees to be done and thereafter at annual interval for PLFT, Audiometry and other required tests .Summary findings of same to submitted along with 6 monthly compliance.
- VII. Ensure use of Quality PPEs equivalent not less than 3M make. Records of same to be maintained and submitted with 6 monthly compliance report with Geo-Tagged photographs.
- VIII. Keep vulnerable areas unmanned. Ensure rotation of duties. Records to be maintained and submitted with 6 monthly compliance report.
- IX. Failing of any of terms & conditions mentioned in EC can lead to revocation / cancellation of EC.

2. Chuwa Stone Deposit - I of M/s Mahaveer Engicons Pvt. Ltd., Village : Chuwa, Thana : Jirwabadi, Distt. : Sahibganj, Jharkhand (2.833 Ha).

(Proposal no.: SIA/JH/MIN/ 564624 /2026)

Name of the consultant : Sathi Planners Pvt. Ltd., Ranchi, Jharkhand.

This is a new project which has been taken for appraisal on 18.01.2026.

Project Sector: 1(a) Mining of Minerals, Category: B1.

Application for Environmental Clearance (EC) after Terms of Reference (ToR).

The State Expert Appraisal Committee, Jharkhand deliberated the project during its 121st meeting held on 08.03.2025 - 12.03.2025 and SEIAA, Jharkhand has approved the ToRs in 121st meeting held on 19th & 20th March, 2025. TOR for the project was issued by SEIAA, Jharkhand vide letter no. EC/SEIAA/2024-25/3526/2024/676, dated 20.03.2025. The final EIA / EMP submitted by PP to SEAC on 12.01.2026.

EC Application for: Proposed Capacity – 83,328 cum/annum or 2,24,986 TPA.

Project and Location Details:

Sl	Parameter	Details
1	Project Name	: Chuwa Stone Deposit 1
2	Lessee	: M/s Mahaveer Engicons Pvt. Ltd. Director- Sri Pranay Kumar Sahu & Sri Shobhit Raj Sahu
3	Lease Address	: Mouza- Chuwa, Thana No.- 08, Thanna- Jirwabari, District- Sahibganj, State- Jharkhand
4	Lease Area	: 2.833 Ha Acres- 7.00 Acres
5	Cluster Details	: 2 no of mines including project site having total cluster area 23.25 Acres/9.41 Ha.
6	Type of Land	: Non-Forest Raiyati Land
7	Project Cost	: Rs. 118.25 Lakhs Recurring: Rs. 10.75 Lakhs/Year
8	EMP Budget	: Capital: Rs. 28.12 lakhs Recurring: Rs. 22.81 Lakh / year
9	New or Expansion	: New
10	Mineable Reserves	: cum.: 5,86,644 cum Tonnes: 15,83,939 tones
11	Mine Life	: 8 years
12	Man power	: 17
13	Water Requirement	: 12.27 KLD {Manpower (17 nos.)- 0.765 KLD, Plantation (2972 nos.)- 8.916 KLD, Dust Suppression- 2.590 KLD.}
14	Water Source	: By authorised hired water tankers
15	DG Set / power	: 60 KVA D.G. Set proposed.
16	Crusher	: No crusher
17	Nearest Water Body	: Ganga River- 8 km. in NE direction of mine site
18	Nearest Habitation	: Few houses at 280 m in NE Direction
19	Nearest Rail Station	: Karamtola Railway station, approx. 4.6 km in NW direction.

20	Nearest Air Port	:	Deoghar Airport, approx. 122.39 km towards SW direction
21	Nearest Forest	:	More Than 250m, as per Division Forest Officer NOC, letter no.-1481 Dated-31/07/2017.
22	Road & Highways	:	The NH-33 Sahibganj-Bhagalpur Road is 3. Km away from the applied lease area in northern side. The applied lease area and easily approachable from village road.
23	Approach Road	:	The distance of Approach Road is 360 m.
24	SE Budget	:	Rs. 6.2 Lakhs (Need based survey)

CO-ORDINATES

Pillar No.	Latitude	Longitude
P1	25°13' 04.289" N	87°34' 28.860" E
P2	25°13' 01.706" N	87°34' 29.347" E
P3	25°13' 00.054" N	87°34' 30.102" E
P4	25°12' 58.238" N	87°34' 30.933" E
P5	25°12' 56.872" N	87°34' 31.694" E
P6	25°12' 55.531" N	87°34' 31.499" E
P7	25°12' 53.558" N	87°34' 30.052" E
P8	25°12' 53.128" N	87°34' 30.088" E
P9	25°12' 52.626" N	87°34' 29.377" E
P10	25°12' 54.919" N	87°34' 28.295" E
P11	25°12' 57.153" N	87°34' 27.241" E
P12	25°12' 59.059" N	87°34' 26.342" E
P13	25°12' 59.871" N	87°34' 25.959" E
P14	25°13' 00.059" N	87°34' 26.149" E
P15	25°13' 00.768" N	87°34' 25.893" E
P16	25°13' 02.486" N	87°34' 27.648" E
P17	25°13' 03.645" N	87°34' 27.997" E

LAND DETAILS

Khata no.	Plot no.
04	3 (P)

STATUTORY CLEARANCES

1	LOI / Lease docs	:	The Letter of Intent (Loi) has been issued by District Mining Officer, Sahibganj vide letter no. 780/M, dated 17.08.2024.
2	CO	:	The CO, Mandro vide memo no. 08 (Mu)/Ra., dated 14.10.2024 has mentioned the plot no. of the project is not recorded as "Jungle- Jhari" in Khatiyon & Register II. During the appraisal it was seen from the KML that few houses at a distance of 280 meter from mining lease area. For which detailed Environmental Management Plan has been prepared and submitted.

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3	DMO Cluster	:	DMO, Sahibganj vide memo no. 1314/M, dated 06.12.2024 certified that 02 other mining lease area (9.00 Acre & 7.25 Acre) exists within 500 meters radius from proposed project site and total area is 23.25 Acre.
4	DFO Wild Life	:	DFO –cum-Incharge Wildlife Sanctuary, Udhwa (Sahibganj) vide letter no. 3290, dated 19.12.2024 certified that the proposed project site is outside Eco Sensitive Zone of Udhwa Bird Sanctuary.
5	DFO Territorial	:	Divisional Forest Officer, Sahibganj Forest Division vide letter no. 1481, dated 31.07.2017 certified that the distance of forest land is more than 250 meters from proposed project site.
6	DSR	:	This project is mentioned in approved DSR of Sahibganj District (Sl. no. 38, Page no. 169).
7	Gram Sabha	:	Gram Sabha conducted on 04.04.2017.
8	Mine Plan Approval	:	Mining plan approved by District Mining Officer, Sahibganj vide Letter No. 1414, dated 20.12.2024.
9	Grid certificate	:	DMO, Sahibganj vide memo no. 273/M, dated 13.02.2025 certified that the proposed project site is outside of Redzone Grid 1, 3, 4 & 7.
10	Qualified Person	:	Shri Vidya Bhushan Mishra was present in the meeting and affirmed that the mine plan has been prepared by him.
11	Baseline monitoring period	:	December, 2024 to February, 2025.
12	Public Hearing	:	Public hearing conducted on 01.11.2025.

Working Details

1	Mining Method	:	Opencast Fully mechanised method
2	Quarry Area	:	2.833 ha.
3	Waste Generation	:	21,193 cum.
4	Stripping Ratio	:	03:10
5	Working Days	:	300
6	Benches: size & No	:	6m x 6m
7	Elevation of Mine	:	268 m AMSL to 238 m AMSL
8	Ground Level Elevation	:	238 m AMSL
9	Ultimate Working Depth	:	215 m AMSL
10	Water Table	:	188 m AMSL

			(Source: JSAC Ground water Prospect Map)
11	Topography of Mine	:	The area represents a hillock land with rock mass of Basalt
12	Explosive Requirement	:	85.04 kg/day Slurry explosives
13	Diesel/Fuel requirement	:	HSD - 246 litre/day (73.8 KL/year)

Production Details

Year	Production of Stone		Removal of O.B
	In cum	In tonnes	Cum
1 st	78,297	2,11,402	4,121
2 nd	79,228	2,13,916	4,170
3 rd	79,880	2,15,675	4,204
4 th	81,928	2,21,206	4,312
5 th	83,328	2,24,986	4,386
Total	4,02,661	10,87,186	21,193

Land Use

Land Utilization	Existing Land use (Ha)	At the end of plan period (Ha)	At Conceptual period (Ha)
Quarry	NIL	1.911(0.145ha area shall be backfilled)	2.163 (0.254 ha area shall be backfilled, 1.276 ha area shall be left as water reservoir and 0.634 ha left as dead benches).
Waste Dump	NIL	Nil (waste dump to be removed and backfilled)	Nil (waste dump to be removed and backfilled)
Road	NIL	0.005	0.00
Safety Zone Plantation	NIL	0.670	0.670
Total	0.000	2.586	2.833
Unused Area	2.833	0.247	0.0
Total Lease Area			2.833

Green Belt Development

Zone	Area	Numbers of Trees
Safety Zone	0.670 ha.	1,072

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Dead Benches	0.634 Ha.	1,014
Backfilled	0.254 Ha.	406
Approach Road	360 m	480
Total		2972 Trees

Note- 2972 tree proposed to be planted out of which 10% plantation will be carried out i.e. (297 trees) as per MoEF&CC, Govt. of India Scheme "Ek Ped Ma Ke Naam".

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

**BUDGETARY PROVISION (IN LAKHS)
PROJECT COST**

Sl. No.	Head	Capital Cost (Rs. in Lakhs)	Recurring Cost (Rs. in Lakhs)
1	Government Revenue (Dead Rent & Royalty)	27.00	—
2	Cost of Infrastructure	5.00	0.50
3	Mining Machineries owned by applicant	66.50	—
	a. Wagon Drill – 01		
	b. Tippers (25 tons) – 02		
	c. Rock Breakers – 01		
	d. Portable Water Pump – 02		
	Mining Machineries on hired basis (Excavator – 02, Tipper – 01)	—	8.50
4	Lease Agreement (lump-sum)	—	1.75
5	Statutory Clearance & Others	9.00	—
6	Contingency	10.75	—
Total		118.25	10.75

ENVIRONMENT MANAGEMENT PLAN (EMP)

S. No.	EMP Activity	Capital Cost (₹ in Lakhs)	Recurring Cost / Year (₹ in Lakhs)
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1	Air Pollution Control (Water sprinkling, greenbelt, dust suppression)	-	3.00
2	Water Pollution Control (Garland drains, settling tank, rainwater harvesting)	4.00	1.00
3	Noise & Vibration Control (acoustic enclosures, monitoring)	1.50	0.50
4	Occupational Health & Safety (PPE, health camps, first aid, training)	1.50	1.00
5	Greenbelt Development (plantation, maintenance)	8.12	0.81
6	Environmental Monitoring (air, water, noise, soil)	-	1.00
7	PH Compliance Budget	3.00	14.50
8	Environment Management Plan (For Habitation)	10.00	1.00
Total		28.12	22.81

Environment Monitoring Plan

Monitoring Parameters and Frequency of Monitoring

S. no	Monitoring Parameters	No. of Locations	Frequency of Monitoring
1	Ambient Air: Ambient Air Quality at appropriate location for PM10, PM2.5, SO2, NOx in the vicinity of the mine area. In the surrounding area covering project site only.	4 Stations	Six Monthly
2	Water: Surface water sample in the vicinity of the Project area.	2 Surface water 2 Ground water	Six Monthly
3	Noise: Day & Night level Noise Monitoring.	4 stations	Six Monthly
4	Soil: Soil Monitoring, Qualitative and quantitative testing/analysis to check the soil fertility, porosity, texture, water holding capacity, etc.	2 stations	Six Monthly

Summary of Baseline Data:

Monitoring season - December 2024 - February 2025 for Winter season.

Type	Parameter
AAQ Parameter at 8 locations	PM10 = 31.5 µg/m3 to 76.8 µg/m3 PM2.5 = 23.1 µg/m3 to 46.5 µg/m3 SO2 = 9.11 µg/m3 to 21.9 µg/m3 NOx = 18.6 µg/m3 to 31.6 µg/m3

Noise quality at 7 locations	Daytime 46.1 to 47.2 dB(A). Nighttime 34.0 to 35.1 dB(A)
Surface water at 2 locations	pH – 6.88 to 6.97 Electrical Conductivity - 469 to 476 µS/cm TDS – 327 to 341 mg/l Alkalinity – 51.3– 56.2 mg/l
Ground water at 6 locations	pH – 6.89 to 7.22 TDS – 219 to 241 mg/l Electrical Conductivity - 421 to 467 µS/cm Alkalinity - 62.5–82.4 mg/l
Soil at 5 locations	pH – 6.96 to 7.13 Conductivity - 0.78 to 0.92 µS/cm Bulk Density - 1.09 to 1.21 gm/cc Permeability - 24 to 31 cm/hr Porosity – 52-62% Phosphorus - 14.2 to 18.7 kg/ha Nitrogen - 237 to 259 kg/ha Alkalinity - 139 and 154 mg/kg.

Public Hearing (Action Plan) –

Sl. No.	Issue Raised	Commitment by Project Proponent (Brief)	Time Frame	Funds to be Spent	
				Capital (in Lakhs)	Recurring (in Lakhs)
1	Arrangements should be made for housing, water facilities, and health check-up camps.	The project proponent assured that housing, water facilities, and health check-up camps would be provided under CSR.	<ul style="list-style-type: none"> ▪ Housing support- Within 1 year of project operation. ▪ Drinking Water Facility (Deep boring)- Within 6 months. ▪ Periodic Health Checkup- Half yearly 		<ul style="list-style-type: none"> ▪Rs. 5.00 Lakhs ▪Rs. 3.00 Lakhs ▪As per CSR
2	A road should be constructed for the villagers' commute.	The project proponent assured that the rural roads would be repaired with gravel and stone blast.	Construction/Improvement of village road- Within 1 Year		Rs. 4.00 Lakhs

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3	A playground is needed for the village children and youth.	The project proponent assured that under CSR, the playground for the village children and youth would be levelled so that they can play there.	Playground – Within 6 months	Rs. 1.50 Lakhs	1.00
4	Mango, jackfruit, jamun, litchi, and other fruit-bearing trees should be planted.	The project proponent assured that mango, jackfruit, jamun, litchi, and other fruit-bearing trees would be planted before the commencement of mining operations.	Before start of mining -		1.00
5	Two deep borewells are needed, one near the headman's house and the other at another location.	The project proponent assured that two deep borewells would be drilled, one near the headman's house and the other at a location identified by the villagers.	Two deep borewells will be drilled- Within 6 months	1.50	0.50
Total				3.00	14.50

SE Need based Survey detail (included in CSR)

Zone	Coverage & Survey Details	Key Socio-Economic Observations	Workforce Characteristics	Priority Needs (Focused)	Proposed Budget (₹ Lakhs)	Implementation Timeline
0–2 km	Villages: 8 Households surveyed: 20 Population covered: 100 FGDs Conducted: 1	Balanced gender composition with presence of children and vulnerable groups. Proximity to mine increases sensitivity to dust, traffic and occupational health issues.	Low workforce participation (~35%); dominance of informal and "other" occupations indicating livelihood instability.	<ul style="list-style-type: none"> Preventive healthcare & health check-ups Local skill development linked to mine & allied activities 	3.0	Short-term & ongoing (Year 1–2)
2–5 km	Villages: 14 Households surveyed: 24 Population covered: 110 FGDs Conducted: 0	Moderate literacy levels with gender disparity; limited access to secondary education and structured training facilities.	Mixed workforce pattern; dependence on agriculture and daily wage labour.	<ul style="list-style-type: none"> Education support (secondary level / scholarships) Agricultural productivity support (inputs, awareness) 	3.2	Medium-term (Year 2–3)

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Total (0–5 km)	6.2 Lakhs
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Environment Management Practices to be followed:

Aspect	Mitigation Measures / Control Measures
Solid Waste Management	<p>Solid waste management is important from both aesthetic and environmental points of view and will be managed as per the Solid Waste Management Rules, 2016.</p> <ul style="list-style-type: none"> • An O.B. (Overburden) dump area has been provided on the within the lease area. • The O.B. dump area will accommodate 21,193 cum of overburden during the working plan period. • After completion of the working plan, the generated O.B. will be backfilled into the stone quarry faces. • Part of the O.B. will be used for haul road and village road maintenance. • The remaining O.B. will be utilized for plantation activities. • No hazardous or other solid waste generation is envisaged from the stone mining activities.
Air Quality Management	<ul style="list-style-type: none"> • Wet drilling and use of sharp drill bits to minimize dust generation. • Controlled blasting using optimum explosive charge during favorable weather conditions. • Regular maintenance of diesel equipment and vehicles to reduce emissions. • Water sprinkling on haul roads, loading/unloading points, and working areas. • All transport vehicles will have valid PUC certificates. • Greenbelt and roadside plantation to act as dust and noise barriers.
Water Quality Management	<ul style="list-style-type: none"> • Mining will be confined only above the Ground Water Table (GWT). • Rainwater accumulated in the pit will be collected and pumped out regularly during monsoon. • Settling sump will be provided to desilt pumped out of mine-pit and collected through garland drain before discharge into natural drainage. • Garland and foot drains will be constructed around the quarry to control surface runoff. • Sewage from rest shelters will be treated through septic tank–soak pit systems. • Foot drain would be provided around the external dump, if any.
Noise Quality Management	<ul style="list-style-type: none"> • Mining activities will be restricted to daytime and carried out with controlled blasting techniques. • Acoustic enclosures and mufflers will be provided for drilling and DG set operations. • Regular maintenance of mining machinery to minimize vibration and noise. • Greenbelt development around the lease boundary to attenuate noise propagation. • Use of delayed blasting technique to minimize the adverse impact

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	of vibration.
Soil Quality Management	<ul style="list-style-type: none"> • Topsoil will be carefully removed and stored separately for future use in plantation and reclamation. • Garland drains and retaining walls will prevent soil erosion and siltation. • Spillage of oil or fuel will be avoided; impervious flooring and oil traps provided near storage areas • Post-mining, the area will be rehabilitated using stored topsoil and native vegetation
Flora & Fauna management	<ul style="list-style-type: none"> • No tree felling will be undertaken without obtaining permission from the competent authority. • Greenbelt and plantation will be developed using native species along approach roads and lease periphery (7.5m Safety Zone). • Dust suppression measures will minimize impact on surrounding vegetation
Socio Economy:	<ul style="list-style-type: none"> • Priority employment to local people in mining and ancillary activities. • Community development initiatives such as tree plantation drives, road maintenance, and local infrastructure support. • Awareness programs on safety, hygiene, and environmental protection
Monitoring & Reporting:	<ul style="list-style-type: none"> • Periodic monitoring of air, water (ground & surface), noise, and soil quality as per CPCB and SPCB guidelines. • All monitoring reports will be submitted to statutory authorities as per the compliance schedule. • Corrective measures will be taken immediately if any deviation from standards is observed.
Risk & Hazard	<p>Activities which are likely to create risk are: Temporary Storage of Explosives, Charging of Explosives, Blasting, Drilling, Bench Formation, Loading / Unloading, Transportation</p> <p>Proposed Preventive measures:</p> <ul style="list-style-type: none"> ▪ Overall slope angles of benches will be maintained at 45°. ▪ Unmanageable heights are not created. ▪ Loose sides are properly dressed. ▪ No loose stone or debris will be permitted to remain on the top of the bench or side of any excavation (Regulation 106(4) of MMR 1961). ▪ No undercutting of any face or sides will be permitted so as to cause any overhanging (Regulation 106(5) of MMR 1961) ▪ It will be ensured that the drilling equipment is suitable for the job. ▪ The person in charge of the drilling machine is competent to carry out the drilling operation; part of the training includes instructions to always face towards the open edge of the bench so that any inadvertent backward step is away from the edge. ▪ Provision of portable rail fencing between the drilling operations and the edge of the bench ▪ Provision to attach a safety line to the drilling rig and provide a harness for the driller to wear.

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	<ul style="list-style-type: none"> ▪ Restricted access to the area to all persons except those necessary for the drilling operation. ▪ Wet drilling will be carried out by constantly injecting a jet of water at the drill bit inside the hole, which prevents dust generation. ▪ In case due to any reason, wet drilling is not possible (due to non-availability of water), exhaust/ vacuum system will be provided which removes the dust from the drill hole continuously and discharges the same in a dust collector specially provided for the purpose. ▪ Drilling machine shall be fitted with dust suppression, collection and disposal arrangement.
<p>Blasting & Handling of Explosives</p>	<ul style="list-style-type: none"> ▪ Blast hole geometry shall be properly designed. ▪ Blast site shall be wetted before and after blasting operations are completed. ▪ Only optimum quantity of permissible explosives shall be used so that the vibrations do not damage the structures/houses if the quarrying operations are close to human habitation. ▪ Blasting shall be conducted only during favourable weather conditions and only during the day time and permissible hours. ▪ While carrying out blasting operations near habitations, wide publicity will be given in the local area through announcement and other available media so that local people become aware of the blasting activities being undertaken in the area and take appropriate precautions. ▪ The vibrations should be monitored periodically in consultation with the local Mining authorities. ▪ Use of explosives is specialist work. Planning for a round of shots is necessary to ensure that the face is properly surveyed, holes correctly drilled, direction logged, the weight of explosive suitable for good fragmentation and the continuity of the initiator are but a few of the steps necessary to ensure its safe use. ▪ Proper and safe storage of explosives in approved and Licensed Magazine. ▪ Proper security system to prevent theft/ pilferage, unauthorized entry into Magazine area and checking authorized persons to prevent carrying of match box, lights, mobile phones, cigarette or Bidi etc. will be put in place. ▪ Explosives shall be conveyed in special containers. ▪ Explosives and detonators shall not be carried in the same container. ▪ The holes which have been charged with explosives will not be left unattended till blasting is completed.
<p>Health Hazards</p>	<p>Health hazards should be interpreted as being harmful dust and noise which is emitted during surface mining operations. All suitable steps and precautions will be undertaken to ensure minimum health hazard. Provision of use of Personal Protective Equipment (PPE) will be kept. The PPE shall be of good make and quality, wherever possible ISI certified, suitable for the hazard e.g. a dust respirator fitted with the correct filter to capture the particulate hazardous dust and maintained to recommended standards. As personal protective equipment only affords limited protection it will only be used as a last resort and as an interim arrangement until other steps are taken to reduce the risk of</p>

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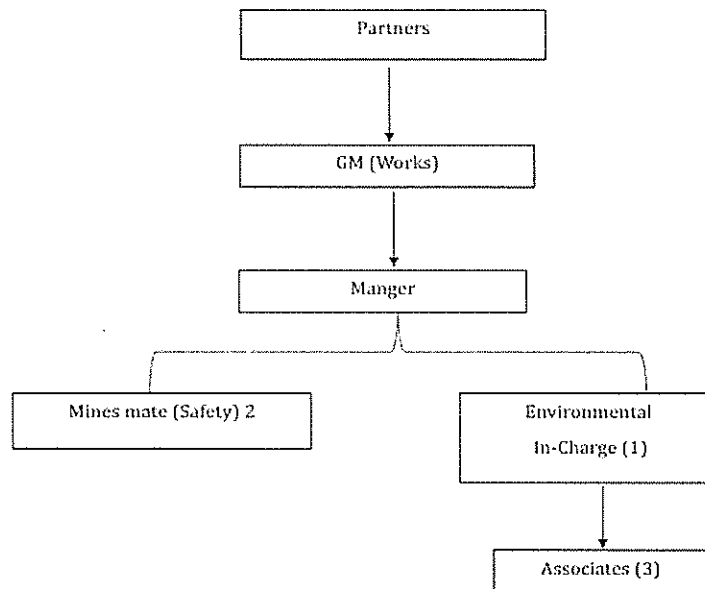
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	personal injury to an acceptable level
Accident Prevention	<ul style="list-style-type: none"> ▪ Mine road shall be made smooth regularly with a road roller. ▪ Mine road will be made sufficiently wide to keep two-way traffic. Regular water sprinkling will be done on mine road and haul road to avoid suspension of dust. ▪ All transportation within the mine lease area should be carried out directly under the supervision and control of management. ▪ The vehicles will be maintained in good working condition and checked thoroughly at least once a month by the competent person authorized for the purpose by the management. ▪ Navigation signs will be provided at each and every turning point up to the main road (wherever required). ▪ To avoid danger while reversing the vehicles especially at working place/loading points, stopper should be posted to properly guide reversing/spotting operating.

Organizational Structure of Environment Management Cell:

ORGANIZATION CHART OF ENVIRONMENTAL MONITORING CELL



EMP Cell structure

The EMP Cell is committed to ensuring environmental sustainability and compliance with regulatory requirements for the Stone Mining Project. With a clear structure, roles, and responsibilities, the EMP Cell is equipped to manage environmental impacts and promote sustainable practices.

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District Survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.

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- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- i. If any tree felling than necessary permission shall be taken from the competent authority.
- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.
- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.
- l. Personal protective equipments such as clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Chuwa Stone Deposit - I of M/s Mahaveer Engicons Pvt. Ltd., Village : Chuwa, Thana : Jirwabadi, Distt. : Sahibganj, Jharkhand (2.833 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I along with following specific conditions :

- I. In compliance of Office Memorandum no. IA-J-11013/20/2025-IA-P, dated 25.11.2025 of MoEF&CC, Govt. of India, the PAs will mandatorily obtain the Environmental Safeguard to be implemented from Jharkhand State Pollution Control Board within 30 days of issuance of EC or 31.01.2026 which ever is earlier.
- II. The mine will come in operation only after obtaining permission from DGMS for controlled and delayed blasting.
- III. That the Deputy Commissioner, Sahibganj will ensure compliance of the order passed by Hon'ble NGT in OA No. 23/2017/EZ, O.A. no. 776/2018 and O.A. no. 373/2019 in the matter of Syed Arshad Nasar Vs Union of India with Ramchandra Chaurasia Vs State of Jharkhand with Pradeep Kumar Singh Vs State of Jharkhand before grant of mining lease.
- IV. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "Ek Ped Ma Ke Naam" and

the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.

- V. The Deputy Commissioner through District Mining Officer will ensure that the mines owner of the respective leases to complete the plantation and maintenance in a time bound manner.
- VI. Suitable plant species of not less than 2 M height to be planted equal to twice the area of saplings proposed in Safety zone. This is to be planted in land available near mines and outside safety zone. This will be in addition to plantation in safety zone. Newly planted saplings to be maintained for minimum 3 years with Geo-Tagged photographs.
- VII. Dedicated water tanker to be provided for mine. The tanker to be used for spraying water on haul road and for irrigating newly planted saplings only. Sprinkling to be done such that the haul road is kept moistened all the time with Geo-Tagged photographs.
- VIII. Pre employment Occupational health check up for employees to be done and thereafter at annual interval for PLFT, Audiometry and other required tests .Summary findings of same to submitted along with 6 monthly compliance.
- IX. Ensure use of Quality PPEs equivalent not less than 3M make. Records of same to be maintained and submitted with 6 monthly compliance report with Geo-Tagged photographs.
- X. Keep vulnerable areas unmanned. Ensure rotation of duties. Records to be maintained and submitted with 6 monthly compliance report.
- XI. Failing of any of terms & conditions mentioned in EC can lead to revocation / cancellation of EC.

3. Chuwa Stone Deposit - II of M/s Mahaveer Engicons Pvt. Ltd., Village : Chuwa, Thana : Jirwabari, Distt. : Sahibganj, Jharkhand (2.833 Ha).


(Proposal no.: SIA/JH/MIN/ 564424 /2026)



Name of the consultant : Sathi Planners Pvt. Ltd., Ranchi, Jharkhand.

This is a new project which has been taken for appraisal on 18.01.2026.

Project Sector: 1(a) Mining of Minerals, Category: B1.

Application for Environmental Clearance (EC) after Terms of Reference (ToR).



The State Expert Appraisal Committee, Jharkhand deliberated the project during its 121st meeting held on 08.03.2025 - 12.03.2025 and SEIAA, Jharkhand has approved the ToRs in 121st meeting held on 19th & 20th March, 2025. TOR for the project was issued by SEIAA, Jharkhand vide letter no. EC/SEIAA/2024-25/3519/2024/639, dated 20.03.2025. The final EIA / EMP submitted by PP to SEAC on 12.01.2026.

EC Application for: Proposed Capacity – 89,452 cum/annum or 2,41,520 TPA.

Project and Location Details:

Sl	Parameter	Details	
1	Project Name	: Chuwa Stone Deposit II	
2	Lessee	: M/s Mahaveer Engicons Pvt. Ltd. Director- Sri Pranay Kumar Sahu & Sri Shobhit Raj Sahu	
3	Lessee Address	: Address: Mauza- Demba, Block- Borio, Sahibganj, Jharkhand.	
4	Lease Area	: 2.833 Ha	Acres- 7.00 Acres
5	Cluster Details	: 2 no of mines including project site having total cluster area 23.25 Acres/9.41 Ha.	
6	Type of Land	: Non-Forest Raiyati Land	
7	Project Cost	: Rs. 119.06 Lakhs	Recurring: Rs.10.75 Lakhs/year
8	EMP Budget	: Capital: Rs. 38.15 lakhs	Recurring: Rs. 19.97 Lakh / year
9	New or Expansion	: New	
10	Mineable Reserves	: cum.: 6,61,921 cum	Tonnes: 17,87,187 tones
11	Mine Life	: 8 years	
12	Man power	: 17	
13	Water Requirement	: 9.6 KLD {Manpower (17 nos.)- 0.765 KLD, Plantation (3103 nos.)- 6.206 KLD, Dust Suppression- 2.651 KLD.}	
14	Water Source	: By authorised hired water tankers	
15	DG Set / power	: 60 KVA D.G. Set proposed.	
16	Crusher	: No crusher	
17	Nearest Water Body	: Ganga River- 5 km. in NE direction of mine site	
18	Nearest Habitation	: Few houses (410 m) in NE Direction (EMP prepared)	
19	Nearest Rail Station	: Karamtola Railway station, approx. 4.6 km in NW direction.	
20	Nearest Air Port	: Deoghar Airport, approx. 122.39 km towards SW direction	
21	Nearest Forest	: More Than 250m, as per Division Forest Officer NOC, letter no.- 1479 Dated-31/07/2017.	
22	Road & Highways	: The NH-33 Sahibganj-Bhagalpur Road is 3.7 Km away from the applied lease area in northern side. The applied lease area and easily approachable from village road.	
23	Approach Road	: The distance of Approach Road is 421m.	
24	SE Budget	: Rs. 6.2 Lakh (Need Based Survey)	

CO-ORDINATES

Pillar No.	Latitude	Longitude
P1	25°13' 04.289" N	87°34' 28.860" E
P2	25°13' 01.706" N	87°34' 29.347" E
P3	25°13' 00.054" N	87°34' 30.102" E

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P4	25°12' 58.238" N	87°34' 30.933" E
P5	25°12' 56.872" N	87°34' 31.694" E
P6	25°12' 55.531" N	87°34' 31.499" E
P7	25°12' 53.558" N	87°34' 30.052" E
P8	25°12' 53.128" N	87°34' 30.088" E
P9	25°12' 52.626" N	87°34' 29.377" E
P10	25°12' 54.919" N	87°34' 28.295" E
P11	25°12' 57.153" N	87°34' 27.241" E
P12	25°12' 59.059" N	87°34' 26.342" E
P13	25°12' 59.871" N	87°34' 25.959" E
P14	25°13' 00.059" N	87°34' 26.149" E
P15	25°13' 00.768" N	87°34' 25.893" E
P16	25°13' 02.486" N	87°34' 27.648" E
P17	25°13' 03.645" N	87°34' 27.997" E

LAND DETAILS

Khata no.	Plot no.
04	3 (P)

STATUTORY CLEARANCES

1	LOI / Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Officer, Sahibganj vide letter no. 758/M, dated 14.08.2024.
2	CO	:	The CO, Mandro vide memo no. 211 (Mu)/Ra., dated 14.10.2024 has mentioned the plot no. of the project is not recorded as "Jungle- Jhari" in R.S. Khatiyani & Register II. During the appraisal it was seen from the KML that nearest village at a distance of 410 meters from mining lease area. For which detailed Environmental Management Plan has been prepared and submitted.
3	DMO Cluster	:	DMO, Sahibganj vide memo no. 1315/M, dated 06.12.2024 certified that 02 other mining lease area (9.00 Acre & 7.25 Acre) exists within 500 meters radius from proposed project site and total area is 23.25 Acre.
4	DFO Wild Life	:	DFO –cum- Incharge Wildlife Sanctuary, Udhwa (Sahibganj) vide letter no. 3274, dated 17.12.2024 certified that the proposed project site is outside Eco Sensitive Zone of Udhwa Lake Bird Sanctuary.
5	DFO Territorial	:	Divisional Forest Officer, Sahibganj Forest Division vide memo no. 1479, dated 31.07.2017 certified that the distance of forest land is more than 250 meters from proposed project site.
6	DSR	:	This project is mentioned in approved DSR of Sahibganj District (Sl. no. 6, Page no. 155).

7	Gram Sabha	:	Gram Sabha conducted on 26.11.2024.
8	Mine Plan Approval	:	Approved by District Mining Officer, Sahibganj vide Letter No. 1415, dated 20.12.2024.
9	Grid Certificate	:	DMO, Sahibganj vide memo no. 274/M, dated 13.02.2025 certified that the proposed project site is not under the Redzone Grid 1, 3, 4 & 7.
10	Qualified Person	:	Shri Vidya Bhushan Mishra was present in the meeting and affirmed that the mine plan has been prepared by him.
11	Baseline monitoring period	:	December, 2024 to February, 2025.
12	Public Hearing	:	Public hearing conducted on 03.11.2025.

Working Details

1	Mining Method	:	Opencast Fully mechanised method
2	Quarry Area	:	2.833 ha.
3	Waste Generation	:	57,454 cum.
4	Stripping Ratio	:	03:10
5	Working Days	:	300
6	Bench: size & No	:	6m x 6m
7	Elevation of Mine	:	251 m AMSL to 235 m AMSL
8	Ground Level Elevation	:	235 m AMSL
9	Ultimate Working Depth	:	199 m AMSL
10	Water Table	:	188 m AMSL (Source: JSAC Ground water Prospect Map)
11	Topography of Mine	:	The area represents gently sloping land.
12	Explosive Requirement	:	85.04 kg/day Slurry Explosives
13	Diesel/Fuel requirement	:	HSD - 246 litre/day (73.8 KL/year)

Production Details

Year	Production of Stone		Removal of O.B
	In cum	In tonnes	Cum
1st	87,724	2,36,855	27,301
2nd	88,232	2,38,227	16,093

3rd	88,639	2,39,325	4,665
4th	89,045	2,40,423	4,687
5th	89,452	2,41,520	4,708
Total	4,43,092	11,96,349	57,454

Land Use

Land Utilization	Existing Land use (Ha)	At the end of plan period (Ha)	At Conceptual period (Ha)
Quarry	0.166	1.445	2.250 (0.261 ha area shall be backfilled, 1.244 ha area shall be left as water reservoir and 0.745 ha left as dead benches).
Waste Dump	NIL	0.463	Nil (waste dump to be removed and backfilled)
Road	0.029	0.029	0.00
Safety Zone Plantation	NIL	0.583	0.583
Total	0.195	2.520	2.833
Unused Area	2.638	0.313	0.0
Total Lease Area			2.833

Green Belt Development

Zone	Area	Numbers of Trees
Safety Zone	0.583 ha.	933
Dead Benches	0.745 Ha.	1192
Backfilled	0.261 Ha.	418
Approach Road	421m	560
Total		3103 Trees

Note- 3103 tree proposed to be planted out of which 10% plantation will be carried out i.e. (310 trees) as per MoEF&CC, Govt. of India Scheme "Ek Ped Ma Ke Naam".

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development,

Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

**BUDGETARY PROVISION (IN LAKHS)
PROJECT COST**

Sl. No.	Head	Capital Cost (Rs. in Lakhs)	Recurring Cost (Rs. in Lakhs)
1	Government Revenue (Dead Rent & Royalty)	28.00	—
2	Cost of Infrastructure	5.00	0.50
3	Mining Machineries owned by applicant	66.24	—
	a. Wagon Drill – 01		
	b. Tippers (25 tons) – 02		
	c. Rock Breakers – 01		
	d. Portable Water Pump – 02		
	Mining Machineries on hired basis (Excavator – 02, Tipper – 01)	—	8.50
4	Lease Agreement (lump-sum)	—	1.75
5	Statutory Clearance & Others	9.00	—
6	Contingency	10.82	—
	Total	119.06	10.75

ENVIRONMENT MANAGEMENT PLAN (EMP)

S. No.	EMP Activity	Capital Cost (₹ in Lakhs)	Recurring Cost / Year (₹ in Lakhs)
1	Air Pollution Control (Water sprinkling, greenbelt, dust suppression)	—	3.00
2	Water Pollution Control (Garland drains, settling tank, rainwater harvesting)	4.00	1.00
3	Noise & Vibration Control (acoustic enclosures, monitoring)	1.50	0.50
4	Occupational Health & Safety (PPE, health camps, first aid, training)	1.50	1.00
5	Greenbelt Development (plantation, maintenance)	14.65	1.47
6	Environmental Monitoring (air, water, noise, soil)	—	1.00
7	PH Compliance Budget	6.50	11.00

8	Environment Management Plan (For Habitation)	10.00	1.00
Total		38.15	19.97

Environment Monitoring Plan

Monitoring Parameters and Frequency of Monitoring

S. no	Monitoring Parameters	No. of Locations	Frequency of Monitoring
1	Ambient Air: Ambient Air Quality at appropriate location for PM10, PM2.5, SO2, NOx in the vicinity of the mine area. In the surrounding area covering project site only.	4 Stations	Six Monthly
2	Water: Surface water sample in the vicinity of the Project area.	2 Surface water 2 Ground water	Six Monthly
3	Noise: Day & Night level Noise Monitoring.	4 stations	Six Monthly
4	Soil: Soil Monitoring, Qualitative and quantitative testing/analysis to check the soil fertility, porosity, texture, water holding capacity, etc.	2 stations	Six Monthly

Summary of Baseline Data:

Monitoring season - December 2024 - February 2025 for Winter season.

Type	Parameter
AAQ Parameter at 8 locations	PM10 = 31.5 µg/m ³ to 76.8 µg/m ³ PM2.5 = 23.1 µg/m ³ to 46.5 µg/m ³ SO ₂ = 9.11 µg/m ³ to 21.9 µg/m ³ NO _x = 18.6 µg/m ³ to 31.6 µg/m ³
Noise quality at 7 locations	Daytime 46.1 to 47.2 dB(A). Nighttime 34.0 to 35.1 dB(A)
Surface water at 2 locations	pH – 6.88 to 6.97 Electrical Conductivity - 469 to 476 µS/cm TDS – 327 to 341 mg/l Alkalinity – 51.3–56.2 mg/l
Ground water at 6 locations	pH – 6.89 to 7.22 TDS – 219 to 241 mg/l Electrical Conductivity - 421 to 467 µS/cm Alkalinity - 62.5–82.4 mg/l
Soil at 5 locations	pH – 6.96 to 7.13 Conductivity - 0.78 to 0.92 µs/cm Bulk Density - 1.09 to 1.42 gm/cc Permeability - 24 to 31 cm/hr Porosity – 52-62%

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Phosphorus - 14.2 to 20.6 kg/ha Nitrogen - 237 to 263 kg/ha Alkalinity - 139 and 154 mg/kg.

Public Hearing (Action Plan) –

Sl. No.	Issue Raised	Commitment by Project Proponent (Brief)	Time Frame	Funds to be Spent	
				Capital (in Lakhs)	Recurring (in Lakhs)
1	Arrangement for books and copies for children's education should be made. Also, transportation facilities should be arranged for taking children to school.	The project proponent assured that under CSR, arrangements for books, copies, and pens for children's education will be made. Additionally, transportation (Tempo) facilities for taking children to school will also be arranged.	Within 6 months of project commencement.	-	2.00
2	Employment for unemployed youths of Narayandih village, plantation along roadside, support in children's education, and repair of the Manjhi Sthan should were demanded.	The project proponent assured that, according to the capability and requirement of the villagers, employment will be provided. Also, roadside plantation will be done. Under CSR, support will be provided for children's education and repair of the Manjhi Sthan.	Within 6-12 months of project commencement.	-	2.50
3	Fencing of Manjhi Sthan and Jaher Than; repair the road for children going to school; provide books, notebooks, and pens for children's education.	The project proponent assured that under CSR, fencing of Manjhi Sthan and Jaher Than will be done. The road for children going to school will be repaired, and books, notebooks, and pens will be provided for children's education.	Within 6 months of project commencement.	2.50	1.00
4	Arrangement for health facilities and one ambulance should be done.	The project proponent assured that under CSR, health facilities and one ambulance will be arranged.	Within 12 months of project commencement.	-	1.50
5	Levelling of the football	The project proponent	Within 12 months of	1.50	0.50

	ground and arrangement for a club house should be done.	assured that under CSR, the football ground will be levelled, and a club house will be arranged.	project commencement.		
6	Regular water sprinkling should be done to control dust particles.	The project proponent assured that regular water sprinkling will be carried out to control dust pollution.	To be implemented from the commencement of mining operations and continued throughout the project period.		
7	Arrangement for notebooks and books for poor children, arrangement of a club house, and support for community marriage should be done.	The project proponent assured that under CSR, notebooks and books for poor children will be provided, a club house will be arranged, and support will be given for community marriage.	Within 12 months of project commencement.		1.50
8	To control dust generated from the roads used for mining traffic, regular water sprinkling should be done. Also, provide employment to villagers.	The project proponent assured that regular water sprinkling will be done to control dust, and employment will be provided to villagers as per their skill and necessity.	Water sprinkling: From the commencement of mining operations and continued throughout the project period. Employment: During project operation phase on a regular basis.		
9	Arrange a vehicle for taking children to school. Arrange deep boring for drinking water.	The project proponent assured that, under CSR, a tempo will be arranged for children to go to school, and deep boring will be done at a location identified by villagers.	Vehicle Arrangement: within 3-6 months of project commencement. Deep boring for drinking water: Within 6-12 months of project commencement.		1.50
10	Arrange a tuition teacher for children's education.	The project proponent assured that, under CSR, a tuition teacher will be arranged.	Within 3- 6 months of project commencement.		1.00
11	Need a community house for women's meetings.	The project proponent assured that, under CSR	Within 12 months of project commencement.	2.50	
	Total			6.50	11.00

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SE Need based Survey detail (included in CSR)

Zone	Coverage & Survey Details	Key Socio-Economic Observations	Workforce Characteristics	Priority Needs (Focused)	Proposed Budget (₹ Lakhs)	Implementation Timeline
0-2 km	Villages: 8 Households surveyed: 20 Population covered: 100 FGDs Conducted: 1	Balanced gender composition with presence of children and vulnerable groups. Proximity to mine increases sensitivity to dust, traffic and occupational health issues.	Low workforce participation (~35%); dominance of informal and "other" occupations indicating livelihood instability.	<ul style="list-style-type: none"> Preventive healthcare & health check-ups Local skill development linked to mine & allied activities 	3.0	Short-term & ongoing (Year 1-2)
2-5 km	Villages: 14 Households surveyed: 24 Population covered: 110 FGDs Conducted: 0	Moderate literacy levels with gender disparity; limited access to secondary education and structured training facilities.	Mixed workforce pattern; dependence on agriculture and daily wage labour.	<ul style="list-style-type: none"> Education support (secondary level / scholarships) Agricultural productivity support (inputs, awareness) 	3.2	Medium-term (Year 2-3)
Total (0-5 km)					6.2 Lakhs	

Environment Management Practices to be followed:

Aspect	Mitigation Measures / Control Measures
Solid Waste Management	<p>Solid waste management is important from both aesthetic and environmental points of view and will be managed as per the Solid Waste Management Rules, 2016.</p> <ul style="list-style-type: none"> An O.B. (Overburden) dump area of 0.180 ha has been provided on the within the lease area. The O.B. dump area will accommodate 57,454 cum of overburden during the working plan period. After completion of the working plan, the generated O.B. will be backfilled into the stone quarry faces. Part of the O.B. will be used for haul road and village road maintenance. The remaining O.B. will be utilized for plantation activities. No hazardous or other solid waste generation is envisaged from the stone mining activities.

Air Quality Management	<ul style="list-style-type: none"> • Wet drilling and use of sharp drill bits to minimize dust generation. • Controlled blasting using optimum explosive charge during favorable weather conditions. • Regular maintenance of diesel equipment and vehicles to reduce emissions. • Water sprinkling on haul roads, loading/unloading points, and working areas. • All transport vehicles will have valid PUC certificates. • Greenbelt and roadside plantation to act as dust and noise barriers.
Water Quality Management	<ul style="list-style-type: none"> • Mining will be confined only above the Ground Water Table (GWT). • Rainwater accumulated in the pit will be collected and pumped out regularly during monsoon. • Settling sump will be provided to desilt pumped out of mine-pit and collected through garland drain before discharge into natural drainage. • Garland and foot drains will be constructed around the quarry to control surface runoff. • Sewage from rest shelters will be treated through septic tank-soak pit systems. • Foot drain would be provided around the external dump, if any.
Noise Quality Management	<ul style="list-style-type: none"> • Mining activities will be restricted to daytime and carried out with controlled blasting techniques. • Acoustic enclosures and mufflers will be provided for drilling and DG set operations. • Regular maintenance of mining machinery to minimize vibration and noise. • Greenbelt development around the lease boundary to attenuate noise propagation. • Use of delayed blasting technique to minimize the adverse impact of vibration.
Soil Quality Management	<ul style="list-style-type: none"> • Topsoil will be carefully removed and stored separately for future use in plantation and reclamation. • Garland drains and retaining walls will prevent soil erosion and siltation. • Spillage of oil or fuel will be avoided; impervious flooring and oil traps provided near storage areas • Post-mining, the area will be rehabilitated using stored topsoil and native vegetation
Flora & Fauna management	<ul style="list-style-type: none"> • No tree felling will be undertaken without obtaining permission from the competent authority. • Greenbelt and plantation will be developed using native species along approach roads and lease periphery (7.5m Safety Zone). • Dust suppression measures will minimize impact on surrounding vegetation
Socio Economy:	<ul style="list-style-type: none"> • Priority employment to local people in mining and ancillary activities. • Community development initiatives such as tree plantation drives, road maintenance, and local infrastructure support. • Awareness programs on safety, hygiene, and environmental protection

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Monitoring & Reporting:	<ul style="list-style-type: none"> • Periodic monitoring of air, water (ground & surface), noise, and soil quality as per CPCB and SPCB guidelines. • All monitoring reports will be submitted to statutory authorities as per the compliance schedule. • Corrective measures will be taken immediately if any deviation from standards is observed.
Risk & Hazard	<p>Activities which are likely to create risk are: Temporary Storage of Explosives, Charging of Explosives, Blasting, Drilling, Bench Formation, Loading / Unloading, Transportation</p> <p>Proposed Preventive measures:</p> <ul style="list-style-type: none"> ▪ Overall slope angles of benches will be maintained at 45°. ▪ Unmanageable heights are not created. ▪ Loose sides are properly dressed. ▪ No loose stone or debris will be permitted to remain on the top of the bench or side of any excavation (Regulation 106(4) of MMR 1961). ▪ No undercutting of any face or sides will be permitted so as to cause any overhanging (Regulation 106(5) of MMR 1961) ▪ It will be ensured that the drilling equipment is suitable for the job. ▪ The person in charge of the drilling machine is competent to carry out the drilling operation; part of the training includes instructions to always face towards the open edge of the bench so that any inadvertent backward step is away from the edge. ▪ Provision of portable rail fencing between the drilling operations and the edge of the bench ▪ Provision to attach a safety line to the drilling rig and provide a harness for the driller to wear. ▪ Restricted access to the area to all persons except those necessary for the drilling operation. ▪ Wet drilling will be carried out by constantly injecting a jet of water at the drill bit inside the hole, which prevents dust generation. ▪ In case due to any reason, wet drilling is not possible (due to non-availability of water), exhaust/ vacuum system will be provided which removes the dust from the drill hole continuously and discharges the same in a dust collector specially provided for the purpose. ▪ Drilling machine shall be fitted with dust suppression, collection and disposal arrangement.
Blasting & Handling of Explosives	<ul style="list-style-type: none"> ▪ Blast hole geometry shall be properly designed. ▪ Blast site shall be wetted before and after blasting operations are completed. ▪ Only optimum quantity of permissible explosives shall be used so that the vibrations do not damage the structures/houses if the quarrying operations are close to human habitation. ▪ Blasting shall be conducted only during favourable weather conditions and only during the day time and permissible hours. ▪ While carrying out blasting operations near habitations, wide publicity will be given in the local area through announcement and

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	<p>other available media so that local people become aware of the blasting activities being undertaken in the area and take appropriate precautions.</p> <ul style="list-style-type: none"> ▪ The vibrations should be monitored periodically in consultation with the local Mining authorities. ▪ Use of explosives is specialist work. Planning for a round of shots is necessary to ensure that the face is properly surveyed, holes correctly drilled, direction logged, the weight of explosive suitable for good fragmentation and the continuity of the initiator are but a few of the steps necessary to ensure its safe use. ▪ Proper and safe storage of explosives in approved and Licensed Magazine. ▪ Proper security system to prevent theft/ pilferage, unauthorized entry into Magazine area and checking authorized persons to prevent carrying of match box, lights, mobile phones, cigarette or Bidi etc. will be put in place. ▪ Explosives shall be conveyed in special containers. ▪ Explosives and detonators shall not be carried in the same container. ▪ The holes which have been charged with explosives will not be left unattended till blasting is completed.
Health Hazards	<p>Health hazards should be interpreted as being harmful dust and noise which is emitted during surface mining operations. All suitable steps and precautions will be undertaken to ensure minimum health hazard. Provision of use of Personal Protective Equipment (PPE) will be kept. The PPE shall be of good make and quality, wherever possible ISI certified, suitable for the hazard e.g. a dust respirator fitted with the correct filter to capture the particulate hazardous dust and maintained to recommended standards. As personal protective equipment only affords limited protection it will only be used as a last resort and as an interim arrangement until other steps are taken to reduce the risk of personal injury to an acceptable level</p>
Accident Prevention	<ul style="list-style-type: none"> ▪ Mine road shall be made smooth regularly with a road roller. ▪ Mine road will be made sufficiently wide to keep two-way traffic. Regular water sprinkling will be done on mine road and haul road to avoid suspension of dust. ▪ All transportation within the mine lease area should be carried out directly under the supervision and control of management. ▪ The vehicles will be maintained in good working condition and checked thoroughly at least once a month by the competent person authorized for the purpose by the management. ▪ Navigation signs will be provided at each and every turning point up to the main road (wherever required). ▪ To avoid danger while reversing the vehicles especially at working place/loading points, stopper should be posted to properly guide reversing/spotting operating.

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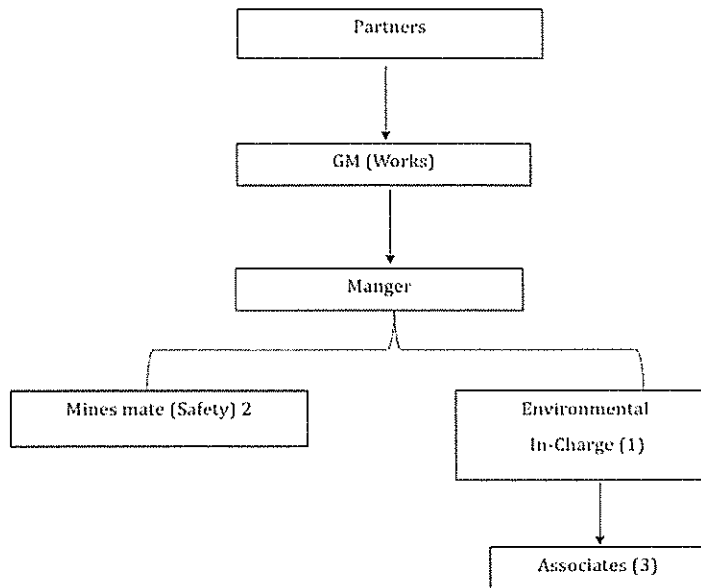
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Organizational Structure of Environment Management Cell:

ORGANIZATION CHART OF ENVIRONMENTAL MONITORING CELL



EMP Cell structure

The EMP Cell is committed to ensuring environmental sustainability and compliance with regulatory requirements for the Stone Mining Project. With a clear structure, roles, and responsibilities, the EMP Cell is equipped to manage environmental impacts and promote sustainable practices.

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District Survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- i. If any tree felling than necessary permission shall be taken from the competent authority.

- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.
- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.
- l. Personal protective equipments such as clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Chuwa Stone Deposit - II of M/s Mahaveer Engicons Pvt. Ltd., Village : Chuwa, Thana : Jirwabari, Distt. : Sahibganj, Jharkhand (2.833 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I along with following specific conditions :

- I. In compliance of Office Memorandum no. IA-J-11013/20/2025-IA-P, dated 25.11.2025 of MoEF&CC, Govt. of India, the PAs will mandatorily obtain the Environmental Safeguard to be implemented from Jharkhand State Pollution Control Board within 30 days of issuance of EC or 31.01.2026 which ever is earlier.
- II. The mine will come in operation only after obtaining permission from DGMS for controlled and delayed blasting.
- III. That the Deputy Commissioner, Sahibganj will ensure compliance of the order passed by Hon'ble NGT in OA No. 23/2017/EZ, O.A. no. 776/2018 and O.A. no. 373/2019 in the matter of Syed Arshad Nasar Vs Union of India with Ramchandra Chaurasia Vs State of Jharkhand with Pradeep Kumar Singh Vs State of Jharkhand before grant of mining lease.
- IV. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "Ek Ped Ma Ke Naam" and the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.
- V. The Deputy Commissioner through District Mining Officer will ensure that the mines owner of the respective leases to complete the plantation and maintenance in a time bound manner.
- VI. Suitable plant species of not less than 2 M height to be planted equal to twice the area of saplings proposed in Safety zone. This is to be planted in land available near mines and outside safety zone. This will be in addition to plantation in safety zone. Newly planted saplings to be maintained for minimum 3 years with Geo-Tagged photographs.
- VII. Dedicated water tanker to be provided for mine. The tanker to be used for spraying water on haul road and for irrigating newly planted saplings only. Sprinkling to be done such that the haul road is kept moistened all the time with Geo-Tagged

photographs.

- VIII. Pre employment Occupational health check up for employees to be done and thereafter at annual interval for PLFT, Audiometry and other required tests .Summary findings of same to submitted along with 6 monthly compliance.
- IX. Ensure use of Quality PPEs equivalent not less than 3M make. Records of same to be maintained and submitted with 6 monthly compliance report with Geo-Tagged photographs.
- X. Keep vulnerable areas unmanned. Ensure rotation of duties. Records to be maintained and submitted with 6 monthly compliance report.
- XI. Failing of any of terms & conditions mentioned in EC can lead to revocation / cancellation of EC.

4. Jiyapani Stone Mine of Shri Avinash Kumar Bhakat, Village : Jiyapani, Thana no. : 60, Thana : Maheshpur, Distt. : Pakur, Jharkhand (2.65 Ha).

(Proposal No : SIA/JH/MIN/ 554410/2025)

Name of the consultant : Sathi Planners Pvt. Ltd., Ranchi, Jharkhand.

This is a new project which has been taken for appraisal on 18.01.2026.

Project Sector: 1(a) Mining of Minerals, Category: B1.

Application for Environmental Clearance (EC) after Terms of Reference (ToR).

The State Expert Appraisal Committee, Jharkhand deliberated the project during its 112th meeting held on 16.05.2024 - 19.05.2024 and SEIAA, Jharkhand has approved the ToRs in 112th meeting held on 23rd & 24th May, 2024. TOR for the project was issued by SEIAA, Jharkhand vide letter no. EC/SEIAA/2024-25/3120/2024/88, dated 28.05.2024. The final EIA / EMP submitted by PP to SEAC on 12.01.2026.

EC Application for: Proposed Capacity – 39,475 cum/annum or 1,14,478 TPA.

Project and Location Details:

Sl	Parameter	Details
1	Project Name	: Jiyapani Stone Mine
2	Applicant	: Shri Avinash Kumar Bhakat
3	Lease address	: Village – Jiyapani, Thana- Maheshpur,

			District- Pakur, State- Jharkhand.	
4	Lease Area	:	2.65 Ha	Acres- 6.55 Acres
5	Cluster Details	:	3 no of mines including project site having total cluster area 23.71 Acres/9.60 Ha.	
6	Type of Land	:	Non-Forest Raiyati Land	
7	Project Cost	:	Rs. 165.09 Lakhs Recurring: 19.654 Lakhs/ year	
8	EMP Budget	:	Capital: Rs. 52.24 lakhs	Recurring: Rs. 7.93 Lakh / year
9	New or Expansion	:	New	
10	Mineable Reserves	:	cum.: 3,18,086 cum	Tonnes: 9,22,449 tones
11	Mine Life	:	10 years	
12	Man power	:	35	
13	Water Requirement	:	12.51 KLD {Manpower (35 nos.)- 1.575 KLD, Plantation (3504 nos.)- 10.512 KLD, Dust Suppression- 0.424 KLD.}	
14	Water Source	:	By authorised hired water tankers	
15	DG Set / power	:	20 KVA D. G. Set proposed.	
16	Crusher	:	No crusher	
17	Nearest Water Body	:	Bansloi River- 4.00 km. in South direction of mine site.	
18	Nearest Habitation	:	Few houses at 200 m in South direction. (EMP submitted)	
19	Nearest Rail Station	:	Murarai Railway station, approx. 18 km in SE direction.	
20	Nearest Air Port	:	Deoghar Airport, approx. 103 km towards W direction	
21	Nearest Forest	:	DFO Pakur letter No. 1735, dated 25.11.2022, certifies that the distance of the reserved/protected forest is more than 250 m from the proposed project site.	
22	Road & Highways	:	SH-18 (Litipara – Pakur road), at 16km in West Direction	
23	Approach Road	:	The distance of Approach Road is 106m.	
24	SE Budget	:	Rs. 6.0 Lakh (Need Based Survey)	

CO-ORDINATES

Point	Latitude	Longitude
1	24° 32' 55.435" N	87° 43' 17.433" E
2	24° 32' 56.044" N	87° 43' 18.088" E
3	24° 32' 56.492" N	87° 43' 18.929" E
4	24° 32' 57.558" N	87° 43' 19.679" E
5	24° 32' 57.943" N	87° 43' 20.130" E
6	24° 32' 58.687" N	87° 43' 20.706" E
7	24° 32' 58.844" N	87° 43' 21.380" E
8	24° 32' 59.008" N	87° 43' 21.664" E
9	24° 32' 59.706" N	87° 43' 22.394" E
10	24° 32' 59.698" N	87° 43' 22.713" E
11	24° 32' 59.068" N	87° 43' 23.628" E
12	24° 32' 58.563" N	87° 43' 24.665" E
13	24° 32' 57.742" N	87° 43' 25.744" E
14	24° 32' 57.528" N	87° 43' 25.619" E
15	24° 32' 57.614" N	87° 43' 25.415" E
16	24° 32' 56.729" N	87° 43' 24.868" E

17	24° 32' 56.022" N	87° 43' 24.505" E
18	24° 32' 56.551" N	87° 43' 23.603" E
19	24° 32' 55.549" N	87° 43' 22.836" E
20	24° 32' 54.525" N	87° 43' 22.129" E
21	24° 32' 53.688" N	87° 43' 21.213" E
22	24° 32' 52.668" N	87° 43' 20.041" E
23	24° 32' 52.279" N	87° 43' 19.455" E
24	24° 32' 51.894" N	87° 43' 18.869" E
25	24° 32' 53.707" N	87° 43' 17.343" E

LAND DETAILS

Khata no.	Plot no.
15	01 (P)
19	02 (P)

STATUTORY CLEARANCES

1	LOI / Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Officer, Pakur vide memo no. 378/M, dated 19.03.2024.
2	CO	:	The CO, Maheshpur vide letter no. 150/Ra., dated 17.02.2023 has mentioned the plot no. of the project is not recorded as "Jungle-Jhari" in R.S. Khatiyani & Register II. During the appraisal it was seen from the KML that few houses at a distance of 200 meter from mining lease area. For which detailed Environmental Management Plan has been prepared and submitted.
3	DMO Cluster	:	DMO, Pakur vide memo no. 500/M, dated 15.04.2024 certified that 03 other mining lease area (7.00 Acre, 3.16 Acre & 7.00 Acre) exists within 500 m radius from proposed project site and total area is 23.71 Acre (9.60 Ha).
4	DFO Wild Life	:	DFO -cum- Incharge Wildlife Sanctuary, Udhwa (Sahibganj) vide letter no. 534, dated 18.04.2023 certified that the proposed project site is outside Eco Sensitive Zone of Udhwa Bird Sanctuary.
5	DFO Territorial	:	Divisional Forest Officer, Pakur Forest Division vide memo no. 1815, dated 01.12.2022 certified that the minimum distance of forest is 700 meters from proposed project site.
6	DSR	:	The DMO, Pakur has been certified vide memo no. 501/M, dated 15.04.2024 that this project is mentioned in approved DSR of Pakur District as a potential area (Sl. no. 136, Page no. 130).






7	Gram Sabha	:	BDO, Maheshpur vide letter no. 1475/Vi., dated 27.07.2023 informed that Gram Sabha conducted on 13.07.2023.
8	Mine Plan Approval	:	Approved by District Mining Officer, Pakur vide Memo No. 591/M, dated 09.05.2024.
9	Qualified Person	:	Shri Malay Kumar Mukhopadhyay was present in the meeting and affirmed that the mine plan has been prepared by him.
10	Baseline monitoring period	:	October, 2024 to December, 2024.
11	Public Hearing	:	Public hearing conducted on 26.07.2025.

Working Details

1	Mining Method	:	Opencast Fully mechanised method
2	Quarry Area	:	2.65 ha.
3	Waste Generation	:	34,129 cum.
4	Stripping Ratio	:	01:0.21
5	Working Days	:	300
6	Benches: size & No	:	6m x 6m
7	Elevation of Mine	:	48 m AMSL to 41 m AMSL
8	Ground Level Elevation	:	41 m AMSL
9	Ultimate Working Depth	:	14 m AMSL
10	Water Table	:	09 m AMSL (Source: JSAC Ground water Prospect Map)
11	Topography of Mine	:	The area represents gently sloping land
12	Explosive Requirement	:	40 kg/day Slurry explosives
13	Diesel/Fuel requirement	:	HSD – 1060 litres/day (318 KL/year)

Production Details

Year	Production of Stone		Removal of O.B
	In cum	In tonnes	Cum
1st	26715	77474	13065
2nd	39056	113262	10614

3rd	39475	114478	10450
4th	26216	76026	0
5th	26125	75763	0
Total	1,57,587	4,57,002	34,129

Land Use

Si. No.	Pattern of Utilization	Present/Existing land use pattern in (Ha.)	Proposed Land use for current plan period (Ha.)	Land to be used in remaining period of the life of the mine. (Ha.)	Land used at the conceptual stage i.e. end of mine life in (Ha.)	Area to be converted in the conceptual period.
1	Mining Activities	0	1.96	1.96	1.080	Water Body
2	Dead Benches	0	0.000	0.000	0.880	Plantation
3	Dumping	0	0.073	0.073	0.073	Plantation
4	Garland drain	0	0.020	0.020	0.020	-
5	Settling Tank	0	0.024	0.024	0.024	-
6	Safety Zone	0	0.473	0.473	0.473	Plantation
7	Unutilized	2.65	0.100	0.100	0.100	Plantation
Total		2.65	2.65	2.65	2.65	-

Green Belt Development

Year	Location	No. of Plants	Area to be Covered (Ha)
1 st Year	Within 7.5m in Safety Zone Area	1,183	0.473
Conceptual	Dead Benches	2,200	0.880
Conceptual	Garland drain	50	0.020
1 st Year	Approach Road	71	106 m
Total		3,504	0.887

Note- 3,504 tree proposed to be planted out of which 10% plantation will be carried out i.e. (350 trees) as per MoEF&CC, Govt. of India Scheme "Ek Ped Ma Ke Naam".

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be

undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

BUDGETARY PROVISION (IN LAKHS)

PROJECT COST

Sl. No.	Particular	Project Cost (in Rs. Lakhs)
1	Cost of Infrastructure	5.50
2	Machinery & Equipment	135.00
3	Contingency @10%	14.48
Total		154.5
Budget for EMP		52.24
Grand Total		165.09

ENVIRONMENT MANAGEMENT PLAN (EMP)

S. No.	EMP Activity	Capital Cost (₹ in Lakhs)	Recurring Cost / Year (₹ in Lakhs)
1.	Air Pollution Control (Water sprinkling, dust suppression)	3.00	2.00
2.	Water Pollution Control (Garland drains, settling tank, rainwater harvesting)	2.00	1.00
3.	Noise & Vibration Control (acoustic enclosures, monitoring)	1.50	0.50
4.	Occupational Health & Safety (PPE, health camps, first aid, training)	1.50	1.00
5.	Greenbelt Development (plantation, maintenance)	14.30	1.43
6.	Environmental Monitoring (air, water, noise, soil)	1.24	1.00
7.	PH Compliance Budget	18.70	-
8.	Environment Management Plan (For Habitation)	10.00	1.00
Total		52.24	7.93

Environment Monitoring Plan

Monitoring Parameters and Frequency of Monitoring

S. no	Monitoring Parameters	No. of	Frequency
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		Locations	of Monitoring
1	Ambient Air: Ambient Air Quality at appropriate location for PM10, PM2.5, SO2, NOx in the vicinity of the mine area. In the surrounding area covering project site only.	4 Stations	Six Monthly
2	Water: Surface water sample in the vicinity of the Project area.	2 Surface water 2 Ground water	Six Monthly
3	Noise: Day & Night level Noise Monitoring.	4 stations	Six Monthly
4	Soil: Soil Monitoring, Qualitative and quantitative testing/analysis to check the soil fertility, porosity, texture, water holding capacity, etc.	2 stations	Six Monthly

Summary of Baseline Data:

Monitoring season - October 2024 - December 2024 for Winter season.

Type	Parameter
AAQ Parameter at 7 locations	PM10 = 88 $\mu\text{g}/\text{m}^3$ to 51 $\mu\text{g}/\text{m}^3$ PM2.5 = 61 $\mu\text{g}/\text{m}^3$ to 30 $\mu\text{g}/\text{m}^3$ SO2 = 12.5 $\mu\text{g}/\text{m}^3$ to <5.0 $\mu\text{g}/\text{m}^3$ NOx = 31.5 $\mu\text{g}/\text{m}^3$ to 14.9 $\mu\text{g}/\text{m}^3$
Noise quality at 7 locations	Daytime 67.8 to 61.0 dB(A) Nighttime 40.2 to 38.3 dB(A)
Surface water at 2 locations	pH – 7.82 to 8.08 TDS – 441 to 514 mg/l Sulphate – 15.1 to 12.9 mg/l Fluoride – 0.268 to 0.266 mg/l Total Hardness – 191.6 to 223.3 mg/l
Ground water at 6 locations	Turbidity – 4.58 to 0.37 NTU pH – 7.01 to 7.92 Total Hardness – 78.9 to 124.8 mg/l TDS – 275 to 422 mg/l Sulphate – 12.1 to 19.2 $\mu\text{S}/\text{cm}$
Soil at 5 locations	pH – 6.0 to 6.5 Potassium – 61.0 to 53.3 mg/kg Nitrogen – 413 to 373 mg/kg

Public Hearing (Action Plan) –

Sl. No.	Issue Raised	Commitment by Project Proponent (Brief)	Time Frame	Funds to be Spent Capital (in Lakhs)
1	Water is a problem. Arrangement should be made for deep boring, regular blasting, regular water sprinkling to reduce dust, and tree planting.	The project proponent assured that blasting will be carried out as per regulations. Additionally, to control dust particles, proper plantation and regular water sprinkling will be done, and under CSR, deep boring will be carried out at the location identified by the villagers to address the water problem.	Blasting pollution control measures- Immediate and continuous during operations (Water Sprinkling and Plantation) CSR activities will be planned annually and implemented throughout the life of the mining project. Deep boring- Within 6 months of project commencement.	Already considered in project and EMP cost. Under CSR fund Rs. 1.50 Lakhs Under CSR Fund
2	Along with that, football game equipment, levelling of the football ground, and arrangement of a football coach should be made.	The levelling of the football ground and provision of sports equipment will be done. Also, for the water problem, deep boring will be carried out at the location identified by the villagers. Furthermore, after consultation with local youth, a football coach will be arranged.	Within 6-8 months of project commencement levelling of the football ground and provision of sports equipment will be done.	Rs. 2.00 Lakhs
3	Arrangement for a tuition teacher should be made.	A tuition teacher will be arranged for the education of rural children.	Tuition teacher - provide education	Rs. 2.00 Lakhs
4	Provision of a vehicle for medical emergencies should be arranged.	A vehicle will be provided for emergency health and medical services.	Medical transport vehicle arrangement (within 3 months of project commencement)	Rs. 5.00 Lakhs
5	We should be helped in building a house and a motorcycle and Rs 9,000/- per month should be given to my two children. And a football coach should be arranged	The project proponent confirmed that the funds would be disbursed on time as per the agreement. Additionally, a house builder, a motorcycle, and 9,000 rupees were given to two children. Deep boring will be done at the location identified by the villagers to address the problem. Additionally, after discussions	Within 9 months	Rs. 2.20 Lakhs

		with the rural youth, a football coach will be arranged.		
6	the village pond should be cleaned with a JCB machine, and a stone crusher should be installed in Jiyapani.	the village pond would be cleaned. A stone crusher was also promised to be installed near the mining unit.	Within 6-9 months of project commencement.	Rs. 5.00 Lakhs
7	The stone boulders produced here should be converted into chips by setting up a crusher here, so that the people here get employment and tankers and financial assistance can be provided for marriages.	The project proponent stated that a stone crusher will be set up locally to produce chips from the stone boulders generated here. This will maximize employment for local people. Additionally, tankers and financial assistance will be provided.	Initial Recruitment- Skill Development & Training (during mine development and construction phase 0-6 months) During marriages of underprivileged families as part of CSR initiatives.	Rs. 1.00 Lakhs Under CSR Fund
Total				18.70 Lakhs

SE Need based Survey detail (included in CSR)

Zone	Coverage & Survey Details	Key Socio-Economic Observations	Workforce Characteristics	Priority Needs (Focused)	Proposed Budget (₹ Lakhs)	Implementation Timeline
0-2 km	Villages: 6 Households surveyed: 20 Population covered: 105 FGDs Conducted: 1	Balanced gender composition with presence of children and vulnerable groups. Proximity to mine increases sensitivity to dust, traffic and occupational health issues.	Low workforce participation (~28%); dominance of informal and "other" occupations indicating livelihood instability.	<ul style="list-style-type: none"> Preventive healthcare & health check-ups Local skill development linked to mine & allied activities 	3.5	Short-term & ongoing (Year 1-2)

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2-5 km	Villages: 10 Households surveyed: 25 Population covered: 115 FGDs Conducted: 0	Moderate literacy levels with gender disparity; limited access to secondary education and structured training facilities.	Mixed workforce pattern; dependence on agriculture and daily wage labour.	<ul style="list-style-type: none"> • Education support (secondary level scholarships) / • Agricultural productivity support (inputs, awareness) 	2.5	Medium-term (Year 2-3)
Total (0-5 km)					6.0	

Environment Management Practices to be followed:

Aspect	Mitigation Measures / Control Measures
Solid Waste Management	<p>Solid waste management is important from both aesthetic and environmental points of view and will be managed as per the Solid Waste Management Rules, 2016.</p> <ul style="list-style-type: none"> • An O.B. (Overburden) dump area of 0.073 ha has been provided within the lease area. • The O.B. dump area will accommodate 34,129 cum of overburden during the working plan period. • After completion of the working plan, the generated O.B. will be backfilled into the stone quarry faces. • Part of the O.B. will be used for haul road and village road maintenance. • The remaining O.B. will be utilized for plantation activities. • No hazardous or other solid waste generation is envisaged from the stone mining activities.
Air Quality Management	<ul style="list-style-type: none"> • Wet drilling and use of sharp drill bits to minimize dust generation. • Controlled blasting using optimum explosive charge during favorable weather conditions. • Regular maintenance of diesel equipment and vehicles to reduce emissions. • Water sprinkling on haul roads, loading/unloading points, and working areas. • All transport vehicles will have valid PUC certificates. • Greenbelt and roadside plantation to act as dust and noise barriers.
Water Quality Management	<ul style="list-style-type: none"> • Mining will be confined only above the Ground Water Table (GWT). • Rainwater accumulated in the pit will be collected and pumped out regularly during monsoon. • Settling sump will be provided to desilt pumped out of mine-pit and

	<p>collected through garland drain before discharge into natural drainage.</p> <ul style="list-style-type: none"> • Garland and foot drains will be constructed around the quarry to control surface runoff. • Sewage from rest shelters will be treated through septic tank–soak pit systems. • Foot drain would be provided around the external dump, if any.
Noise Quality Management	<ul style="list-style-type: none"> • Mining activities will be restricted to daytime and carried out with controlled blasting techniques. • Acoustic enclosures and mufflers will be provided for drilling and DG set operations. • Regular maintenance of mining machinery to minimize vibration and noise. • Greenbelt development around the lease boundary to attenuate noise propagation. • Use of delayed blasting technique to minimize the adverse impact of vibration.
Soil Quality Management	<ul style="list-style-type: none"> • Topsoil will be carefully removed and stored separately for future use in plantation and reclamation. • Garland drains and retaining walls will prevent soil erosion and siltation. • Spillage of oil or fuel will be avoided; impervious flooring and oil traps provided near storage areas • Post-mining, the area will be rehabilitated using stored topsoil and native vegetation
Flora & Fauna management	<ul style="list-style-type: none"> • No tree felling will be undertaken without obtaining permission from the competent authority. • Greenbelt and plantation will be developed using native species along approach roads and lease periphery (7.5m Safety Zone). • Dust suppression measures will minimize impact on surrounding vegetation
Socio Economy:	<ul style="list-style-type: none"> • Priority employment to local people in mining and ancillary activities. • Community development initiatives such as tree plantation drives, road maintenance, and local infrastructure support. • Awareness programs on safety, hygiene, and environmental protection
Monitoring & Reporting:	<ul style="list-style-type: none"> • Periodic monitoring of air, water (ground & surface), noise, and soil quality as per CPCB and SPCB guidelines. • All monitoring reports will be submitted to statutory authorities as per the compliance schedule. • Corrective measures will be taken immediately if any deviation from standards is observed.
Risk & Hazard	

	<p>Activities which are likely to create risk are: Temporary Storage of Explosives, Charging of Explosives, Blasting, Drilling, Bench Formation, Loading / Unloading, Transportation</p> <p>Proposed Preventive measures:</p> <ul style="list-style-type: none"> ▪ Overall slope angles of benches will be maintained at 45°. ▪ Unmanageable heights are not created. ▪ Loose sides are properly dressed. ▪ No loose stone or debris will be permitted to remain on the top of the bench or side of any excavation (Regulation 106(4) of MMR 1961). ▪ No undercutting of any face or sides will be permitted so as to cause any overhanging (Regulation 106(5) of MMR 1961) ▪ It will be ensured that the drilling equipment is suitable for the job. ▪ The person in charge of the drilling machine is competent to carry out the drilling operation; part of the training includes instructions to always face towards the open edge of the bench so that any inadvertent backward step is away from the edge. ▪ Provision of portable rail fencing between the drilling operations and the edge of the bench ▪ Provision to attach a safety line to the drilling rig and provide a harness for the driller to wear. ▪ Restricted access to the area to all persons except those necessary for the drilling operation. ▪ Wet drilling will be carried out by constantly injecting a jet of water at the drill bit inside the hole, which prevents dust generation. ▪ In case due to any reason, wet drilling is not possible (due to non-availability of water), exhaust/ vacuum system will be provided which removes the dust from the drill hole continuously and discharges the same in a dust collector specially provided for the purpose. ▪ Drilling machine shall be fitted with dust suppression, collection and disposal arrangement.
<p>Blasting & Handling of Explosives</p>	<ul style="list-style-type: none"> ▪ Blast hole geometry shall be properly designed. ▪ Blast site shall be wetted before and after blasting operations are completed. ▪ Only optimum quantity of permissible explosives shall be used so that the vibrations do not damage the structures/houses if the quarrying operations are close to human habitation. ▪ Blasting shall be conducted only during favourable weather conditions and only during the day time and permissible hours. ▪ While carrying out blasting operations near habitations, wide publicity will be given in the local area through announcement and other available media so that local people become aware of the blasting activities being undertaken in the area and take appropriate

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	<p>precautions.</p> <ul style="list-style-type: none"> ▪ The vibrations should be monitored periodically in consultation with the local Mining authorities. ▪ Use of explosives is specialist work. Planning for a round of shots is necessary to ensure that the face is properly surveyed, holes correctly drilled, direction logged, the weight of explosive suitable for good fragmentation and the continuity of the initiator are but a few of the steps necessary to ensure its safe use. ▪ Proper and safe storage of explosives in approved and Licensed Magazine. ▪ Proper security system to prevent theft/ pilferage, unauthorized entry into Magazine area and checking authorized persons to prevent carrying of match box, lights, mobile phones, cigarette or Bidi etc. will be put in place. ▪ Explosives shall be conveyed in special containers. ▪ Explosives and detonators shall not be carried in the same container. ▪ The holes which have been charged with explosives will not be left unattended till blasting is completed.
Health Hazards	<p>Health hazards should be interpreted as being harmful dust and noise which is emitted during surface mining operations. All suitable steps and precautions will be undertaken to ensure minimum health hazard. Provision of use of Personal Protective Equipment (PPE) will be kept. The PPE shall be of good make and quality, wherever possible ISI certified, suitable for the hazard e.g. a dust respirator fitted with the correct filter to capture the particulate hazardous dust and maintained to recommended standards. As personal protective equipment only affords limited protection it will only be used as a last resort and as an interim arrangement until other steps are taken to reduce the risk of personal injury to an acceptable level</p>
Accident Prevention	<ul style="list-style-type: none"> ▪ Mine road shall be made smooth regularly with a road roller. ▪ Mine road will be made sufficiently wide to keep two-way traffic. Regular water sprinkling will be done on mine road and haul road to avoid suspension of dust. ▪ All transportation within the mine lease area should be carried out directly under the supervision and control of management. ▪ The vehicles will be maintained in good working condition and checked thoroughly at least once a month by the competent person authorized for the purpose by the management. ▪ Navigation signs will be provided at each and every turning point up to the main road (wherever required). ▪ To avoid danger while reversing the vehicles especially at working place/loading points, stopper should be posted to properly guide reversing/spotting operating.

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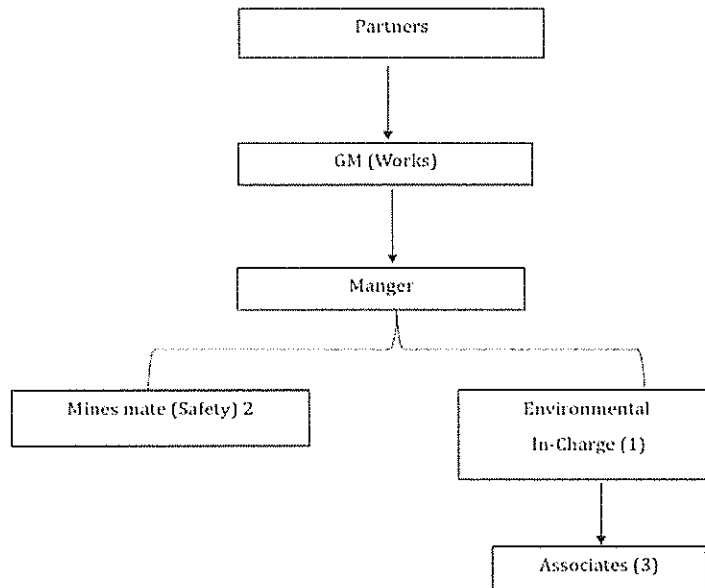
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Organizational Structure of Environment Management Cell:

ORGANIZATION CHART OF ENVIRONMENTAL MONITORING CELL



EMP Cell structure

The EMP Cell is committed to ensuring environmental sustainability and compliance with regulatory requirements for the Stone Mining Project. With a clear structure, roles, and responsibilities, the EMP Cell is equipped to manage environmental impacts and promote sustainable practices.

Undertaking submitted affirming:

- Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- The District Survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- The Boundary Pillars of the proposed mine lease area will be maintained properly.
- One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- If any tree felling than necessary permission shall be taken from the competent authority.

- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.
- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.
- l. Personal protective equipments such as clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Jiyapani Stone Mine of Shri Avinash Kumar Bhakat, Village : Jiyapani, Thana no. : 60, Thana : Maheshpur, Distt. : Pakur, Jharkhand (2.65 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I along with following specific conditions :

- I. In compliance of Office Memorandum no. IA-J-11013/20/2025-IA-P, dated 25.11.2025 of MoEF&CC, Govt. of India, the PAs will mandatorily obtain the Environmental Safeguard to be implemented from Jharkhand State Pollution Control Board within 30 days of issuance of EC or 31.01.2026 which ever is earlier.
- II. The mine will come in operation only after obtaining permission from DGMS for controlled and delayed blasting.
- III. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "Ek Ped Ma Ke Naam" and the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.
- IV. The Deputy Commissioner through District Mining Officer will ensure that the mines owner of the respective leases to complete the plantation and maintenance in a time bound manner.
- V. Suitable plant species of not less than 2 M height to be planted equal to twice the area of saplings proposed in Safety zone. This is to be planted in land available near mines and outside safety zone. This will be in addition to plantation in safety zone. Newly planted saplings to be maintained for minimum 3 years with Geo-Tagged photographs.
- VI. Dedicated water tanker to be provided for mine. The tanker to be used for spraying water on haul road and for irrigating newly planted saplings only. Sprinkling to be done such that the haul road is kept moistened all the time with Geo-Tagged photographs.
- VII. Pre employment Occupational health check up for employees to be done and thereafter at annual interval for PLFT, Audiometry and other required tests .Summary findings of same to submitted along with 6 monthly compliance.
- VIII. Ensure use of Quality PPEs equivalent not less than 3M make. Records of same to be maintained and submitted with 6 monthly compliance report with Geo-Tagged

photographs.

- IX. Keep vulnerable areas unmanned. Ensure rotation of duties. Records to be maintained and submitted with 6 monthly compliance report.
- X. Failing of any of terms & conditions mentioned in EC can lead to revocation / cancellation of EC.

- 5. Group Housing Project "Oak Aditya" of M/s Nisith Keshari Construction Pvt. Ltd. (Director : Shri Nisith Kumar Keshari), Village : Pandra, Thana no. : 149, Distt. : Ranchi, Jharkhand.

(Proposal no.: SIA/JH/INFRA2/565269 /2026)

Name of the consultant : P & M Solution, Noida, U.P.

This is a new project which has been listed for appraisal on 18.01.2026. On the request of PAs this has been taken up for consideration on 21.01.2026.

Project Sector: 8(a) Building and Construction Projects , Category: B2.

Application for Environment Clearance (EC) as per EIA notification, 2006.

EC Application for: Proposed Group housing project "Oak Aditya" plot no. 13,14,15,24,25 & 26 and khata no. 29 & 32 thana no. 149 Village- Pandra, District-Ranchi, State-Jharkhand

Built-up Area: 49316.82 sq. meter.

PROJECT And LOCATION Details:

Parameters	Description
Total Plot Area	10485.00 Square meter
Gifted Area to Municipal Corporation for Road widening	557.47 Square Meter
Net Plot Area	9927.53 Square Meter
Project Cost	INR 95 Crores
F.A.R(Permissible)@3.3	32760.849 sq. m.
(Proposed FAR @3.26-	32455.68Sq. Meter
Green Area (@ 5% of plot area)	693.93 Square Meter
Green Belt @ 15 % of net plot area	1489.12 Sq. Meter

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Population	2910
Water Requirement	169 KLD
Fresh Water Requirement	107 KLD
Wastewater Generation	143 KLD
STP	150KLD
Total Municipal Waste	901 kg/day
Bio Medical Waste	Nil
Power Requirement	Maximum power demand for the project during operation phase is estimated to be 913 kVA. Source of power will be Jharkhand State Electricity Board.
DG Sets	1 no. of DG set of Total 500 KVA
RWH Pits	7 nos.
Parking Number	808
Nearest Road	Ranchi Road approx. 0.10 km in SW direction
Nearest Railway Station	Ranchi Railway Station at approx. 8.5 km, in SE direction.
Nearest Airport	Birsa Munda Airport, Ranchi is at distance of 10.0 km in South direction.
Nearest Hospitals	Braunwald Hospital 1 km SE
Nearest Water Bodies	Dhurwa Dam approx 10.0 km South Direction.

CO-ORDINATES

Point	Latitude	Longitude
A	23°23'34.89"N	85°16'11.24"E
B	23°23'38.88"N	85°16'12.81"E
C	23°23'38.98"N	85°16'8.58"E
D	23°23'39.73"N	85°16'9.75"E

LAND DETAILS

Khata no.	Plot no.
29 & 32	13, 14, 15, 24, 25 & 26

AREA STATEMENT

S No.	Description	Area (Sq m)
A.	Total Plot area	10485.00
B.	Gifted Area	557.47
C.	Net Plot Area	9927.53
D.	Proposed Ground Coverage (@34.90 % of plot area)	3463.79
E.	Proposed FAR	32455.68
F.	Non FAR	16861.14
G.	Built-Up area	49316.82
H.	Green Area (21.99 % of the plot area)	2184.00
I.	No of Dwelling units	204
J.	Height	87.35
K.	No. Of Shop	39
L.	No. of Restaurant	2

Population Detail

S. No.	Category	No of DU/Area (sq m)	Standard	Population
Residential				
1.	Residents (3 BHK)	204	6 person/unit	1224
2.	Staff	--	1224@5%	61
3.	Visitors	--	1224@10%	122
Total Residential Population				1407
Commercial				
4.	Population in commercial area	9023.83sqm	6 sqm/person	1503
5.	Staff	--	1503@10%	150
6.	Visitors	--	1503@90%	1353
Total Commercial Population				1031
7	Total Population			2910

Water Requirement Details

Category	Population/Area (sqm)/Capacity	Standard (LPCD)	Water Requirement-KLD	Fresh Water Requirement-KLD	Recycled Water requirement-KLD
Domestic					
Residents	1224	100	122	85	37

Staff	211	45	10	7	3
Visitors	1475	15	22	15	7
Total Domestic Water Demand			154	107	47
Landscape	2184 sqm	6l/day	13	0	13
Fire Fighting	--	--	2	--	2
Total			169	107	62

Wastewater Calculations

Category	Total Quantity (KLD)
Fresh water Req.	107
Flushing water Req.	47
Sewage generation (@80% of the fresh + 100% flushing water requirement)	133
Capacity of STP	150
Recovered water from STP (90% of Waste water)	120
1. Flushing	47
2. Landscaping	13
3. Fire Fighting	2
4. Discharge to Sewer/Road/Car washing	58

Solid Waste Generation

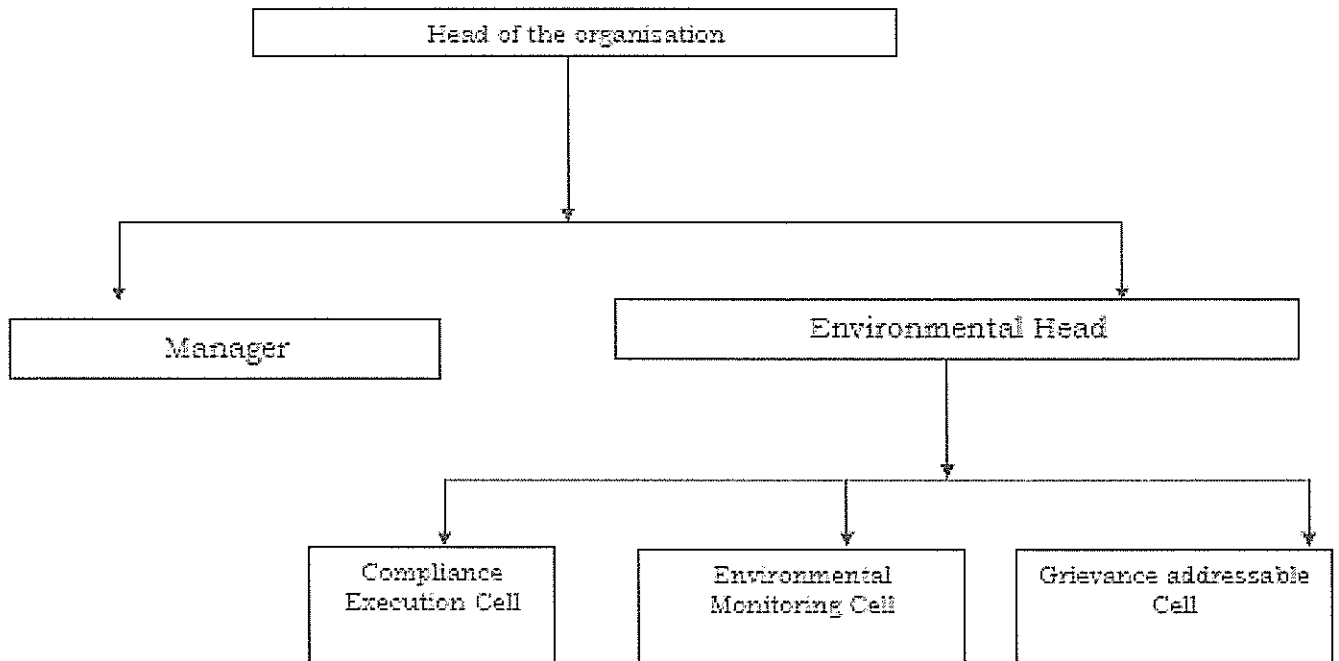
S. No	Description	Occupancy/ Area	kg/capit a/day	Total Solid Waste Generation (kg/day)	Biodegradable (kg/day)	Non-Biodegradable
1.	Residents	1224	0.5	612	245	367
2.	Staff	211	0.25	53	21	32
3.	Visitors	1475	0.15	221	88	133
5.	Landscape waste	0.53 acres	-	1	1	--
5.	STP sludge	150 KLD	--	14	14	-
Total Waste Generated				901	369	532

Note:- An Organic waste converter having capacity of 500 kg/day will be provided at site

EMP Cost – Approx. Budget Operational Phase:

S. No.	Activity	Capacity/ Area/Nos./parameters	Capital Cost (Lacs)	Annual Recurring Cost (Lacs)
1.	STP	150 KLD	25	10

2.	Landscaping & planting trees	2184.00sq m	15	8
3.	Solid waste Management	Municipal waste-901kg/day	25	15
4.	RWH Pit Installation	7 pits	25	6
5.	Energy Saving	10%	10	4
6.	Environmental Monitoring*	Air, water, soil and noise	-	4
Total			100	47



Organization Structure

ENVIRONMENT MANAGEMENT

Green Belt Development

- Combination of local trees and shrubs are planned within the project site.
 - Total green belt provided at the site is 1489.12 sq m (15% of the plot area) & Green Areas is 693.93 sq m (@6.99 % of net plot area) which will enhance the beauty of the site and help combat air and noise pollution.
- The plant species will be selected on the basis of Guidelines for Developing Green Belts, CPCB March 2000.
- Environment Monitoring Programme

Sl. No	Description	No. Monitoring Stations	Duration	Budget
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1	Air	4 Stations	6 Monthly	20000
2	Soil	2 Stations	6 Monthly	8000
3	Surface Water	2 Stations	6 Monthly	7500
4	Ground Water	2 Stations	6 Monthly	7500
5	Noise	4 Stations	6 Monthly	7000

Solid Waste Management

During Construction Phase

- Construction yards are proposed for storage of construction material.
- Excavated top soil will be stored in temporary constructed soil bank and will be reused for landscaping of the project.
- Remaining soil will be utilized for refilling/road work/raising of site level at locations.
- There will be "Refuse Containers" at site for the management of domestic waste generated by the construction labourers and these containers will be emptied at least once daily.
- Cement bags, waste paper and packing material (cardboard) will be sold off to recyclers.

During Operation Phase

- The solid waste will be collected and segregated at source.
- Adequate number of colored bins (green, white & Black) separate for bio-degradable, non-biodegradable and Hazardous waste are proposed to be provided at the strategic location within site.
- Bio-degradable (will be composted through organic waste converter).
- Non-Biodegradable wastes will be disposed to govt. or SPCB approved third party vendors.
- Sludge generated from STP will be used as fertilizer for green belt development.
- Approx. 1 KLD of waste oil will be generated from project site during operational phase. It will be managed as per the Hazardous and Other Wastes (Management and Trans boundary Movement) Rules, 2016.
- Horticultural Waste is composted and used for gardening purposes.

Water Quality Management

During Construction Phase

- The site drainage will be planned in such a way that there is no accumulation of water/wastewater within the project premises or in the vicinity of the site.
- Mobile toilets to be provided for construction Laborers.

During Operation Phase

- STP of capacity i.e. 150KLD of STP is proposed for treatment of wastewater.
- Treated waste water would be reused for Flushing, Landscaping, Road Washing & Misc
- Use of water efficient plumbing fixtures to conserve water.
- Approx. 107 KLD of fresh water is required during operational phase of the project.

Air Quality Management

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- Warehouse/stock yard will be provided for storage of construction material
- Covering of stored construction materials with tarpaulin covers which will be resold to authorized construction material handling agency for reuse.
- Covering of trucks carrying construction materials.
- Dust suppression by water sprinkling.
- Adequate maintenance of construction equipment & vehicles.
- Wheel wash facility at the entry/exit of the site to prevent dust emissions.
- Periodical Ambient Air Quality Monitoring.
- PUC Certified vehicles.
- Glow signs Speed Limits to 20 kmph to reduce emissions on site will be displayed at the important junctions.

Energy conservation

- Energy will be conserved via solar power at least 2 % of the total power requirement.

Undertaking

- -An undertaking that no ground water will be used without any prior approval from CGWA
- An undertaking that at least 2 % of total power requirement will be provided by solar energy.

STATUTORY CLEARANCES

1	Land Docs	:	Lease agreement : Nisith Keshari Construction Pvt. Ltd. for Development.
2	DFO Territorial	:	DFO, Ranchi Forest Division vide letter no. 86, dated 08.01.2026 certified that the distance of reserved / protected forest is more than 250 meters from project site.
3	DFO Wildlife	:	DFO, Wildlife Division, Ranchi vide letter no. 789, dated 24.11.2025 certified that proposed project site is out side Eco Sensitive Zone of Palkot Wildlife Sanctuary.
4	CO certificate	:	The CO, Hehal, Ranchi vide letter no. 40 (ii), dated 21.01.2026 has mentioned the plot no. of the project is not recorded as "Jungle - Jhari" in R.S. Khatiyan & Register II.
5	AAI NOC	:	Airport authority of India issued NOC vide NOC ID no. RANC /EAST /B/ 022325/1589028, dated 20.03.2025 valid up to 19.03.2033.
6	Building Plan approval	:	Conceptual Plan submitted.

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7	Fire Department	:	Fire Advisory has been issued by Fire Department, Jharkhand, Ranchi, vide memo no. 7872/Tech./2025, dated 01.10.2025.
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Based on the presentation made and information provided, the Committee decided that the proposal for Group Housing Project "Oak Aditya" of M/s Nisith Keshari Construction Pvt. Ltd. (Director : Shri Nisith Kumar Keshari), Village : Pandra, Thana no. : 149, Distt. : Ranchi, Jharkhand is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure –II alongwith the following specific conditions :

- I. Treated water from STP shall be discharged out side the premises only after obtaining permission from the Competent Authority.
- II. In compliance of Office Memorandum no. IA-J-11013/20/2025-IA-P, dated 25.11.2025 of MoEF&CC, Govt. of India, the PAs will mandatorily obtain the Environmental Safeguard to be implemented from Jharkhand State Pollution Control Board within 30 days of issuance of EC or 31.01.2026 which ever is earlier.
- III. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "Ek Ped Ma Ke Naam" and the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.
- IV. Ground water to be drawn for use in the project only after obtaining permission from the Competent Authority.
- V. Environment management system including organization structure to be drawn to ensure compliance of EC conditions stipulated based on principles of Continual Improvement and periodical management review.
- VI. All raw material to be stored only under covered shed.
- VII. PAs to offset (upto20%) consumption of conventional energy sources by promoting use of solar energy, passive energy utilization, optimum fenestration, shading effect and heat islands.
- VIII. Developers to promote energy conservation measures such that it offsets not less than 02 % of connected load.
- IX. Trees should be developed & maintained not less than 15% of project area.
- X. Organic Waste Converter (OWC) to be installed of sufficient capacity such that all organic waste (bio degradable) generated is composted at source only.
- XI. Developers/Company to install STP of sufficient capacity such that all the sewer produced is treated and reused.
- XII. Developers/Company to install Rain water harvesting structures such that all the roof top water runoff is collected and harvested including reuse on 100% basis.
- XIII. Developers/Company to conduct and submit carbon footprint and carbon sequestration study report including mitigation measures as a part of EC compliance.

- XIV. Water runoff originating from open non constructed areas of project premises to be harvested /guided in such a way that it does not create water logging condition outside.
- XV. Sufficient number of EV fast charging points to be installed.
- XVI. MSW Collection centre should be located in isolated and preferably unmanned area. Movement of the vehicle carrying waste should be under tarpaulin covered condition only. Route of vehicle should be such that it avoids residential areas as far as practical.
- XVII. ISO 14k EMS system standard to be followed for implementation of EMPs with MRM in place for feedback to Sr management.

6. Tokisud – II Sand Deposit in the river bed of Damodar of M/s Gurudev Jee Trading Company (Prop. : Shri Birendra Kumar), Village : Tokisud, Distt. : Ramgarh, Jharkhand (2.28 Ha).

(Proposal no.: SIA/JH/MIN/ 564995 /2026)

Name of the consultant : P & M Solution, Noida, U.P.

This is a new project which has been taken for appraisal on 18.01.2026

Project Sector: 1(a) Mining of Minerals, Category: B2.

Application for Environmental Clearance (EC).

EC Application for: Proposed Capacity- 23427 Cum/Annum or 36078 TPA

Project and Location Details:

Sl	Parameter	Details	
1	Project Name	:	Tokisud- II Sand Deposit
2	Lessee:	:	M/s Gurudev Jee Trading Company Proprietor- Sri Birendra Kumar,
3	Lessee Address	:	Proprietor- Sri Birendra Kumar, Ward No-16, Mohania, Kaimur, Bihar
4	Lease Area	:	2.28 ha.
5	Type of Land	:	Govt. non forest (river) land
6	Project Cost	:	Rs. 60 lakh
7	EMP Budget	:	Capital: 7.90Lakhs Recurring: 5.0Lakhs / year
8	New or Expansion	:	New

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9	Mineable Reserves	:	117135 cum or 180388 Tonnes
10	Mine Life	:	5 year
11	Man power	:	30
12	Water Requirement	:	9.78~ 9.80 KLD
13	Water Source	:	From Nearby villages by tankers
14	DG Set / power	:	NA
15	Crusher	:	NA
16	Nearest Water Body	:	Project lies on Damodar River.
17	Nearest Habitation	:	Tokisud Approx, 0.61 km in ESE direction.
18	Nearest Railway Station	:	Tokisud Railway Station approx 3.71 Km in SSW direction
19	Nearest Air Port	:	Birsa Munda Ranchi Airport approx.44.37 km towards SSE direction. .
20	Nearest Forest	:	Tokisud P.F. , Approx. 1.54 Km in SE direction from mining lease Fairly Dense Jungle, Approx. 2.67 Km in NNW direction from mining lease Chatra P.F., Approx. 8.26 Km in NW direction from mining lease
21	Road & Highways	:	SH 2 Approx. 10.80 Km in SE direction from mining lease

CO-ORDINATES

Corner Point Coordinates (in Degree Decimal) – Approved DSR		
Point	Latitude	Longitude
1	23.711278	85.24580261
2	23.711646	85.24582424
3	23.711491	85.24648115
4	23.711144	85.24682738
5	23.710845	85.2472144
6	23.710577	85.24786151
7	23.710347	85.24863335
8	23.709869	85.24901367
9	23.709594	85.24935718
10	23.708662	85.24995672
11	23.708303	85.25021746
12	23.70817	85.24991701
13	23.70915	85.24902551
14	23.709967	85.24830296
15	23.710437	85.24787826

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16	23.710715	85.24702405
17	23.710973	85.24649563
18	23.711199	85.24603663
19	23.711278	85.24580261

LAND DETAILS

Khata no.	Plot no.
64	01

STATUTORY CLEARANCES

1	LOI / Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Officer, Ramgarh vide letter no. 1156/Khanan, dated 13.10.2025.
2	CO	:	The CO, Patratu (Ramgarh) vide letter no. 269, dated 07.03.2025 has mentioned the plot no. of the project is not recorded as "Jungle- Jhari" in R.S. Khatiyani & Register II.
3	DMO Cluster	:	DMO, Ramgarh vide memo no. 1393/Khanan, dated 16.12.2025 certified that 01 other sand ghat (0.93 Ha) exists within 500 meters radius from proposed project site and total area is 3.21 Ha.
4	DFO Wild Life	:	DFO, Wildlife Division, Hazaribag vide letter no. 1007, dated 04.06.2024 certified that the proposed project site is outside Eco Sensitive Zone of Hazaribag Wildlife Sanctuary.
5	DFO Territorial	:	Divisional Forest Officer, Ramgarh Forest Division vide letter no. 983, dated 24.05.2024 certified that the distance of reserved / protected forest is more than 250 meters from proposed project site.
6	DSR	:	This project is mentioned in approved DSR of Ramgarh District (Sl. no. 11).
7	Gram Sabha	:	BDO, Patratu, Ramgarh vide letter no. 2078/Sa. Dated 06.06.2024 informed that Gram Sabha conducted on 22.05.2024.
8	Mine Plan Approval	:	Approved by DMO, Ramgarh vide Letter No. 1387/Mining, dated 16.12.2025.
9	Qualified Person	:	Shri Vidya Bhushan Mishra was present in the meeting and affirmed that the mine plan has been prepared by him.

Working Details

1	Mining Method	:	Opencast Manual Method
2	Quarry Area	:	2.28 Ha.
3	Waste Generation	:	NA, as it is sand mining project.
4	Stripping Ratio	:	0:0
5	Working Days	:	200 Days
6	Bench: size & No	:	Bench height – 1.71m & Bench width - 20.0 m.
7	Elevation of Mine	:	342 AMSL to 348 AMSL
8	Ground Level Elevation	:	342AMSL
9	Ultimate Working Depth	:	340.29 AMSL (up to depth of 1.71m)
10	Water Table	:	NA
11	Topography of Mine	:	Area lying in river plain.
12	Explosive Requirement	:	NA
13	Diesel/Fuel requirement	:	NA

Production Details

Year	Production Area (Ha)	Average Replenishment Rate(%)	Depth (m)	Tonnage Factor	Volume (cum)	Quantity in tonne
1st Year	1.37	117.64	1.71	1.54	23427	36078
2 nd Year	1.37	117.64	1.71	1.54	23427	36078
3 rd Year	1.37	117.64	1.71	1.54	23427	36078
4 th Year	1.37	117.64	1.71	1.54	23427	36078
5 th Year	1.37	117.64	1.71	1.54	23427	36078
Total Mineable Reserve/ Production					117135	180388

Land Use

Type of Land	Area in (ha)
Forest Land	Nil
G.M land (River)	2.28
Residential area	Nil
Company land	Nil
Private Land	Nil

Total	2.28
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ENVIRONMENT MANAGEMENT

Green Belt Development

S. No.	Location	Area/Length	No. of Trees
1	Plantation along both sides of approach road	510m	1020
2	No. of Plants distributed with consultation local authorities/ village Panchayat	--	50

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Environment Management Plan

Sl. No	Description	Capital Cost (Rs.)	Recurring Cost (Rs.)
1	Pollution Control & Dust Suppression	Nil	2,00,000
2	Baseline Monitoring i) Air ii) Water iii) Soil iv) Noise	--	20,000 15,000 8,000 7,000
3	Plantation	5,35,000	1,00,000
4	Construction and maintenance of haul road	2,55,000	1,50,000
Total		7,90,000	5,00,000

Note: *1070 plants * 500 Rs (for each plants including hedges and fences) = 5.35lakh

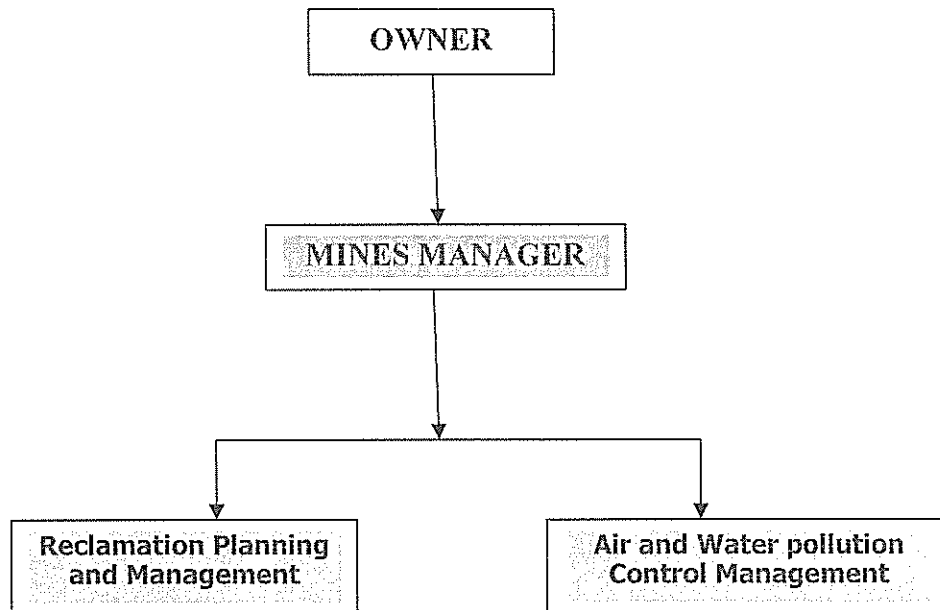
Salary of Labor for haul road maintenance 1 labor*300 = 300 per day

300* 300 = 90,000/~ 1,50,000 including maintenance

* 5.0 lakh per kilometer (500000 * 0.51 km haul road = 2,55,000/-)

Environment Monitoring Programme

S. No.	Description	No. Monitoring Stations	Duration
1	Air	4 Stations	6 Monthly
2	Soil	2 Stations	6 Monthly
3	Surface Water	2 Stations	6 Monthly
4	Ground Water	2 Stations	6 Monthly
5	Noise	4 Stations	6 Monthly



Organization Structure

Solid Waste Management

No solid waste is generated during the course of mining.

Water Quality Management

A. Mining will be confined to above Ground Water Table (GWT). No mining will be done below GWT.

B. Sewage from rest shelter would be treated in Septic Tank soak pit.

C. There is no other source for generation or discharge of trade effluent.

Air Quality Management

Sand will be mined manually. No mining equipment would be needed. However, diesel operated tippers/tractors would be used for transportation of sand from mine to stockyard.

I. **Operation of Diesel Equipment's** – They generate Noxious gases. It will be ensured that all transport vehicles would be repaired & maintained regularly.

II. **Loading of Product on tippers** – Water will be sprinkled on blasted Sand mass before they are loaded to trucks for transport.

III. **Movement of tippers on Road** – Movement of tippers on road generate dust. For mitigation of this pollution following measures will be taken

- Regular water sprinkling on Haul road by using water tankers.
- Regular repair of Haul road

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- All Trucks carrying Sand outside lease area will have PUC certificate.
- Transport tippers/traders moving on public road will be covered with tarpaulin.

RISK ASSOCIATED WITH PROJECT ACTIVITIES AND THEIR MITIGATION MEASURES ARE DICUSSED BELOW:

Road accidents

Transportation of sand along the public road may cause accident which may cause injury.

Preventive Measures;

1. Ensure speed limit for the haulage vehicle for 40 KMPH.
2. Regular maintenance of haulage road
3. Appropriate navigational signs informing sensitive area like school and habitation
4. Regular maintenance of the vehicles.

Dust generation

- No drilling involved
- Dust mass would be supplied to workers.
- Regular sprinkling of water on road

Noise Generation

Source of noise pollution in the project would be movement of tippers / tractors transporting sand from mine to stock yard. In general tippers / tractors produce a noise level of 75 – 90 (A) measured at distance of 3m from the source.

Preventive measures

- Transportation activities would be confined during day time only.
- There would be a speed limit of 40 kmph for tippers. Higher is speed higher is noise.
- Regular repair and maintenance of tippers/tractors.
- Plantation on both sides of haulage road.
- Tippers having PUC certified will be allowed to be used for sand transportation.

Health Hazards

During digging and handling of sand i.e. loading, transportation and unloading of sand, workmen would be exposed to inhalation of fine dust particles. This poses a health hazard.

Measures

Following mitigation measures would be taken to minimize this impact on health

- Regular water sprinkling on haulage roads
- Tree plantation on both sides of haulage road
- Tippers / Tractors carrying sand would be covered
- Mask would be provided to workmen employed for digging, loading, transportation and unloading activities

Accident at Site

This is a project with only source of accident at site would be movement of tippers /tractors within mine site for transportation of sand.

Preventive measures

Following mitigation measures would be taken to minimize risk of road accident:

- Separate alignment for movement of loaded vehicles coming out of mine site
- Ensure speed restriction of 10 KMPH within mine site for incoming and outgoing tippers
- Regular maintenance and repair of haulage vehicles employed for sand transportation

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- No overtaking of transportation vehicles within mine site
- Proper maintenance of haulage roads

Transportation

The usual method of transporting minerals from the working face is by tractor. Large earth moving equipment's are not used for loading /transporting large quantity of mineral from a mine. During transportation of minerals in the mining area, utmost care will be taken by the vehicle operator to avoid any accident with any incoming vehicle by keeping sufficient gap between the two vehicles, keep safe distance from the edge of the mine face, avoid any accident to a worker crossing the haul road and shall maintain low speed. The vehicle operator shall not try to overtake another vehicle.

- Mine road/approach road shall be made smooth regularly with a road roller.
- Mine road/approach road will be cleaned daily for smooth transportation.
- Mine road/approach road will be made sufficiently wide to keep two-way traffic.
- Mine roads will be designed as per the specifications given under MMR 1961.
- Regular water sprinkling will be done on mine road and haul road to avoid suspension of dust.
- All transportation within the mine lease area should be carried out directly under the supervision and control of management.
- The vehicles will be maintained in good working condition and checked thoroughly at least once a month by the competent person authorized for the purpose by the management.
- Navigation signs will be provided at each and every turning point up to the main road (wherever required)
- To avoid danger while reversing the vehicles especially at working place/loading points, stopper should be posted to properly guide reversing/spotting operating.
- Only trained drivers will be hired.

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District Survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.

- i. If any tree felling than necessary permission shall be taken from the competent authority.
- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.
- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.
- l. Personal protective equipments such as clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Tokisud – II Sand Deposit in the river bed of Damodar of M/s Gurudev Jee Trading Company (Prop. : Shri Birendra Kumar), Village : Tokisud, Distt. : Ramgarh, Jharkhand (2.28 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I along with following specific conditions :

- I. In compliance of Office Memorandum no. IA-J-11013/20/2025-IA-P, dated 25.11.2025 of MoEF&CC, Govt. of India, the PAs will mandatorily obtain the Environmental Safeguard to be implemented from Jharkhand State Pollution Control Board within 30 days of issuance of EC or 31.01.2026 which ever is earlier.
- I. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "Ek Ped Ma Ke Naam" and the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.
- II. The Deputy Commissioner through District Mining Officer will ensure that the mines owner of the respective leases to complete the plantation and maintenance in a time bound manner.
- III. Replenishment study shall be conducted during pre-monsoon and post monsoon every year and study report have to be submitted to SEIAA / SEAC, Jharkhand. The production shall be restricted to 60% of the replenished quantity or the proposed quantity in the mine plan, which ever is less.
- IV. Suitable plant species of not less than 2 M height to be planted in area equal to twice the area of saplings proposed in Safety zone. This is to be planted in land available near mines and outside safety zone. This will be in addition to plantation in safety zone. Newly planted saplings to be maintained for minimum 3 years with Geo-Tagged photographs.
- V. Dedicated water tanker to be provided for spraying water on haul road and for irrigating newly planted saplings only. Sprinkling to be done such that the haul road is kept moistened all the time with Geo-Tagged photographs.



- VI. Pre-employment Occupational health checkup for employees to be done and thereafter at annual interval for PLFT, Audiometry and other required tests. Summary findings of same to be submitted along with 6 monthly compliance.
- VII. Ensure use of Quality PPEs equivalent not less than 3M make. Records of same to be maintained and submitted within 6 monthly compliance report with Geo-Tagged photographs.
- VIII. Keep vulnerable areas unmanned. Ensure rotation of duties. Records to be maintained and submitted within 6 monthly compliance report.
- IX. Failing of any of terms & conditions mentioned in EC can lead to revocation / cancellation of EC.
- X. Project Authority will ensure that personal protective equipments such as protective clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel's.
- XI. River Sand Mining shall not be done in rainy Season (mid June to mid October of each calendar year).
- XII. Dept. of Mines & Geology, Govt. of Jharkhand shall keep a strict vigil in the compliance of relevant provisions of applicable Jharkhand Minerals (Prevention of illegal mining, Transportation and Storage) Rule 2017 and its amendment especially scientific execution of mining plan (as approved by them themselves) and report violations if any is found as well as action taken for the same.
- XIII. Project Proponent shall submit (to the SEIAA, Jharkhand, Regional Office of MoEF&CC at Ranchi, Jharkhand State Pollution Control Board) six monthly compliance report with evidence of the conditions within a fortnight after the end of every six month till validity period of Environmental Clearance.
- XIV. The project proponent before starting any activity / preparation of ground, on the leased area shall demarcate his lease hold by RCC pillars erected at the cost of lease holder after certification of the mining officer. On each pillar Geo-Coordinate and fore bearing / back bearing shall be written with permanent paint mark as described in the mining plan. All the pillars should remain intact at same geo-coordinate. Establishment / labeling of Benchmark at each pillars or ground control points.
- XV. Extraction of sand beyond annual production capacity is not permitted.
- XVI. The Project Proponent should undertake the sand mining limited to 03 meter (three meter) depth by exclusively manual method.
- XVII. The stacking area of mined-out sand which shall be situated near the mining site within a fenced area from all sides to avoid being spread in the nearby areas by high winds and the height of stacking should not exceed 2 meter. Transportation shall be confined to day time only that is from sunrise to sunset, to avoid inconvenience to local population in any manner.
- XVIII. Mining activity shall not be done for mine lease where mining can cause danger to site of flood protection works, places of cultural, religious, historical and archaeological importance.
- XIX. Project Proponent shall submit the annual replenishment report certified by an authorized agency.
- XX. No labour camp shall be allowed in riverbed.



- XXI. Provision shall be made for housing labour with all necessary infrastructure and facilities (outside mining Block and river-bed) such as fuel for cooking, toilets / mobile toilets, safe drinking water, First-Aid facilities, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- XXII. Labour & Personnel working in dusty areas shall wear protective respiratory devices and they shall also be provided with adequate training and information on safety and health aspects. Occupational health surveillance program of the workers shall be undertaken periodically to observe any adverse health impact due to exposure to dust and take corrective measures, if needed.
- XXIII. The Project Proponent shall make arrangements for safe drinking water, first aid facility along with anti-venom injection, in case of emergency for the workers.
- XXIV. Sand and gravel may be extracted across the entire active channel during the dry season.
- XXV. Abandoned stream channels on the terrace and inactive floodplains be preferred rather than active channels and their deltas and flood plains. The stream should not be diverted to form the inactive channel.
- XXVI. Layers of sand and gravel which could be removed from the river bed shall depend on the width of the river and replenishment rate of the river.
- XXVII. Sand and gravel shall not be allowed to be extracted where erosion may occur, such as at the concave bank.
- XXVIII. Sand and gravel shall not be extracted up to a distance of 1 kilo meter (1 km.) from major bridges and highways on both sides, of five times (5x) of the span (x) of a bridge / public civil structure (including water intake points) on up-stream side and ten times (10x) the span of such bridge on down-stream side, subjected to a minimum of 250 meters on the upstream side and 500 meters on the downstream side.
- XXIX. Sand and gravel could be extracted from the downstream of the sand bar at river bends.
- XXX. Mining depth should be restricted to 3 meters and distance from the band should be $1/4^{\text{th}}$ of river width and should not be less than 7.5 meters.
- XXXI. A buffer distance / unmined block of 50 meters after every block of 1000 meters over which mining is undertaken or at such distance as may be the directed / prescribed by the regulatory authority shall be maintained.
- XXXII. River bed sand mining shall be restricted within the central $3/4^{\text{th}}$ width of the river/rivulet of 7.5 meters (inward) from river banks but up to 10% of the width of the river, as the case may be. Regulating authority while regulating the zone of river bed mining shall ensure that the objective to minimize the effects of riverbank erosion and consequential channel migration are achieved to the extent possible. In general, the area for removal of minerals shall not exceed 60% of the mine lease area, and any deviation of relaxation in this regard shall be adequately supported by the scientific report.



7. Murgidih Bricks Clay Deposit of M/s BPL Bricks (Prop. : Shri Basant Singh), Mouza : Murgidih, Thana : Barwadih, Distt. : Latehar, Jharkhand (1.35 Ha).

(Proposal no.: SIA/JH/MIN/ 561512 /2026)

Name of the consultant : P & M Solution, Noida, U.P.

This is a new project which has been taken for appraisal on 18.01.2026.

Project Sector: 1(a) Mining of Minerals, Category: B2.

Application for Environmental Clearance (EC).

EC Application for: Proposed Capacity-1200.00cum soil/year

Project and location details:

Sl	Parameter	Details	
1.	Project Name	Murgidih Bricks Clay Deposit	
2.	Lessee:	M/s BPL Bricks, Prop- Basant SinghS/O- Late Maharaj Singh At -Kanchanpur, P.O-Barwadih,Dist – Latehar, Jharkhand	
3.	Lease Address	Mouza – Murgidih, Thana-Barwadih, District-Latehar, State- Jharkhand	
4.	Lease Area	1.35 ha	Acres-3.35Acres
5.	Type of Land	Non Forest – Raiyati Land	
6.	Project Cost	Rs. 50Lakhs	
7.	EMP Budget	Capital: 10.15 Lakh	Recurring: 6.0Lakh / year
8.	New or Expansion	New	
9.	Mineable Reserves	Cum.23870.00Cum	Tonnes: 31,031tonnes
10.	Mine Life	19.89 or 20 year	
11.	Man power	11	
12.	Water Requirement	8.75 ~ 8.80 KLD (Drinking: 0.11KLD,Dust Suppression:5.38 KLD, Plantation:3.26KLD)	
13.	Water Source	From Nearby villages by tankers	
14.	DG Set /power	-	
15.	Crusher	No crusher	
16.	Nearest Water Body	Dhardhari Nala Approx. 0.12 km West direction. North Koel River Approx. 1.83 km WNW direction.	
17.	Nearest Habitation	Approx. 80 meter towardsSWdirection. EMP has been submitted.	
18.	Nearest Rail Station	Mangra Railway Station at a distance of 0.81 km towards ENE direction from site.	
19.	Nearest	Birsa MundaAirport, Ranchi at a distance of 137.77 km in ESE	

	Airport	:	direction from mine site.
20	Nearest Forest	:	Betla National Park Approx. 1.70 km towards East direction of mine site. Khapia PF Approx. 4.40 km towards North direction of mine site. Barichatan PF Approx. 4.50 km towards SSW direction of mine site. Protected forest, Approx 3.10 km towards NE direction
21	Road & Highways	:	SH -3, Approx, 1.51Km towards SE direction. NH -39, Approx,10.46 Km towards North direction.

CO-ORDINATES

Point No.	Latitude	Longitude
1	23°52' 48.91"N	84°07' 23.29"E
2	23°52' 45.12"N	84°07' 23.90"E
3	23°52' 44.36"N	84°07' 21.99"E
4	23°52' 45.51"N	84°07' 19.22"E
5	23°52' 48.17"N	84°07' 20.38"E

LAND DETAILS

Khata no.	Plot no.
29	611

STATUTORY CLEARANCES

1	LOI / Lease docs	:	Land agreement made.
2	CO	:	The CO, Barwadih vide letter no. 211, dated 08.02.2021 has mentioned the plot no. of the project is not recorded as "Jungle-Jhari" in R.S. Khatiyani & Register II. During the appraisal it was seen from the KML that Nalla at a distance of 1150 meters and few houses at a distance of 80 meters from mining lease area. For which detailed Environmental Management Plan has been prepared and submitted.
3	DMO Cluster	:	DMO, Latehar vide memo no. 1180/M, dated 06.11.2025 certified that no other mining lease area exists within 500 m radius from

		proposed project site.
4	DFO Wild Life	: Deputy Director, Palamau Tiger Project, North Division, Medininagar vide letter no. 813, dated 07.09.2022 certified that the proposed project site is outside Eco Sensitive Zone of Palamau Tiger Reserve.
5	DFO Territorial	: Deputy Director, Palamau Tiger Project, North Division, Medininagar vide letter no. 812, dated 07.09.2022 certified that the distance of reserved / protected forest is more than 250 meter from proposed project site.
6	DSR	: The DMO, Latehar has certified vide memo no. 58/Khanan, dated 17.01.2026 that this project is mentioned in approved DSR of Latehar District as a potential area (Page no. 71).
7	Gram Sabha	: Gram Sabha conducted on 11.09.2023 & 21.09.2024.
8	Mine Plan Approval	: Approved by AMO –cum- Incharge DMO, Latehar vide memo no. 810/M, dated 06.09.2024.
9	Qualified Person	: Shri Sahadev Singh was present in the meeting and affirmed that the mine plan has been prepared by him.

Working Details

1	Mining Method	: Opencast Manual Mining method
2	Quarry Area	: 0.893 ha Life of Mine – 20 Year
3	Waste Generation	: 0.0 Cu.m
4	Stripping Ratio	: 01:00
5	Working Days	: 150
6	Benches: size & No	: --
7	Elevation of Mine	: 264AMSL to 272AMSL
8	Ground Level Elevation	: 264AMSL
9	Ultimate Working Depth	: 262AMSL (2 mbgl)
10	Water Table	: 224-230AMSL (34-40 mbgl)
11	Topography of Mine	: Area represents flat topography
12	Explosive Requirement	: --
13	Diesel/Fuel requirement	: --

Production Details

Year	Total excavation of brick clay in cum
1st year	1199.86
2nd year	1200.00
3rd year	1200.00

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4th year	1200.00
5th year	1200.00
Total	5999.86

Land Use

Pattern of Utilization	Existing Land use (Ha)	At the end of plan period (Ha)	At Conceptual period (Ha)
Mining / Quarrying	Nil	0.304	0.893 (reclaimed as cultivated land and handed over to the concern rayat).
Storage of casted bricks	Nil	0.100	Storage of casted bricks within quarry
Kiln	-	0.141	0.141
Plantation at safety Zone	Nil	0.316 (Plantation)	0.316 (Plantation)
Total	Nil	0.861	1.35
Balance land	Nil	0.489	-
Total Lease Area		1.35	

ENVIRONMENT MANAGEMENT

Green Belt Development

S.No.	Location	Area/Length	No of Trees
1	Safety Zone	0.316ha	790
2	Haul /Approach Road	370m	740
3	No. of Plants distributed in Anganwadi, Panchayat Bhawan or in schools	--	100

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

- Note-1630 tree proposed to be planted out of which 10% plantation will be carried out i.e. (163 trees) as per MoEF & CC, Govt. of India Scheme "Ek Ped Ma Ke Naam"..

Solid Waste Management

There is no generation of waste.

Environment Management Plan

Sl. No	Description	Capital Cost (Rs.)	Recurring Cost (Rs.)
1	Pollution Control & Dust Suppression	--	2,00,000
2	Baseline Monitoring i) Air ii) Water iii) Soil iv) Noise	--	20,000 15,000 8,000 7,000
3	Plantation	8,15,000	2,00,000
4	Construction and maintenance of haul road	2,00,000	1,50,000
TOTAL		10,15,000	6,00,000

Note: *1630 plants * 500 Rs (for each plants including hedges) = 8.15 lakhs

Salary of Labor for haul road maintenance 2 labor*150 =300 per day

300* 300 = 90,000/- ~ 1,50,000/-

Environment Monitoring Programme

S. No.	Description	No. Monitoring Stations	Duration
1	Air	4 Stations	6 Monthly
2	Soil	2 Stations	6 Monthly
3	Surface Water	2 Stations	6 Monthly
4	Ground Water	2 Stations	6 Monthly
5	Noise	4 Stations	6 Monthly

Water Quality Management

- Mining is planned to above the ground water table. In case any intersection is likely, mining activities will be stopped 2m above the Ground Water Table.
- The rain water during rainy season will be collected in a pit and shall be use for dust suppression and plantation.Excess water, if any shall be discharged in natural stream after settling of suspendedparticles in the pit. Pump having required capacity will be installed to liftaccumulated rain water from working pit and pumped to the settling tank.
- It shall be ensured that quality of drinking water for the worker is hygienic and goodsanitation system shall be made available.

Air Quality Management

- Dust extractor or wet drilling shall be followed to control dust at source of emissionduring drilling.

- Sharp drill bits will be used for drilling and regrinding will be done periodically to reduce the dust generation.
- All machineries and transport vehicles shall be properly maintained and pollution check will be done once in a year to keep the emissions from machineries and vehicle under control. Records for same to be maintained.
- Water sprinkling will be done on haul road to control emission of dust while transporting minerals and waste. Provision for water spray by tankers on 'kaccharoad shall be done.
- Water sprinkling at loading area shall be done
- Use of personal protective equipment like dust mask e.t.c shall be put in practice.
- Ambient air pollution monitoring shall be carried out every six months.

RISK ASSOCIATED WITH PROJECT ACTIVITIES AND THEIR MITIGATION MEASURES ARE DISCUSSED BELOW:

Road accidents

Transportation of sand along the public road may cause accident which may cause injury.

Preventive Measures;

1. Ensure speed limit for the haulage vehicle for 40 KMPH.
2. Regular maintenance of haulage road
3. Appropriate navigational signs informing sensitive area like school and habitation
4. Regular maintenance of the vehicles.

Dust generation

- No drilling involved
- Dust mass would be supplied to workers.
- Regular sprinkling of water on road

Noise Generation

Source of noise pollution in the project would be movement of tippers / tractors transporting sand from mine to stock yard. In general tippers / tractors produce a noise level of 75 – 90 (A) measured at distance of 3m from the source.

Preventive measures

- Transportation activities would be confined during day time only.
- There would be a speed limit of 40 kmph for tippers. Higher is speed higher is noise.
- Regular repair and maintenance of tippers/tractors.
- Plantation on both sides of haulage road.
- Tippers having PUC certified will be allowed to be used for sand transportation.

Health Hazards

During digging and handling of sand i.e. loading, transportation and unloading of sand, workmen would be exposed to inhalation of fine dust particles. This poses a health hazard.

Measures

Following mitigation measures would be taken to minimize this impact on health

- Regular water sprinkling on haulage roads
- Tree plantation on both sides of haulage road
- Tippers / Tractors carrying sand would be covered

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- Mask would be provided to workmen employed for digging, loading, transportation and unloading activities

Accident at Site

This is a project with only source of accident at site would be movement of tippers /tractors within mine site for transportation of sand.

Preventive measures

Following mitigation measures would be taken to minimize risk of road accident:

- Separate alignment for movement of loaded vehicles coming out of mine site
- Ensure speed restriction of 10 KMPH within mine site for incoming and outgoing tippers
- Regular maintenance and repair of haulage vehicles employed for sand transportation
- No overtaking of transportation vehicles within mine site
- Proper maintenance of haulage roads

Transportation

The usual method of transporting minerals from the working face is by tractor. Large earth moving equipment's are not used for loading /transporting large quantity of mineral from a mine. During transportation of minerals in the mining area, utmost care will be taken by the vehicle operator to avoid any accident with any incoming vehicle by keeping sufficient gap between the two vehicles, keep safe distance from the edge of the mine face, avoid any accident to a worker crossing the haul road and shall maintain low speed. The vehicle operator shall not try to overtake another vehicle.

- Mine road/approach road shall be made smooth regularly with a road roller.
- Mine road/approach road will be cleaned daily for smooth transportation.
- Mine road/approach road will be made sufficiently wide to keep two-way traffic.
- Mine roads will be designed as per the specifications given under MMR 1961.
- Regular water sprinkling will be done on mine road and haul road to avoid suspension of dust.
- All transportation within the mine lease area should be carried out directly under the supervision and control of management.
- The vehicles will be maintained in good working condition and checked thoroughly at least once a month by the competent person authorized for the purpose by the management.
- Navigation signs will be provided at each and every turning point up to the main road (wherever required)
- To avoid danger while reversing the vehicles especially at working place/loading points, stopper should be posted to properly guide reversing/spotting operating.
- Only trained drivers will be hired.

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District Survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.

- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- i. If any tree felling than necessary permission shall be taken from the competent authority.
- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.
- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.
- l. Personal protective equipments such as clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Murgidih Bricks Clay Deposit of M/s BPL Bricks (Prop. : Shri Basant Singh), Mouza : Murgidih, Thana : Barwadih, Distt. : Latehar, Jharkhand (1.35 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I along with following specific conditions :

- I. In compliance of Office Memorandum no. IA-J-11013/20/2025-IA-P, dated 25.11.2025 of MoEF&CC, Govt. of India, the PAs will mandatorily obtain the Environmental Safeguard to be implemented from Jharkhand State Pollution Control Board within 30 days of issuance of EC or 31.01.2026 which ever is earlier.
- II. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "Ek Ped Ma Ke Naam" and the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.
- III. The Deputy Commissioner through District Mining Officer will ensure that the mines owner of the respective leases to complete the plantation and maintenance in a time bound manner.

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- IV. Suitable plant species of not less than 2 M height to be planted equal to twice the area of saplings proposed in Safety zone. This is to be planted in land available near mines and outside safety zone. This will be in addition to plantation in safety zone. Newly planted saplings to be maintained for minimum 3 years with Geo-Tagged photographs.
- V. Dedicated water tanker to be provided for mine. The tanker to be used for spraying water on haul road and for irrigating newly planted saplings only. Sprinkling to be done such that the haul road is kept moistened all the time with Geo-Tagged photographs.
- VI. Pre employment Occupational health check up for employees to be done and thereafter at annual interval for PLFT, Audiometry and other required tests .Summary findings of same to submitted along with 6 monthly compliance.
- VII. Ensure use of Quality PPEs equivalent not less than 3M make. Records of same to be maintained and submitted with 6 monthly compliance report with Geo-Tagged photographs.
- VIII. Keep vulnerable areas unmanned. Ensure rotation of duties. Records to be maintained and submitted with 6 monthly compliance report.
- IX. Failing of any of terms & conditions mentioned in EC can lead to revocation / cancellation of EC.

8. Fatehpur Urf Khatdih Stone Deposit of M/s Maa Durga Stone (Partners : Shri Prabhat Ranjan & Shri Rajendra Mehta), Village : Fatehpur Urf Khatdih, Anchal : Topchanchi, Distt. : Dhanbad, Jharkhand (2.02 Ha).

(Proposal no.: SIA/JH/MIN/ 559730 /2025)

Name of the consultant : P & M Solution, Noida, U.P.

This is a new project which has been taken for appraisal on 18.01.2026.

Project Sector: 1(a) Mining of Minerals, Category: B2.

Application for Environmental Clearance (EC).

EC Application for: Proposed Capacity – 47845.80cum/annum or 129183.66 TPA

Project and Location Details:

Sl	Parameter	Details
1	Project Name	: Fatehpur Urf Khatdih Stone Deposit

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2	Lessee	:	M/s Maa Durga Stone (Partners - Sri Prabha Ranjan & Sri Rajendra Mehta)
3	Lessee Address	:	M/S MAA DURGA STONE Partner-(1) Sri Prabhat Ranjan, S/O-Sri Indra Kumar Yadav Address - At-Ranchi-Patna Road, Koltex Muhalla P.O. + Thana +District -Koderma, State-Jharkhand Partner-(2) Sri Rajendra Mehta, S/O-Sri Chhoti Mehta Address - Village-Maheshpur (Domchanch), P.O.-Domchanch, Thana +District-Koderma, State Jharkhand
4	Lease Area	:	2.02 Ha. 5.00 Acre
5	Type of Land	:	Non-Forest Raiyati Land
6	Project Cost	:	Capital: Rs 75,46,000.00
7	EMP Budget	:	Capital: Rs 3,96,000.00 Recurring: Rs. 4,89,500.00 per year
8	New or Expansion	:	New
9	Mineable Reserves	:	1288656.00 Tonnes 4,77,280 Cum
10	Mine Life	:	9.98 or 10 years
11	Man power	:	21
12	Water Requirement	:	10.17 ~ 10.20 KLD
13	Water Source	:	By authorised hired water tankers
14	DG Set / power	:	50 KVA
15	Crusher	:	No crusher
16	Nearest Water Body	:	Jamunia River (3.58 km)
17	Nearest Habitation	:	Nearest Habitation 590 meter towards SW direction
18	Nearest Rail Station	:	Bholidih Railway station which are about 3.17 Km
19	Nearest Air Port	:	Deoghar Airport (81.87 km)
20	Nearest Forest	:	Divisional Forest Officer, Dhanbad certified that the distance of reserved / protected forest is more than 280 meters from proposed project site.
21	Road & Highways	:	NH-19 is about 0.75 Km from the project site.
22	Approach Road	:	approx, 340 meter

CO-ORDINATES

SL. NO.	LATITUDE	LONGITUDE
BP-1	23°54'41.49"N	86°08'44.57"E
BP-2	23°54'39.88"N	86°08'47.73"E
BP-3	23°54'35.97"N	86°08'47.53"E

BP-4	23°54'35.53"N	86°08'45.08"E
BP-5	23°54'36.97"N	86°08'44.40"E
BP-6	23°54'37.28"N	86°08'42.98"E
BP-7	23°54'39.84"N	86°08'42.78"E
BP-8	23°54'38.90"N	86°08'41.29"E

LAND DETAILS

Khata no.	Plot no.
116	2286 (P)

STATUTORY CLEARANCES

1	LOI / Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Officer, Dhanbad vide letter no. 797/M, dated 24.05.2025.
2	CO	:	The CO, Topchanchi (Dhanbad) vide letter no. 156, dated 25.02.2025 has mentioned the plot no. of the project is not recorded as "Jungle- Jhari" in R.S. Khatiyani & Register II.
3	DMO Cluster	:	DMO, Dhanbad vide memo no. 1748/M, dated 21.11.2025 certified that 01 other mining lease area (7.00 Acre) exists within 500 meters radius from proposed project site and total area is 12.00 Acre.
4	DFO Wild Life	:	DFO, Wildlife Division, Hazaribag vide letter no. 2487, dated 14.12.2024 certified that the proposed project site is outside Eco Sensitive Zone of Parasnath & Topchanchi Wildlife Sanctuary.
5	DFO Territorial	:	Divisional Forest Officer, Dhanbad Forest Division vide letter no. 2162, dated 17.08.2024 certified that the distance of reserved / protected forest is more than 250 meters from proposed project site.
6	DSR	:	This project is mentioned in approved DSR of Dhanbad District (Page no. 64, Sl. no. 30).
7	Gram Sabha	:	Gram Sabha conducted on 17.08.2024.
8	Mine Plan Approval	:	Approved by DMO, Dhanbad vide Memo No. 1532/M, dated 04.10.2025.
9	Qualified Person	:	Shri Tapan Kumar Chakravarty through e-mail dated 17.01.2026

		affirmed that the mine plan has been prepared by him.
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Working Details

1	Mining Method	:	Opencast mechanized Method
2	Quarry Area	:	1.62Ha
3	Waste Generation	:	13754.20 cum
4	Stripping Ratio	:	1:0.01
5	Working Days	:	300
6	Bench: size & No	:	6m to 6m
7	Elevation of Mine	:	260 m AMSL to 259 m AMSL
8	Ground Level Elevation	:	259 m AMSL
9	Ultimate Working Depth	:	218 m AMSL
10	Water Table	:	210 m AMSL
11	Topography of Mine	:	Area represents Undulating small hillock.
12	Explosive Requirement	:	26 kg/day
13	Diesel/Fuel requirement	:	126 litre/day

Production Details

Year	Production of Stone in Cum	Production of Stone in Tonnes	Waste (cum)in plan period	Waste (cum)in in ultimate
1 st Year	45220.00	122094.00	(686.00+2380.00) =3066.00	12765.80
2 nd Year	47845.80	129183.66	(714.00+2518.20) =3232.20	
3 rd Year	47310.00	127737.00	2490.00	
4 th Year	47191.25	127416.38	2483.75	
5 th Year	47162.75	127339.43	2482.25	
Total	234729.80	633770.46	13754.20	12765.80

Land Use

Land Utilization	Existing Land use (Ha)	At the end of plan period (Ha)	At Conceptual period (Ha)
Quarry	0.0	1.62	1.62 (Entire area will be converted into rain water harvesting).
Mine Road	0.0	Comes under quarry	Comes under quarry

Safety Zone	0.0	0.40 (Plantation)	0.40 (Plantation)
Total	0.0	2.02	2.02
Unused Area	2.02	0.0	0.00
Total Lease Area	2.02		

Green Belt Development

	Area / Length	Number of Trees	Remarks	Timeline	Species
Area in Safety Zone (Ha.)	0.40	640	1600 Tree per Hectare	1st Year	Arjun, Jackfruits, Jamun, Babul, Gulmohar, Neem, Pipal, Mango etc.
Length of Approach Road Area (m.)	340	680	2m X 2 m spacing in two rows both side		
Total		1320			

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Note- 1320 tree proposed to be planted out of which 10% plantation will be carried out i.e. (132 trees) as per MoEF & CC, Govt. of India Scheme "Ek Ped Ma Ke Naam"..

BUDGETARY PROVISION (IN LAKHS)

PROJECT COST

Particulars			Capital	Recurring
Land			50,00,000 .00	500,000 .00
Infrastructure			15,00,000.00	1,50,000.00
Mining Equipment			0.00	46,00,000.00
<i>Equipment</i>	<i>Quantity</i>	<i>Rent per year</i>		
Dumper	2	400000		
Compressor	1	1000000		

Water Sprinkler	1	600000		
Rock Breaker	3	600000		
Excavator	2	800000		
Loader	4	1200000		
Water Facility for Domestic Purpose "0.21" KLD (Annual Water Demand "63"KL @4L per Tanker, total number of tanker required ("16") and per tanker cost @Rs. 500)			0.00	8,000.00
Statutory Clearances			5,00,000.00	0.00
Mine Closure Cost for fencing around mine			1,50,000.00	0.00
Environment Management Plan (EMP) Cost			3,96,000.00	4,89,500.00
Total			75,46,000.00	57,47,500.00

ENVIRONMENT MANAGEMENT PLAN (EMP)

Particulars	Capital	Recurring
1320Tree Plantation @Rs.300 per Tree for planting & @Rs.50 per tree for maintenance	3,96,000.00	66,000.00
Water Tanker @Rs. 500 per Tanker for Dust Suppression (2.04 KLD) & Horticulture (7.92KLD) 2.04 + 7.92 = 9.96 KLD 9.96 KLD X 300 Days = 2988 KLD 2988KLD / 4 KLD = 747Tankers	0	3,73,500.00
Environment Monitoring & Compliance	0	50,000.00
Total	3,96,000.00	4,89,500.00

Environment Monitoring Plan

Monitoring Parameters and Frequency of Monitoring

S. no	Monitoring Parameters	No. of Locations	Frequency of Monitoring
1	Ambient Air: Ambient Air Quality at appropriate location for PM10, PM2.5, SO2, NOx in the vicinity of the mine area. In the surrounding area covering project site only.	3 Stations	Six Monthly
2	Water: Surface water sample in the vicinity of the Project area.	2 Surface water 2 Ground water	Six Monthly
3	Noise: Day & Night level Noise Monitoring.	4 stations	Six Monthly

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4	Soil: Soil Monitoring, Qualitative and quantitative testing/analysis to check the soil fertility, porosity, texture, water holding capacity, etc.	2 stations	Six Monthly
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Environment Management Practices to be followed:

Aspect	Mitigation Measures / Control Measures
Solid Waste Management	In Fatehpur urf Khatdih Stone Deposit, the lease area is devoid of any top soil generation. The stone is exposed throughout the area on the upper part of the hillocks. On that basis, 95% recovery of rock is considered and rest 5% intercalated waste & 1.00m overburden from surface level. there is 13754.20 cum waste generated during this Mining Plan period and 12765.80 cum in ultimate stage which is used for village & haul road maintenance.
Air Quality Management	<ul style="list-style-type: none"> • Wet drilling and use of sharp drill bits to minimize dust generation. • Controlled blasting using optimum explosive charge during favorable weather conditions. • Regular maintenance of diesel equipment and vehicles to reduce emissions. • Water sprinkling on haul roads, loading/unloading points, and working areas. • All transport vehicles will have valid PUC certificates. • Greenbelt and roadside plantation to act as dust and noise barriers.
Water Quality Management	<ul style="list-style-type: none"> • Mining will be confined only above the Ground Water Table (GWT). • Rainwater accumulated in the pit will be collected and pumped out regularly during monsoon. • Settling sump will be provided to desilt pumped out of mine-pit and collected through garland drain before discharge into natural drainage. • Garland and foot drains will be constructed around the quarry to control surface runoff. • Sewage from rest shelters will be treated through septic tank-soak pit systems. • Foot drain would be provided around the external dump, if any.
Noise Quality Management	<ul style="list-style-type: none"> • Mining activities will be restricted to daytime and carried out with controlled blasting techniques. • Acoustic enclosures and mufflers will be provided for drilling and DG set operations. • Regular maintenance of mining machinery to minimize vibration and noise. • Greenbelt development around the lease boundary to attenuate noise propagation. • Use of delayed blasting technique to minimize the adverse impact of vibration.

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Soil Quality Management	<ul style="list-style-type: none"> • Topsoil will be carefully removed and stored separately for future use in plantation and reclamation. • Garland drains and retaining walls will prevent soil erosion and siltation. • Spillage of oil or fuel will be avoided; impervious flooring and oil traps provided near storage areas • Post-mining, the area will be rehabilitated using stored topsoil and native vegetation
Flora & Fauna management	<ul style="list-style-type: none"> • No tree felling will be undertaken without obtaining permission from the competent authority. • Greenbelt and plantation will be developed using native species along approach roads and lease periphery (7.5m Safety Zone). • Dust suppression measures will minimize impact on surrounding vegetation
Socio Economy:	<ul style="list-style-type: none"> • Priority employment to local people in mining and ancillary activities. • Community development initiatives such as tree plantation drives, road maintenance, and local infrastructure support. • Awareness programs on safety, hygiene, and environmental protection
Monitoring & Reporting:	<ul style="list-style-type: none"> • Periodic monitoring of air, water (ground & surface), noise, and soil quality as per CPCB and SPCB guidelines. • All monitoring reports will be submitted to statutory authorities as per the compliance schedule. • Corrective measures will be taken immediately if any deviation from standards is observed.
Risk & Hazard	<p>Activities which are likely to create risk are: Temporary Storage of Explosives, Charging of Explosives, Blasting, Drilling, Bench Formation, Loading / Unloading, Transportation</p> <p>Proposed Preventive measures:</p> <ul style="list-style-type: none"> ▪ Overall slope angles of benches will be maintained at 45°. ▪ Unmanageable heights are not created. ▪ Loose sides are properly dressed. ▪ No loose stone or debris will be permitted to remain on the top of the bench or side of any excavation (Regulation 106(4) of MMR 1961). ▪ No undercutting of any face or sides will be permitted so as to cause any overhanging (Regulation 106(5) of MMR 1961) ▪ It will be ensured that the drilling equipment is suitable for the job. ▪ The person in charge of the drilling machine is competent to carry out the drilling operation; part of the training includes instructions to always face towards the open edge of the bench so that any inadvertent backward step is away from the edge.

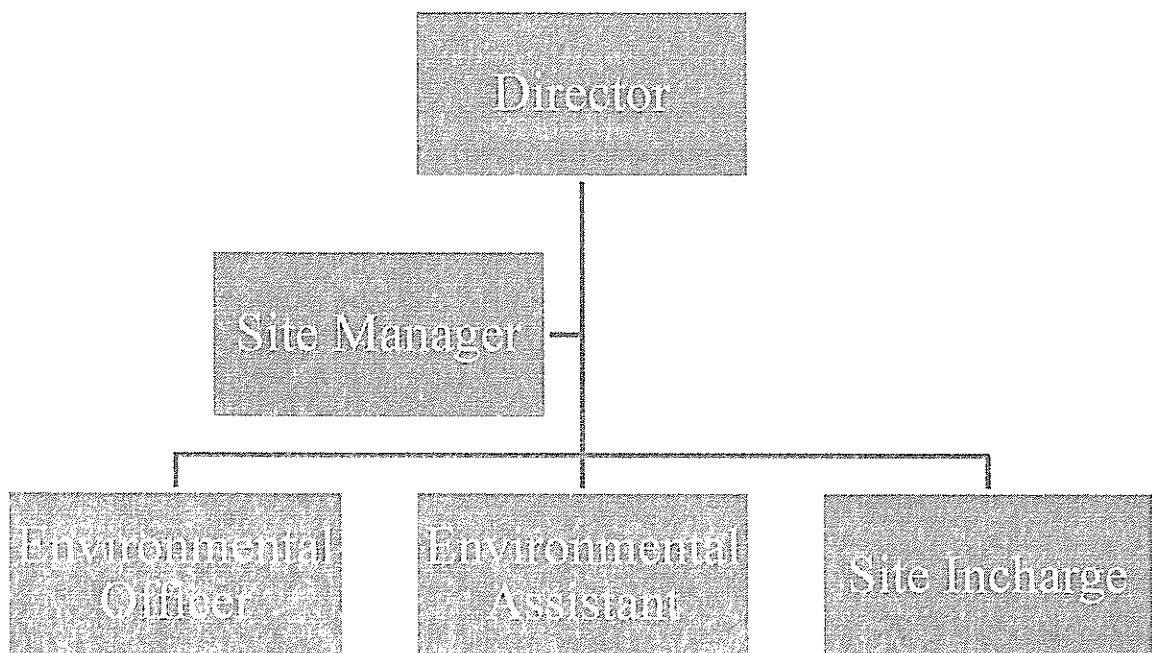
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	<ul style="list-style-type: none"> ▪ Provision of portable rail fencing between the drilling operations and the edge of the bench ▪ Provision to attach a safety line to the drilling rig and provide a harness for the driller to wear. ▪ Restricted access to the area to all persons except those necessary for the drilling operation. ▪ Wet drilling will be carried out by constantly injecting a jet of water at the drill bit inside the hole, which prevents dust generation. ▪ In case due to any reason, wet drilling is not possible (due to non-availability of water), exhaust/ vacuum system will be provided which removes the dust from the drill hole continuously and discharges the same in a dust collector specially provided for the purpose. ▪ Drilling machine shall be fitted with dust suppression, collection and disposal arrangement.
<p>Blasting & Handling of Explosives</p>	<ul style="list-style-type: none"> ▪ Blast hole geometry shall be properly designed. ▪ Blast site shall be wetted before and after blasting operations are completed. ▪ Only optimum quantity of permissible explosives shall be used so that the vibrations do not damage the structures/houses if the quarrying operations are close to human habitation. ▪ Blasting shall be conducted only during favourable weather conditions and only during the day time and permissible hours. ▪ While carrying out blasting operations near habitations, wide publicity will be given in the local area through announcement and other available media so that local people become aware of the blasting activities being undertaken in the area and take appropriate precautions. ▪ The vibrations should be monitored periodically in consultation with the local Mining authorities. ▪ Use of explosives is specialist work. Planning for a round of shots is necessary to ensure that the face is properly surveyed, holes correctly drilled, direction logged, the weight of explosive suitable for good fragmentation and the continuity of the initiator are but a few of the steps necessary to ensure its safe use. ▪ Proper and safe storage of explosives in approved and Licensed Magazine. ▪ Proper security system to prevent theft/ pilferage, unauthorized entry into Magazine area and checking authorized persons to prevent carrying of match box, lights, mobile phones, cigarette or Bidi etc. will be put in place. ▪ Explosives shall be conveyed in special containers. ▪ Explosives and detonators shall not be carried in the same container. ▪ The holes which have been charged with explosives will not be left unattended till blasting is completed.

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Health Hazards	<p>Health hazards should be interpreted as being harmful dust and noise which is emitted during surface mining operations. All suitable steps and precautions will be undertaken to ensure minimum health hazard. Provision of use of Personal Protective Equipment (PPE) will be kept. The PPE shall be of good make and quality, wherever possible ISI certified, suitable for the hazard e.g. a dust respirator fitted with the correct filter to capture the particulate hazardous dust and maintained to recommended standards. As personal protective equipment only affords limited protection it will only be used as a last resort and as an interim arrangement until other steps are taken to reduce the risk of personal injury to an acceptable level</p>
Accident Prevention	<ul style="list-style-type: none"> ▪ Mine road shall be made smooth regularly with a road roller. ▪ Mine road will be made sufficiently wide to keep two-way traffic. Regular water sprinkling will be done on mine road and haul road to avoid suspension of dust. ▪ All transportation within the mine lease area should be carried out directly under the supervision and control of management. ▪ The vehicles will be maintained in good working condition and checked thoroughly at least once a month by the competent person authorized for the purpose by the management. ▪ Navigation signs will be provided at each and every turning point up to the main road (wherever required). ▪ To avoid danger while reversing the vehicles especially at working place/loading points, stopper should be posted to properly guide reversing/spotting operating.

Organizational Structure of Environment Management Cell:



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EMP Cell structure

The EMP Cell is committed to ensuring environmental sustainability and compliance with regulatory requirements for the Stone Mining Project. With a clear structure, roles, and responsibilities, the EMP Cell is equipped to manage environmental impacts and promote sustainable practices.

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District Survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- i. If any tree felling than necessary permission shall be taken from the competent authority.
- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.
- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.
- l. Personal protective equipments such as clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Fatehpur Urf Khatdih Stone Deposit of M/s Maa Durga Stone (Partners : Shri Prabhat Ranjan & Shri Rajendra Mehta), Village : Fatehpur Urf Khatdih, Anchal : Topchanchi, Distt. : Dhanbad, Jharkhand (2.02 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I along with following specific conditions :



- I. In compliance of Office Memorandum no. IA-J-11013/20/2025-IA-P, dated 25.11.2025 of MoEF&CC, Govt. of India, the PAs will mandatorily obtain the Environmental Safeguard to be implemented from Jharkhand State Pollution Control Board within 30 days of issuance of EC or 31.01.2026 which ever is earlier.
- II. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "Ek Ped Ma Ke Naam" and the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.
- III. The Deputy Commissioner through District Mining Officer will ensure that the mines owner of the respective leases to complete the plantation and maintenance in a time bound manner.
- IV. Suitable plant species of not less than 2 M height to be planted equal to twice the area of saplings proposed in Safety zone. This is to be planted in land available near mines and outside safety zone. This will be in addition to plantation in safety zone. Newly planted saplings to be maintained for minimum 3 years with Geo-Tagged photographs.
- V. Dedicated water tanker to be provided for mine. The tanker to be used for spraying water on haul road and for irrigating newly planted saplings only. Sprinkling to be done such that the haul road is kept moistened all the time with Geo-Tagged photographs.
- VI. Pre employment Occupational health check up for employees to be done and thereafter at annual interval for PLFT, Audiometry and other required tests .Summary findings of same to submitted along with 6 monthly compliance.
- VII. Ensure use of Quality PPEs equivalent not less than 3M make. Records of same to be maintained and submitted with 6 monthly compliance report with Geo-Tagged photographs.
- VIII. Keep vulnerable areas unmanned. Ensure rotation of duties. Records to be maintained and submitted with 6 monthly compliance report.
- IX. Failing of any of terms & conditions mentioned in EC can lead to revocation / cancellation of EC.



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9. Gorga Stone Deposit of Md. Afzal Ansari, Village : Gorga, Anchal : Purbi Tundi, Distt. : Dhanbad, Jharkhand (1.464 Ha).

(Proposal no.: SIA/JH/MIN/ 564648 /2026)

Name of the consultant : P & M Solution, Noida, U.P.

This is a new project which has been taken for appraisal on 18.01.2026.

Project Sector: 1(a) Mining of Minerals, Category: B2.

Application for Environmental Clearance (EC).

EC Application for: Proposed Capacity – 76834 cum/ annum or 207452 TPA

Project and Location Details:

Sl	Parameter	Details
1	Project Name	: Gorga Stone Deposit
2	Lessee	: Md. Afzal Ansari S/o Late Maniruddin Ansari,
3	Lessee Address	: Village + PO- Jangalpur, P.S. + Govindpur , District – Dhanbad, Jharkhand
4	Lease Area	: 1.464 Ha. 3.62 Acre
5	Type of Land	: Non-Forest Raiyati Land
6	Project Cost	: Capital: Rs 67,38,900.00
7	EMP Budget	: Capital: Rs 10,38,900.00 Recurring: Rs. 4,77,150 per year
8	New or Expansion	: New
9	Mineable Reserves	: 1010071 tonnes 374101 Cum
10	Mine Life	: 5 years
11	Man power	: 21
12	Water Requirement	: 7.90 KLD
13	Water Source	: By authorised hired water tankers
14	DG Set / power	: 50 KVA
15	Crusher	: No crusher
16	Nearest Water Body	: Barkar River (2.46 km)
17	Nearest Habitation	: Nearest Habitation 250 meter towards NNW direction, EMP Submitted.
18	Nearest Rail Station	: Kalubathan railway station which are about 16.84 Km
19	Nearest Air Port	: Deoghar Airport (59.44 Km)
20	Nearest Forest	: Divisional Forest Officer, Ranchi certified that the distance of reserved / protected forest is more than 254 meters from proposed project site.
21	Road & Highways	: NH-419 is about 0.99 Km from the project site.
22	Approach Road	: approx, 220 meter

CO-ORDINATES

Pillar No.	Degree, Minute, Second	
	Latitude	Longitude
1	86°38'34.24956"	23°54'30.90906"
2	86°38'35.02108"	23°54'30.75944"
3	86°38'35.00898"	23°54'31.07603"
4	86°38'35.64859"	23°54'31.25300"
5	86°38'36.71560"	23°54'31.17978"
6	86°38'36.95903"	23°54'31.13903"
7	86°38'37.38203"	23°54'29.76692"
8	86°38'37.59850"	23°54'28.63868"
9	86°38'37.43423"	23°54'28.47312"
10	86°38'37.13471"	23°54'28.49310"
11	86°38'37.12416"	23°54'28.25561"
12	86°38'36.95986"	23°54'28.10038"
13	86°38'37.01699"	23°54'27.75294"
14	86°38'36.18434"	23°54'26.98358"
15	86°38'36.12696"	23°54'26.52361"
16	86°38'35.90444"	23°54'26.21459"
17	86°38'35.60262"	23°54'25.95287"
18	86°38'35.43853"	23°54'25.95290"
19	86°38'34.49713"	23°54'26.40283"
20	86°38'34.22450"	23°54'26.40434"
21	86°38'34.23790"	23°54'26.93588"
22	86°38'34.27480"	23°54'27.17186"
23	86°38'34.35630"	23°54'27.48866"
24	86°38'34.19729"	23°54'27.74344"
25	86°38'33.99583"	23°54'27.49003"
26	86°38'33.26348"	23°54'27.86746"
27	86°38'32.34095"	23°54'28.48990"
28	86°38'32.15566"	23°54'28.70863"
29	86°38'32.81190"	23°54'29.13887"
30	86°38'33.52819"	23°54'29.60849"
31	86°38'34.04188"	23°54'30.19968"
32	86°38'34.03381"	23°54'30.41302"

LAND DETAILS

Khata no.	Plot no.
138 & 20	1289 & 1303

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STATUTORY CLEARANCES

1	LOI / Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Officer, Dhanbad vide letter no. 1413/M, dated 08.09.2025.
2	CO	:	The CO, East Tundi (Dhanbad) vide letter no. 448, dated 03.08.2023 has mentioned the plot no. of the project is not recorded as "Jungle- Jhari" in R.S. Khatiyani & Register II. During the appraisal it was seen from the KML that habitation at a distance of 250 meters from mining lease area. For which detailed Environmental Management Plan has been prepared and submitted.
3	DMO Cluster	:	DMO, Dhanbad vide memo no. 1938/M, dated 17.12.2025 certified that 01 other mining lease area (8.02 Acre) exists within 500 meters radius from proposed project site and total area is 11.64 Acre.
4	DFO Wild Life	:	DFO, Wildlife Division, Hazaribag vide letter no. 1484, dated 07.08.2025 certified that the proposed project site is outside Eco Sensitive Zone of Parasnath & Topchanchi Wildlife Sanctuary.
5	DFO Territorial	:	Divisional Forest Officer, Dhanbad Forest Division vide letter no. 2444, dated 17.08.2023 certified that the distance of reserved / protected forest is more than 250 meters from proposed project site.
6	DSR	:	This project is mentioned in approved DSR of Dhanbad District (Page no. 62, Sl. no. 16).
7	Gram Sabha	:	Gram Sabha conducted on 16.08.2023.
8	Mine Plan Approval	:	Approved by DMO, Dhanbad vide Memo No. 1613/M, dated 18.10.2025.
9	Qualified Person	:	Shri Vidya Bhushan Mishra was present in the meeting and affirmed that the mine plan has been prepared by him.

Working Details

1	Mining Method	:	Opencast semi- mechanized Method
2	Quarry Area	:	1.085 Ha
3	Waste Generation	:	48734 cum
4	Stripping Ratio	:	1:0.13
5	Working Days	:	300
6	Benches: size & No	:	6m to 6m
7	Elevation of Mine	:	197 m AMSL to 191 m AMSL

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8	Ground Level Elevation	:	145 m AMSL
9	Ultimate Working Depth	:	149 m AMSL
10	Water Table	:	140-137 m AMSL
11	Topography of Mine	:	Area represents undulating small hillock.
12	Explosive Requirement	:	25 kg/day
13	Diesel/Fuel requirement	:	125 litre/day

Production Details

Year	Production of stone in cum	Production of stone in Tonnes	Overburden in cum	Intercalated waste in cum	Total Waste in cum
1 st	72907	196848	23850	3837	27687
2 nd	73410	198208	0	3864	3864
3 rd	74417	200927	0	3917	3917
4 th	76532	206636	5194	4028	9222
5 th	76834	207452	0	4044	4044
Total	374101	1010071	29044	19690	48734

Land Use

Category	Present Land Use(in Ha)	At the End of Scheme Period (in Ha.)	At the End of mine (in Ha.)
Excavation	0.0	1.085 (0.108 ha area shall be backfilled)	1.085 (0.108 ha area shall be backfilled, 0.794 ha converted in to water reservoir & 0.183 ha shall be left as dead benches)
Waste Dump	0.0	0.0	Nil (comes under quarry)
Infrastructure	0.0	0.0	0.0
Road	0.0	0.0	0.0
Safety Zone	0.0	0.379 (Plantation)	0.379 (Plantation)
Total area in use	0.0	1.464	1.464
Unused area	1.464	0.0	0.0
Total Lease Area	1.464		

Green Belt Development

	Area Length /	Number of Trees	Remarks	Timeline	Species
Area in Safety Zone	0.379	607	1600 Tree per	1st Year	Jamun Gulmohar

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(Ha.)			Hectare		Arjun, Jackfruits, Babul, Neem, Pipal, Mango etc..
Length of Approach Road Area (m.)	220	440	2m X 2 m spacing in two rows both side		
Dead Bench (Ha.)	0.183	293	1600 Tree per Hectare	At the end of life of mine	
Backfilled (Ha.)	0.108	173			
Total		1513			

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Note- 1513 tree proposed to be planted out of which 10% plantation will be carried out i.e. (151 trees) as per MoEF & CC, Govt. of India Scheme "Ek Ped Ma Ke Naam"..

BUDGETARY PROVISION (IN LAKHS)

PROJECT COST

Particulars			Capital	Recurring
Land			36,00,000.00	3,60,000.00
Infrastructure			15,00,000.00	1,50,000.00
Mining Equipment			0.00	40,00,000.00
<i>Equipment</i>	<i>Quantity</i>	<i>Rent per year</i>		
Dumper	2	400000		
Compressor	1	1000000		
Water Sprinkler	1	600000		
Rock Breaker	2	600000		
Excavator	2	800000		
Loader	2	600000		
Water Facility for Domestic Purpose "0.21" KLD (Annual Water Demand "63"KL @4L per Tanker, total number of tanker required ("16") and per tanker cost @Rs. 500)			0.00	7,500.00
Statutory Clearances			5,00,000.00	0.00
Mine Closure Cost for fencing around mine			1,00,000.00	0.00
Environment Management Plan (EMP) Cost			10,38,900.00	4,77,150.00
Total			68,38,900	49,94,650

ENVIRONMENT MANAGEMENT PLAN (EMP)

Particulars	Capital	Recurring
1513 Tree Plantation @Rs.300 per Tree for planting & @Rs.50 per tree for maintenance	4,53,900	75,650
Water Tanker @Rs. 500 per Tanker for Dust Suppression (1.53 KLD) & Horticulture (6.28 KLD) 1.53+ 6.28 = 7.81 KLD 7.81 KLD X 300 Days = 2343 KLD 2343KLD / 4 KLD = 586 Tankers	0	2,93,000
Environment Monitoring & Compliance	0	50,000
Environment Management Plan (For Habitation) under compliance of OM Z-11013/57/2014-IA.II (M) dated 29/10/2014 issued by MoEF & CC	585,000	58,500
Total	10,38,900	4,77,150

Environment Monitoring Plan

Monitoring Parameters and Frequency of Monitoring

S. no	Monitoring Parameters	No. of Locations	Frequency of Monitoring
1	Ambient Air: Ambient Air Quality at appropriate location for PM10, PM2.5, SO2, NOx in the vicinity of the mine area. In the surrounding area covering project site only.	3 Stations	Six Monthly
2	Water: Surface water sample in the vicinity of the Project area.	2 Surface water 2 Ground water	Six Monthly
3	Noise: Day & Night level Noise Monitoring.	4 stations	Six Monthly
4	Soil: Soil Monitoring, Qualitative and quantitative testing/analysis to check the soil fertility, porosity, texture, water holding capacity, etc.	2 stations	Six Monthly

Environment Management Practices to be followed:

Aspect	Mitigation Measures / Control Measures
Solid Waste Management	Solid waste management is important from both aesthetic and environmental points of view and will be managed as per the Solid Waste

	<p>Management Rules, 2016.</p> <ul style="list-style-type: none"> ➤ In this applied lease area, the stone deposit is covered with 2m layer of intermixed soil which considered as over burden. ➤ The recovery of stone is about 95%, thus intercalated waste of only 5% shall be generate from this mine. ➤ It has been calculated that total 48734 cum in-situ waste shall be generated during this plan period, out of which 26803 cum (In situ) shall be utilized for approach & haul road maintenance. ➤ The rest waste material 21930 cum in situ 27412.59 cum loose & 23300.70 cum compact waste shall be temporary dumped on the northern part of the applied lease area upto the third year, during the fourth & fifth year, the generated waste and waste materials of past dumping shall be removed and used for backfilling of exhausted part of quarry in eastern part and it will cover about 0.108ha area. ➤ Garland drain shall be provided along the OB dump. This drain would collect surface run off from dump body. Water collected in this drain would be stored in a sedimentation tank, the treated water shall be released for natural runoff.
Air Quality Management	<ul style="list-style-type: none"> • Wet drilling and use of sharp drill bits to minimize dust generation. • Controlled blasting using optimum explosive charge during favorable weather conditions. • Regular maintenance of diesel equipment and vehicles to reduce emissions. • Water sprinkling on haul roads, loading/unloading points, and working areas. • All transport vehicles will have valid PUC certificates. • Greenbelt and roadside plantation to act as dust and noise barriers.
Water Quality Management	<ul style="list-style-type: none"> • Mining will be confined only above the Ground Water Table (GWT). • Rainwater accumulated in the pit will be collected and pumped out regularly during monsoon. • Settling sump will be provided to desilt pumped out of mine-pit and collected through garland drain before discharge into natural drainage. • Garland and foot drains will be constructed around the quarry to control surface runoff. • Sewage from rest shelters will be treated through septic tank–soak pit systems. • Foot drain would be provided around the external dump, if any.
Noise Quality Management	<ul style="list-style-type: none"> • Mining activities will be restricted to daytime and carried out with controlled blasting techniques. • Acoustic enclosures and mufflers will be provided for drilling and DG set operations.

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	<ul style="list-style-type: none"> • Regular maintenance of mining machinery to minimize vibration and noise. • Greenbelt development around the lease boundary to attenuate noise propagation. • Use of delayed blasting technique to minimize the adverse impact of vibration.
Soil Quality Management	<ul style="list-style-type: none"> • Topsoil will be carefully removed and stored separately for future use in plantation and reclamation. • Garland drains and retaining walls will prevent soil erosion and siltation. • Spillage of oil or fuel will be avoided; impervious flooring and oil traps provided near storage areas • Post-mining, the area will be rehabilitated using stored topsoil and native vegetation
Flora & Fauna management	<ul style="list-style-type: none"> • No tree felling will be undertaken without obtaining permission from the competent authority. • Greenbelt and plantation will be developed using native species along approach roads and lease periphery (7.5m Safety Zone). • Dust suppression measures will minimize impact on surrounding vegetation
Socio Economy:	<ul style="list-style-type: none"> • Priority employment to local people in mining and ancillary activities. • Community development initiatives such as tree plantation drives, road maintenance, and local infrastructure support. • Awareness programs on safety, hygiene, and environmental protection
Monitoring & Reporting:	<ul style="list-style-type: none"> • Periodic monitoring of air, water (ground & surface), noise, and soil quality as per CPCB and SPCB guidelines. • All monitoring reports will be submitted to statutory authorities as per the compliance schedule. • Corrective measures will be taken immediately if any deviation from standards is observed.
Risk & Hazard	<p>Activities which are likely to create risk are: Temporary Storage of Explosives, Charging of Explosives, Blasting, Drilling, Bench Formation, Loading / Unloading, Transportation</p> <p>Proposed Preventive measures:</p> <ul style="list-style-type: none"> ▪ Overall slope angles of benches will be maintained at 45°. ▪ Unmanageable heights are not created. ▪ Loose sides are properly dressed. ▪ No loose stone or debris will be permitted to remain on the top of the bench or side of any excavation (Regulation 106(4) of MMR 1961). ▪ No undercutting of any face or sides will be permitted so as to cause any overhanging (Regulation 106(5) of MMR 1961)

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	<ul style="list-style-type: none"> ▪ It will be ensured that the drilling equipment is suitable for the job. ▪ The person in charge of the drilling machine is competent to carry out the drilling operation; part of the training includes instructions to always face towards the open edge of the bench so that any inadvertent backward step is away from the edge. ▪ Provision of portable rail fencing between the drilling operations and the edge of the bench ▪ Provision to attach a safety line to the drilling rig and provide a harness for the driller to wear. ▪ Restricted access to the area to all persons except those necessary for the drilling operation. ▪ Wet drilling will be carried out by constantly injecting a jet of water at the drill bit inside the hole, which prevents dust generation. ▪ In case due to any reason, wet drilling is not possible (due to non-availability of water), exhaust/ vacuum system will be provided which removes the dust from the drill hole continuously and discharges the same in a dust collector specially provided for the purpose. ▪ Drilling machine shall be fitted with dust suppression, collection and disposal arrangement.
<p>Blasting & Handling of Explosives</p>	<ul style="list-style-type: none"> ▪ Blast hole geometry shall be properly designed. ▪ Blast site shall be wetted before and after blasting operations are completed. ▪ Only optimum quantity of permissible explosives shall be used so that the vibrations do not damage the structures/houses if the quarrying operations are close to human habitation. ▪ Blasting shall be conducted only during favourable weather conditions and only during the day time and permissible hours. ▪ While carrying out blasting operations near habitations, wide publicity will be given in the local area through announcement and other available media so that local people become aware of the blasting activities being undertaken in the area and take appropriate precautions. ▪ The vibrations should be monitored periodically in consultation with the local Mining authorities. ▪ Use of explosives is specialist work. Planning for a round of shots is necessary to ensure that the face is properly surveyed, holes correctly drilled, direction logged, the weight of explosive suitable for good fragmentation and the continuity of the initiator are but a few of the steps necessary to ensure its safe use. ▪ Proper and safe storage of explosives in approved and Licensed Magazine. ▪ Proper security system to prevent theft/ pilferage, unauthorized entry into Magazine area and checking authorized persons to prevent carrying of match box, lights, mobile phones, cigarette or Bidi etc. will be put in place. ▪ Explosives shall be conveyed in special containers. ▪ Explosives and detonators shall not be carried in the same container.

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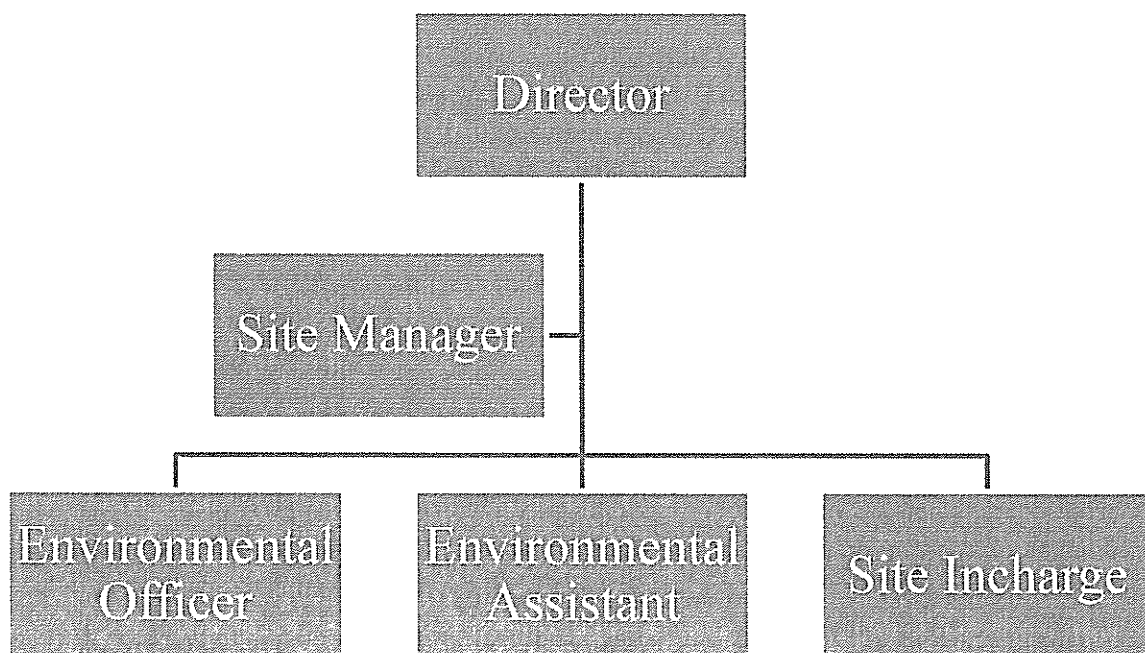
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	<ul style="list-style-type: none"> ▪ The holes which have been charged with explosives will not be left unattended till blasting is completed.
Health Hazards	<p>Health hazards should be interpreted as being harmful dust and noise which is emitted during surface mining operations. All suitable steps and precautions will be undertaken to ensure minimum health hazard. Provision of use of Personal Protective Equipment (PPE) will be kept. The PPE shall be of good make and quality, wherever possible ISI certified, suitable for the hazard e.g. a dust respirator fitted with the correct filter to capture the particulate hazardous dust and maintained to recommended standards. As personal protective equipment only affords limited protection it will only be used as a last resort and as an interim arrangement until other steps are taken to reduce the risk of personal injury to an acceptable level</p>
Accident Prevention	<ul style="list-style-type: none"> ▪ Mine road shall be made smooth regularly with a road roller. ▪ Mine road will be made sufficiently wide to keep two-way traffic. Regular water sprinkling will be done on mine road and haul road to avoid suspension of dust. ▪ All transportation within the mine lease area should be carried out directly under the supervision and control of management. ▪ The vehicles will be maintained in good working condition and checked thoroughly at least once a month by the competent person authorized for the purpose by the management. ▪ Navigation signs will be provided at each and every turning point up to the main road (wherever required). ▪ To avoid danger while reversing the vehicles especially at working place/loading points, stopper should be posted to properly guide reversing/spotting operating.

Organizational Structure of Environment Management Cell:



EMP Cell structure

The EMP Cell is committed to ensuring environmental sustainability and compliance with regulatory requirements for the Stone Mining Project. With a clear structure, roles, and responsibilities, the EMP Cell is equipped to manage environmental impacts and promote sustainable practices.

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District Survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- i. If any tree felling than necessary permission shall be taken from the competent authority.
- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.
- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.
- l. Personal protective equipments such as clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Gorga Stone Deposit of Md. Afzal Ansari, Village : Gorga, Anchal : Purbi Tundi, Distt. : Dhanbad, Jharkhand (1.464 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I along with following specific conditions :

- I. In compliance of Office Memorandum no. IA-J-11013/20/2025-IA-P, dated 25.11.2025 of MoEF&CC, Govt. of India, the PAs will mandatorily obtain the Environmental Safeguard to be implemented from Jharkhand State Pollution Control Board within 30 days of issuance of EC or 31.01.2026 which ever is earlier.
- II. The mine will come in operation only after obtaining permission from DGMS for controlled and delayed blasting.
- III. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked

green belt area as the part of tree plantation campaign “Ek Ped Ma Ke Naam” and the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.

- IV. The Deputy Commissioner through District Mining Officer will ensure that the mines owner of the respective leases to complete the plantation and maintenance in a time bound manner.
- V. Suitable plant species of not less than 2 M height to be planted equal to twice the area of saplings proposed in Safety zone. This is to be planted in land available near mines and outside safety zone. This will be in addition to plantation in safety zone. Newly planted saplings to be maintained for minimum 3 years with Geo-Tagged photographs.
- VI. Dedicated water tanker to be provided for mine. The tanker to be used for spraying water on haul road and for irrigating newly planted saplings only. Sprinkling to be done such that the haul road is kept moistened all the time with Geo-Tagged photographs.
- VII. Pre employment Occupational health check up for employees to be done and thereafter at annual interval for PLFT, Audiometry and other required tests .Summary findings of same to submitted along with 6 monthly compliance.
- VIII. Ensure use of Quality PPEs equivalent not less than 3M make. Records of same to be maintained and submitted with 6 monthly compliance report with Geo-Tagged photographs.
- IX. Keep vulnerable areas unmanned. Ensure rotation of duties. Records to be maintained and submitted with 6 monthly compliance report.
- X. Failing of any of terms & conditions mentioned in EC can lead to revocation / cancellation of EC.

10. Chamdi Stone Deposit of M/s Chamdi Stone Works (Partners : Meshar Ali & Aquib Anis),
Village : Chamdi, Thana : Taljhari, Distt. : Sahibganj, Jharkhand (2.81 Ha).

(Proposal no.: SIA/JH/MIN/ 563680 /2026)

Name of the consultant : P & M Solution, Noida, U.P.

This is a new project which has been taken for appraisal on 18.01.2026.

Project Sector: 1(a) Mining of Minerals, Category: B2.

Application for Environmental Clearance (EC).

EC Application for: Proposed Capacity – 56082 cum/annum or 157031 TPA

Project and Location Details:

Sl	Parameter	Details
1	Project Name	: Chamdi Stone Deposit

2	Lessee	:	M/s Chamdi Stone Works Partner: 1) Meshar Ali S/o Zakashu Seikh Partner: 2) Aquib Anis,
3	Lessee Address	:	Partner 1- At-Umar Ali Tola, Fulwariya, Lakhipur, Sajanpur, P.O. - Narayanpur, Thana - Rajmahal, District -Sahebganj, Pin Code-816108, State – Jharkhand Partner -2 At-Tinpahar, P.O. & P.S. - Tinpahar, District - Sahebganj, Pin Code-816116, State - Jharkhand.
4	Lease Area	:	2.81 Ha. 6.95 Acre
5	Type of Land	:	Non-Forest Raiyati Land
6	Project Cost	:	Capital: Rs 105,70,800.00
7	EMP Budget	:	Capital: Rs 14,20,800.00 Recurring: Rs. 14,86,800.00 per year
8	New or Expansion	:	New
9	Mineable Reserves	:	1569749 Tonnes 560624 Cum
10	Mine Life	:	10.0 years
11	Man power	:	29
12	Water Requirement	:	32.3 KLD
13	Water Source	:	By authorised hired water tankers
14	DG Set / power	:	50 KVA
15	Crusher	:	No crusher
16	Nearest Water Body	:	Ganga river (10.49km)
17	Nearest Habitation	:	Nearest Habitation 2.23 KM towards SSW direction
18	Nearest Rail Station	:	Tinpahar Junction railway station which are about 6.40 Km
19	Nearest Air Port	:	Deoghar Airport (119.06 Km)
20	Nearest Forest	:	Divisional Forest Officer, Sahibganj certified that the distance of reserved / protected forest is more than 254 meters from proposed project site.
21	Road & Highways	:	SH- 18 (Dumka- Sahibganj Road) is about 8.25 Km from the project site.
22	Approach Road	:	approx, 600 meter

CO-ORDINATES

Pillar No.	Degree, Minute, Second	
	Latitude	Longitude
1	25°02'08.158" N	87°41'38.533" E
2	25°02'07.512" N	87°41'40.269" E
3	25°02'06.831" N	87°41'42.102" E
4	25°02'06.187" N	87°41'43.832" E
5	25°02'05.542" N	87°41'45.566" E
6	25°02'03.955" N	87°41'44.771" E

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7	25°02'02.259" N	87°41'43.923" E
8	25°02'00.632" N	87°41'43.109" E
9	25°02'00.942" N	87°41'41.416" E
10	25°02'01.240" N	87°41'39.783" E
11	25°02'02.454" N	87°41'40.426" E
12	25°02'03.607" N	87°41'41.035" E
13	25°02'04.341" N	87°41'39.392" E
14	25°02'04.896" N	87°41'38.151" E
15	25°02'05.419" N	87°41'36.981" E
16	25°02'06.795" N	87°41'37.761" E

LAND DETAILS

Khata No.	Plot No.
18	102(P)
9	103(P)
14	155(P)

STATUTORY CLEARANCES

1	LOI / Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Officer, Sahibganj vide letter no. 2016/M, dated 09.12.2025.
2	CO	:	The CO, Taljhari vide letter no. 275, dated 05.04.2025 has mentioned the plot no. of the project is not recorded as "Jungle-Jhari" in R.S. Khatiyon & Register II.
3	DMO Cluster	:	DMO, Sahibganj vide memo no. 2027/M, dated 09.12.2025 certified that no other mining lease area exists within 500 meters radius from proposed project site.
4	DFO Wild Life	:	DFO – cum- Incharge Wildlife Sanctuary, Udhwa (Sahibganj) vide letter no. 1427, dated 20.05.2025 certified that the proposed project site is outside Eco Sensitive Zone of Udhwa Bird Sanctuary.
5	DFO Territorial	:	Divisional Forest Officer, Sahibganj Forest Division vide letter no. 1426, dated 20.05.2025 certified that the distance of reserved / protected forest is more than 250 meters from proposed project site.
6	DSR	:	The DMO, Sahibganj has certified vide memo no. 2020/M, dated 09.12.2025 that this project is mentioned in approved DSR of Sahibganj District as a potential area (Page no. 192).
7	Gram Sabha	:	Gram Sabha conducted on 08.09.2025.

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8	Grid certificate	:	DMO, Sahibganj vide memo no. 1681/M, dated 15.09.2025 certified that said project falls under grid no. 66 and production is within the over all permissible production limit. The DMO also stated that this certificate is issued in the light of order passed by Hon'ble NGT on 22.12.2021 in OA No. 23/2017/EZ, O.A. no. 776/2018 and O.A. no. 373/2019. It also states this certificate is issued in compliance of report of Expert Committee.
9	Mine Plan Approval	:	Approved by DMO, Sahibganj vide Letter No. 2071/M, dated 22.12.2025.
10	Qualified Person	:	Shri P.K. Sen was present in the meeting and affirmed that the mine plan has been prepared by him.

Working Details

1	Mining Method	:	Opencast semi- mechanized Method
2	Quarry Area	:	2.25 Ha
3	Waste Generation	:	14746 cum
4	Stripping Ratio	:	1:0.05
5	Working Days	:	300
6	Benches: size & No	:	6m to 6m
7	Elevation of Mine	:	155 m AMSL to 195 m AMSL
8	Ground Level Elevation	:	126 m AMSL
9	Ultimate Working Depth	:	136 m AMSL
10	Water Table	:	123-128 m AMSL
11	Topography of Mine	:	Highly potential area .
12	Explosive Requirement	:	26 kg/day
13	Diesel/Fuel requirement	:	126 litre/day

Production Details

Year	Production of stone in cum	Production of stone in Tonnes	Waste
1 st	55983	156754	10720
2 nd	56044	156921	6247
3 rd	56054	156951	6513
4 th	56027	156874	4774
5 th	56082	157031	4954
Total	280190	784531	33208

Land Use

Pattern of Utilization	Present Land Use (Ha)	At the end of the Plan period (Ha)	At The End of mine (Ha)	Conceptual Period (in Ha)		
				Public use	Water Body	Plantation
Quarry	Nil	1.89 (including temporary dumped area 0.531 Ha. & 0.133 Ha)	2.25 (Including Backfilling 0.60 Ha)	--	0.60	1.65 (Dead Bench Plantation)
Greenbelt within Safety, Barrier	Nil	0.56 Plantation	0.56 Plantation	--	--	0.56 (Plantation)
Road	0.006	Nil (Merged with safety barrier)	Nil (Merged with quarry & Safety Barrier)	--	--	--
Total Area in use	0.006	2.45	2.81	--	0.60	2.21
Balanced Area unused	2.804	0.36	--	--	2.21	--
Total Applied Area	2.810					

Green Belt Development

	Area / Length	Number of Trees	Remarks	Timeline	Species
Area in Safety Zone (Ha.)	0.56	896	1600 Tree per Hectare.	1st Year	Gulmohar, Babul, Neem, Mango, Jamun Jackfruits, , Pipal, Arjun, etc..
Length of Approach Road Area (m.)	600	1200	2m X 2 m spacing in two rows both side		
Dead Bench (Ha.)	1.65	2640	1600 Tree per Hectare	At the end of life of mine	
Total		4736			

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Note- 4736 tree proposed to be planted out of which 10% plantation will be carried out i.e. (474 trees) as per MoEF & CC, Govt. of India Scheme "Ek Ped Ma Ke Naam"..

BUDGETARY PROVISION (IN LAKHS)



PROJECT COST

Particulars	Capital	Recurring																					
Land	70,00,000	7,00,000.00																					
Infrastructure	15,00,000.00	1,50,000.00																					
Mining Equipment	0.00	49,00,000.00																					
<table border="1"> <thead> <tr> <th>Equipment</th> <th>Quantity</th> <th>Rent per year</th> </tr> </thead> <tbody> <tr> <td>Dumper</td> <td>2</td> <td>400000</td> </tr> <tr> <td>Compressor</td> <td>1</td> <td>1000000</td> </tr> <tr> <td>Water Sprinkler</td> <td>1</td> <td>600000</td> </tr> <tr> <td>Rock Breaker</td> <td>3</td> <td>900000</td> </tr> <tr> <td>Excavator</td> <td>2</td> <td>800000</td> </tr> <tr> <td>Loader</td> <td>4</td> <td>1200000</td> </tr> </tbody> </table>	Equipment	Quantity	Rent per year	Dumper	2	400000	Compressor	1	1000000	Water Sprinkler	1	600000	Rock Breaker	3	900000	Excavator	2	800000	Loader	4	1200000		
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Water Facility for Domestic Purpose "0.2" KLD (Annual Water Demand "60"KL @4L per Tanker, total number of tanker required ("15") and per tanker cost @Rs. 500)	0.00	11,000.00																					
Statutory Clearances	5,00,000.00	0.00																					
Mine Closure Cost for fencing around mine	1,50,000.00	0.00																					
Environment Management Plan (EMP) Cost	14,20,800.00	14,86,800.00																					
Total	105,70,800. 00	72,47,800.00																					

ENVIRONMENT MANAGEMENT PLAN (EMP)

Particulars	Capital	Recurring
4736 Tree Plantation @Rs.300 per Tree for planting & @Rs.50 per tree for maintenance	14,20,800.00	2,36,800.00
Water Tanker @Rs. 500 per Tanker for Dust Suppression (3.60 KLD) & Horticulture (28.41 KLD) 3.60 + 28.41 = 32.01 KLD 32.01 KLD X 300 Days = 9603 KLD 9603 KLD / 4 KLD = 2400 Tankers	0	12,00,000.00
Environment Monitoring & Compliance	0	50,000.00
Total	14,20,800.00	14,86,800.00

Environment Monitoring Plan

Monitoring Parameters and Frequency of Monitoring

S. no	Monitoring Parameters	No. of Locations	Frequency of Monitoring
1	Ambient Air: Ambient Air Quality at appropriate location for PM10, PM2.5, SO2, NOx in the vicinity of	3 Stations	Six Monthly

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	the mine area. In the surrounding area covering project site only.		
2	Water: Surface water sample in the vicinity of the Project area.	2 Surface water 2 Ground water	Six Monthly
3	Noise: Day & Night level Noise Monitoring.	4 stations	Six Monthly
4	Soil: Soil Monitoring, Qualitative and quantitative testing/analysis to check the soil fertility, porosity, texture, water holding capacity, etc.	2 stations	Six Monthly

Environment Management Practices to be followed:

Aspect	Mitigation Measures / Control Measures
Solid Waste Management	<p>Solid waste management is important from both aesthetic and environmental points of view and will be managed as per the Solid Waste Management Rules, 2016.</p> <p>33208 cum of waste will be generated during plan period. Part of the O.B. will be used for haul road and village road maintenance. And remaining will be used for backfilling of exhausted quarry. Dump generated during plan period will be dumped in following manner</p> <p>During quarry development in 1st & 2nd year gritty soil and intercalated waste will be removed and this soil & waste will be temporarily dumped at 3 number of dump</p> <ul style="list-style-type: none"> ➤ Area - 0.035 Ha, (L x W x H = 20m x 18m x 5m), Area - 0.085 Ha. (L x W x H = 53m x 16m x 5m), ➤ Area 0.093 Ha, (L x W x H = 62m x 15m x 5m) ➤ Area-0.125 Ha, (L x W x H = 70m x 18m x 5m)] at the north-east part of the area with suitable precaution like constructing parapet wall, garland drain ➤ In 3rd year gritty soil & intercalated waste will be removed and this soil, waste & existing temporary dumped materials will be temporarily dumped (Area 0.469 Ha. (L x W x H = 85m x 5m x 5m)) within the quarry. ➤ In 4th year gritty soil & intercalated waste will be removed and this soil, waste & existing temporary dumped materials will be temporarily dumped [Area 0.565 Ha, (L x W x H = 132m x 43m x 5m)] within the quarry & ➤ In 5th year gritty soil & intercalated waste will be removed and this soil, waste & existing temporary dumped materials will be temporarily dumped [Area -0.531 Ha, (L x W x H = 133m x 40m x 5m) & Area 0.133 Ha, (L x W x H = 155m x 24m x 5m)] within the quarry. ➤ In conceptual period total removal gritty soil, intercalated waste & plan period existing temporarily dumped materials together will be backfill within the exhausted quarry.
Air Quality Management	<ul style="list-style-type: none"> • Wet drilling and use of sharp drill bits to minimize dust generation. • Controlled blasting using optimum explosive charge during favorable

	<p>weather conditions.</p> <ul style="list-style-type: none"> • Regular maintenance of diesel equipment and vehicles to reduce emissions. • Water sprinkling on haul roads, loading/unloading points, and working areas. • All transport vehicles will have valid PUC certificates. • Greenbelt and roadside plantation to act as dust and noise barriers.
Water Quality Management	<ul style="list-style-type: none"> • Mining will be confined only above the Ground Water Table (GWT). • Rainwater accumulated in the pit will be collected and pumped out regularly during monsoon. • Settling sump will be provided to desilt pumped out of mine-pit and collected through garland drain before discharge into natural drainage. • Garland and foot drains will be constructed around the quarry to control surface runoff. • Sewage from rest shelters will be treated through septic tank-soak pit systems. • Foot drain would be provided around the external dump, if any.
Noise Quality Management	<ul style="list-style-type: none"> • Mining activities will be restricted to daytime and carried out with controlled blasting techniques. • Acoustic enclosures and mufflers will be provided for drilling and DG set operations. • Regular maintenance of mining machinery to minimize vibration and noise. • Greenbelt development around the lease boundary to attenuate noise propagation. • Use of delayed blasting technique to minimize the adverse impact of vibration.
Soil Quality Management	<ul style="list-style-type: none"> • Topsoil will be carefully removed and stored separately for future use in plantation and reclamation. • Garland drains and retaining walls will prevent soil erosion and siltation. • Spillage of oil or fuel will be avoided; impervious flooring and oil traps provided near storage areas • Post-mining, the area will be rehabilitated using stored topsoil and native vegetation
Flora & Fauna management	<ul style="list-style-type: none"> • No tree felling will be undertaken without obtaining permission from the competent authority. • Greenbelt and plantation will be developed using native species along approach roads and lease periphery (7.5m Safety Zone). • Dust suppression measures will minimize impact on surrounding vegetation
Socio Economy:	<ul style="list-style-type: none"> • Priority employment to local people in mining and ancillary activities. • Community development initiatives such as tree plantation drives, road maintenance, and local infrastructure support. • Awareness programs on safety, hygiene, and environmental protection
Monitoring &	<ul style="list-style-type: none"> • Periodic monitoring of air, water (ground & surface), noise, and soil

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Reporting:	<p>quality as per CPCB and SPCB guidelines.</p> <ul style="list-style-type: none"> • All monitoring reports will be submitted to statutory authorities as per the compliance schedule. • Corrective measures will be taken immediately if any deviation from standards is observed.
Risk & Hazard	<p>Activities which are likely to create risk are: Temporary Storage of Explosives, Charging of Explosives, Blasting, Drilling, Bench Formation, Loading / Unloading, Transportation</p> <p>Proposed Preventive measures:</p> <ul style="list-style-type: none"> ▪ Overall slope angles of benches will be maintained at 45°. ▪ Unmanageable heights are not created. ▪ Loose sides are properly dressed. ▪ No loose stone or debris will be permitted to remain on the top of the bench or side of any excavation (Regulation 106(4) of MMR 1961). ▪ No undercutting of any face or sides will be permitted so as to cause any overhanging (Regulation 106(5) of MMR 1961) ▪ It will be ensured that the drilling equipment is suitable for the job. ▪ The person in charge of the drilling machine is competent to carry out the drilling operation; part of the training includes instructions to always face towards the open edge of the bench so that any inadvertent backward step is away from the edge. ▪ Provision of portable rail fencing between the drilling operations and the edge of the bench ▪ Provision to attach a safety line to the drilling rig and provide a harness for the driller to wear. ▪ Restricted access to the area to all persons except those necessary for the drilling operation. ▪ Wet drilling will be carried out by constantly injecting a jet of water at the drill bit inside the hole, which prevents dust generation. ▪ In case due to any reason, wet drilling is not possible (due to non-availability of water), exhaust/ vacuum system will be provided which removes the dust from the drill hole continuously and discharges the same in a dust collector specially provided for the purpose. ▪ Drilling machine shall be fitted with dust suppression, collection and disposal arrangement.
Blasting & Handling of Explosives	<ul style="list-style-type: none"> ▪ Blast hole geometry shall be properly designed. ▪ Blast site shall be wetted before and after blasting operations are completed. ▪ Only optimum quantity of permissible explosives shall be used so that the vibrations do not damage the structures/houses if the quarrying operations are close to human habitation. ▪ Blasting shall be conducted only during favourable weather conditions and only during the day time and permissible hours. ▪ While carrying out blasting operations near habitations, wide publicity will be given in the local area through announcement and other available media so that local people become aware of the

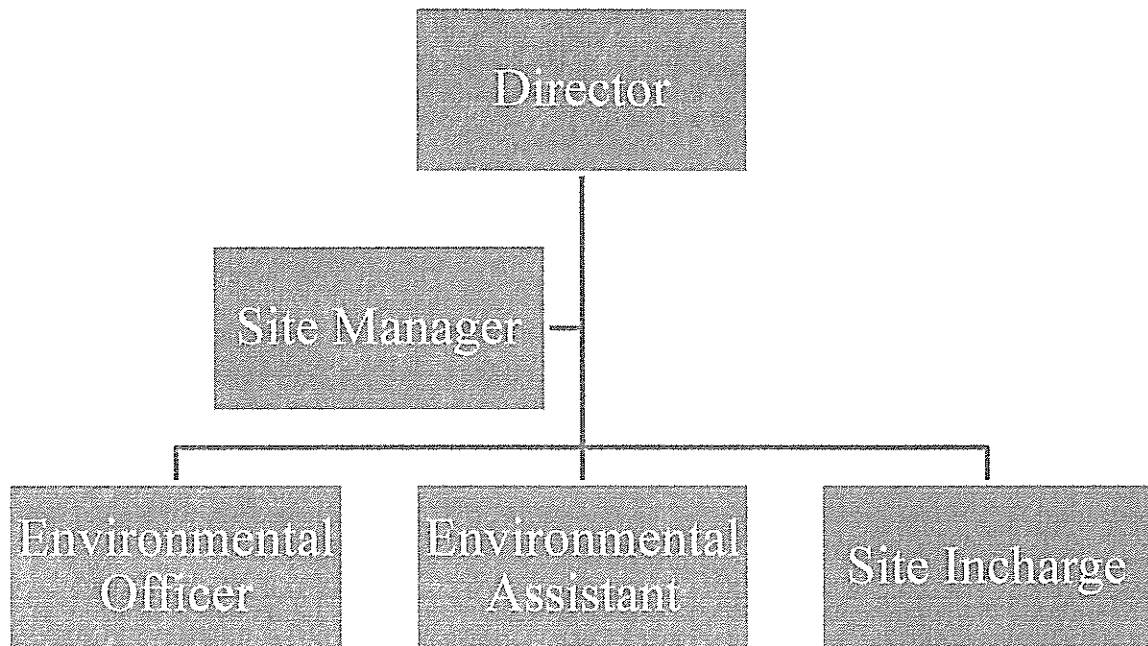


	<p>blasting activities being undertaken in the area and take appropriate precautions.</p> <ul style="list-style-type: none"> ▪ The vibrations should be monitored periodically in consultation with the local Mining authorities. ▪ Use of explosives is specialist work. Planning for a round of shots is necessary to ensure that the face is properly surveyed, holes correctly drilled, direction logged, the weight of explosive suitable for good fragmentation and the continuity of the initiator are but a few of the steps necessary to ensure its safe use. ▪ Proper and safe storage of explosives in approved and Licensed Magazine. ▪ Proper security system to prevent theft/ pilferage, unauthorized entry into Magazine area and checking authorized persons to prevent carrying of match box, lights, mobile phones, cigarette or Bidi etc. will be put in place. ▪ Explosives shall be conveyed in special containers. ▪ Explosives and detonators shall not be carried in the same container. ▪ The holes which have been charged with explosives will not be left unattended till blasting is completed.
Health Hazards	<p>Health hazards should be interpreted as being harmful dust and noise which is emitted during surface mining operations. All suitable steps and precautions will be undertaken to ensure minimum health hazard. Provision of use of Personal Protective Equipment (PPE) will be kept. The PPE shall be of good make and quality, wherever possible ISI certified, suitable for the hazard e.g. a dust respirator fitted with the correct filter to capture the particulate hazardous dust and maintained to recommended standards. As personal protective equipment only affords limited protection it will only be used as a last resort and as an interim arrangement until other steps are taken to reduce the risk of personal injury to an acceptable level</p>
Accident Prevention	<ul style="list-style-type: none"> ▪ Mine road shall be made smooth regularly with a road roller. ▪ Mine road will be made sufficiently wide to keep two-way traffic. Regular water sprinkling will be done on mine road and haul road to avoid suspension of dust. ▪ All transportation within the mine lease area should be carried out directly under the supervision and control of management. ▪ The vehicles will be maintained in good working condition and checked thoroughly at least once a month by the competent person authorized for the purpose by the management. ▪ Navigation signs will be provided at each and every turning point up to the main road (wherever required). ▪ To avoid danger while reversing the vehicles especially at working place/loading points, stopper should be posted to properly guide reversing/spotting operating.

Organizational Structure of Environment Management Cell:

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EMP Cell structure

The EMP Cell is committed to ensuring environmental sustainability and compliance with regulatory requirements for the Stone Mining Project. With a clear structure, roles, and responsibilities, the EMP Cell is equipped to manage environmental impacts and promote sustainable practices.

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District Survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- i. If any tree felling than necessary permission shall be taken from the competent authority.
- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.

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- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.
- l. Personal protective equipments such as clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Chamdi Stone Deposit of M/s Chamdi Stone Works (Partners : Meshar Ali & Aquib Anis), Village : Chamdi, Thana : Taljhari, Distt. : Sahibganj, Jharkhand (2.81 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I along with following specific conditions :

- I. In compliance of Office Memorandum no. IA-J-11013/20/2025-IA-P, dated 25.11.2025 of MoEF&CC, Govt. of India, the PAs will mandatorily obtain the Environmental Safeguard to be implemented from Jharkhand State Pollution Control Board within 30 days of issuance of EC or 31.01.2026 which ever is earlier.
- II. That the Deputy Commissioner, Sahibganj will ensure compliance of the order passed by Hon'ble NGT in OA No. 23/2017/EZ, O.A. no. 776/2018 and O.A. no. 373/2019 in the matter of Syed Arshad Nasar Vs Union of India with Ramchandra Chaurasia Vs State of Jharkhand with Pradeep Kumar Singh Vs State of Jharkhand before grant of mining lease.
- III. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "Ek Ped Ma Ke Naam" and the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.
- IV. The Deputy Commissioner through District Mining Officer will ensure that the mines owner of the respective leases to complete the plantation and maintenance in a time bound manner.
- V. Suitable plant species of not less than 2 M height to be planted equal to twice the area of saplings proposed in Safety zone. This is to be planted in land available near mines and outside safety zone. This will be in addition to plantation in safety zone. Newly planted saplings to be maintained for minimum 3 years with Geo-Tagged photographs.
- VI. Dedicated water tanker to be provided for mine. The tanker to be used for spraying water on haul road and for irrigating newly planted saplings only. Sprinkling to be done such that the haul road is kept moistened all the time with Geo-Tagged photographs.
- VII. Pre employment Occupational health check up for employees to be done and thereafter at annual interval for PLFT, Audiometry and other required tests Summary findings of same to submitted along with 6 monthly compliance.

- VIII. Ensure use of Quality PPEs equivalent not less than 3M make. Records of same to be maintained and submitted with 6 monthly compliance report with Geo-Tagged photographs.
- IX. Keep vulnerable areas unmanned. Ensure rotation of duties. Records to be maintained and submitted with 6 monthly compliance report.
- X. Failing of any of terms & conditions mentioned in EC can lead to revocation / cancellation of EC.

**11. Sonda Stone Deposit of M/s Shiv Enterprises Stone Works (Partner : Shri Rajendra Kumar),
Village : Sonda, Thana : Mandro, Distt. : Sahibganj, Jharkhand (2.832 Ha).**

(Proposal no.: SIA/JH/MIN/ 564323 /2026)

Name of the consultant : P & M Solution, Noida, U.P.

This is a new project which has been taken for appraisal on 18.01.2026.

Project Sector: 1(a) Mining of Minerals, Category: B2.

Application for Environmental Clearance (EC).

EC Application for: Proposed Capacity – 51129 cum/annum or 138048 TPA

Project and Location Details:

Sl	Parameter	Details	
1	Project Name	Sonda Stone Deposit	
2	Lessee	M/s Shiv Enterprises Stone Works, Partner - Sri Rajendra Kumar and others	
3	Lessee Address	M/s Shiv Enterprises Stone Works Partner - Sri Rajendra Kumar, S/O - Ramdhan Sharma, Head - House No. 118, Sector 18, Panipath, Haryana and others.	
4	Lease Area	2.832 Ha.	7.00 Acre
5	Type of Land	Non-Forest Raiyati Land	
6	Project Cost	Capital: Rs 70,03,200.00	
7	EMP Budget	Capital: Rs 18,21,700.00	Recurring: Rs. 8,93,450.00 per year
8	New or Expansion	New	
9	Mineable	1173729 Tonnes	434714.44 Cum

	Reserves		
10	Mine Life	:	10.0 years
11	Man power	:	21
12	Water Requirement	:	16.64 ~ 16.70 KLD
13	Water Source	:	By authorised hired water tankers
14	DG Set / power	:	50 KVA
15	Crusher	:	No crusher
16	Nearest Water Body	:	Ganga River (11.01 km)
17	Nearest Habitation	:	Nearest Habitation 480 meter towards NNE direction. EMP Submitted
18	Nearest Rail Station	:	Karamtola Railway station which are about 4.20 Km
19	Nearest Air Port	:	Deoghar Airport (120.0 km)
20	Nearest Forest	:	Divisional Forest Officer, Sahibganj certified that the distance of reserved / protected forest is more than 260 meters from proposed project site.
21	Road & Highways	:	NH-33 is about 4.06 Km from the project site.
22	Approach Road	:	approx, 500 meter

CO-ORDINATES

Point	Latitude	Longitude
1	25°13'09.391"N	87°32'26.157"E
2	25°13'10.550"N	87°32'27.877"E
3	25°13'06.602"N	87°32'28.681"E
4	25°13'08.187"N	87°32'30.610"E
5	25°13'07.294"N	87°32'32.093"E
6	25°13'06.404"N	87°32'33.571"E
7	25°13'06.058"N	87°32'35.145"E
8	25°13'05.649"N	87°32'36.691"E
9	25°13'05.179"N	87°32'36.996"E
10	25°13'04.503"N	87°32'38.391"E
11	25°13'05.291"N	87°32'38.391"E
12	25°13'05.627"N	87°32'38.402"E
13	25°13'05.604"N	87°32'40.454"E
14	25°13'05.582"N	87°32'42.484"E
15	25°13'04.416"N	87°32'41.633"E
16	25°13'03.889"N	87°32'41.143"E
17	25°13'02.993"N	87°32'40.567"E
18	25°13'02.812"N	87°32'40.337"E
19	25°13'03.261"N	87°32'38.625"E

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20	25°13'03.700"N	87°32'36.950"E
21	25°13'04.123"N	87°32'35.335"E
22	25°13'04.595"N	87°32'33.710"E
23	25°13'05.228"N	87°32'33.470"E
24	25°13'04.805"N	87°32'33.016"E
25	25°13'04.053"N	87°32'31.560"E
26	25°13'05.377"N	87°32'30.551"E
27	25°13'06.426"N	87°32'29.752"E
28	25°13'07.789"N	87°32'28.559"E
29	25°13'08.415"N	87°32'27.084"E

LAND DETAILS

Khata No.	Plot No.
05,08,09,10,11 & 12	9(P), 10(P), 12(P), 15, 17(P), 18(P), 41(P) & 42

STATUTORY CLEARANCES

1	LOI / Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Officer, Sahibganj vide letter no. 2060/M, dated 16.12.2025.
2	CO	:	The CO, Mandro vide letter no. 641/Ra., dated 13.07.2019 has mentioned the plot no. of the project is not recorded as "Jungle-Jhari" in R.S. Khatiyani & Register II. During the appraisal it was seen from the KML that few houses at a distance of 480 meters from mining lease area. For which detailed Environmental Management Plan has been prepared and submitted.
3	DMO Cluster	:	DMO, Sahibganj vide memo no. 1569/M, dated 26.08.2025 certified that no other mining lease area exists within 500 meters radius from proposed project site.
4	DFO Wild Life	:	DFO, Wildlife Division, Hazaribag vide letter no. 2225, dated 21.10.2019 certified that the proposed project site is outside Eco Sensitive Zone of Udhwa Lake Bird Sanctuary.
5	DFO Territorial	:	Divisional Forest Officer, Sahibganj Forest Division vide memo no. 1956, dated 23.10.2018 certified that the distance of forest land is more than 250 meters from proposed project site.
6	DSR	:	The DMO, Sahibganj has certified vide memo no. 2092/M, dated 24.12.2025 that this project is mentioned in approved DSR of Sahibganj District as a potential area (Page no. 185).

7	Gram Sabha	:	Gram Sabha conducted on 15.05.2018.
8	Grid certificate	:	DMO, Sahibganj vide memo no. 1568/M, dated 26.08.2025 certified that said project falls under grid no. 12 and production is within the over all permissible production limit. The DMO also stated that this certificate is issued in the light of order passed by Hon'ble NGT on 22.12.2021 in OA No. 23/2017/EZ, O.A. no. 776/2018 and O.A. no. 373/2019. It also states this certificate is issued in compliance of report of Expert Committee.
9	Mine Plan Approval	:	Approved by DMO, Sahibganj vide Letter No. 2091/M, dated 24.12.2025.
10	Qualified Person	:	Shri Vidya Bhushan Mishra was present in the meeting and affirmed that the mine plan has been prepared by him.

Working Details

1	Mining Method	:	Opencast Semi -mechanized method
2	Quarry Area	:	2.058 Ha
3	Waste Generation	:	43096 cum
4	Stripping Ratio	:	1:0.04
5	Working Days	:	300
6	Benches: size & No	:	6m to 6m
7	Elevation of Mine	:	170 m AMSL to 189 m AMSL
8	Ground Level Elevation	:	170 m AMSL
9	Ultimate Working Depth	:	151 m AMSL
10	Water Table	:	130 m AMSL
11	Topography of Mine	:	Area represents Undulating small hillock.
12	Explosive Requirement	:	50 kg/day
13	Diesel/Fuel requirement	:	130 litre/day

Production Details

Year	Production of stone in Cum	Production of stone in Tonnes	Overburden in cum	Intercalated waste in Cum	Total waste in Cum
1 st Year	41078	110911	31165	2162	33327

2 nd Year	43372	117105	0	2283	2283
3 rd Year	44465	120055	0	2340	2340
4 th Year	46650	125954	0	2455	2455
5 th Year	51129	138048	0	2691	2691
Total	226694	612073	31165	11931	43096

Land Use

Land Utilization	Existing Land Use (Ha)	At the end of the Plan period (Ha)	At conceptual Period (Ha)
Quarry	0.0	0.849	2.058 (0.214ha area shall be backfilled, 0.743 ha area shall be converted into water reservoir and 1.101 ha left as dead benches).
Waste Dump	0.0	0.354	Nil (comes under quarry)
Road	0.0	0.006	Nil (comes under quarry)
Crusher	0.0	0.0	Nil
Safety zone (Green belt)	0.0	0.774 (Plantation)	0.774 (Plantation)
Total	0.0	1.983	0.0
Unused Area	2.832	0.849	0.00
Total Lease area	2.832		

Green Belt Development

	Area / Length	Number of Trees	Remarks	Timeline	Species
Area in Safety Zone (Ha.)	0.774	1239	1600 Tree per Hectare	1st Year	Arjun, Jackfruits, Jamun, Babul, Gulmohar, Neem, Pipal, Mango etc.
Length of Approach Road Area (m.)	500	1000	2m X 2 m spacing in two rows both side		
Dead Bench (Ha.)	1.101	1762	1600 Tree per Hectare	At the end of life of mine	

Backfilled (Ha.)	0.214	343		
Total		4344		

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

- Note- 4344 tree proposed to be planted out of which 10% plantation will be carried out i.e. (434 trees) as per MoEF & CC, Govt. of India Scheme "Ek Ped Ma Ke Naam"..

BUDGETARY PROVISION (IN LAKHS)

PROJECT COST

Particulars			Capital	Recurring
Land			24,00,000.00	2,00,000.00
Infrastructure			15,00,000.00	1,50,000.00
Mining Equipment			0.00	46,00,000.00
<i>Equipment</i>	<i>Quantity</i>	<i>Rent per year</i>		
Dumper	2	400000		
Compressor	1	1000000		
Water Sprinkler	1	600000		
Rock Breaker	3	600000		
Excavator	2	800000		
Loader	4	1200000		
Water Facility for Domestic Purpose "0.21" KLD (Annual Water Demand "96"KL @4L per Tanker, total number of tanker required ("16") and per tanker cost @Rs. 500)			0.00	8,000.00
Mine Closure Cost for Plantation of "2105" number of trees @Rs. 300 per tree for plant & @Rs. 50 per tree for maintenance			6,31,500.00	1,05,250.00
Statutory Clearances			5,00,000.00	0.00
Mine Closure Cost for fencing around mine			1,50,000.00	0.00
Environment Management Plan (EMP) Cost			18,21,700	8,93,450

Total	70,03,200.00	59,56,700.00
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ENVIRONMENT MANAGEMENT PLAN (EMP)

Particulars	Capital	Recurring
2239 Tree Plantation @Rs.300 per Tree for planting & @Rs.50 per tree for maintenance	6,71,700.00	1,11,950.00
Water Tanker @Rs. 500 per Tanker for Dust Suppression (3.0 KLD) & Horticulture (13.43 KLD) 3.0 + 13.43 = 16.43 KLD 16.43 KLD X 300 Days = 4929 KLD 4929KLD / 4 KLD = 1233 Tankers	0	6,16,500.00
Environment Monitoring & Compliance	0	50,000.00
Environment Management Plan (For Habitation) under compliance of OM Z-11013/57/2014-IA.II (M) dated 29/10/2014 issued by MoEF & CC	11,50,000.00	1,15,000.00
Total	18,21,700.00	8,93,450.00

Environment Monitoring Plan

Monitoring Parameters and Frequency of Monitoring

S. no	Monitoring Parameters	No. of Locations	Frequency of Monitoring
1	Ambient Air: Ambient Air Quality at appropriate location for PM10, PM2.5, SO2, NOx in the vicinity of the mine area. In the surrounding area covering project site only.	3 Stations	Six Monthly
2	Water: Surface water sample in the vicinity of the Project area.	2 Surface water 2 Ground water	Six Monthly
3	Noise: Day & Night level Noise Monitoring.	4 stations	Six Monthly
4	Soil: Soil Monitoring, Qualitative and quantitative testing/analysis to check the soil fertility, porosity, texture, water holding capacity, etc.	2 stations	Six Monthly

Environment Management Practices to be followed:

Aspect	Mitigation Measures / Control Measures
Solid Waste Management	Solid waste management is important from both aesthetic and environmental points of view and will be managed as per the Solid Waste Management Rules, 2016. ➤ In this applied lease area, the stone deposit is covered with 2m

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	<p>layer of intermixed soil which considered as over burden. The recovery of stone is about 95%, thus intercalated waste of only 5% shall be generate from this mine</p> <ul style="list-style-type: none"> ➤ It has been calculated that total 43096 cum in-situ waste shall be generated during this plan period, out of which 23703 cum (In situ) shall be utilized for approach & haul road maintenance ➤ The rest waste material 19393 cum in situ 24241.64 cum loose & 20605.39 cum compact waste shall be temporary dumped in central part it will cover 0.354ha area. While excavation of insitu waste, its volume shall be increase, as it becomes loose (insitu cum X 1.25), during the dumping/backfilling these loose materials shall be compacted with the use of dozer and volume will be decreased up to 85% of loose waste ➤ Garland drain shall be provided along the OB dump. This drain would collect surface run off from dump body. Water collected in this drain would be stored in a sedimentation tank, the treated water shall be released for natural runoff
Air Quality Management	<ul style="list-style-type: none"> • Wet drilling and use of sharp drill bits to minimize dust generation. • Controlled blasting using optimum explosive charge during favorable weather conditions. • Regular maintenance of diesel equipment and vehicles to reduce emissions. • Water sprinkling on haul roads, loading/unloading points, and working areas. • All transport vehicles will have valid PUC certificates. • Greenbelt and roadside plantation to act as dust and noise barriers.
Water Quality Management	<ul style="list-style-type: none"> • Mining will be confined only above the Ground Water Table (GWT). • Rainwater accumulated in the pit will be collected and pumped out regularly during monsoon. • Settling sump will be provided to desilt pumped out of mine-pit and collected through garland drain before discharge into natural drainage. • Garland and foot drains will be constructed around the quarry to control surface runoff. • Sewage from rest shelters will be treated through septic tank-soak pit systems. • Foot drain would be provided around the external dump, if any.
Noise Quality Management	<ul style="list-style-type: none"> • Mining activities will be restricted to daytime and carried out with controlled blasting techniques. • Acoustic enclosures and mufflers will be provided for drilling and DG set operations. • Regular maintenance of mining machinery to minimize vibration and noise. • Greenbelt development around the lease boundary to attenuate noise propagation. • Use of delayed blasting technique to minimize the adverse impact of vibration.
Soil Quality Management	<ul style="list-style-type: none"> • Topsoil will be carefully removed and stored separately for future use in plantation and reclamation.

	<ul style="list-style-type: none"> • Garland drains and retaining walls will prevent soil erosion and siltation. • Spillage of oil or fuel will be avoided; impervious flooring and oil traps provided near storage areas • Post-mining, the area will be rehabilitated using stored topsoil and native vegetation
Flora & Fauna management	<ul style="list-style-type: none"> • No tree felling will be undertaken without obtaining permission from the competent authority. • Greenbelt and plantation will be developed using native species along approach roads and lease periphery (7.5m Safety Zone). • Dust suppression measures will minimize impact on surrounding vegetation
Socio Economy:	<ul style="list-style-type: none"> • Priority employment to local people in mining and ancillary activities. • Community development initiatives such as tree plantation drives, road maintenance, and local infrastructure support. • Awareness programs on safety, hygiene, and environmental protection
Monitoring & Reporting:	<ul style="list-style-type: none"> • Periodic monitoring of air, water (ground & surface), noise, and soil quality as per CPCB and SPCB guidelines. • All monitoring reports will be submitted to statutory authorities as per the compliance schedule. • Corrective measures will be taken immediately if any deviation from standards is observed.
Risk & Hazard	<p>Activities which are likely to create risk are: Temporary Storage of Explosives, Charging of Explosives, Blasting, Drilling, Bench Formation, Loading / Unloading, Transportation</p> <p>Proposed Preventive measures:</p> <ul style="list-style-type: none"> ▪ Overall slope angles of benches will be maintained at 45°. ▪ Unmanageable heights are not created. ▪ Loose sides are properly dressed. ▪ No loose stone or debris will be permitted to remain on the top of the bench or side of any excavation (Regulation 106(4) of MMR 1961). ▪ No undercutting of any face or sides will be permitted so as to cause any overhanging (Regulation 106(5) of MMR 1961) ▪ It will be ensured that the drilling equipment is suitable for the job. ▪ The person in charge of the drilling machine is competent to carry out the drilling operation; part of the training includes instructions to always face towards the open edge of the bench so that any inadvertent backward step is away from the edge. ▪ Provision of portable rail fencing between the drilling operations and the edge of the bench ▪ Provision to attach a safety line to the drilling rig and provide a harness for the driller to wear. ▪ Restricted access to the area to all persons except those necessary for the drilling operation. ▪ Wet drilling will be carried out by constantly injecting a jet of water at

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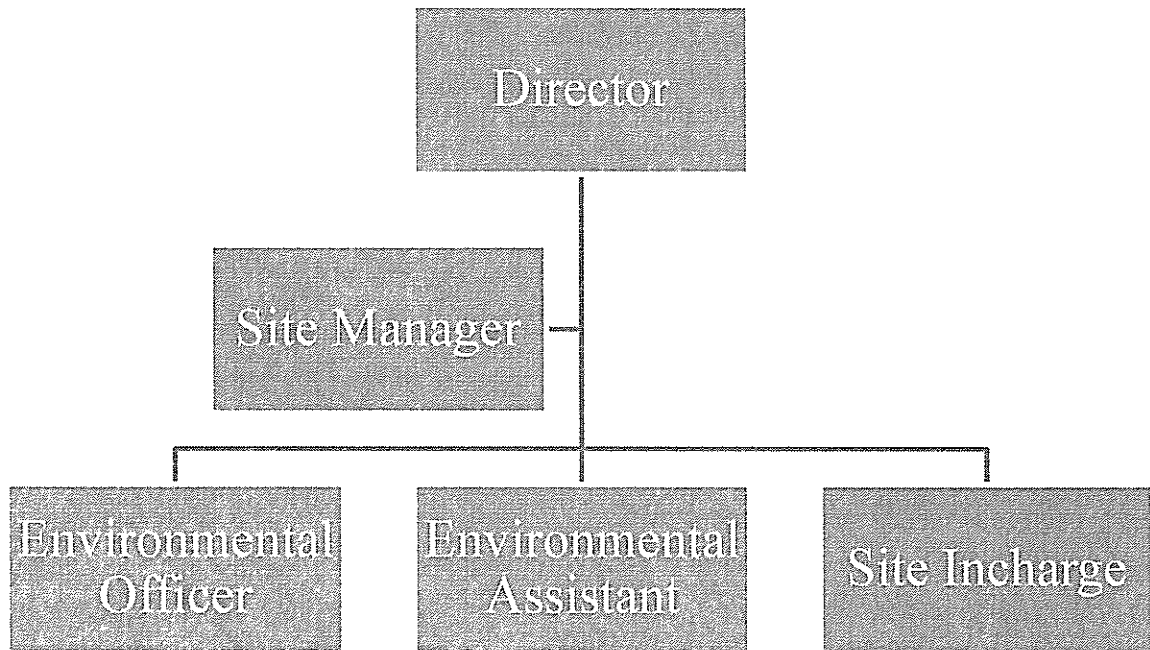
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	<p>the drill bit inside the hole, which prevents dust generation.</p> <ul style="list-style-type: none"> ▪ In case due to any reason, wet drilling is not possible (due to non-availability of water), exhaust/ vacuum system will be provided which removes the dust from the drill hole continuously and discharges the same in a dust collector specially provided for the purpose. ▪ Drilling machine shall be fitted with dust suppression, collection and disposal arrangement.
Blasting & Handling of Explosives	<ul style="list-style-type: none"> ▪ Blast hole geometry shall be properly designed. ▪ Blast site shall be wetted before and after blasting operations are completed. ▪ Only optimum quantity of permissible explosives shall be used so that the vibrations do not damage the structures/houses if the quarrying operations are close to human habitation. ▪ Blasting shall be conducted only during favourable weather conditions and only during the day time and permissible hours. ▪ While carrying out blasting operations near habitations, wide publicity will be given in the local area through announcement and other available media so that local people become aware of the blasting activities being undertaken in the area and take appropriate precautions. ▪ The vibrations should be monitored periodically in consultation with the local Mining authorities. ▪ Use of explosives is specialist work. Planning for a round of shots is necessary to ensure that the face is properly surveyed, holes correctly drilled, direction logged, the weight of explosive suitable for good fragmentation and the continuity of the initiator are but a few of the steps necessary to ensure its safe use. ▪ Proper and safe storage of explosives in approved and Licensed Magazine. ▪ Proper security system to prevent theft/ pilferage, unauthorized entry into Magazine area and checking authorized persons to prevent carrying of match box, lights, mobile phones, cigarette or Bidi etc. will be put in place. ▪ Explosives shall be conveyed in special containers. ▪ Explosives and detonators shall not be carried in the same container. ▪ The holes which have been charged with explosives will not be left unattended till blasting is completed.
Health Hazards	<p>Health hazards should be interpreted as being harmful dust and noise which is emitted during surface mining operations. All suitable steps and precautions will be undertaken to ensure minimum health hazard. Provision of use of Personal Protective Equipment (PPE) will be kept. The PPE shall be of good make and quality, wherever possible ISI certified, suitable for the hazard e.g. a dust respirator fitted with the correct filter to capture the particulate hazardous dust and maintained to recommended standards. As personal protective equipment only affords limited protection it will only be used as a last resort and as an interim arrangement until other steps are taken to reduce the risk of personal injury to an acceptable level</p>
Accident Prevention	<ul style="list-style-type: none"> ▪ Mine road shall be made smooth regularly with a road roller. ▪ Mine road will be made sufficiently wide to keep two-way traffic.

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	<p>Regular water sprinkling will be done on mine road and haul road to avoid suspension of dust.</p> <ul style="list-style-type: none"> ▪ All transportation within the mine lease area should be carried out directly under the supervision and control of management. ▪ The vehicles will be maintained in good working condition and checked thoroughly at least once a month by the competent person authorized for the purpose by the management. ▪ Navigation signs will be provided at each and every turning point up to the main road (wherever required). ▪ To avoid danger while reversing the vehicles especially at working place/loading points, stopper should be posted to properly guide reversing/spotting operating.
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Organizational Structure of Environment Management Cell:



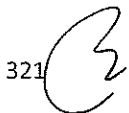




EMP Cell structure

The EMP Cell is committed to ensuring environmental sustainability and compliance with regulatory requirements for the Stone Mining Project. With a clear structure, roles, and responsibilities, the EMP Cell is equipped to manage environmental impacts and promote sustainable practices.

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District Survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard



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- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- i. If any tree felling than necessary permission shall be taken from the competent authority.
- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.
- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.
- l. Personal protective equipments such as clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Sonda Stone Deposit of M/s Shiv Enterprises Stone Works (Partner : Shri Rajendra Kumar), Village : Sonda, Thana : Mandro, Distt. : Sahibganj, Jharkhand (2.832 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I along with following specific conditions :

- I. In compliance of Office Memorandum no. IA-J-11013/20/2025-IA-P, dated 25.11.2025 of MoEF&CC, Govt. of India, the PAs will mandatorily obtain the Environmental Safeguard to be implemented from Jharkhand State Pollution Control Board within 30 days of issuance of EC or 31.01.2026 which ever is earlier.
- II. The mine will come in operation only after obtaining permission from DGMS for controlled and delayed blasting.
- III. That the Deputy Commissioner, Sahibganj will ensure compliance of the order passed by Hon'ble NGT in OA No. 23/2017/EZ, O.A. no. 776/2018 and O.A. no. 373/2019 in the matter of Syed Arshad Nasar Vs Union of India with Ramchandra Chaurasia Vs State of Jharkhand with Pradeep Kumar Singh Vs State of Jharkhand before grant of mining lease.
- IV. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "Ek Ped Ma Ke Naam" and the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.

- V. The Deputy Commissioner through District Mining Officer will ensure that the mines owner of the respective leases to complete the plantation and maintenance in a time bound manner.
- VI. Suitable plant species of not less than 2 M height to be planted equal to twice the area of saplings proposed in Safety zone. This is to be planted in land available near mines and outside safety zone. This will be in addition to plantation in safety zone. Newly planted saplings to be maintained for minimum 3 years with Geo-Tagged photographs.
- VII. Dedicated water tanker to be provided for mine. The tanker to be used for spraying water on haul road and for irrigating newly planted saplings only. Sprinkling to be done such that the haul road is kept moistened all the time with Geo-Tagged photographs.
- VIII. Pre employment Occupational health check up for employees to be done and thereafter at annual interval for PLFT, Audiometry and other required tests .Summary findings of same to submitted along with 6 monthly compliance.
- IX. Ensure use of Quality PPEs equivalent not less than 3M make. Records of same to be maintained and submitted with 6 monthly compliance report with Geo-Tagged photographs.
- X. Keep vulnerable areas unmanned. Ensure rotation of duties. Records to be maintained and submitted with 6 monthly compliance report.
- XI. Failing of any of terms & conditions mentioned in EC can lead to revocation / cancellation of EC.

12. Banjhi Stone Deposit of Shri Ashok Prasad, Village : Banjhi, Anchal : Taljhari, Distt. : Sahibganj, Jharkhand (2.428 Ha).

(Proposal no.: SIA/JH/MIN/ 564491 /2026)

Name of the consultant : P & M Solution, Noida, U.P.

This is a new project which has been taken for appraisal on 18.01.2026.

Project Sector: 1(a) Mining of Minerals, Category: B2.

Application for Environmental Clearance (EC).

EC Application for: Proposed Capacity – 82236 cum/annum or 222037 TPA

Project and Location Details:

Sl	Parameter	Details	
1	Project Name	: Banjhi Stone Deposit	
2	Lessee	: Shri Ashok Prasad, S/O- Late Viswanath Prasad	
3	Lessee Address	: Village- Manika, P.O.+ District: Latehar, State: Jharkhand.	
4	Lease Area	: 2.428 Ha.	6.00 Acre
5	Type of Land	: Non-Forest Raiyati Land	
6	Project Cost	: Capital: Rs 90,13,400.00	
7	EMP Budget	: Capital: Rs 5,43,900.00	Recurring: Rs. 6,24,890.00 per year
8	New or Expansion	: New	
9	Mineable Reserves	: 2110723 Tonnes	781750 Cum
10	Mine Life	: 10.0 years	
11	Man power	: 23	
12	Water Requirement	: 14.10 KLD	
13	Water Source	: By authorised hired water tankers	
14	DG Set / power	: 50 KVA	
15	Crusher	: No crusher	
16	Nearest Water Body	: Ganga river (3.08 km)	
17	Nearest Habitation	: Nearest Habitation 750 meter towards SSW direction	
18	Nearest Rail Station	: Maharajpur railway station which are about 2.44 Km	
19	Nearest Air Port	: Deoghar Airport (134.7 Km)	
20	Nearest Forest	: Divisional Forest Officer, Ranchi certified that the distance of reserved / protected forest is more than 258 meters from proposed project site.	
21	Road & Highways	: NH-33 is about 2.07Km from the project site.	
22	Approach Road	: approx, 500 meter	

CO-ORDINATES

Pillar No.	Degree, Minute, Second	
	Latitude	Longitude
1	25° 11' 28.678" N	87° 43' 36.434" E
2	25° 11' 29.008" N	87° 43' 36.643" E
3	25° 11' 28.854" N	87° 43' 37.585" E
4	25° 11' 30.122" N	87° 43' 38.682" E
5	25° 11' 31.261" N	87° 43' 38.399" E
6	25° 11' 31.664" N	87° 43' 38.973" E
7	25° 11' 28.400" N	87° 43' 45.201" E

8	25° 11' 25.032" N	87° 43' 43.794" E
9	25° 11' 26.839" N	87° 43' 40.147" E

LAND DETAILS

Khata no.	Plot no.
14	95 (P)

STATUTORY CLEARANCES

1	LOI / Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Officer, Sahibganj vide letter no. 2034/M, dated 11.12.2025.
2	CO	:	The CO, Taljhari vide letter no. 200, dated 11.03.2025 has mentioned the plot no. of the project is not recorded as "Jungle-Jhari" in R.S. Khatiyani & Register II.
3	DMO Cluster	:	DMO, Sahibganj vide memo no. 2037/M, dated 11.12.2025 certified that no other mining lease area exists within 500 meters radius from proposed project site.
4	DFO Wild Life	:	DFO –cum-Incharge Wildlife Sanctuary, Udhwa (Sahibganj) vide letter no. 1462, dated 22.05.2025 certified that the proposed project site is outside Eco Sensitive Zone of Udhwa Bird Sanctuary.
5	DFO Territorial	:	Divisional Forest Officer, Sahibganj Forest Division vide letter no. 1461, dated 22.05.2025 certified that the distance of forest land is more than 250 meters from proposed project site.
6	DSR	:	The DMO, Sahibganj has certified vide memo no. 2036/M, dated 11.12.2025 that this project is mentioned in approved DSR of Sahibganj District as a potential area (Page no. 192).
7	Gram Sabha	:	Gram Sabha conducted on 15.02.2025.
8	Grid certificate	:	DMO, Sahibganj vide memo no. 1516/M, dated 20.08.2025 certified that said project falls under grid no. 17 and production is within the over all permissible production limit. The DMO also stated that this certificate is issued in the light of order passed by Hon'ble NGT on 22.12.2021 in OA No. 23/2017/EZ, O.A. no. 776/2018 and O.A. no. 373/2019. It also states this certificate is issued in compliance of report of Expert Committee.
9	Mine Plan Approval	:	Approved by DMO, Sahibganj vide Letter No. 2068/M, dated 18.12.2025.

10	Qualified Person	:	Shri Vidya Bhushan Mishra was present in the meeting and affirmed that the mine plan has been prepared by him.
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Working Details

1	Mining Method	:	Opencast semi- mechanized Method
2	Quarry Area ,	:	1.920 Ha
3	Waste Generation	:	64849 cum
4	Stripping Ratio	:	1:0.01
5	Working Days	:	300
6	Benches: size & No	:	6m to 6m
7	Elevation of Mine	:	274 m AMSL to 224 m AMSL
8	Ground Level Elevation	:	224 m AMSL
9	Ultimate Working Depth	:	188 m AMSL
10	Water Table	:	147-150 m AMSL
11	Topography of Mine	:	Area represents Undulating small hillock.
12	Explosive Requirement	:	26 kg/day
13	Diesel/Fuel requirement	:	126 litre/day

Production Details

Year	Production of stone in cum	Production of stone in Tonnes	Overburden in cum	Intercalated waste in cum	Total Waste in cum
1 st	75616	204164	25326	3980	29306
2 nd	76253	205882	9782	4013	13795
3 rd	77780	210007	8844	4094	12938
4 th	80072	216194	268	4214	4482
5 th	82236	222037	0	4328	4328
Total	391957	1058283	44220	20629	64849

Land Use

Category	Present Land Use(in Ha)	At the End of Scheme Period (in Ha.)	At the End of mine (in Ha.)
Excavation	0.0	1.349	1.920 (0.260 ha area shall be backfilled, 0.942 ha area shall be converted into water reservoir and 0.718 ha left as dead benches).
Waste Dump	0.0	0.351	Nil (comes under quarry)

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Road	0.0	0.004	Nil (comes under quarry)
Infrastructure	0.0	0.0	Nil
Safety zone (Green belt)	0.0	0.508 (Plantation)	0.508 (Plantation)
Total	0.0	2.212	2.428
Unused Area	2.428	0.216	0.00
Total Lease area	2.428		

Green Belt Development

	Area / Length	Number of Trees	Remarks	Timeline	Species
Area in Safety Zone (Ha.)	0.508	813	1600 Tree per Hectare	1st Year	Arjun, Jackfruits, Jamun, Babul, Gulmohar, Neem, Pipal, Mango etc.
Length of Approach Road Area (m.)	500	1000	2m X 2 m spacing in two rows both side		
Dead Bench (Ha.)	0.718	1149	1600 Tree per Hectare	At the end of life of mine	
Backfilled (Ha.)	0.260	416			
Total		3378			

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Note- 3378 tree proposed to be planted out of which 10% plantation will be carried out i.e. (338 trees) as per MoEF & CC, Govt. of India Scheme "Ek Ped Ma Ke Naam"..

BUDGETARY PROVISION (IN LAKHS)

PROJECT COST

Particulars	Capital	Recurring
Land	6,000,000.00	600,000.00
Infrastructure	15,00,000.00	1,50,000.00

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Mining Equipment			0.00	46,00,000.00
<i>Equipment</i>	<i>Quantity</i>	<i>Rent per year</i>		
Dumper	2	400000		
Compressor	1	1000000		
Water Sprinkler	1	600000		
Rock Breaker	3	600000		
Excavator	2	800000		
Loader	4	1200000		
Water Facility for Domestic Purpose "0.23" KLD (Annual Water Demand "69"KL @4L per Tanker, total number of tanker required ("18") and per tanker cost @Rs. 500)			0.00	9,000.00
Statutory Clearances			5,00,000.00	0.00
Mine Closure Cost for fencing around mine			1,50,000.00	0.00
Mine Closure Cost for Plantation of "1565" number of trees @Rs. 300 per tree for plant & @Rs. 50 per tree for maintenance			4,69,500.00	46,950.00
Environment Management Plan (EMP) Cost			5,43,900.00	6,24,890.00
Total			90,13,400.00	60,30,840.00

ENVIRONMENT MANAGEMENT PLAN (EMP)

Particulars	Capital	Recurring
1813 Tree Plantation @Rs.300 per Tree for planting & @Rs.50 per tree for maintenance	5,43,900.00	54,390.00
Water Tanker @Rs. 500 per Tanker for Dust Suppression (3.0 KLD) & Horticulture (10.87 KLD) 3.0 + 10.87 = 13.87 KLD 13.87 KLD X 300 Days = 4,161KLD 4,161KLD / 4 KLD = 1041 Tankers	0	5,20,500.00
Environment Monitoring & Compliance	0	50,000.00
Total	5,43,900.00	6,24,890.00

Environment Monitoring Plan

Monitoring Parameters and Frequency of Monitoring

S. no	Monitoring Parameters	No. of Locations	Frequency of Monitoring
1	Ambient Air: Ambient Air Quality at appropriate location for PM10, PM2.5, SO2, NOx in the vicinity of the mine area. In the surrounding area covering project site only.	3 Stations	Six Monthly

2	Water: Surface water sample in the vicinity of the Project area.	2 Surface water 2 Ground water	Six Monthly
3	Noise: Day & Night level Noise Monitoring.	4 stations	Six Monthly
4	Soil: Soil Monitoring, Qualitative and quantitative testing/analysis to check the soil fertility, porosity, texture, water holding capacity, etc.	2 stations	Six Monthly

Environment Management Practices to be followed:

Aspect	Mitigation Measures / Control Measures
Solid Waste Management	In this applied lease area, the stone deposit is covered with 2m layer of gritty intermixed soil which considered as over burden. The recovery of stone is about 95%, thus intercalated waste of only 5% shall be generate from this mine. It has been calculated that total 64849 cum in-situ waste shall be generated during this plan period, out of which 35667 cum (Insitu) shall be utilized for approach & haul road maintenance. The rest waste material 29182 cum insitu 36477.73 cum loose & 31006.07 cum compact waste shall be used for temporary dumped in the south eastern part of the applied lease area and it will cover 0.351ha area. While excavation of insitu waste, its volume shall be increase, as it becomes loose (insitu cum X 1.25), during the dumping/backfilling these loose materials shall be compacted with the use of dozer and volume will be decreased up to 85% of loose waste. Garland drain shall be provided along the OB dump. This drain would collect surface run off from dump body. Water collected in this drain would be stored in a sedimentation tank, the treated water shall be released for natural runoff.
Air Quality Management	<ul style="list-style-type: none"> • Wet drilling and use of sharp drill bits to minimize dust generation. • Controlled blasting using optimum explosive charge during favorable weather conditions. • Regular maintenance of diesel equipment and vehicles to reduce emissions. • Water sprinkling on haul roads, loading/unloading points, and working areas. • All transport vehicles will have valid PUC certificates. • Greenbelt and roadside plantation to act as dust and noise barriers.
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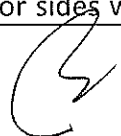
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Noise Quality Management	<ul style="list-style-type: none"> • Mining activities will be restricted to daytime and carried out with controlled blasting techniques. • Acoustic enclosures and mufflers will be provided for drilling and DG set operations. • Regular maintenance of mining machinery to minimize vibration and noise. • Greenbelt development around the lease boundary to attenuate noise propagation. • Use of delayed blasting technique to minimize the adverse impact of vibration.
Soil Quality Management	<ul style="list-style-type: none"> • Topsoil will be carefully removed and stored separately for future use in plantation and reclamation. • Garland drains and retaining walls will prevent soil erosion and siltation. • Spillage of oil or fuel will be avoided; impervious flooring and oil traps provided near storage areas • Post-mining, the area will be rehabilitated using stored topsoil and native vegetation
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Risk & Hazard	<p>Activities which are likely to create risk are: Temporary Storage of Explosives, Charging of Explosives, Blasting, Drilling, Bench Formation, Loading / Unloading, Transportation</p> <p>Proposed Preventive measures:</p> <ul style="list-style-type: none"> ▪ Overall slope angles of benches will be maintained at 45°. ▪ Unmanageable heights are not created. ▪ Loose sides are properly dressed. ▪ No loose stone or debris will be permitted to remain on the top of the bench or side of any excavation (Regulation 106(4) of MMR 1961). ▪ No undercutting of any face or sides will be permitted so as to cause



	<p>any overhanging (Regulation 106(5) of MMR 1961)</p> <ul style="list-style-type: none"> ▪ It will be ensured that the drilling equipment is suitable for the job. ▪ The person in charge of the drilling machine is competent to carry out the drilling operation; part of the training includes instructions to always face towards the open edge of the bench so that any inadvertent backward step is away from the edge. ▪ Provision of portable rail fencing between the drilling operations and the edge of the bench ▪ Provision to attach a safety line to the drilling rig and provide a harness for the driller to wear. ▪ Restricted access to the area to all persons except those necessary for the drilling operation. ▪ Wet drilling will be carried out by constantly injecting a jet of water at the drill bit inside the hole, which prevents dust generation. ▪ In case due to any reason, wet drilling is not possible (due to non-availability of water), exhaust/ vacuum system will be provided which removes the dust from the drill hole continuously and discharges the same in a dust collector specially provided for the purpose. ▪ Drilling machine shall be fitted with dust suppression, collection and disposal arrangement.
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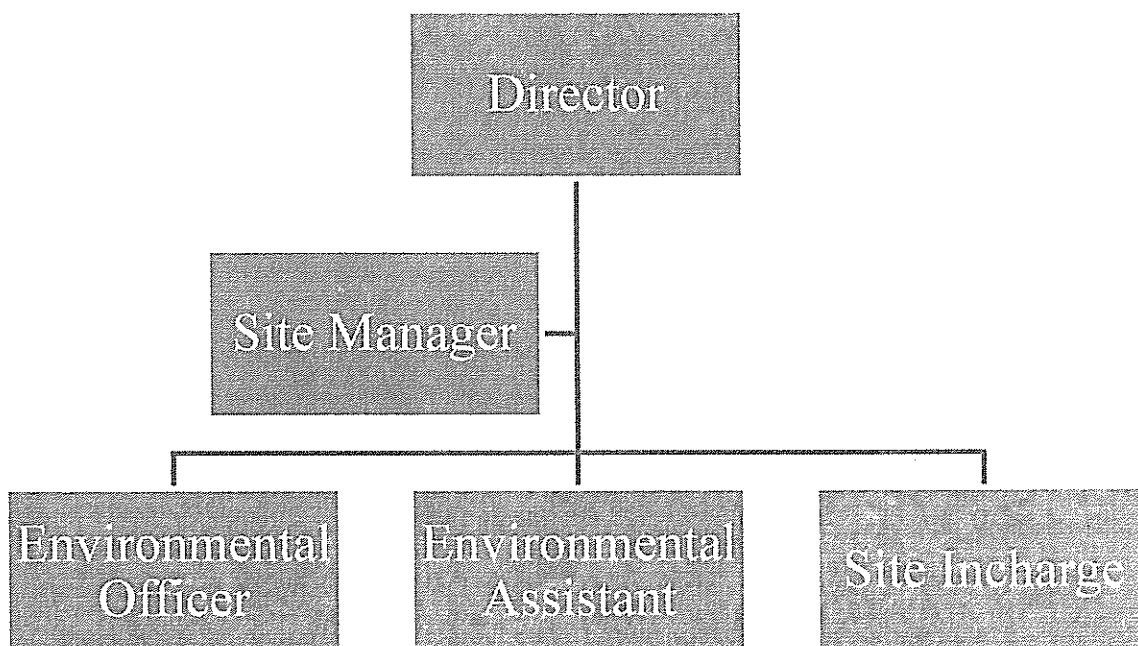
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Health Hazards	<p>Health hazards should be interpreted as being harmful dust and noise which is emitted during surface mining operations. All suitable steps and precautions will be undertaken to ensure minimum health hazard. Provision of use of Personal Protective Equipment (PPE) will be kept. The PPE shall be of good make and quality, wherever possible ISI certified, suitable for the hazard e.g. a dust respirator fitted with the correct filter to capture the particulate hazardous dust and maintained to recommended standards. As personal protective equipment only affords limited protection it will only be used as a last resort and as an interim arrangement until other steps are taken to reduce the risk of personal injury to an acceptable level</p>
Accident Prevention	<ul style="list-style-type: none"> ▪ Mine road shall be made smooth regularly with a road roller. ▪ Mine road will be made sufficiently wide to keep two-way traffic. Regular water sprinkling will be done on mine road and haul road to avoid suspension of dust. ▪ All transportation within the mine lease area should be carried out directly under the supervision and control of management. ▪ The vehicles will be maintained in good working condition and checked thoroughly at least once a month by the competent person authorized for the purpose by the management. ▪ Navigation signs will be provided at each and every turning point up to the main road (wherever required). ▪ To avoid danger while reversing the vehicles especially at working place/loading points, stopper should be posted to properly guide reversing/spotting operating.

Organizational Structure of Environment Management Cell:



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EMP Cell structure

The EMP Cell is committed to ensuring environmental sustainability and compliance with regulatory requirements for the Stone Mining Project. With a clear structure, roles, and responsibilities, the EMP Cell is equipped to manage environmental impacts and promote sustainable practices.

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District Survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
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Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Banjhi Stone Deposit of Shri Ashok Prasad, Village : Banjhi, Anchal : Taljhari, Distt. : Sahibganj, Jharkhand (2.428 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I along with following specific conditions :

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- I. In compliance of Office Memorandum no. IA-J-11013/20/2025-IA-P, dated 25.11.2025 of MoEF&CC, Govt. of India, the PAs will mandatorily obtain the Environmental Safeguard to be implemented from Jharkhand State Pollution Control Board within 30 days of issuance of EC or 31.01.2026 which ever is earlier.
- II. That the Deputy Commissioner, Sahibganj will ensure compliance of the order passed by Hon'ble NGT in OA No. 23/2017/EZ, O.A. no. 776/2018 and O.A. no. 373/2019 in the matter of Syed Arshad Nasar Vs Union of India with Ramchandra Chaurasia Vs State of Jharkhand with Pradeep Kumar Singh Vs State of Jharkhand before grant of mining lease.
- III. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "Ek Ped Ma Ke Naam" and the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.
- IV. The Deputy Commissioner through District Mining Officer will ensure that the mines owner of the respective leases to complete the plantation and maintenance in a time bound manner.
- V. Suitable plant species of not less than 2 M height to be planted equal to twice the area of saplings proposed in Safety zone. This is to be planted in land available near mines and outside safety zone. This will be in addition to plantation in safety zone. Newly planted saplings to be maintained for minimum 3 years with Geo-Tagged photographs.
- VI. Dedicated water tanker to be provided for mine. The tanker to be used for spraying water on haul road and for irrigating newly planted saplings only. Sprinkling to be done such that the haul road is kept moistened all the time with Geo-Tagged photographs.
- VII. Pre employment Occupational health check up for employees to be done and thereafter at annual interval for PLFT, Audiometry and other required tests .Summary findings of same to submitted along with 6 monthly compliance.
- VIII. Ensure use of Quality PPEs equivalent not less than 3M make. Records of same to be maintained and submitted with 6 monthly compliance report with Geo-Tagged photographs.
- IX. Keep vulnerable areas unmanned. Ensure rotation of duties. Records to be maintained and submitted with 6 monthly compliance report.
- X. Failing of any of terms & conditions mentioned in EC can lead to revocation / cancellation of EC.



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13. Stone Mine of M/s Gitanjali Mining Private Limited (Director : Shri Sanjay Yadav), Village : Dehad, Anchal : Borio, Distt. : Sahibganj, Jharkhand (2.95 Ha).

(Proposal no.: SIA/JH/MIN/ 561461 /2025)

Name of the consultant : P & M Solution, Noida, U.P.

This is a new project which has been taken for appraisal on 18.01.2026.

Project Sector: 1(a) Mining of Minerals, Category: B2.

Application for Environmental Clearance (EC).

EC Application for: Proposed Capacity – 121666.66 cum/annum or 328500.00 TPA

Project and Location Details:

Sl	Parameter	Details	
1	Project Name	: Stone Mine of Gitanjali Mining Private Limited	
2	Lessee	: Gitanjali Mining Private Limited Director: Sri Sanjay Yadav, S/o Bhola Yadav	
3	Lessee Address	: Gitanjali Mining Private Limited Director: Sri Sanjay Yadav, S/o Bhola Yadav At : Mahadevganj, PO- Ganga Prasad, PS. & District – Sahibganj, State – Jharkhand	
4	Lease Area	: 2.95 Ha.	7.30 Acre
5	Type of Land	: Non-Forest Raiyati Land	
6	Project Cost	: Capital: Rs 99,90,000.00	
7	EMP Budget	: Capital: Rs 5,10,000.00	Recurring: Rs. 6,45,000.00 per year
8	New or Expansion	: New	
9	Mineable Reserves	: 3483141.75 Tonnes	1290052.5 Cum
10	Mine Life	: 10.60 years	
11	Man power	: 30	
12	Water Requirement	: 13.20 KLD	
13	Water Source	: By authorised hired water tankers	
14	DG Set / power	: 50 KVA	
15	Crusher	: No crusher	
16	Nearest Water Body	: Chatro Nadi, (3.80 km)	
17	Nearest Habitation	: Nearest Habitation 760 meter towards NE direction	
18	Nearest Rail Station	: Tinpahar Junction which are about 8.70 Km	
19	Nearest Air Port	: Deoghar Airport (114.21km)	
20	Nearest Forest	: Divisional Forest Officer, Sahibganj certified that the distance of reserved / protected forest is more than 271 meters from	

		proposed project site.
21	Road & Highways	: NH-18 is about 5.87 Km from the project site.
22	Approach Road	: approx, 450 meter

CO-ORDINATES

Coordinate of Pillars		
Pillar	Latitude	Longitude
P1	24°59'57.77" N	87°39'19.80" E
P2	24°59'54.82" N	87°39'26.65" E
P3	24°59'53.38" N	87°39'26.16" E
P4	24°59'50.80" N	87°39'22.30" E
P5	24°59'53.24" N	87°39'16.43" E

LAND DETAILS

Khata no.	Plot no.
03	01 (P)

STATUTORY CLEARANCES

1	LOI / Lease docs	: The Letter of Intent (LoI) has been issued by District Mining Officer, Sahibganj vide letter no. 1974/M, dated 03.12.2025.
2	CO	: The CO, Borio, Sahibganj vide memo no. 693, dated 16.07.2025 has mentioned the plot no. of the project is not recorded as "Jungle- Jhari" in R.S. Khatiyani & Register II.
3	DMO Cluster	: DMO, Sahibganj vide memo no. 1982/M, dated 04.12.2025 certified that no other mining lease area exists within 500 meters radius from proposed project site.
4	DFO Wild Life	: DFO –cum-Incharge Wildlife Sanctuary, Udhwa (Sahibganj) vide letter no. 2321, dated 12.08.2025 certified that the proposed project site is outside Eco Sensitive Zone of Udhwa Bird Sanctuary.
5	DFO Territorial	: Divisional Forest Officer, Sahibganj Forest Division vide letter no. 2320, dated 12.08.2025 certified that the distance of forest land is more than 250 meters from proposed project site.
6	DSR	: The DMO, Sahibganj has certified vide memo no. 1981/M, dated 04.12.2025 that this project is mentioned in approved DSR of Sahibganj District as a potential area (Page no. 197).

7	Gram Sabha	:	Gram Sabha conducted on 23.12.2024 and 11.07.2025 respectively.
8	Grid certificate	:	DMO, Sahibganj vide memo no. 1594/M, dated 30.08.2025 certified that said project falls under grid no. 75 and Hon'ble NGT does not decided the production capacity of that Grid. The DMO also stated that this certificate is issued in the light of order passed by Hon'ble NGT on 22.12.2021 in OA No. 23/2017/EZ, O.A. no. 776/2018 and O.A. no. 373/2019. It also states this certificate is issued in compliance of report of Expert Committee.
9	Mine Plan Approval	:	Approved by DMO, Sahibganj vide Letter No. 2014/M, dated 09.12.2025.
10	Qualified Person	:	Dr. Amarjeet Kumar Singh was present in the meeting and affirmed that the mine plan has been prepared by him.

Working Details

1	Mining Method	:	Opencast Fully Mechanized Method
2	Quarry Area	:	2.45 Ha
3	Waste Generation	:	31951.81cum
4	Stripping Ratio	:	1:0.01
5	Working Days	:	300
6	Benches: size & No	:	6m to 6m
7	Elevation of Mine	:	208 m AMSL to 250 m AMSL
8	Ground Level Elevation	:	208 m AMSL
9	Ultimate Working Depth	:	166 m AMSL
10	Water Table	:	25-27 m AMSL, As per topography survey
11	Topography of Mine	:	Area represents Undulating small hillock.
12	Explosive Requirement	:	40 kg/day
13	Diesel/Fuel requirement	:	150 litre/day

Production Details

Year	Production of Stone in Cum	Production of Stone in Tonnes	intercalated waste in cum
1 st Year	121182	327191.40	6378.00
2 nd Year	121666.66	328500.00	6403.51
3 rd Year	121603.8	328330.26	6400.20

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4 th Year	121233.3	327329.91	6380.70
5 th Year	121398.6	327776.22	6389.40
Total	607084.36	1639127.79	31951.81

Land Use

Category	Existing Land Use (in Ha)	During Scheme period (in Ha)	During Conceptual Period (in Ha)
Quarry	-	2.37	2.45 (entire area shall be left as water reservoir)
Infrastructure	-	0.01	-
Mine Road	-	Under quarry	-
Garland drain	-	0.06	Under Quarry
Green Belt	-	0.50 (Plantation)	0.50 (Plantation)
Settling Tank	-	0.01	-
Total area in use	-	2.95	2.95
Balanced Area	2.95	-	-
Total Lease area	2.95	2.95	2.95

Green Belt Development

	Area / Length	Number of Trees	Remarks	Timeline	Species
Area in Safety Zone (Ha.)	0.50	800	1600 Tree per Hectare	1st Year	Arjun, Jackfruits, Jamun, Babul, Gulmohar, Neem, Pipal, Mango etc.
Length of Approach Road Area (m.)	450	900	2m X 2 m spacing in two rows both side		
Total		1700			

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Note- 1700 tree proposed to be planted out of which 10% plantation will be carried out i.e. (170 trees) as per MoEF & CC, Govt. of India Scheme "Ek Ped Ma Ke Naam".

BUDGETARY PROVISION (IN LAKHS)

PROJECT COST

Particulars			Capital	Recurring
Land			73,00,000.00	7,30,000 .00
Infrastructure			15,00,000.00	1,50,000.00
Mining Equipment			0.00	56,00,000.00
<i>Equipment</i>	<i>Quantity</i>	<i>Rent per year</i>		
Dumper	2	400000		
Compressor	2	2000000		
Water Sprinkler	1	600000		
Rock Breaker	3	600000		
Excavator	2	800000		
Loader	4	1200000		
Water Facility for Domestic Purpose "0.30" KLD (Annual Water Demand "90"KL @4L per Tanker, total number of tanker required ("23") and per tanker cost @Rs. 500)			0.00	11,500.00
Statutory Clearances			5,00,000.00	0.00
Mine Closure Cost for fencing around mine			1,80,000.00	0.00
Environment Management Plan (EMP) Cost			5,10,000.00	6,45,000.00
Total			99,90,000.00	71,36,500.00

ENVIRONMENT MANAGEMENT PLAN (EMP)

<u>Particulars</u>	<u>Capital</u>	<u>Recurring</u>
1700 Tree Plantation @Rs.300 per Tree for planting & @Rs.50 per tree for maintenance	5,10,000.00	85,000.00
Water Tanker @Rs. 500 per Tanker for Dust Suppression (2.7 KLD) & Horticulture (10.20KLD) 2.70+ 10.20 = 12.90 KLD 12.90 KLD X 300 Days = 3870KLD 3870 KLD / 4 KLD = 968Tankers	0	4,84,000.00
Environment Monitoring & Compliance	0	50,000.00
Total	5,10,000.00	6,45,000.00

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Environment Monitoring Plan

Monitoring Parameters and Frequency of Monitoring

S. no	Monitoring Parameters	No. of Locations	Frequency of Monitoring
1	Ambient Air: Ambient Air Quality at appropriate location for PM10, PM2.5, SO2, NOx in the vicinity of the mine area. In the surrounding area covering project site only.	3 Stations	Six Monthly
2	Water: Surface water sample in the vicinity of the Project area.	2 Surface water 2 Ground water	Six Monthly
3	Noise: Day & Night level Noise Monitoring.	4 stations	Six Monthly
4	Soil: Soil Monitoring, Qualitative and quantitative testing/analysis to check the soil fertility, porosity, texture, water holding capacity, etc.	2 stations	Six Monthly

Environment Management Practices to be followed:

Aspect	Mitigation Measures / Control Measures
Solid Waste Management	Total 31951.81 cum intercalated waste generated during this Mining Plan period which is used for village & haul road maintenance.
Air Quality Management	<ul style="list-style-type: none"> • Wet drilling and use of sharp drill bits to minimize dust generation. • Controlled blasting using optimum explosive charge during favorable weather conditions. • Regular maintenance of diesel equipment and vehicles to reduce emissions. • Water sprinkling on haul roads, loading/unloading points, and working areas. • All transport vehicles will have valid PUC certificates. • Greenbelt and roadside plantation to act as dust and noise barriers.
Water Quality Management	<ul style="list-style-type: none"> • Mining will be confined only above the Ground Water Table (GWT). • Rainwater accumulated in the pit will be collected and pumped out regularly during monsoon. • Settling sump will be provided to desilt pumped out of mine-pit and collected through garland drain before discharge into natural drainage. • Garland and foot drains will be constructed around the quarry to control surface runoff. • Sewage from rest shelters will be treated through septic tank-soak pit systems. • Foot drain would be provided around the external dump, if any.
Noise Quality Management	<ul style="list-style-type: none"> • Mining activities will be restricted to daytime and carried out with controlled blasting techniques.

	<ul style="list-style-type: none"> • Acoustic enclosures and mufflers will be provided for drilling and DG set operations. • Regular maintenance of mining machinery to minimize vibration and noise. • Greenbelt development around the lease boundary to attenuate noise propagation. • Use of delayed blasting technique to minimize the adverse impact of vibration.
Soil Quality Management	<ul style="list-style-type: none"> • Topsoil will be carefully removed and stored separately for future use in plantation and reclamation. • Garland drains and retaining walls will prevent soil erosion and siltation. • Spillage of oil or fuel will be avoided; impervious flooring and oil traps provided near storage areas • Post-mining, the area will be rehabilitated using stored topsoil and native vegetation
Flora & Fauna management	<ul style="list-style-type: none"> • No tree felling will be undertaken without obtaining permission from the competent authority. • Greenbelt and plantation will be developed using native species along approach roads and lease periphery (7.5m Safety Zone). • Dust suppression measures will minimize impact on surrounding vegetation
Socio Economy:	<ul style="list-style-type: none"> • Priority employment to local people in mining and ancillary activities. • Community development initiatives such as tree plantation drives, road maintenance, and local infrastructure support. • Awareness programs on safety, hygiene, and environmental protection
Monitoring & Reporting:	<ul style="list-style-type: none"> • Periodic monitoring of air, water (ground & surface), noise, and soil quality as per CPCB and SPCB guidelines. • All monitoring reports will be submitted to statutory authorities as per the compliance schedule. • Corrective measures will be taken immediately if any deviation from standards is observed.
Risk & Hazard	<p>Activities which are likely to create risk are: Temporary Storage of Explosives, Charging of Explosives, Blasting, Drilling, Bench Formation, Loading / Unloading, Transportation</p> <p>Proposed Preventive measures:</p> <ul style="list-style-type: none"> ▪ Overall slope angles of benches will be maintained at 45°. ▪ Unmanageable heights are not created. ▪ Loose sides are properly dressed. ▪ No loose stone or debris will be permitted to remain on the top of the bench or side of any excavation (Regulation 106(4) of MMR 1961). ▪ No undercutting of any face or sides will be permitted so as to cause any overhanging (Regulation 106(5) of MMR 1961) ▪ It will be ensured that the drilling equipment is suitable for the job. ▪ The person in charge of the drilling machine is competent to carry out

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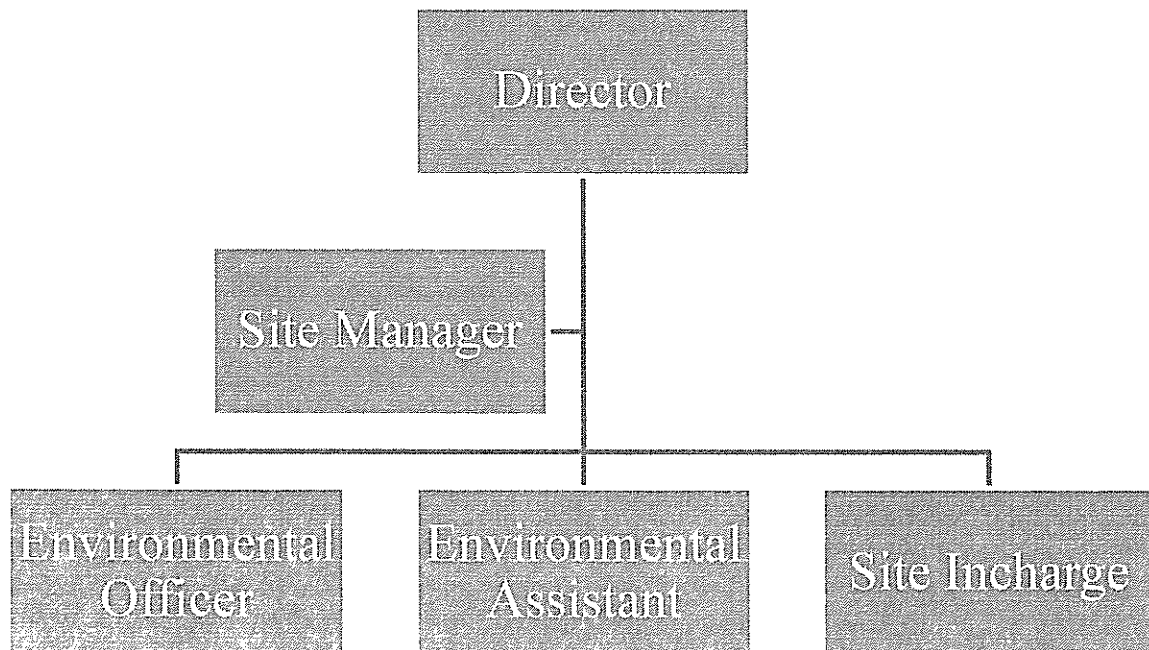
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EMP Cell structure

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Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Stone Mine of M/s Gitanjali Mining Private Limited (Director : Shri Sanjay Yadav), Village : Dehad, Anchal : Borio, Distt. : Sahibganj, Jharkhand (2.95 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I along with following specific conditions :

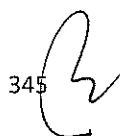
- l. In compliance of Office Memorandum no. IA-J-11013/20/2025-IA-P, dated 25.11.2025 of MoEF&CC, Govt. of India, the PAs will mandatorily obtain the

Environmental Safeguard to be implemented from Jharkhand State Pollution Control Board within 30 days of issuance of EC or 31.01.2026 whichever is earlier.

- II. That the Deputy Commissioner, Sahibganj will ensure compliance of the order passed by Hon'ble NGT in OA No. 23/2017/EZ, O.A. no. 776/2018 and O.A. no. 373/2019 in the matter of Syed Arshad Nasar Vs Union of India with Ramchandra Chaurasia Vs State of Jharkhand with Pradeep Kumar Singh Vs State of Jharkhand before grant of mining lease.
- III. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "Ek Ped Ma Ke Naam" and the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.
- IV. The Deputy Commissioner through District Mining Officer will ensure that the mines owner of the respective leases to complete the plantation and maintenance in a time bound manner.
- V. Suitable plant species of not less than 2 M height to be planted equal to twice the area of saplings proposed in Safety zone. This is to be planted in land available near mines and outside safety zone. This will be in addition to plantation in safety zone. Newly planted saplings to be maintained for minimum 3 years with Geo-Tagged photographs.
- VI. Dedicated water tanker to be provided for mine. The tanker to be used for spraying water on haul road and for irrigating newly planted saplings only. Sprinkling to be done such that the haul road is kept moistened all the time with Geo-Tagged photographs.
- VII. Pre employment Occupational health check up for employees to be done and thereafter at annual interval for PLFT, Audiometry and other required tests .Summary findings of same to submitted along with 6 monthly compliance.
- VIII. Ensure use of Quality PPEs equivalent not less than 3M make. Records of same to be maintained and submitted with 6 monthly compliance report with Geo-Tagged photographs.
- IX. Keep vulnerable areas unmanned. Ensure rotation of duties. Records to be maintained and submitted with 6 monthly compliance report.
- X. Failing of any of terms & conditions mentioned in EC can lead to revocation / cancellation of EC.

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14. Bara Bana Para & Matiyani Stone Mine of M/s Rahul Metals (Prop. : Shri Gopi Sadhwani), Village : Bara Bana Para & Matiyani, Thana : Taljhari, Distt. : Sahibganj, Jharkhand (9.086 Ha).

(Proposal no.: SIA/JH/MIN/ 559051 /2025)

Name of the consultant : P & M Solution, Noida, U.P.

This is an expansion project which has been taken for appraisal on 18.01.2026.

Project Sector: 1(a) Mining of Minerals, Category: B1.

Application for Environmental Clearance (EC) after Terms of Reference (ToR).

The State Expert Appraisal Committee, Jharkhand deliberated the project during its 122nd meeting held on 24.03.2025 - 28.03.2025 and SEIAA, Jharkhand has approved the ToRs in 122nd meeting held on 08th & 09th April, 2025. TOR for the project was issued by SEIAA, Jharkhand vide letter no. EC/SEIAA/2024-25/3650/2024/28, dated 15.04.2025. The final EIA / EMP submitted by PP to SEAC on 13.01.2026.

EC Application for: Proposed Capacity- From 105129 cum/year or 315387 TPA to 305482 cum/year or 916446 TPA

Project and Location Details:

Sl	Parameter	Details
1	Project Name	: Bara Bana Para & Matiyani Stone Mine
2	Lessee:	: M/S Rahul Metals, Prop – Sri Gopi Sadhwani
3	Lease Address	: Village – Bara Bana Para & Matiyani, P.S. - Taljhari, District – Sahibganj, State- Jharkhand
4	Lease Area	: 9.086Ha 22.45Acres
5	Type of Land	: Non- Forest (Raiyati Land)
6	Project Cost	: Rs. 86.59200 Lakhs
7	EMP Budget	: Capital: Rs. 41,52,200/- Recurring: Rs. 24,04,200 / year
8	New or Expansion	: Expansion
9	Mineable Reserves	: cum.:738272 cum Tonnes:2214815tons
10	Mine Life	: Up to the lease period i.e. 15.12.2018 to 23.06.2026.
11	Man power	: 65
12	Water Requirement	: 28.95~30.0 KLD (Drinking: 0.65 KLD, Dust Suppression:3.0KLD, Plantation:25.30KLD)
13	Water Source	: Water will be taken from nearby village
14	DG Set / power	: 50 KVA
15	Crusher	: Yes
16	Nearest Water Body	: Bramhajamalpur Pond, (Approx. 8.50 km)
17	Nearest Habitation	: Approx. 250 meter towards NNW EMP has been submitted
18	Nearest Railway Station	: Bakudi Railway station, approx. 1.50 km towards North East direction.

19	Nearest Air Port	:	Deoghar Airport approx. 120 km towards WSW direction.
20	Nearest Forest	:	Protected Forest , Approx. 0.80 km in ENE direction Protected Forest , Approx. 3.31 km in South direction
21	Road & Highways	:	NH-33, Approx. 2.45 km. in SE direction.
22	Approach Road	:	500m

CO-ORDINATES

1	Latitude	N24°55'02.89308"	N24°55'18.77444"
2	Longitude	E87°45'41.01728"	E87°46'02.5800

LAND DETAILS

Village	Khata No.	Plot No.	Area
Bara Bana Para & Matiyani	55 & 56	Bara Bana Para - 15, 17(P), 18, 19, 24(P), 25(P), 26(P) Matiyani- 15, 16, 17 & 18	9.086 Ha or 22.45 Acres

STATUTORY CLEARANCES

1	LOI / Lease docs	:	Lease deed : 15.12.2018 to 23.06.2026.
2	CO	:	The CO, Taljhari vide letter no. 53/Ra., dated 20.01.2023 has mentioned the plot no. of the project is not recorded as "Jungle-Jhari" in R.S. Khatiyani & Register II. During the appraisal it was seen from the KML that few houses at a distance of 250 meter from mining lease area. For which detailed Environmental Management Plan has been prepared and submitted.
3	DMO Cluster	:	DMO, Sahibganj vide memo no. 626/M, dated 08.04.2025 certified that no other mining lease area exists within 500 meters radius from proposed project site.
4	DFO Wild Life	:	DFO –cum-Incharge Wildlife Sanctuary, Udhwa (Sahibganj) vide letter no. 2863, dated 26.11.2022 certified that the proposed project site is outside Eco Sensitive Zone of Udhwa Bird Sanctuary.
5	DFO Territorial	:	Divisional Forest Officer, Sahibganj Forest Division vide letter no. 1285, dated 24.06.2015 certified that the distance of forest land is more than 250 meters from proposed project site.
6	DSR	:	This project is mentioned in approved DSR of Sahibganj District (Sl. No. 111, Page no. 286).
7	Gram Sabha	:	Gram Sabha conducted on 15.01.2015.

8	Mining Scheme / Mine Plan Approval	:	Approved by District Mining Officer, Sahibganj vide Letter No. 256/M, dated 23.03.2024.
9	Previous Production Report	:	Production report issued by DMO, Sahibganj vide memo no. 245, dated 22.03.2024.
10	Previous Environmental Clearance (EC)	:	Previous EC granted by SEIAA, Jharkhand vide letter no. EC/SEIAA/2015-16/1016/2015/2010, dated 30.11.2015.
11	Transfer of EC	:	Transfer of EC granted by SEIAA vide letter no. 457, dated 24.03.2023.
12	Certified Compliance Report	:	Compliance report of previous EC has been certified by JSPCB, Ranchi vide letter no. 3138, dated 26.11.2025.
13	Consent to Establish (CTE)	:	CTE issued by JSPCB vide Ref. No. : JSPCB/HO/RNC/CTE-706483/2016/242, dated 06.08.2016.
14	Consent to Operate (CTO)	:	CTO issued by JSPCB vide Ref. No. : JSPCB/HO/RNC/CTO-16312683/2023/1115, dated 25.06.2023.
15	Grid certificate	:	DMO, Sahibganj vide memo no. 1319/M, dated 12.07.2025 certified that said project falls under grid no. 98 and production is within the over all permissible production limit. The DMO also stated that this certificate is issued in the light of order passed by Hon'ble NGT on 22.12.2021 in OA No. 23/2017/EZ, O.A. no. 776/2018 and O.A. no. 373/2019. It also states this certificate is issued in compliance of report of Expert Committee.
16	Qualified Person	:	Shri P.K. Sen was present in the meeting and affirmed that the mining scheme has been prepared by him.
17	Baseline monitoring period	:	December, 2024 to February, 2025.
18	Public Hearing	:	Public hearing conducted on 31.10.2025.

Working Details

1	Mining Method	:	Opencast Mechanized Method
2	Quarry Area	:	6.911 Ha
			Life of Mine – Up to the lease period i.e. 15.12.2018 to

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			23.06.2026. The mineable reserve would be 738272 cum. During plan period 1 year 2 months production will be 356392 cum. The balance mineable reserve will be $(738272-356392)= 381880$ cum. Thus the mineable reserve will be worked out in further $(381880/305482=1.3$ year) hence life if mine will be 2 years 5 month (1 year 2 month + next 1 year 3 month)
3	Waste Generation	:	Total 80,354 cum waste will be generated during the plan period
4	Stripping Ratio	:	1: 0.45
5	Working Days	:	300
6	Benches: Size & No	:	6m to 6m
7	Elevation of Mine	:	79 AMSL to 94AMSL
8	Ground Level Elevation	:	79 AMSL
9	Ultimate Working Depth	:	Up to 52AMSL (27mgb)
10	Water Table	:	39-42 AMSL (37-40mgb) as per topography survey
11	Topography of Mine	:	The area represents a hillock with rock Mass of basalt.
12	Explosive Requirement	:	140kg/day
13	Diesel/Fuel requirement	:	150 litre/day

Production Details

Year	Production of stone in Tons		Waste In cum	Bench (AMSL)
	In cum	In tonnes		
1th	50910	152730	22, 996	94-106
2nd	305482	916446	57,358	94-106
Total	356392	1069176	80,354	

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Land Use

Type of Land	Present Land Use (In Ha)	At the End of the Plan Period (In Ha)	At the End of Mine (In Ha.)	Conceptual Period (in Ha.)		
				Public Use	Water Body	Plantation
Quarry	3.156	5.906 (Including backfilling 0.837 Ha)	6.911 (Including backfilling 1.391 Ha)	---	3.025 (0.837 ha area will be backfilled and after backfilling entire area will be converted in to water reservoir)	3.886 (Dead bench plantation)
Green Belt Safety Barrier	2.160 (Plantation)	2.160 (Plantation)	2.160 (Plantation)	---	-	2.160 (Plantation)
Road	0.187	0.005	Nil	--	-	--
Existing Crusher	0.511	0.511	nil	--	-	-
Blocked Area due to Bore well saftey	0.010	0.010	0.010	0.010	-	-
Blocked Area due to Road sefety	0.005	0.005	0.005	0.005	-	-
Total area in Use	3.869	8.592	9.086	0.015	3.025	6.046
Balanced Area unused Area	3.057	0.489	Nil	-	-	-
Total Applied Area	9.086	9.086	9.086	9.086		

ENVIRONMENT MANAGEMENT

Green Belt Development

	Area / Length	Number of Trees	Remarks	Timeline	Species
Area in Safety Zone (Ha.)	2.160	3456	1600 Tree per Hectare	(in previous year of mining 800 tree has been planted rest will be	Pipal, Gulmohar Jackfruits, Mango, Jamun,

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				planted in 1 st year of mining)	Babul, Neem, Arjun, etc.
Length of Approach Road Area (m.)	500	1000	2m X 2 m spacing in two rows both side	1st Year	
Plantation in dead bench (Ha)	3.886	6218	1600 Tree per Hectare	At the end of plan period	
Total		10,674			

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Note-10764 tree proposed to be planted out of which 10% plantation will be carried out i.e. (1076 trees) as per MoEF&CC, Govt. of India Scheme "Ek Ped Ma Ke Naam"..

Summary of Baseline Data:

Monitoring season – December 2024 to February 2025

Parameter	No. of Locations	Environmental Baseline Study
Ambient Air Quality Monitoring	8 locations	PM2.5- 27.09 µg/m ³ to 45.47µg/m ³ PM10- 51.59 µg/m ³ to 90.11 µg/m ³ SO ₂ - 5.76 to 11.24µg/m ³ NO ₂ - 10.01 µg/m ³ to 21.01 µg/m ³
Noise level monitoring	8 locations	During daytime- 49.0 to 57.2 dB (A) During Night time- 40.0 to 43.6 dB (A) Results were found within permissible limits
Water samples	Surface water – 2 locations	Dissolved Oxygen (4.8 to 6.8 mg/l), pH (7.36- 7.49), Chloride (36.0-68.2mg/l) , Total Hardness (150-220 mg/l), Fluoride (0.25 to 0.41 mg/l), BOD (3.8 to 7.8 mg/l), COD (16.0 to 46.0 mg/l) TDS (294 TO 394 mg/l)
	Ground water- 5locations	TDS (498-580mg/l), pH (7.41 to 7.89), Hardness (165-219mg/l), Chloride (75.6 to 86.5 mg/l), Fluoride (0.32 to 0.50 mg/l) , Alkalinity (165.2 to 216.0 mg/l)
Soil Samples	5 locations	pH- 7.42- 7.89 Conductivity- 351 to 518µmhos/cm Sodium- 56.15 to 90.21 mg/kg Potassium- 249.23 TO 283.26 mg/kg

		Water Holding capacity- 28.94 to 35.94 %
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Public hearing has been conducted on 31.10.2025

Public Hearing (Action Plan) –

S. No.	Issue	Reply	Time bound action Plan
1.	Regular water sprinkling should be made available	Regular water sprinkling should be made available for the prevention and control of air/dust pollution due to the mining operations	Total Rs. 2.0 lakh will be spent as recurring cost for Pollution Control & Dust Suppression. Water sprinkling will be done twice a day.
2.	Barbed-wire fencing should be done .	mining area has been fenced with barbed wire and immediate repairs will be carried out wherever damage is required	The cost of barbed wire fencing will be Rs 1.0 lakh as a capital cost 0.50 lakh as a recurring cost which has been included in the EMP budget. This will be done immediately after opening of mine.
3.	Health check-up camps should be organized	Health check-up camps will be organized every month in the village.	A budget of Rs 2.0 lakh will be spent on health check-up camps and medicine distribution as a recurring cost.
4	Regular maintenance of the road should be carried out.	Regular maintenance of the road will be done.	Budget for Construction and maintenance of haul road 2.50 lakh capital cost and 1.50 lakh Recurring Cost. This will be done immediately after opening of mine.
5	Arrangements should be made for ambulance	Ambulance will be made available	Budget for ambulance/ vehicle facilities Rs 2.50 lakh will be spent as recurring cost. Ambulance will be made available immediately after opening of mine.

6	Support to the villagers during all kinds of situations, whether happy or difficult	The problems of the villagers will be resolved	Rs 2.50 lakh will be spent as a recurring cost for the happiness and sorrow of the villagers and for the development work of the village,
7.	Jaggery should be given to all workers	jaggery will be provided to the mine workers	Rs 0.50 lakh will be spent for distribution of Gud/Jaggery to the workers.
8	Total		Capital Cost-3.5 Lakh Recurring Cost-11.5 Lakh

BUDGETARY PROVISION (IN LAKHS)

PROJECT COST

Particulars			Capital	Recurring
Land			22,450,000.00	2,45,000
Infrastructure			13,620,000.00	1,50,000
Mining Equipment			0.00	97,00,000.00
<i>Equipment</i>	<i>Quantity</i>	<i>Rent per year</i>		
Dumper	5	20,00,000		
Compressor	1	10,00,000		
Water Sprinkler	2	12,00,000		
Rock Breaker	2	12,0,0000		
Excavator	2	16,00,000		
Loader	3	27,00,000		
Water Facility for Domestic Purpose "0.65" KLD (Annual Water Demand "195"KL @4L per Tanker, total number of tanker required ("49") and per tanker cost @Rs. 500)			0.00	24,500.00
Statutory Clearances			6,00,000.00	0.00
Mine Closure Cost for fencing around mine			3,00,000.00	0.00
Environment Management Plan (EMP) Cost			41,52,200	24,04,200
Total			86,59,200	1,25,23,700

COST PROPOSED FOR EMP

Particulars	Capital	Recurring
9874 Tree Plantation @Rs.300 per Tree for planting & @Rs.50 per tree for maintenance	29,62,200.00	4,93,700
Water Tanker @Rs. 500 per Tanker for Dust Suppression (3.20 KLD) & Horticulture (10.41 KLD)	0	5,10,500

3.20 + 10.41 = 13.61 KLD 13.61KLD X 300 Days = 4083 KLD 4083 KLD / 4 KLD = 1021 Tankers		
Environment Monitoring & Compliance	0	50,000.00
Environment Management Plan (For Habitation) under compliance of OM Z-11013/57/2014-IA.II (M) dated 29/10/2014 issued by MoEF& CC	8,40,000.00	2,00,000.00
Suggestions As per Public Hearing		
Budget for villagers welfare and village development work	-	2,50,000
Water Sprinkling for dust suppression	-	2,00,000
Budget for Barbed wire fencing	1,00,000	50,000
Budget for health check-up camps and medicine distribution	-	2,00,000
Ambulance	-	2,50,000
For Maintenance of Road	2,50,000	1,50,000
Budget for distribution of Gud/Jaggery to the workers	-	50,000
Total	41,52,200	24,04,200

SE Need based Survey detail

S. No.	Community Priority	Status	Need of the Community	Yearly Budget, Rs. In lacks
1.	Medical & Health Facilities	Very Poor	Health Camp for routine check-up, and medicine distribution	5.5
2	Drinking Water	Moderate Level	Bore well required	1.5
3	Social Issues	Un-employment	Employment will be provided based on capability and experience	
TOTAL				7.0

Environment Monitoring Programme

S. no	Monitoring Parameters	No. of Locations	Frequency of Monitoring
1	Ambient Air: Ambient Air Quality at appropriate location for PM10, PM2.5, SO2, NOx in the vicinity of the mine area. In the surrounding area covering project site only.	3 Stations	Six Monthly

2	Water: Surface water sample in the vicinity of the Project area.	2 Surface water 2 Ground water	Six Monthly
3	Noise: Day & Night level Noise Monitoring.	4 stations	Six Monthly
4	Soil: Soil Monitoring, Qualitative and quantitative testing/analysis to check the soil fertility, porosity, texture, water holding capacity, etc.	2 stations	Six Monthly

Environment Management Practices to be followed:

Aspect	Mitigation Measures / Control Measures
Solid Waste Management	<p>Solid waste management is important from both aesthetic and environmental points of view and will be managed as per the Solid Waste Management Rules, 2016.</p> <p>As this is the case of expansion no new OB dump has been proposed during plan period.</p> <p>A total waste 80,354 cum will be generated during the plan period. This will be used in the backfilling of all ready exhausted quarry.</p>
Air Quality Management	<ul style="list-style-type: none"> • Wet drilling and use of sharp drill bits to minimize dust generation. • Controlled blasting using optimum explosive charge during favorable weather conditions. • Regular maintenance of diesel equipment and vehicles to reduce emissions. • Water sprinkling on haul roads, loading/unloading points, and working areas. • All transport vehicles will have valid PUC certificates. • Greenbelt and roadside plantation to act as dust and noise barriers.
Water Quality Management	<ul style="list-style-type: none"> • Mining will be confined only above the Ground Water Table (GWT). • Rainwater accumulated in the pit will be collected and pumped out regularly during monsoon. • Settling sump will be provided to desilt pumped out of mine-pit and collected through garland drain before discharge into natural drainage. • Garland and foot drains will be constructed around the quarry to control surface runoff. • Sewage from rest shelters will be treated through septic tank-soak pit systems. • Foot drain would be provided around the external dump, if any.
Noise Quality Management	<ul style="list-style-type: none"> • Mining activities will be restricted to daytime and carried out with controlled blasting techniques. • Acoustic enclosures and mufflers will be provided for drilling and DG set operations. • Regular maintenance of mining machinery to minimize vibration and noise. • Greenbelt development around the lease boundary to attenuate noise propagation. • Use of delayed blasting technique to minimize the adverse impact of vibration.
Soil Quality	<ul style="list-style-type: none"> • Topsoil will be carefully removed and stored separately for future use

Management	<p>in plantation and reclamation.</p> <ul style="list-style-type: none"> • Garland drains and retaining walls will prevent soil erosion and siltation. • Spillage of oil or fuel will be avoided; impervious flooring and oil traps provided near storage areas • Post-mining, the area will be rehabilitated using stored topsoil and native vegetation
Flora & Fauna management	<ul style="list-style-type: none"> • No tree felling will be undertaken without obtaining permission from the competent authority. • Greenbelt and plantation will be developed using native species along approach roads and lease periphery (7.5m Safety Zone). • Dust suppression measures will minimize impact on surrounding vegetation
Socio Economy:	<ul style="list-style-type: none"> • Priority employment to local people in mining and ancillary activities. • Community development initiatives such as tree plantation drives, road maintenance, and local infrastructure support. • Awareness programs on safety, hygiene, and environmental protection
Monitoring & Reporting:	<ul style="list-style-type: none"> • Periodic monitoring of air, water (ground & surface), noise, and soil quality as per CPCB and SPCB guidelines. • All monitoring reports will be submitted to statutory authorities as per the compliance schedule. • Corrective measures will be taken immediately if any deviation from standards is observed.
Risk & Hazard	<p>Activities which are likely to create risk are: Temporary Storage of Explosives, Charging of Explosives, Blasting, Drilling, Bench Formation, Loading / Unloading, Transportation</p> <p>Proposed Preventive measures:</p> <ul style="list-style-type: none"> ▪ Overall slope angles of benches will be maintained at 45°. ▪ Unmanageable heights are not created. ▪ Loose sides are properly dressed. ▪ No loose stone or debris will be permitted to remain on the top of the bench or side of any excavation (Regulation 106(4) of MMR 1961). ▪ No undercutting of any face or sides will be permitted so as to cause any overhanging (Regulation 106(5) of MMR 1961) ▪ It will be ensured that the drilling equipment is suitable for the job. ▪ The person in charge of the drilling machine is competent to carry out the drilling operation; part of the training includes instructions to always face towards the open edge of the bench so that any inadvertent backward step is away from the edge. ▪ Provision of portable rail fencing between the drilling operations and the edge of the bench ▪ Provision to attach a safety line to the drilling rig and provide a harness for the driller to wear. ▪ Restricted access to the area to all persons except those necessary for the drilling operation.

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	<ul style="list-style-type: none"> ▪ Wet drilling will be carried out by constantly injecting a jet of water at the drill bit inside the hole, which prevents dust generation. ▪ In case due to any reason, wet drilling is not possible (due to non-availability of water), exhaust/ vacuum system will be provided which removes the dust from the drill hole continuously and discharges the same in a dust collector specially provided for the purpose. ▪ Drilling machine shall be fitted with dust suppression, collection and disposal arrangement.
Blasting & Handling of Explosives	<ul style="list-style-type: none"> ▪ Blast hole geometry shall be properly designed. ▪ Blast site shall be wetted before and after blasting operations are completed. ▪ Only optimum quantity of permissible explosives shall be used so that the vibrations do not damage the structures/houses if the quarrying operations are close to human habitation. ▪ Blasting shall be conducted only during favourable weather conditions and only during the day time and permissible hours. ▪ While carrying out blasting operations near habitations, wide publicity will be given in the local area through announcement and other available media so that local people become aware of the blasting activities being undertaken in the area and take appropriate precautions. ▪ The vibrations should be monitored periodically in consultation with the local Mining authorities. ▪ Use of explosives is specialist work. Planning for a round of shots is necessary to ensure that the face is properly surveyed, holes correctly drilled, direction logged, the weight of explosive suitable for good fragmentation and the continuity of the initiator are but a few of the steps necessary to ensure its safe use. ▪ Proper and safe storage of explosives in approved and Licensed Magazine. ▪ Proper security system to prevent theft/ pilferage, unauthorized entry into Magazine area and checking authorized persons to prevent carrying of match box, lights, mobile phones, cigarette or Bidi etc. will be put in place. ▪ Explosives shall be conveyed in special containers. ▪ Explosives and detonators shall not be carried in the same container. ▪ The holes which have been charged with explosives will not be left unattended till blasting is completed.
Health Hazards	<p>Health hazards should be interpreted as being harmful dust and noise which is emitted during surface mining operations. All suitable steps and precautions will be undertaken to ensure minimum health hazard. Provision of use of Personal Protective Equipment (PPE) will be kept. The PPE shall be of good make and quality, wherever possible ISI certified, suitable for the hazard e.g. a dust respirator fitted with the correct filter to capture the particulate hazardous dust and maintained to recommended standards. As personal protective equipment only affords limited protection it will only be used as a last resort and as an interim arrangement until other steps are taken to reduce the risk of personal injury to an acceptable level</p>
Accident	<ul style="list-style-type: none"> ▪ Mine road shall be made smooth regularly with a road roller.

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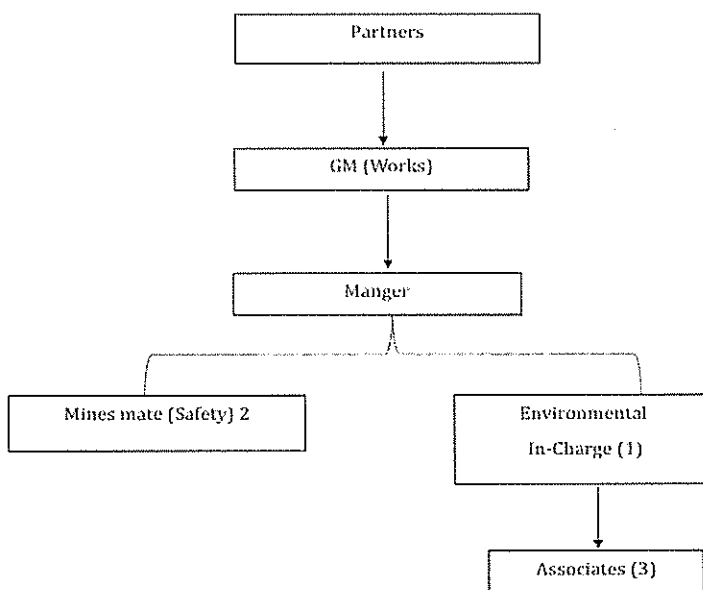
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Prevention	<ul style="list-style-type: none"> ▪ Mine road will be made sufficiently wide to keep two-way traffic. Regular water sprinkling will be done on mine road and haul road to avoid suspension of dust. ▪ All transportation within the mine lease area should be carried out directly under the supervision and control of management. ▪ The vehicles will be maintained in good working condition and checked thoroughly at least once a month by the competent person authorized for the purpose by the management. ▪ Navigation signs will be provided at each and every turning point up to the main road (wherever required). ▪ To avoid danger while reversing the vehicles especially at working place/loading points, stopper should be posted to properly guide reversing/spotting operating.
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Organizational Structure of Environment Management Cell:

ORGANIZATION CHART OF ENVIRONMENTAL MONITORING CELL



EMP Cell structure

The EMP Cell is committed to ensuring environmental sustainability and compliance with regulatory requirements for the Stone Mining Project. With a clear structure, roles, and responsibilities, the EMP Cell is equipped to manage environmental impacts and promote sustainable practices.

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District Survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.

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- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- i. If any tree felling than necessary permission shall be taken from the competent authority.
- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.
- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.
- l. Personal protective equipments such as clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Bara Bana Para & Matiyani Stone Mine of M/s Rahul Metals (Prop. : Shri Gopi Sadhwani), Village : Bara Bana Para & Matiyani, Thana : Taljhari, Distt. : Sahibganj, Jharkhand (9.086 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I along with following specific conditions :

- I. The mine will come in operation only after obtaining permission from DGMS for controlled and delayed blasting.
- II. That the Deputy Commissioner, Sahibganj will ensure compliance of the order passed by Hon'ble NGT in OA No. 23/2017/EZ, O.A. no. 776/2018 and O.A. no. 373/2019 in the matter of Syed Arshad Nasar Vs Union of India with Ramchandra Chaurasia Vs State of Jharkhand with Pradeep Kumar Singh Vs State of Jharkhand before grant of mining lease.
- III. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "Ek Ped Ma Ke Naam" and the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.
- IV. The Deputy Commissioner through District Mining Officer will ensure that the mines owner of the respective leases to complete the plantation and maintenance in a time bound manner.

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- V. Suitable plant species of not less than 2 M height to be planted equal to twice the area of saplings proposed in Safety zone. This is to be planted in land available near mines and outside safety zone. This will be in addition to plantation in safety zone. Newly planted saplings to be maintained for minimum 3 years with Geo-Tagged photographs.
- VI. Dedicated water tanker to be provided for mine. The tanker to be used for spraying water on haul road and for irrigating newly planted saplings only. Sprinkling to be done such that the haul road is kept moistened all the time with Geo-Tagged photographs.
- VII. Pre employment Occupational health check up for employees to be done and thereafter at annual interval for PLFT, Audiometry and other required tests .Summary findings of same to submitted along with 6 monthly compliance.
- VIII. Ensure use of Quality PPEs equivalent not less than 3M make. Records of same to be maintained and submitted with 6 monthly compliance report with Geo-Tagged photographs.
- IX. Keep vulnerable areas unmanned. Ensure rotation of duties. Records to be maintained and submitted with 6 monthly compliance report.
- X. Failing of any of terms & conditions mentioned in EC can lead to revocation / cancellation of EC.

15. Dhatapara Stone Mine of Partners : Shri Rajkumar Kispotta and Shri Rubal Singh Gill, Village : Dhatapara, Anchal : Barharwa, Distt. : Sahibganj, Jharkhand (2.233 Ha).

(Proposal no.: SIA/JH/MIN/ 565341 /2026)

Name of the consultant : P & M Solution, Noida, U.P.

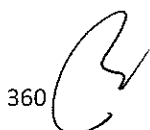
This is a new project which has been taken for appraisal on 18.01.2026.

Project Sector: 1(a) Mining of Minerals, Category: B1.

Application for Environmental Clearance (EC) after Terms of Reference (ToR).

The State Expert Appraisal Committee, Jharkhand deliberated the project during its 122nd meeting held on 24.03.2025 - 28.03.2025 and SEIAA, Jharkhand has approved the ToRs in 122nd meeting held on 08th & 09th April, 2025. TOR for the project was issued by SEIAA, Jharkhand vide letter no. EC/SEIAA/2024-25/3657/2024/77, dated 16.04.2025. The final EIA /



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EMP submitted by PP to SEAC on 13.01.2026.

EC Application for: Proposed Capacity- 38903 cum/year or 105037 TPA

Project and Location Details :

SI	Parameter	Details	
1	Project Name	: Dhatapara Stone Mine	
2	Lessee:	: Sli Rajkumar Kispotta & Sri Rubal Singh Gill	
3	Lease Address	: Village – Dhatapara , P.S- Barharwa District – Sahibganj, State- Jharkhand	
4	Lease Area	: 2.233 Ha	Acres- 5.52Acres
5	Type of Land	: Non- Forest (Raiyati Land)	
6	Project Cost	: Rs. 1,02,91,300	
7	EMP Budget	: Capital: Rs. 23.91300 Lakh	Recurring: Rs. 13.17050Lakh per year
8	New or Expansion	: New	
9	Mineable Reserves	: cum.:361921.48cum	Tonnes:977188 tons
10	Mine Life	: 9.3 or 10 years	
11	Man power	: 17	
12	Water Requirement	: 14.79 or 14.80 KLD (Drinking: 0.17 KLD,Dust Suppression:2.40KLD, Plantation:12.22KLD)	
13	Water Source	: By authorised hired water tankers	
14	DG Set / power	: 50 KVA	
15	Crusher	: No crusher	
16	Nearest Water Body	: Gumani Nadi, (approx. 1.85 km)	
17	Nearest Habitation	: Approx. 210 meter towards NW direction. EMP has been submitted.	
18	Nearest Rail Station	: Kotalpukur Junction Railway Station, approx.3.78 km. in SE direction.	
19	Nearest Air Port	: Deoghar Airport, approx. 116.75 km, in WSW direction	
20	Nearest Forest	: Divisional Forest Officer, Ranchi certified that the distance of reserved/protected forest is more than 250 meters from proposed project site.	
21	Road & Highways	: NH- 133 A is about approx. 6.14 km in West direction from the project site.	
22	Approach Road	: approx, 400 meter	

CO-ORDINATES

Pillar No.	Degree, Minute, Second	
	LATTITUDE	LONGITUDE
1.	24°46'5.227"N	87°47'55.291"E
2.	24°46'4.985"N	87°47'55.695"E
3.	24°46'4.798"N	87°47'55.638"E

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4.	24°46'4.549"N	87°47'55.986"E
5.	24°46'2.971"N	87°47'55.975"E
6.	24°46'2.982"N	87°47'55.639"E
7.	24°46'1.861"N	87°47'55.323"E
8.	24°46'15.435"N	87°47'55.077"E
9.	24°45'59.394"N	87°47'54.561"E
10.	24°45'59.158"N	87°47'54.509"E
11.	24°45'59.210"N	87°47'54.134"E
12.	24°45'58.826"N	87°47'53.693"E
13.	24°45'58.538"N	87°47'53.863"E
14.	24°45'57.275"N	87°47'53.219"E
15.	24°45'56.664"N	87°47'54.031"E
16.	24°45'56.402"N	87°47'54.800"E
17.	24°45'55.485"N	87°47'54.544"E
18.	24°45'55.671"N	87°47'53.661"E
19.	24°45'55.113"N	87°47'53.471"E
20.	24°45'55.423"N	87°47'51.502"E
21.	24°45'54.665"N	87°47'51.193"E
22.	24°45'55.006"N	87°47'50.030"E
23.	24°45'56.290"N	87°47'50.479"E
24.	24°45'55.958"N	87°47'51.567"E
25.	24°45'57.003"N	87°47'51.760"E
26.	24°45'57.217"N	87°47'50.714"E
27.	24°45'56.875"N	87°47'50.707"E
28.	24°45'57.003"N	87°47'50.087"E
29.	24°45'58.266"N	87°47'50.402"E
30.	24°45'58.241"N	87°47'50.691"E
31.	24°45'58.765"N	87°47'50.800"E
32.	24°45'58.675"N	87°47'52.225"E
33.	24°45'59.801"N	87°47'52.9028"E
34.	24°45'59.826"N	87°47'53.192"E
35.	24°46'1.330"N	87°47'52.370"E
36.	24°46'1.285"N	87°47'52.016"E
37.	24°46'1.790"N	87°47'52.096"E
38.	24°46'1.830"N	87°47'52.479"E
39.	24°46'3.868"N	87°47'53.205"E
40.	24°46'4.588"N	87°47'54.168"E

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LAND DETAILS

Khata no.	Plot no.
01, 05, 16, 27, 37 & 72	337, 338, 340, 326 (P), 323, 324, 325, 297, 304, 307, 298, 335, 336 & 341

STATUTORY CLEARANCES

1	LOI / Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Officer, Sahibganj vide letter no. 143/M, dated 04.02.2025.
2	CO	:	The CO, Barharwa vide letter no. 415/Ra., dated 03.07.2020 has mentioned the plot no. of the project is not recorded as "Jungle-Jhari" in R.S. Khatiyani & Register II. During the appraisal it was seen from the KML that habitation at a distance of 210 meters from mining lease area. For which detailed Environmental Management Plan has been prepared and submitted.
3	DMO Cluster	:	DMO, Sahibganj vide memo no. 486/M, dated 18.03.2025 certified that 03 other mining lease area (4.54 Acre, 6.00 Acre & 6.00 Acre) exists within 500 meters radius from proposed project site.
4	DFO Wild Life	:	DFO, Wildlife Division, Hazaribag vide letter no. 1400, dated 13.08.2020 certified that the proposed project site is outside Eco Sensitive Zone of Udhwa Lake Bird Sanctuary.
5	DFO Territorial	:	Divisional Forest Officer, Sahibganj Forest Division vide letter no. 2152, dated 15.09.2020 certified that the distance of reserved / protected forest is more than 250 meters from proposed project site.
6	DSR	:	The DMO, Sahibganj has been certified vide memo no. 558/M, dated 25.03.2025 that this project is mentioned in approved DSR of Sahibganj District as a potential area (Page no. 195).
7	Gram Sabha	:	Gram Sabha conducted on 14.02.2020.
8	Mine Plan Approval	:	Approved by District Mining Officer, Sahibganj vide Letter No. 485/M, dated 18.03.2025.
9	Qualified Person	:	Shri Vidya Bhushan Mishra was present in the meeting and affirmed that the mine plan has been prepared by him.
10	Baseline monitoring period	:	March, 2025 to May, 2025.

11	Public Hearing	:	Public hearing conducted on 09.12.2025.
12	Grid certificate	:	DMO, Sahibganj vide memo no. 207/M, dated 17.01.2026 certified that said project falls outside of all the 130 Grids demarcated by the Expert Committee. The DMO also stated that this certificate is issued in the light of order passed by Hon'ble NGT on 22.12.2021 in OA No. 23/2017/EZ, O.A. no. 776/2018 and O.A. no. 373/2019. It also states this certificate is issued in compliance of report of Expert Committee.

Working Details

1	Mining Method	:	Opencast Semi Mechanized Method
2	Quarry Area	:	2.233ha Life of Mine – 9.3 or 10 years
3	Waste Generation	:	Total 45195 cum waste generated during the plan period.
4	Stripping Ratio	:	1: 0.25
5	Working Days	:	300
6	Benches: size & No	:	6m to 6m
7	Elevation of Mine	:	53 AMSL to 56AMSL
8	Ground Level Elevation	:	53 AMSL
9	Ultimate Working Depth	:	Up to 26AMSL (27 mgbl)
10	Water Table	:	11-08AMSL (42-45mbgl) as per topography survey.
11	Topography of Mine	:	The area represents a gently hill track.
12	Explosive Requirement	:	110kg/day
13	Diesel/Fuel requirement	:	140 litre/day

Production Details

Year	Production of stone In cum	Production of stone In tonnes	Overburden In cum	Intercalated waste In cum	Total waste In cum	Bench (AMSL)
1st	35112	94802	22110	1848	23958	50-44
2nd	35582	96072	0	1873	1873	50-44
3rd	36836	99458	0	1939	1939	44-38
4th	38247	103267	0	2013	2013	38-26
5th	38903	105037	13365	2048	15413	56-26
Total	184680	498636	35475	9720	45195	

Land Use

Pattern of Utilization	Existing Land Use (Ha)	At the end of Plan period (Ha)	Conceptual stage (Ha) (after life of mine)
Quarry	NIL	1.135	1.460 ha (0.304 ha area will be backfilled, 0.405 ha as a dead bench & 0.751 ha as a water reservoir)
Waste Dump	NIL	0.318	Nil (waste dump to be removed and backfilled)
Road	NIL	0.003	0.0
Safety Zone	NIL	0.773 (Plantation)	0.773 (Plantation)
Total	NIL	2.229	2.233
Unused Area	2.233	0.004	0.00
Total Lease Area	2.233		

Green Belt Development

	Area / Length	Number of Trees	Remarks	Timeline	Species
Area in Safety Zone (Ha.)	0.773	1237	1600 Tree per Hectare	1st Year	Pipal, Gulmohar Jackfruits, Mango, Jamun, Babul, Neem, Arjun, etc.
Length of Approach Road Area (m.)	400	800	2m X 2 m spacing in two rows both side		
On backfilled Area (ha)	0.304	486	1600 Tree per Hectare	At the end of life of mine	
On dead bench (ha)	0.405	648			
Total		3171			

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Note- Note-3171 tree proposed to be planted out of which 10% plantation will be carried out i.e. (317 trees) as per MoEF&CC, Govt. of India Scheme "Ek Ped Ma Ke Naam"..

Summary of Baseline Data:

Monitoring season – March 2025 to May 2025

Parameter	No. of Locations	Environmental Baseline Study
Ambient Air Quality Monitoring	8 locations	PM2.5- 27.17 µg/m ³ to 49.24 µg/m ³ PM10- 69.65 to 91.60 µg/m ³ SO ₂ - 5.62 to 8.79 µg/m ³ NO ₂ - 12.03 µg/m ³ to 19.99 µg/m ³
Noise level monitoring	8 locations	During daytime- 51.4 to 57.9 dB (A) During Night time- 40.8 to 44.8 dB (A) Results were found within permissible limits
Water samples	Surface water – 2 locations	pH (7.25- 7.46), Chloride (41.2-45.5 mg/l) Fluoride (0.23 to 0.36 mg/l), BOD (4.8 to 7.6 mg/l), COD (23.0 to 32.0 mg/l) TDS (198.0 TO 210.0 mg/l) DO- (6.5 to 7.2) mg/l
	Ground water- 5 locations	TDS (402-497 mg/l), pH (7.19 to 7.98), Hardness (168-210 mg/l), Chloride (60.2to 81.0 mg/l), Fluoride (0.39 to 0.57mg/l) , Alkalinity (178 to 234.0 mg/l)
Soil Samples	6 locations	pH- 7.20 to 7.88 Conductivity- 312.0-423.0 µmhos/cm Sodium- 256.0 to 284.0 mg/kg Potassium- 94.08 to 186.20 mg/kg Water Holding capacity- 32.28 to 40.02 %

Public Hearing (Action Plan) –

S. No.	Issue	Reply	Action Plan
1.	Health check-up camps should be organized	Health check-up camps will be organized every month in the village.	A budget of Rs 2.0 lakh will be spent on health check-up camps and medicine distribution as a recurring cost.
2.	Issues raised for drinking water should be provided to the villagers.	The project proponent assured that deep boring will be done for water at a place identified by the villagers	Arrangement of 02 Hand Pump with deep boring for water facility will be done for which total Rs. 2.50 lakh will be spent as capital cost and Rs 0.50 lakh will be spent as recurring cost which has also been included in EMP Cost.

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3.	Employment	The project proponent assured that priority will be given to villagers for employment as required, based on their qualifications.	About 17 persons will be hired as per their qualifications; priority will be given to villagers for employment.
4	Arrangement of Transformer	The project proponent assured that they will request government to provide transformer at the earliest.	A sum of Rs. 1.0 lakh as a capital cost and 0.25 lakh as a recurring cost for solar street light.
5	Total		Capital Cost:- Rs. 3,50,000 Recurring Cost:- Rs. 2,75,000

BUDGETARY PROVISION (IN LAKHS)

PROJECT COST

Particulars			Capital	Recurring
Land			56,00,000	5,60,000
Infrastructure			15,00,000	1,50,000
Mining Equipment			0.00	52,00,000
<i>Equipment</i>	<i>Quantity</i>	<i>Rent per year</i>		
Dumper	1	1000000		
Compressor	1	1000000		
Water Sprinkler	1	600000		
Rock Breaker	2	600000		
Excavator	1	800000		
Loader	1	600000		
Water Facility for Domestic Purpose "0.17" KLD (Annual Water Demand "51"KL @4L per Tanker, total number of tanker required ("13") and per tanker cost @Rs. 500)			0.00	6,500
Statutory Clearances			6,00,000	0.00
Mine Closure Cost for fencing around mine			2,00,000	0.00
Environment Management Plan (EMP) Cost			23,91,300	13,17,050
Total			1,02,91,300	72,33,550

COST PROPOSED FOR EMP

Particulars	Capital	Recurring
3171 Tree Plantation @Rs.300 per Tree for planting & @Rs.50 per tree for maintenance	9,51,300	1,58,550
Water Tanker @Rs. 500 per Tanker for Dust Suppression (2.40 KLD) & Horticulture (12.22 KLD) 2.40 + 12.22 = 14.62 KLD 14.62 KLD X 300 Days = 4386 KLD 4386 KLD / 4 KLD = 1097 Tankers	0	5,48,500
Environment Monitoring & Compliance	0	50,000
Environment Management Plan (For Habitation) under compliance of OM Z-11013/57/2014-IA.II (M) dated 29/10/2014 issued by MoEF & CC	9,00,000	2,25,000
Garland Drain & Retaining wall	1,90,000	60,000
Suggestions As per Public Hearing		
Arrangement of 02 Hand Pump	2,50,000	50,000
For Health check-up	-	2,00,000
Arrangement for Solar street light	1,00,000	25,000
Total	23,91,300	13,17,050

Monitoring Parameters and Frequency of Monitoring

S. no	Monitoring Parameters	No. of Locations	Frequency of Monitoring
1	Ambient Air: Ambient Air Quality at appropriate location for PM10, PM2.5, SO2, NOx in the vicinity of the mine area. In the surrounding area covering project site only.	3 Stations	Six Monthly
2	Water: Surface water sample in the vicinity of the Project area.	2 Surface water 2 Ground water	Six Monthly
3	Noise: Day & Night level Noise Monitoring.	4 stations	Six Monthly
4	Soil: Soil Monitoring, Qualitative and quantitative testing/analysis to check the soil fertility, porosity, texture, water holding capacity, etc.	2 stations	Six Monthly

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SE Need based Survey detail

S. No.	Community Priority	Status	Need of the Community	Yearly Budget, Rs. In lacks
1.	Education	Moderate Level	School building construction and stationary distribution	1.50
2.	Medical Facilities	Very Poor	Health Camp for routine check-up, and medicine distribution	2.50
3.	Drinking Water	Moderate Level	Bore well required	1.00
4.	Employment	Poor	Employment is the major issue, and will be provided on the basis of capability and experience of local people	
TOTAL				5.50

Environment Management Practices to be followed:

Aspect	Mitigation Measures / Control Measures
Solid Waste Management	<p>Solid waste management is important from both aesthetic and environmental points of view and will be managed as per the Solid Waste Management Rules, 2016.</p> <ul style="list-style-type: none"> ➤ An O.B. Dump 0.318 ha on the southern part of lease area will be provided. ➤ During plan period 45195 cum of waste will be generated. Approx 30000 cum of waste will be used for road maintenance. ➤ During conceptual period approx. 69778 cum of waste will be generated. Approx 20000 cum of waste will be used for road maintenance. ➤ Waste remain during plan period and conceptual period will be used in backfilling. ➤ No dump will remain at the end of life of mine. ➤ Nohazardous or other solid waste generation is envisaged from the stone mining activities
Air Quality Management	<ul style="list-style-type: none"> • Wet drilling and use of sharp drill bits to minimize dust generation. • Controlled blasting using optimum explosive charge during favorable weather conditions. • Regular maintenance of diesel equipment and vehicles to reduce emissions. • Water sprinkling on haul roads, loading/unloading points, and

	<p>working areas.</p> <ul style="list-style-type: none"> • All transport vehicles will have valid PUC certificates. • Greenbelt and roadside plantation to act as dust and noise barriers.
Water Quality Management	<ul style="list-style-type: none"> • Mining will be confined only above the Ground Water Table (GWT). • Rainwater accumulated in the pit will be collected and pumped out regularly during monsoon. • Settling sump will be provided to desilt pumped out of mine-pit and collected through garland drain before discharge into natural drainage. • Garland and foot drains will be constructed around the quarry to control surface runoff. • Sewage from rest shelters will be treated through septic tank–soak pit systems. • Foot drain would be provided around the external dump, if any.
Noise Quality Management	<ul style="list-style-type: none"> • Mining activities will be restricted to daytime and carried out with controlled blasting techniques. • Acoustic enclosures and mufflers will be provided for drilling and DG set operations. • Regular maintenance of mining machinery to minimize vibration and noise. • Greenbelt development around the lease boundary to attenuate noise propagation. • Use of delayed blasting technique to minimize the adverse impact of vibration.
Soil Quality Management	<ul style="list-style-type: none"> • Topsoil will be carefully removed and stored separately for future use in plantation and reclamation. • Garland drains and retaining walls will prevent soil erosion and siltation. • Spillage of oil or fuel will be avoided; impervious flooring and oil traps provided near storage areas • Post-mining, the area will be rehabilitated using stored topsoil and native vegetation
Flora & Fauna management	<ul style="list-style-type: none"> • No tree felling will be undertaken without obtaining permission from the competent authority. • Greenbelt and plantation will be developed using native species along approach roads and lease periphery (7.5m Safety Zone). • Dust suppression measures will minimize impact on surrounding vegetation
Socio Economy:	<ul style="list-style-type: none"> • Priority employment to local people in mining and ancillary activities. • Community development initiatives such as tree plantation drives, road maintenance, and local infrastructure support. • Awareness programs on safety, hygiene, and environmental protection

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Monitoring & Reporting:	<ul style="list-style-type: none"> • Periodic monitoring of air, water (ground & surface), noise, and soil quality as per CPCB and SPCB guidelines. • All monitoring reports will be submitted to statutory authorities as per the compliance schedule. • Corrective measures will be taken immediately if any deviation from standards is observed.
Risk & Hazard	<p>Activities which are likely to create risk are: Temporary Storage of Explosives, Charging of Explosives, Blasting, Drilling, Bench Formation, Loading / Unloading, Transportation</p> <p>Proposed Preventive measures:</p> <ul style="list-style-type: none"> ▪ Overall slope angles of benches will be maintained at 45°. ▪ Unmanageable heights are not created. ▪ Loose sides are properly dressed. ▪ No loose stone or debris will be permitted to remain on the top of the bench or side of any excavation (Regulation 106(4) of MMR 1961). ▪ No undercutting of any face or sides will be permitted so as to cause any overhanging (Regulation 106(5) of MMR 1961) ▪ It will be ensured that the drilling equipment is suitable for the job. ▪ The person in charge of the drilling machine is competent to carry out the drilling operation; part of the training includes instructions to always face towards the open edge of the bench so that any inadvertent backward step is away from the edge. ▪ Provision of portable rail fencing between the drilling operations and the edge of the bench ▪ Provision to attach a safety line to the drilling rig and provide a harness for the driller to wear. ▪ Restricted access to the area to all persons except those necessary for the drilling operation. ▪ Wet drilling will be carried out by constantly injecting a jet of water at the drill bit inside the hole, which prevents dust generation. ▪ In case due to any reason, wet drilling is not possible (due to non-availability of water), exhaust/ vacuum system will be provided which removes the dust from the drill hole continuously and discharges the same in a dust collector specially provided for the purpose. ▪ Drilling machine shall be fitted with dust suppression, collection and disposal arrangement.
Blasting & Handling of Explosives	<ul style="list-style-type: none"> ▪ Blast hole geometry shall be properly designed. ▪ Blast site shall be wetted before and after blasting operations are completed. ▪ Only optimum quantity of permissible explosives shall be used so that

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	<p>the vibrations do not damage the structures/houses if the quarrying operations are close to human habitation.</p> <ul style="list-style-type: none"> ▪ Blasting shall be conducted only during favourable weather conditions and only during the day time and permissible hours. ▪ While carrying out blasting operations near habitations, wide publicity will be given in the local area through announcement and other available media so that local people become aware of the blasting activities being undertaken in the area and take appropriate precautions. ▪ The vibrations should be monitored periodically in consultation with the local Mining authorities. ▪ Use of explosives is specialist work. Planning for a round of shots is necessary to ensure that the face is properly surveyed, holes correctly drilled, direction logged, the weight of explosive suitable for good fragmentation and the continuity of the initiator are but a few of the steps necessary to ensure its safe use. ▪ Proper and safe storage of explosives in approved and Licensed Magazine. ▪ Proper security system to prevent theft/ pilferage, unauthorized entry into Magazine area and checking authorized persons to prevent carrying of match box, lights, mobile phones, cigarette or Bidi etc. will be put in place. ▪ Explosives shall be conveyed in special containers. ▪ Explosives and detonators shall not be carried in the same container. ▪ The holes which have been charged with explosives will not be left unattended till blasting is completed.
Health Hazards	<p>Health hazards should be interpreted as being harmful dust and noise which is emitted during surface mining operations. All suitable steps and precautions will be undertaken to ensure minimum health hazard. Provision of use of Personal Protective Equipment (PPE) will be kept. The PPE shall be of good make and quality, wherever possible ISI certified, suitable for the hazard e.g. a dust respirator fitted with the correct filter to capture the particulate hazardous dust and maintained to recommended standards. As personal protective equipment only affords limited protection it will only be used as a last resort and as an interim arrangement until other steps are taken to reduce the risk of personal injury to an acceptable level</p>
Accident Prevention	<ul style="list-style-type: none"> ▪ Mine road shall be made smooth regularly with a road roller. ▪ Mine road will be made sufficiently wide to keep two-way traffic. Regular water sprinkling will be done on mine road and haul road to avoid suspension of dust. ▪ All transportation within the mine lease area should be carried out directly under the supervision and control of management.

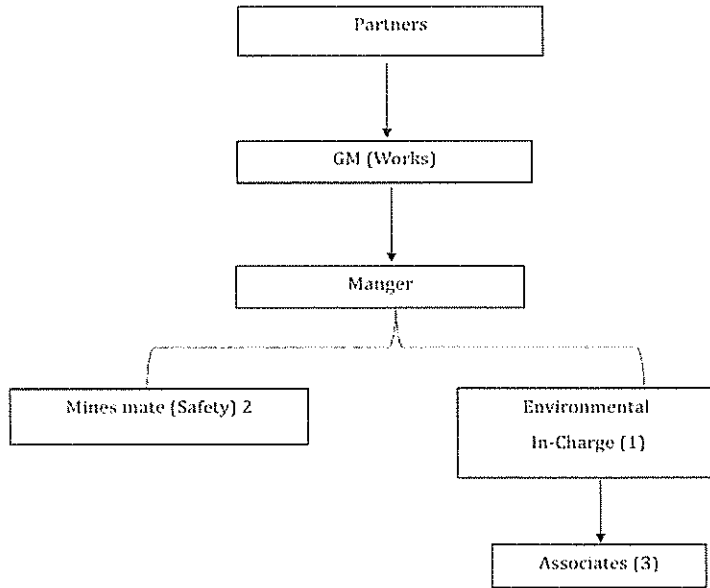
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	<ul style="list-style-type: none"> ▪ The vehicles will be maintained in good working condition and checked thoroughly at least once a month by the competent person authorized for the purpose by the management. ▪ Navigation signs will be provided at each and every turning point up to the mainroad (wherever required). ▪ To avoid danger while reversing the vehicles especially at working place/loading points, stopper should be posted to properly guide reversing/spotting operating.
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Organizational Structure of Environment Management Cell:

ORGANIZATION CHART OF ENVIRONMENTAL MONITORING CELL



EMP Cell structure

The EMP Cell is committed to ensuring environmental sustainability and compliance with regulatory requirements for the Stone Mining Project. With a clear structure, roles, and responsibilities, the EMP Cell is equipped to manage environmental impacts and promote sustainable practices.

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District Survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.

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- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- i. If any tree felling than necessary permission shall be taken from the competent authority.
- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.
- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.
- l. Personal protective equipments such as clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Dhatapara Stone Mine of Partners : Shri Rajkumar Kispotta and Shri Rubal Singh Gill, Village : Dhatapara, Anchal : Barharwa, Distt. : Sahibganj, Jharkhand (2.233 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I along with following specific conditions :

- I. In compliance of Office Memorandum no. IA-J-11013/20/2025-IA-P, dated 25.11.2025 of MoEF&CC, Govt. of India, the PAs will mandatorily obtain the Environmental Safeguard to be implemented from Jharkhand State Pollution Control Board within 30 days of issuance of EC or 31.01.2026 which ever is earlier.
- II. The mine will come in operation only after obtaining permission from DGMS for controlled and delayed blasting.
- III. That the Deputy Commissioner, Sahibganj will ensure compliance of the order passed by Hon'ble NGT in OA No. 23/2017/EZ, O.A. no. 776/2018 and O.A. no. 373/2019 in the matter of Syed Arshad Nasar Vs Union of India with Ramchandra Chaurasia Vs State of Jharkhand with Pradeep Kumar Singh Vs State of Jharkhand before grant of mining lease.
- IV. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "Ek Ped Ma Ke Naam" and the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.

- V. The Deputy Commissioner through District Mining Officer will ensure that the mines owner of the respective leases to complete the plantation and maintenance in a time bound manner.
- VI. Suitable plant species of not less than 2 M height to be planted equal to twice the area of saplings proposed in Safety zone. This is to be planted in land available near mines and outside safety zone. This will be in addition to plantation in safety zone. Newly planted saplings to be maintained for minimum 3 years with Geo-Tagged photographs.
- VII. Dedicated water tanker to be provided for mine. The tanker to be used for spraying water on haul road and for irrigating newly planted saplings only. Sprinkling to be done such that the haul road is kept moistened all the time with Geo-Tagged photographs.
- VIII. Pre employment Occupational health check up for employees to be done and thereafter at annual interval for PLFT, Audiometry and other required tests .Summary findings of same to submitted along with 6 monthly compliance.
- IX. Ensure use of Quality PPEs equivalent not less than 3M make. Records of same to be maintained and submitted with 6 monthly compliance report with Geo-Tagged photographs.
- X. Keep vulnerable areas unmanned. Ensure rotation of duties. Records to be maintained and submitted with 6 monthly compliance report.
- XI. Failing of any of terms & conditions mentioned in EC can lead to revocation / cancellation of EC.

16. Shyampur Stone Deposit of M/s Mandhan Minerals Corporation, Village : Shyampur, Thana : Malpahari (OP), Distt.: Pakur, Jharkhand (2.083 Ha).

(Proposal no.: SIA/JH/MIN /559119/2025)

Name of the consultant : P & M Solution, Noida, U.P.

This is a new project which has been taken for appraisal on 18.01.2026.

Project Sector: 1(a) Mining of Minerals, Category: B1.


Application for Environmental Clearance (EC) after Terms of Reference (ToR).

The State Expert Appraisal Committee, Jharkhand deliberated the project during its 116th meeting held on 23.08.2024 - 25.08.2024 and SEIAA, Jharkhand has approved the ToRs in 116th meeting held on 03rd & 04th September, 2024. TOR for the project was issued by SEIAA,

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Jharkhand vide letter no. EC/SEIAA/2024-25/3222/2024/259, dated 09.09.2024. The final EIA / EMP submitted by PP to SEAC on 13.01.2026.

EC Application for: Proposed Capacity- 45211.45 cum/annum or 135634.35 TPA

Project and Location Details :

Sl	Parameter	Details	
1	Project Name	: Shyampur Stone Deposit	
2	Lessee:	: M/s Mandhan Minerals Corporation Partner - 1. Sri Anil Kumar Tanwani, 2. Sri Dinesh Tanwani, 3. Sri Suresh Kumar Tanwani, 4. Sri Bhavesh Tanwani, 5. Sri Piyush Tanwani	
3	Lease Address	: At - Sindhipara, District- Pakur, State – Jharkhand	
4	Lease Area	: 2.083 Ha	Acres- 5.147 Acres
5	Type of Land	: Non- Forest (Raiyati Land)	
6	Project Cost	: Rs. 97.56700 Lakh	
7	EMP Budget	: Capital: Rs. 23.56700Lakh	Recurring: Rs. 16.48950 Lakh per year
8	New or Expansion	: New	
9	Mineable Reserves	: cum.:314481.35 cum	Tonnes:943444.05 tons
10	Mine Life	: 7 years	
11	Man power	: 40	
12	Water Requirement	: 13.45 ~ 13.50 KLD (Drinking: 0.40 KLD,Dust Suppression:2.82KLD, Plantation:10.23KLD)	
13	Water Source	: By authorised hired water tankers	
14	DG Set / power	: 50 KVA	
15	Crusher	: Yes	
16	Nearest Water Body	: Torainadi, (approx. 5.60 km)	
17	Nearest Habitation	: Approx. 350 meter towards SE direction EMP has been submitted.	
18	Nearest Rail Station	: Pakur Railway station, approx. 4.0 km in NE direction.	
19	Nearest Air Port	: Deoghar Airport, approx. 114 km towards WSW direction.	
20	Nearest Forest	: Divisional Forest Officer, Pakur certified that the distance of reserved/protected forest is more than 1982 meters from proposed project site.	
21	Road & Highways	: NH-133A, Approx. 2.65 km in North direction	
22	Approach Road	: approx., 470 meter	

CO-ORDINATES

Pillar Id	Longitude	Latitude
P1	87° 49'32.28654"E	24°36'49.78566"N
P2	87° 49'32.83842"E	24°36'49.72817"N
P3	87° 49'35.12255"E	24°36'49.20120"N
P4	87° 49'35.15941"E	24°36'48.63856"N
P5	87° 49'35.20276"E	24°36'47.97673"N

P6	87° 49'35.46242"E	24°36'47.97274"N
P7	87° 49'35.52719"E	24°36'47.51561"N
P8	87° 49'35.73854"E	24°36'47.03188"N
P9	87° 49'35.64174"E	24°36'46.90595"N
P10	87° 49'35.27234"E	24°36'46.96477"N
P11	87° 49'35.20121"E	24°36'46.44904"N
P12	87° 49'35.11027"E	24°36'45.92826"N
P13	87° 49'35.03154"E	24°36'45.26604"N
P14	87° 49'34.97012"E	24°36'44.78839"N
P15	87° 49'35.20934"E	24°36'44.72665"N
P16	87° 49'35.11844"E	24°36'44.16307"N
P17	87° 49'35.04180"E	24°36'43.66804"N
P18	87° 49'34.92984"E	24°36'43.38734"N
P19	87° 49'34.82231"E	24°36'42.89854"N
P20	87° 49'34.07502"E	24°36'43.04131"N
P21	87° 49'33.43055"E	24°36'43.17797"N
P22	87° 49'32.52371"E	24°36'43.35498"N
P23	87° 49'32.54556"E	24°36'43.56533"N
P24	87° 49'31.87664"E	24°36'43.68539"N
P25	87° 49'31.85400"E	24°36'43.10057"N
P26	87° 49'31.03097"E	24°36'43.14038"N
P27	87° 49'30.90518"E	24°36'43.33460"N
P28	87° 49'30.91807"E	24°36'43.86355"N
P29	87° 49'30.88502"E	24°36'44.56051"N
P30	87° 49'30.95681"E	24°36'44.78868"N
P31	87° 49'31.38870"E	24°36'45.32332"N
P32	87° 49'30.87973"E	24°36'45.90673"N
P33	87° 49'31.25917"E	24°36'46.54199"N
P34	87° 49'31.62306"E	24°36'46.95016"N
P35	87° 49'31.62403"E	24°36'47.48540"N
P36	87° 49'31.69297"E	24°36'47.67710"N
P37	87° 49'31.64963"E	24°36'47.80357"N
P38	87° 49'31.91088"E	24°36'48.18060"N
P39	87° 49'31.89457"E	24°36'48.61058"N
P40	87° 49'31.95502"E	24°36'48.98390"N
P41	87° 49'32.08210"E	24°36'49.18180"N

LAND DETAILS

Khata No.	Plot No.
7	398, 399, 400, 401, 404, 405, 407, 408, 409, 410, 411, 412, 413 & 414

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8	403, 402 & 406
18	397 & 415
23	392, 393, 394, 395 & 396

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	The Letter of Intent (LoI) has been issued by DMO, Pakur vide memo no. - 381/M, dated 19.03.2024.
2	CO	:	The CO, Pakur vide letter no. : 192/Ra, dated 15.02.2023 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyani & Register II and also mentioned that the habitation at a distance of 350 meters of proposed project site, accordingly PAs has submitted EMP for the same.
3	DMO Cluster	:	DMO, Pakur vide memo no. 524/M, dated 19.04.2024 certified that 03 other mining lease area (6.83 Acre, 3.12 Acre & 6.62 Acre) exists within 500 m radius of proposed project site and total area is 21.717 Acre or 8.79 Ha.
4	DFO Wild Life	:	DFO-cum-Incharge Wildlife Sanctuary, Udhwa (Sahibganj) vide letter no. 364, dated 02.03.2024 certified that the proposed project site is outside Eco Sensitive Zone of Udhwa Bird Sanctuary.
5	DFO Territorial	:	DFO, Pakur Forest Division vide memo no. : 1673, dated 05.11.2022 certified that the distance of forest is 1982 meters from proposed project site.
6	DSR	:	The DMO, Pakur has been certified vide memo no. 525/M, dated 19.04.2024 that this project is mentioned in approved DSR of Pakur District as a potential area (Sl. no. 60, Page no. 149).
7	Gram Sabha	:	BDO, Pakur vide letter no. 1331/Vi. Dated 24.08.2022 informed that Gram Sabha conducted on 17.08.2022.
8	Mine Plan Approval	:	Approved by DMO, Pakur vide memo no. 1074/M, dated 16.07.2024.
9	Qualified Person	:	Shri P.K. Sen was present in the meeting and affirmed that the mine plan has been prepared by him.
10	Baseline monitoring period	:	October, 2024 to December, 2024.
11	Public Hearing	:	Public hearing conducted on 08.11.2025.

Working Details

1	Mining Method	:	Opencast Mechanized Method	
2	Quarry Area	:	1.605 ha	Life of Mine – 7 years
3	Waste Generation	:	18,819.95cum of Waste will be generated during the plan period	
4	Stripping Ratio	:	1:0.08	
5	Working Days	:	300	
6	Benches: size & No	:	6m x 6m	
7	Elevation of Mine	:	64 AMSL to 58 AMSL	
8	Ground Level Elevation	:	58 AMSL	
9	Ultimate Working Depth	:	22 AMSL (36 m BGL)	
10	Water Table	:	10-5 AMSL (48-53 m BGL) as per topography Survey	
11	Topography of Mine	:	Area represents a moderately sloping land	
12	Explosive Requirement	:	110 kg/day	
13	Diesel/Fuel requirement	:	110 litre/day	

Production Details

Year	Production of Stone		Waste in cum	Bench (AMSL)
	in cum	in tones		
1st	44935.00	1344805.00	9337.00	64-52
2nd	44914.10	134742.30	2363.90	58-52
3rd	45211.45	135634.35	2379.55	58-46
4th	44970.15	134910.45	2366.85	52-22
5th	45080.35	135241.05	2372.65	52-28
Total	225111.05	675333.15	18,819.95	

Land Use

Pattern of Utilization	Existing (Ha)	During Plan Period (ha)	After Life of Mine (ha)	Conceptual Period (In Ha)	
				Water Body	Plantation
Quarry	--	1.31 (including Temporary Dumping 0.08 ha.)	1.605 (including backfill 0.283 ha.)	1.303	0.302 (Dead Bench)
Safety Zone	--	0.478 (plantation)	0.478 (plantation)	-	0.478
Road	0.02	0.005	--	-	--
Temporary Dumping	--	0.185	--	-	--

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Parapet Wall & Garland Drain	--	0.026	--	--	--
Total area in use	0.02	2.004	2.083	1.303	0.78
Unused Area	2.063	0.079	--	--	
Lease hold area	2.083			2.083	

Green Belt Development

	Area Length /	Number of Trees	Remarks	Timeline	Species
Area in Safety Zone (Ha.)	0.478	765	1600 Tree per Hectare	1st Year	Arjun, Jackfruits, Jamun, Babul, Gulmohar, Neem, Pipal, Mango etc.
Length of Approach Road Area (m.)	470	940	2m X 2 m spacing in two rows both side		
Dead Bench (Ha.)	0.302	484	1600 Tree per Hectare	At the end of life of mine	
Total		2189			

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Note- Note-2189 tree proposed to be planted out of which 10% plantation will be carried out i.e. (219 trees) as per MoEF&CC, Govt. of India Scheme "Ek Ped Ma Ke Naam"..
10 % of total plantation i.e. 219 will be done as Ek Ped Maa Ke Naam

Summary of Baseline Data:

Monitoring season - October To December 2024

Parameter	No. of Locations	Environmental Baseline Study
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MAA A

B

A

MAA

Ambient Air Quality Monitoring	8 locations	PM2.5- 19.21 µg/m ³ to 54.78 µg/m ³ PM10- 53.4 µg/m ³ to 87.3 µg/m ³ SO ₂ - 5.36 µg/m ³ to 18.56 µg/m ³ NO ₂ - 9.52 µg/m ³ to 20.31 µg/m ³
Noise level monitoring	8 locations	During daytime- 41.60 to 50.27 dB (A) During Night 32.61 to 41.23 dB (A) Results were found within permissible limits
Water samples	Surface water – 2 locations	Dissolved Oxygen (5.4 to 5.8 mg/l), pH (7.52- 7.65), Chloride (25.36-25.4 mg/l), Alkalinity (114.56 to - 124.10 mg/l), Fluoride (0.08 to 0.10 mg/l), BOD (4.5 to 4.6 mg/l), COD (12.4 to 13.5 mg/l) TDS (289.10 TO 304.60 mg/l)
	Ground water- 5 locations	TDS (498-580mg/l), pH (7.50 to 7.73), Hardness (158-180 mg/l), Chloride (31.80 to 42.56 mg/l), Fluoride (0.05 to 0.1 mg/l) , Alkalinity (146.12 to 161.85 mg/l) .
Soil Samples	5 locations	pH- 7.10- 7.85 Conductivity- 390to 418µmhos/cm Sodium- 36.89 to 41.85 mg/kg Potassium- 55.10 to 75.41 mg/kg Water Holding capacity- 27.51 to 31.53 %

Public Hearing (Action Plan) –

S. No.	Issue	Reply	Action Plan
1.	Arrangement for tuition teachers	assured that arrangements for tuition teachers for the education of children will be made	Rs 1.0 lakh will be spent as recurring cost for tuition teacher which is also included in the EMP cost.
2.	Support for their education	Assured that support for education will be provided	Rs 0.50 lakh will be spent as recurring cost for education of children from economically poor families, which is also included in the EMP cost.
3.	Platform (chabutra) should be constructed	Assured that a platform for meetings will be constructed in the village	Budget of Rs.2.0 lakhs will be spent as capital cost and 0.50 as a recurring cost for building platform which has also

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			been included in EMP Cost. Platform will be constructed immediately after opening of mine.
4.	Employment	He said that local people should be given employment so that their migration can be stopped.	About 40 persons will be hired as per their qualifications. Remuneration will be given as Government Norms.
5.	Hand pump installation should be done	Installation of a hand pump there will be done	Hand Pump for water facility will be done for which total Rs. 2.50 lakh will be spent as capital cost and Rs 0.50 lakh will be spent as recurring cost which has also been included in EMP Cost. Hand pump will be installed in the first year of mining operation.
6.	Jaherthan/Religious place should be fenced	Jaherthan/Religious place will be fenced	Budget of Rs. 1.0 lakhs capital cost and 0.25 lakh as a recurring cost will be spent for fencing of Jaherthan Fencing will be done in the 1 st year of mining.
7.	playground should be levelled and jerseys, boots and footballs should be provided	Ground will be levelled and jerseys, boots and football would be provided	Budget for ground leveling Rs. 1.0 Lakh capital cost & Rs 0.25 Lakh as a recurring cost has been proposed for the distribution of the sports kit . Ground leveling will be done in the 1 st year of mining operation.
8.	Distribution of the Dairy	Dairy will be provided.	Budget of Rs 0.25 Lakh as recurring cost will be provided for distribution of dairy
9.	financial support in times of distress and happiness for Raiyats	Raiyat would be supported in their happiness and distress.	Rs. 2.0 lakh will be spent to provide assistance during festivals and times of happiness and sorrow which is also included in the EMP cost.
10	Maintenance of Road	Village road will be maintained on regular basis	A sum of Rs. 2.0 Lakh as a capital cost and 0.5 Lakh as a recurring cost will be allocated for Village road repair.
11	Total		Capital Cost:-8,50,000 Recurring Cost:- 7,75,000

BUDGETARY PROVISION (IN LAKHS)

PROJECT COST

Particulars			Capital	Recurring
Land			52,00,000	5,20,000
Infrastructure			15,00,000	1,50,000
Mining Equipment			0.00	72,00,000
<i>Equipment</i>	<i>Quantity</i>	<i>Rent per year</i>		
Dumper	2	1600000		
Compressor	1	2000000		
Water Sprinkler	1	600000		
Rock Breaker	3	1800000		
Excavator	1	600000		
	Loader	1	600000	
Water Facility for Domestic Purpose "0.40" KLD (Annual Water Demand "120"KL @4L per Tanker, total number of tanker required ("30") and per tanker cost @Rs. 500)			0.00	15,000
Statutory Clearances			5,00,000	0.00
Mine Closure Cost for fencing around mine			2,00,000	0.00
Environment Management Plan (EMP) Cost			23,56,700	16,48,950
Total			97,56,700	95,33,950

COST PROPOSED FOR EMP

Sl. No	Description	Capital Cost (Rs.)	Recurring Cost (Rs.)
1	2189 Tree Plantation @Rs.300 per Tree for planting & @Rs.50 per tree for maintenance	6,56,700.00	1,09,450
2	Water Tanker @Rs. 500 per Tanker for Dust Suppression (2.82 KLD) & Horticulture (10.23 KLD), 2.82+ 10.23 = 13.05 KLD 13.05 KLD X 300 Days = 3915 KLD 3915KLD / 4 KLD = 979Tankers	0	4,89,500.00
3	Environment Monitoring & Compliance	0	50,000.00
4	Environment Management Plan (For Habitation) under compliance of OM Z-11013/57/2014-IA.II (M) dated 29/10/2014 issued by MoEF& CC	8,50,000.00	2,25,000.00
Suggestions As per Public Hearing			
5	Budget for tuition Teacher for education	-	1,00,000

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6	Budget for education of children	-	50,000
7	For building platform (chabutra) for meeting	2,00,000	50,000
8	For Fencing (Jaherthan)	1,00,000	25000
10	For installing Hand Pump	2,50,000	50,000
11	Budget for ground leveling	1,00,000	25,000
12	Distribution of the sports kit for playing football	-	1,00,000
13	Distribution of Dairy	-	25,000
14	For organizing sports activity	-	1,00,000
15	Financial support in times of distress and happiness	-	2,00,000
16	Maintenance of Village Road	2,00,000	50,000
TOTAL		23,56,700	16,48,950

Monitoring Parameters and Frequency of Monitoring

S. no	Monitoring Parameters	No. of Locations	Frequency of Monitoring
1	Ambient Air: Ambient Air Quality at appropriate location for PM10, PM2.5, SO2, NOx in the vicinity of the mine area. In the surrounding area covering project site only.	3 Stations	Six Monthly
2	Water: Surface water sample in the vicinity of the Project area.	2 Surface water 2 Ground water	Six Monthly
3	Noise: Day & Night level Noise Monitoring.	4 stations	Six Monthly
4	Soil: Soil Monitoring, Qualitative and quantitative testing/analysis to check the soil fertility, porosity, texture, water holding capacity, etc.	2 stations	Six Monthly

SE Need based Survey detail

S. No.	Community Priority	Status	Need of the Community	Yearly Budget, Rs. In lacks
1.	Sport & Education	Very Poor	Playground levelling and sports kit , and Books distribution	4.00
2.	Drinking Water	Average	Hand Pump and Bore wells required	2.00
3.	Social Issues	Un-employment	Employment will be provided based on capability and experience	
TOTAL				6.00

Environment Management Practices to be followed:

Aspect	Mitigation Measures / Control Measures
Solid Waste Management	<p>Solid waste management is important from both aesthetic and environmental points of view and will be managed as per the Solid Waste Management Rules, 2016.</p> <ul style="list-style-type: none"> ➤ An O.B. (Overburden) dump area of 0.19 ha (L x W x H=67 m x 28 m x 5 m) has been provided on the north side of area. This will accommodate 9337 cum of waste during 1st year. Some quantity approx. 5000 cum will be used in road maintenance. ➤ In the 2nd year of mining intercalated waste will be removed and this will be temporally dumped in the area 0.08 ha (L x Wx H= 54 m x 15m x 3 m) at slop dumping over the 1st year dump. Approx 3000 cum quantity of waste shall be used for road maintenance. During second year of mining. In 3rd, 4th & 5th year intercalated waste will be removed and this intercalated waste material during plan period will be dumped temporally and it will be used in road dressing. ➤ In conceptual plan period total waste generated will be used in backfilling in lower bench of exhausted quarry. ➤ Total waste generated during plan period is 18,819.95 cum. ➤ No hazardous or other solid waste generation is envisaged from the stone mining activities
Air Quality Management	<ul style="list-style-type: none"> • Wet drilling and use of sharp drill bits to minimize dust generation. • Controlled blasting using optimum explosive charge during favorable weather conditions. • Regular maintenance of diesel equipment and vehicles to reduce emissions. • Water sprinkling on haul roads, loading/unloading points, and working areas. • All transport vehicles will have valid PUC certificates. • Greenbelt and roadside plantation to act as dust and noise barriers.
Water Quality Management	<ul style="list-style-type: none"> • Mining will be confined only above the Ground Water Table (GWT). • Rainwater accumulated in the pit will be collected and pumped out regularly during monsoon. • Settling sump will be provided to desilt pumped out of mine-pit and collected through garland drain before discharge into natural drainage. • Garland and foot drains will be constructed around the quarry to control surface runoff. • Sewage from rest shelters will be treated through septic tank-soak pit systems. • Foot drain would be provided around the external dump, if any.
Noise Quality Management	<ul style="list-style-type: none"> • Mining activities will be restricted to daytime and carried out with controlled blasting techniques. • Acoustic enclosures and mufflers will be provided for drilling and DG set operations. • Regular maintenance of mining machinery to minimize vibration and noise. • Greenbelt development around the lease boundary to attenuate

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	<p>noise propagation.</p> <ul style="list-style-type: none"> • Use of delayed blasting technique to minimize the adverse impact of vibration.
Soil Quality Management	<ul style="list-style-type: none"> • Topsoil will be carefully removed and stored separately for future use in plantation and reclamation. • Garland drains and retaining walls will prevent soil erosion and siltation. • Spillage of oil or fuel will be avoided; impervious flooring and oil traps provided near storage areas • Post-mining, the area will be rehabilitated using stored topsoil and native vegetation
Flora & Fauna management	<ul style="list-style-type: none"> • No tree felling will be undertaken without obtaining permission from the competent authority. • Greenbelt and plantation will be developed using native species along approach roads and lease periphery (7.5m Safety Zone). • Dust suppression measures will minimize impact on surrounding vegetation
Socio Economy:	<ul style="list-style-type: none"> • Priority employment to local people in mining and ancillary activities. • Community development initiatives such as tree plantation drives, road maintenance, and local infrastructure support. • Awareness programs on safety, hygiene, and environmental protection
Monitoring & Reporting:	<ul style="list-style-type: none"> • Periodic monitoring of air, water (ground & surface), noise, and soil quality as per CPCB and SPCB guidelines. • All monitoring reports will be submitted to statutory authorities as per the compliance schedule. • Corrective measures will be taken immediately if any deviation from standards is observed.
Risk & Hazard	<p>Activities which are likely to create risk are: Temporary Storage of Explosives, Charging of Explosives, Blasting, Drilling, Bench Formation, Loading / Unloading, Transportation</p> <p>Proposed Preventive measures:</p> <ul style="list-style-type: none"> ▪ Overall slope angles of benches will be maintained at 45°. ▪ Unmanageable heights are not created. ▪ Loose sides are properly dressed. ▪ No loose stone or debris will be permitted to remain on the top of the bench or side of any excavation (Regulation 106(4) of MMR 1961). ▪ No undercutting of any face or sides will be permitted so as to cause any overhanging (Regulation 106(5) of MMR 1961) ▪ It will be ensured that the drilling equipment is suitable for the job. ▪ The person in charge of the drilling machine is competent to carry out the drilling operation; part of the training includes instructions to always face towards the open edge of the bench so that any inadvertent backward step is away from the edge. ▪ Provision of portable rail fencing between the drilling operations and the edge of the bench

	<ul style="list-style-type: none"> ▪ Provision to attach a safety line to the drilling rig and provide a harness for the driller to wear. ▪ Restricted access to the area to all persons except those necessary for the drilling operation. ▪ Wet drilling will be carried out by constantly injecting a jet of water at the drill bit inside the hole, which prevents dust generation. ▪ In case due to any reason, wet drilling is not possible (due to non-availability of water), exhaust/ vacuum system will be provided which removes the dust from the drill hole continuously and discharges the same in a dust collector specially provided for the purpose. ▪ Drilling machine shall be fitted with dust suppression, collection and disposal arrangement.
Blasting & Handling of Explosives	<ul style="list-style-type: none"> ▪ Blast hole geometry shall be properly designed. ▪ Blast site shall be wetted before and after blasting operations are completed. ▪ Only optimum quantity of permissible explosives shall be used so that the vibrations do not damage the structures/houses if the quarrying operations are close to human habitation. ▪ Blasting shall be conducted only during favourable weather conditions and only during the day time and permissible hours. ▪ While carrying out blasting operations near habitations, wide publicity will be given in the local area through announcement and other available media so that local people become aware of the blasting activities being undertaken in the area and take appropriate precautions. ▪ The vibrations should be monitored periodically in consultation with the local Mining authorities. ▪ Use of explosives is specialist work. Planning for a round of shots is necessary to ensure that the face is properly surveyed, holes correctly drilled, direction logged, the weight of explosive suitable for good fragmentation and the continuity of the initiator are but a few of the steps necessary to ensure its safe use. ▪ Proper and safe storage of explosives in approved and Licensed Magazine. ▪ Proper security system to prevent theft/ pilferage, unauthorized entry into Magazine area and checking authorized persons to prevent carrying of match box, lights, mobile phones, cigarette or Bidi etc. will be put in place. ▪ Explosives shall be conveyed in special containers. ▪ Explosives and detonators shall not be carried in the same container. ▪ The holes which have been charged with explosives will not be left unattended till blasting is completed.
Health Hazards	<p>Health hazards should be interpreted as being harmful dust and noise which is emitted during surface mining operations. All suitable steps and precautions will be undertaken to ensure minimum health hazard. Provision of use of Personal Protective Equipment (PPE) will be kept. The PPE shall be of good make and quality, wherever possible ISI certified, suitable for the hazard e.g. a dust respirator fitted with the correct filter to capture the particulate hazardous dust and maintained to recommended standards. As personal protective equipment only</p>

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	affords limited protection it will only be used as a last resort and as an interim arrangement until other steps are taken to reduce the risk of personal injury to an acceptable level
Accident Prevention	<ul style="list-style-type: none"> ▪ Mine road shall be made smooth regularly with a road roller. ▪ Mine road will be made sufficiently wide to keep two-way traffic. Regular water sprinkling will be done on mine road and haul road to avoid suspension of dust. ▪ All transportation within the mine lease area should be carried out directly under the supervision and control of management. ▪ The vehicles will be maintained in good working condition and checked thoroughly at least once a month by the competent person authorized for the purpose by the management. ▪ Navigation signs will be provided at each and every turning point up to the main road (wherever required). ▪ To avoid danger while reversing the vehicles especially at working place/loading points, stopper should be posted to properly guide reversing/spotting operating.

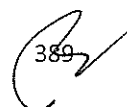
Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District Survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- i. If any tree felling than necessary permission shall be taken from the competent authority.
- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.
- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.
- l. Personal protective equipments such as clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Shyampur Stone Deposit of M/s Mandhan Minerals Corporation, Village : Shyampur, Thana : Malpahari (OP), Distt.: Pakur, Jharkhand (2.083 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I along with following specific conditions :

- I. In compliance of Office Memorandum no. IA-J-11013/20/2025-IA-P, dated 25.11.2025 of MoEF&CC, Govt. of India, the PAs will mandatorily obtain the Environmental Safeguard to be implemented from Jharkhand State Pollution Control Board within 30 days of issuance of EC or 31.01.2026 which ever is earlier.
- II. The mine will come in operation only after obtaining permission from DGMS for controlled and delayed blasting.
- III. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "Ek Ped Ma Ke Naam" and the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.
- IV. The Deputy Commissioner through District Mining Officer will ensure that the mines owner of the respective leases to complete the plantation and maintenance in a time bound manner.
- V. Suitable plant species of not less than 2 M height to be planted equal to twice the area of saplings proposed in Safety zone. This is to be planted in land available near mines and outside safety zone. This will be in addition to plantation in safety zone. Newly planted saplings to be maintained for minimum 3 years with Geo-Tagged photographs.
- VI. Dedicated water tanker to be provided for mine. The tanker to be used for spraying water on haul road and for irrigating newly planted saplings only. Sprinkling to be done such that the haul road is kept moistened all the time with Geo-Tagged photographs.
- VII. Pre employment Occupational health check up for employees to be done and thereafter at annual interval for PLFT, Audiometry and other required tests .Summary findings of same to submitted along with 6 monthly compliance.
- VIII. Ensure use of Quality PPEs equivalent not less than 3M make. Records of same to be maintained and submitted with 6 monthly compliance report with Geo-Tagged photographs.
- IX. Keep vulnerable areas unmanned. Ensure rotation of duties. Records to be maintained and submitted with 6 monthly compliance report.
- X. Failing of any of terms & conditions mentioned in EC can lead to revocation / cancellation of EC.

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A. Deputy Commissioner, Garhwa or through authorized representative.

- i. Updated District Survey Report (DSR) for Minor Minerals other than Sand Mining or River Bed Mining (Stone / Earth Work), Distt. Garhwa.

The updated DSR was submitted by Deputy Commissioner, Garhwa. He was represented by Shri Rajendra Oraon, District Mining Officer, Garhwa at the SEAC meeting on 19.01.2026.

During the meeting the DMO, Garhwa presented the DSR before the Committee. The DSR was appraised in light of S.O. no. 3611 (E), dated 25.07.2018 of MoEF&CC, Govt. of India.

It was found during the appraisal that the DSR is not prepared as per S.O. no. 3611 (E), dated 25.07.2018 of MoEF&CC, Govt. of India.

It will be taken up for consideration after the revised DSR as per S.O. no. 3611 (E), dated 25.07.2018 of MoEF&CC, Govt. of India.

B. Consideration of proposals :

1. Bantahajam Stone Mine of M/s R.S. Minerals (Partner : Shri Sanjay Kumar Yadav & Shri Rakesh Sharma), Village : Bantahajam, Thana : Silli, Thana no. : 108, Distt. : Ranchi, Jharkhand (2.94 Ha).

(Proposal no.: SIA/JH/MIN/ 558043 /2025)

Name of the consultant : Oceao-Enviro Management Solutions (India) Pvt. Ltd., Ghaziabad, U.P.

This is a new project which has been taken for appraisal on 19.01.2026.

Project Sector: 1(a) Mining of Minerals, Category: B2.

Application for Environmental Clearance (EC).

EC Application for: Proposed Capacity: 1,47,921Cum Per Annum or 3,99,386.70Ton Per Annum

Project and Location Details:

S. No	Parameter	Details
1	Project Name	: Bantahajam Stone Mineby M/s R.S. Minerals.









2	Partners	: Sri Sanjay Kumar Yadav S/o Sri Dwarika Prasad Yadav At- village-Rampur karara, Thana- Taljahari, Post-Sakrigali Ghat District – Sahibganj-816115, Jharkhand. Sri Rakesh Sharma S/o Sri Bodan Ram Sharma At- LIG-208, Deen Dayal Colony, Motilal Nehru Nagar, Bhilai, Post-Smritinagar, District – Durg, Chhattisgarh-490020.
3	Lease Address	: Village -Bantahajam, Thana - Silli, Thana No-108, District - Ranchi, Jharkhand
4	Lease Area	: Acres: 7.26 Ha: 2.94
5	Cluster Details	: NA
6	Type of Land	: Raiyati Land (Non-Forest)
7	Project Cost	: Rs. 42.00 lakhs
8	EMP Budget	: Capital: 35.54Lakhs Recurring: 6.65 Lakhs / year
9	New or Expansion	: New
10	Mineable Reserves	: 6,99,943 Cum 18,89,846.10 Tonnes
11	Mine Life	: FiveYears
12	Man power	: 28 persons
13	Water Requirement	: Total water requirement is about 11.0 KLD= 1.0 KLD (Drinking & Domestic Uses) + 6.0 KLD Plantation) +4.0 KLD (Dust Suppression)
14	Water Source	: by Authorised hired water tankers.
15	DG Set / power	: 25 KVA (Temporary setup for Backup).
16	Crusher	: No
17	Nearest Water Body	: Subarnarekha River is about 1.25 km in E direction.
18	Nearest Habitation	: Small Barn is about 119 m in northern direction Nearest habitation is about 450m in west direction.(EMP Submitted)
19	Nearest Rail Station	: Torang Railway station is approx. 4.79 km in ESE direction lease area.
20	Nearest Airport	: Deoghar is about 50.09 km and Birsa Munda Airport, Ranchi is about 49.07 in W Direction away from lease area.
21	Nearest Forest	: Kalimati R.F is about 10.91 km in E direction
22	Road & Highways	: (SH-1), Muri-Ranchi is 7.74 Km in N direction and Barendra Road is 0.16 km in W direction.
23	Approach Road	: Approach Road is approx. 400 m in S-W direction

CO-ORDINATES

S. No.	Latitude	Longitude	S. No.	Latitude	Longitude
1	23° 17' 2.331" N	85° 48' 47.971" E	10	23° 16' 54.393" N	85° 48' 51.587" E
2	23° 17' 1.533" N	85° 48' 49.832" E	11	23° 16' 54.034" N	85° 48' 50.268" E
3	23° 17' 0.733" N	85° 48' 51.672" E	12	23° 16' 54.334" N	85° 48' 48.147" E

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4	23° 16' 59.597" N	85° 48' 51.193" E	13	23° 16' 55.002" N	85° 48' 47.943" E
5	23° 16' 58.443" N	85° 48' 50.632" E	14	23° 16' 57.226" N	85° 48' 49.057" E
6	23° 16' 58.258" N	85° 48' 52.245" E	15	23° 16' 58.857" N	85° 48' 47.734" E
7	23° 16' 57.412" N	85° 48' 53.709" E	16	23° 16' 59.542" N	85° 48' 46.796" E
8	23° 16' 55.779" N	85° 48' 53.371" E	17	23° 17' 0.423" N	85° 48' 46.995" E
9	23° 16' 53.928" N	85° 48' 53.362" E	18	23° 17' 1.500" N	85° 48' 47.309" E

LAND DETAILS

S.No.	Khata No.	Plot No.
1.	183	8312
2.	204	8277(P)

STATUTORY CLEARANCES

1	LOI / Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Officer, Ranchi vide letter no. 1084/M, dated 30.08.2025.
2	CO	:	The CO, Silli (Ranchi) vide letter no. 467 (ii), dated 31.05.2025 has mentioned the plot no. of the project is not recorded as "Jungle-Jhari" in R.S. Khatiyani & Register II. During the appraisal it was seen from the KML that few houses at 119 meters and habitation at a distance of 450 meters from mining lease area. For which detailed Environmental Management Plan has been prepared and submitted.
3	DMO Cluster	:	DMO, Ranchi vide memo no. 1230/M, dated 03.10.2025 certified that no other mining lease area exists within 500 meters radius from proposed project site.
4	DFO Wild Life	:	DFO, Wildlife Division, Ranchi vide letter no. 390, dated 17.06.2025 certified that the proposed project site is outside Eco Sensitive Zone of Palkot Wildlife Sanctuary.
5	DFO Territorial	:	Divisional Forest Officer, Ranchi Forest Division vide letter no. 2310, dated 02.08.2025 certified that the distance of reserved / protected forest is more than 250 meters from proposed project site.
6	DSR	:	The LoI was granted on 30.08.2025. The DSR for Ranchi was approved by the Sub-Divisional Committee on 22.07.2024 and submitted to SEIAA for approval on 22.07.2024. However, DC-cum-District Magistrate, Ranchi vide letter no. 1223/M, dated 27.09.2025 requested to consider the said project proposal as part of approved District Survey Report & further requested that this project may be taken up for consideration for grant of EC.

			The Committee accepted the request of the DC-cum-District Magistrate, Ranchi.
7	Gram Sabha	:	BDO, Silli (Ranchi) vide letter no. 720 (ii), dated 02.08.2025 informed that Gram Sabha conducted on 15.07.2025.
8	Mine Plan Approval	:	Approved by DMO, Ranchi vide Memo No. 1280/M, dated 15.10.2025.
9	Qualified Person	:	Md. Tauseef Warsi was present in the meeting and affirmed that the mine plan has been prepared by him.

WORKING DETAILS

1	Mining Method	:	OCM & Semi Mechanized
2	Quarry Area	:	2.31Ha Life of Mine –FiveYears
3	Waste Generation	:	5 years–Waste or O.B–62401.00Cum
4	Stripping Ratio(t/m ³)	:	1:0.03
5	Working Days	:	300
6	Benches: size & No	:	6m x 6m
7	Highest Elevation of lease Area	:	251m AMSL
8	Lowest Elevation of lease Area	:	240m AMSL
9	Ultimate Working Depth	:	204m AMSL
10	Water Table	:	190m AMSL (50m BGL)
11	Topography of Mine	:	Two Small outcrop
12	Explosive Requirement	:	332.92kg/Day (External Agency)
13	Diesel/Fuel requirement	:	668 Litres per day

YEAR WISE PRODUCTION DETAILS

Year	Production of Stone in Cum	Production of Stone in Tonnes	Generation of waste/Overburden in Cum	Grade/Uses
1st	1,38,431.00	3,73,763.70	35230.00	Construction & Road
2nd	1,44,089.00	3,89,040.30	7832.00	Construction & Road
3rd	1,34,730.00	3,63,771.00	19339.00	Construction & Road
4th	1,34,390.00	3,62,853.00	0.00	Construction & Road
5th	1,47,921.00	3,99,386.70	0.00	Construction & Road
Total	6,99,561.00	18,88,814.70	62,401.00	

LAND USE

LAND USE PATTERN			
	Existing	First to Fifth Years	At Conceptual period
Category	Area in	Area in Hectares	Area in Hectares

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	Hectares		
Quarry	0.00	2.31	2.31 ha area converted in to water reservoir
Haul Road	0.00	0.02 (used under quarry)	0.00
Proposed Crusher	0.00	0.00	0.00
Green belt in Safety Zone	0.00	0.63	0.63
Dump with Parapet wall & Garland drain	0.00	0.00	Top soil will be used for plantation in first year and rest OB will be used road dressing and Backfilling
Total area in use	0.00	2.94	2.94
Balance unused area	2.94	0.00	0.00
Balance used area	0.00	0.00	0.00
Total Applied Lease Area	2.94	2.94	2.94

ENVIRONMENT MANAGEMENT

Green Belt Development

Year	Place of Plantation	Spacing b/w plants	Total No. of Plants	Area Cover in Square Meters	Total Area in Ha.	Species
1st	Safety Zone	2.5 x 2.5	1008	6300	0.63	<u>Safety Zone</u> Gulmohar, Gular, Sagwan, Sakua <u>Along the Rd.</u> <u>fruit bearing trees</u> Mango, Jack fruit, Guava,
	Approach Road	2.0 x 2.0	800	400 M Approach Road 400/2 = 200 Plants 200 x 4 row = 800 Plant	---	
2nd	Care & Protection	---	---	---	---	
3rd	Care & Protection	---	---	---	---	
4th	Care & Protection	---	---	---	---	
5th	Care & Protection	---	---	---	---	
Total			1,808	6300	0.63	

- In accordance with Office Memorandum No. F.No. IA3-22/3/2024-IA.III (E-241594), dated 24.07.2024, issued by the Ministry of Environment, Forest and Climate Change (MoEF&CC), out of the total 1808 trees proposed to be planted in the designated green belt area—both within and outside the lease boundary—10% (approximately 181 saplings) shall be earmarked under the national tree plantation campaign "Ek Ped Ma Ke Naam."
- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable

species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Environment Management Budget.

PROPOSED FOR ENVIRONMENT MANAGEMENT COST			
S.NO	Mitigative measures to protect Environment	Capital Cost (In Lakhs)	Recurring cost (In Lakhs)
01.	Water Sprinkling/Air pollution control (Dust Suppression along haulage road and mine)	20.0	2.5
02.	Green belt development safety zone 7.5mtrand along the road (for each plant including hedges and fences) @ No. of plants 1808 x 500Rs.	9.04	2.0
03.	Environment Monitoring (Air, Water, Noise & Soil Monitoring)	Nil	1.20
04	Solar Light Installed in Village Bantahajam10Pcs @15000	1.5	0.30
05.	Settling tank & Garland drain	2.0	0.5
TOTAL		32.54	6.5

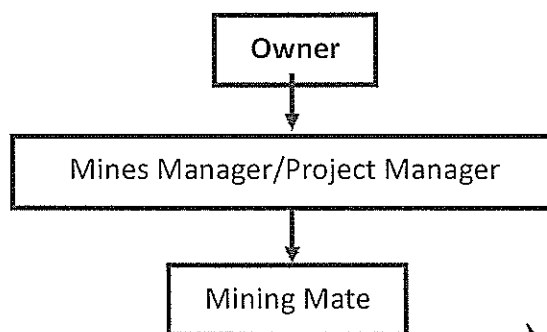
Additional Blasting cost

BLASTING			
		Capital	Recurring
1	Training and Awareness of personnel during Blasting operations	50,000	0
2	Provision of safe distance from the Project site for the settlements		
	• Blasting shelters and Sirens	50,000	5,000
	• Portable Drop Arm Barrier	2,00,000	10,000
Total cost		3,00,000	15,000

Endangered species of flora, fauna & Schedule-I

Based on the preliminary study conducted during the baseline data generation phase, along with consultations with local residents and relevant authorities, no endangered species of flora or fauna, including those listed under Schedule-I of the Wildlife (Protection) Act, 1972, were observed within the designated 10 km study area.

Environment Monitoring Cell



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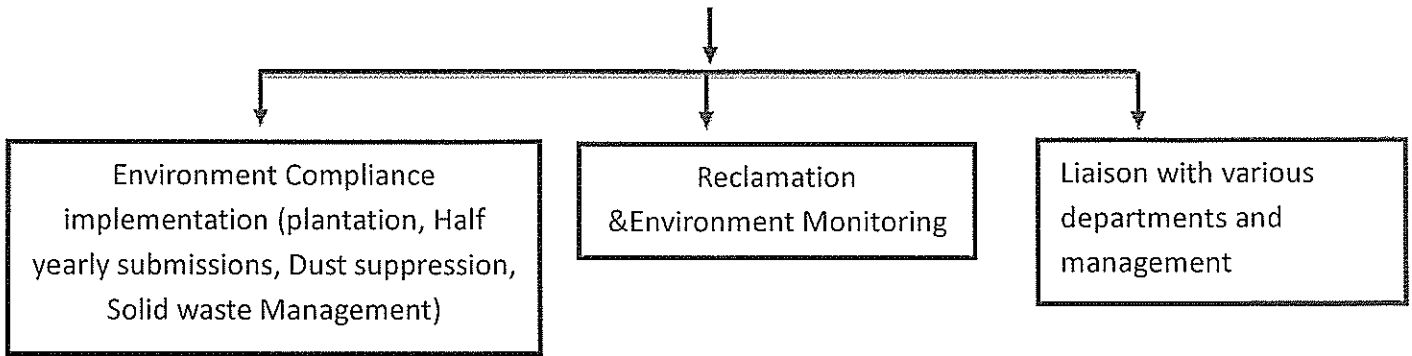


Fig: Organization Chart for Environment Management Cell

Functions of Environment Management cell

- Supervision: Managed by Mines Manager with a qualified technical team.
- Personnel: Includes skilled, semi-skilled, unskilled, and other third parties.
- Responsibilities:
 - ✓ Implement environmental control measures.
 - ✓ Oversee reclamation planning and management.
 - ✓ Manage air and water pollution control.
 - ✓ Liaise with state and central statutory agencies.
 - ✓ Develop greenbelt areas.
- Performance Review: Assess corporate environmental performance and report non-compliances.
- Remedial Actions: Suggest and implement actions for exceeding pollution limits.
- Coordination:

Collect health statistics for workers and local population.

Act as a bridge for project implementation and Project Authorities

Facilitate afforestation efforts.

Environment Monitoring Plan (post operation)

Monitoring Parameters and Frequency of Monitoring

S. no	Monitoring Parameters	No. of Locations	Frequency of Monitoring
1	Ambient Air: Ambient Air Quality at appropriate location for PM10, PM2.5, SO2, NOx in the vicinity of the mine area. In the surrounding area covering project site only.	3 Stations	Six Monthly
2	Water: Surface water sample in the vicinity of the Project area.	2 Surface water 2 Ground water	Six Monthly
3	Noise: Day & Night level Noise Monitoring.	4 stations	Six Monthly
4	Soil: Soil Monitoring, Qualitative and quantitative testing/analysis to check the soil fertility, porosity,	2 station	Six Monthly

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	texture, water holding capacity, etc.		
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No Schedule-I species or significant wildlife movement was observed during the survey period.

Overall, the study area exhibits low to moderate ecological sensitivity, with no critical biodiversity or habitat constraints for the proposed project.

Environment Management Practices to be followed:

Aspect	Mitigation Measures / Control Measures
Solid Waste Management	The waste encountered during the mining operation is mainly 62401.00 cum. During Plan period gritty soil removed will be dumped at south-east side with suitable precaution. Some quantity of the removed gritty soil would also be used for road dressing and plantation. After conceptual period mined out area of quarry will be reclaimed to the extent possible.
Air Quality Management	<ul style="list-style-type: none"> • Wet drilling and use of sharp drill bits to minimize dust generation. • Controlled blasting using optimum explosive charge during favorable weather conditions. • Regular maintenance of diesel equipment and vehicles to reduce emissions. • Water sprinkling on haul roads, loading/unloading points, and working areas. • All transport vehicles will have valid PUC certificates. • Greenbelt and roadside plantation to act as dust and noise barriers.
Water Quality Management	<ul style="list-style-type: none"> • Mining will be confined only above the Ground Water Table (GWT). • Rainwater accumulated in the pit will be collected and pumped out regularly during monsoon. • Settling sump will be provided to desilt pumped out of mine-pit and collected through garland drain before discharge into natural drainage. • Garland and foot drains will be constructed around the quarry to control surface runoff. • Sewage from rest shelters will be treated through septic tank-soak pit systems. • Foot drain would be provided around the external dump, if any.
Noise Quality Management	<ul style="list-style-type: none"> • Mining activities will be restricted to daytime and carried out with controlled blasting techniques. • Acoustic enclosures and mufflers will be provided for drilling and DG set operations. • Regular maintenance of mining machinery to minimize vibration and noise. • Greenbelt development around the lease boundary to attenuate noise propagation. • Use of delayed blasting technique to minimize the adverse impact of vibration.
Soil Quality Management	<ul style="list-style-type: none"> • Topsoil will be carefully removed and stored separately for future use in plantation and reclamation.

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	<ul style="list-style-type: none"> • Garland drains and retaining walls will prevent soil erosion and siltation. • Spillage of oil or fuel will be avoided; impervious flooring and oil traps provided near storage areas • Post-mining, the area will be rehabilitated using stored topsoil and native vegetation
Flora & Fauna management	<ul style="list-style-type: none"> • No tree felling will be undertaken without obtaining permission from the competent authority. • Greenbelt and plantation will be developed using native species along approach roads and lease periphery (7.5m Safety Zone). • Dust suppression measures will minimize impact on surrounding vegetation
Socio Economy:	<ul style="list-style-type: none"> • Priority employment to local people in mining and ancillary activities. • Community development initiatives such as tree plantation drives, road maintenance, and local infrastructure support. • Awareness programs on safety, hygiene, and environmental protection
Monitoring & Reporting:	<ul style="list-style-type: none"> • Periodic monitoring of air, water (ground & surface), noise, and soil quality as per CPCB and SPCB guidelines. • All monitoring reports will be submitted to statutory authorities as per the compliance schedule. • Corrective measures will be taken immediately if any deviation from standards is observed.
Risk & Hazard	<p>Activities which are likely to create risk are: Temporary Storage of Explosives, Charging of Explosives, Blasting, Drilling, Bench Formation, Loading / Unloading, Transportation</p> <p>Proposed Preventive measures:</p> <ul style="list-style-type: none"> ▪ Overall slope angles of benches will be maintained at 45°. ▪ Unmanageable heights are not created. ▪ Loose sides are properly dressed. ▪ No loose stone or debris will be permitted to remain on the top of the bench or side of any excavation (Regulation 106(4) of MMR 1961). ▪ No undercutting of any face or sides will be permitted so as to cause any overhanging (Regulation 106(5) of MMR 1961) ▪ It will be ensured that the drilling equipment is suitable for the job. ▪ The person in charge of the drilling machine is competent to carry out the drilling operation; part of the training includes instructions to always face towards the open edge of the bench so that any inadvertent backward step is away from the edge. ▪ Provision of portable rail fencing between the drilling operations and the edge of the bench ▪ Provision to attach a safety line to the drilling rig and provide a harness for the driller to wear. ▪ Restricted access to the area to all persons except those necessary for the drilling operation. ▪ Wet drilling will be carried out by constantly injecting a jet of water at the drill

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		<p>bit inside the hole, which prevents dust generation.</p> <ul style="list-style-type: none"> ▪ In case due to any reason, wet drilling is not possible (due to non-availability of water), exhaust/ vacuum system will be provided which removes the dust from the drill hole continuously and discharges the same in a dust collector specially provided for the purpose. ▪ Drilling machine shall be fitted with dust suppression, collection and disposal arrangement.
Blasting & Handling of Explosives		<ul style="list-style-type: none"> ▪ Blast hole geometry shall be properly designed. ▪ Blast site shall be wetted before and after blasting operations are completed. ▪ Only optimum quantity of permissible explosives shall be used so that the vibrations do not damage the structures/houses if the quarrying operations are close to human habitation. ▪ Blasting shall be conducted only during favourable weather conditions and only during the day time and permissible hours. ▪ While carrying out blasting operations near habitations, wide publicity will be given in the local area through announcement and other available media so that local people become aware of the blasting activities being undertaken in the area and take appropriate precautions. ▪ The vibrations should be monitored periodically in consultation with the local Mining authorities. ▪ Use of explosives is specialist work. Planning for a round of shots is necessary to ensure that the face is properly surveyed, holes correctly drilled, direction logged, the weight of explosive suitable for good fragmentation and the continuity of the initiator are but a few of the steps necessary to ensure its safe use. ▪ Proper and safe storage of explosives in approved and Licensed Magazine. ▪ Proper security system to prevent theft/ pilferage, unauthorized entry into Magazine area and checking authorized persons to prevent carrying of match box, lights, mobile phones, cigarette or Bidi etc. will be put in place. ▪ Explosives shall be conveyed in special containers. ▪ Explosives and detonators shall not be carried in the same container. ▪ The holes which have been charged with explosives will not be left unattended till blasting is completed.
Health Hazards		<p>Health hazards should be interpreted as being harmful dust and noise which is emitted during surface mining operations. All suitable steps and precautions will be undertaken to ensure minimum health hazard. Provision of use of Personal Protective Equipment (PPE) will be kept.</p> <p>The PPE shall be of good make and quality, wherever possible ISI certified suitable for the hazard e.g. a dust respirator fitted with the correct filter to capture the particulate hazardous dust and maintained to recommended standards. As personal protective equipment only affords limited protection it will only be used as a last resort and as an interim arrangement until other steps are taken to reduce the risk of personal injury to an acceptable level</p>
Accident Prevention		<ul style="list-style-type: none"> ▪ Mine road shall be made smooth regularly with a road roller. ▪ Mine road will be made sufficiently wide to keep two-way traffic. Regular water sprinkling will be done on mine road and haul road to avoid suspension of dust. ▪ All transportation within the mine lease area should be carried out directly under the supervision and control of management.

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	<ul style="list-style-type: none"> ▪ The vehicles will be maintained in good working condition and checked thoroughly at least once a month by the competent person authorized for the purpose by the management. ▪ Navigation signs will be provided at each and every turning point up to the mainroad (wherever required). ▪ To avoid danger while reversing the vehicles especially at working place/loading points, stopper should be posted to properly guide reversing/spotting operating.
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Undertaking submitted affirming:


- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District Survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- i. If any tree felling than necessary permission shall be taken from the competent authority.
- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.
- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.
- l. Personal protective equipments such as clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.


The Lol has been granted although this area is not included in the approved DSR. This EC has been considered on the request of the DC, Ranchi. However, the DC must ensure that the area over which the Lol is granted is meeting all the guideline as required for approval of the DSR and also to take concurrence from the Sub-Divisional Committee. The lease is to be granted only after taking concurrence of the Sub-Divisional Committee.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Bantahajam Stone Mine of M/s R.S. Minerals (Partner : Shri Sanjay Kumar Yadav & Shri Rakesh Sharma), Village : Bantahajam, Thana : Silli, Thana no. : 108, Distt. : Ranchi, Jharkhand (2.94 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I along with following specific conditions :

- I. In compliance of Office Memorandum no. IA-J-11013/20/2025-IA-P, dated 25.11.2025 of MoEF&CC, Govt. of India, the PAs will mandatorily obtain the Environmental Safeguard to be implemented from Jharkhand State Pollution Control Board within 30 days of issuance of EC or 31.01.2026 which ever is earlier.
- II. The mine will come in operation only after obtaining permission from DGMS for controlled and delayed blasting.
- III. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "Ek Ped Ma Ke Naam" and the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.
- IV. The Deputy Commissioner through District Mining Officer will ensure that the mines owner of the respective leases to complete the plantation and maintenance in a time bound manner.
- V. Suitable plant species of not less than 2 M height to be planted equal to twice the area of saplings proposed in Safety zone. This is to be planted in land available near mines and outside safety zone. This will be in addition to plantation in safety zone. Newly planted saplings to be maintained for minimum 3 years with Geo-Tagged photographs.
- VI. Dedicated water tanker to be provided for mine. The tanker to be used for spraying water on haul road and for irrigating newly planted saplings only. Sprinkling to be done such that the haul road is kept moistened all the time with Geo-Tagged photographs.
- VII. Pre employment Occupational health check up for employees to be done and thereafter at annual interval for PLFT, Audiometry and other required tests .Summary findings of same to submitted along with 6 monthly compliance.
- VIII. Ensure use of Quality PPEs equivalent not less than 3M make. Records of same to be maintained and submitted with 6 monthly compliance report with Geo-Tagged photographs.
- IX. Keep vulnerable areas unmanned. Ensure rotation of duties. Records to be maintained and submitted with 6 monthly compliance report.
- X. Failing of any of terms & conditions mentioned in EC can lead to revocation / cancellation of EC.

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2. Lowapara Stone Deposit of M/s Lakshmi Stone Works, Village : Lowapara, Thana : Shikaripara, Distt. : Dumka, Jharkhand (1.963 Ha).

(Proposal no.: SIA/JH/MIN/ 565270 /2026)

Name of the consultant : Oceao-Enviro Management Solutions (India) Pvt. Ltd., Ghaziabad, U.P.

This is a new project which has been taken for appraisal on 19.01.2026.

Project Sector: 1(a) Mining of Minerals, Category: B1.

Application for Terms of Reference (ToR) as per EIA Notification.

ToR Application for: Proposed Capacity:56,635 Cum per Year/1,52,915 tonnes per Year.

Project and Location Details:

S. No	Parameter	Details
1	Project Name	: Lowapara Stone Deposit By Lakshmi Stone Works
2	Proponent/Partner	: Sri Ajay Modi (HUF) R/o- Bhagalpur Road, Dudhani Dumka, Post & Thana-Dumka, District-Dumka-814101.
3	Lease Address	: Village -Lowapara, Anchal & Thana - Sikaripara, District - Dumka, Jharkhand
4	Lease Area	: Acres: 4.85 Ha: 1.963
5	Cluster Details	: Total area: (4.34+4.0+2.51+4.85= 15.70 Acre or 6.35 ha) Total no of mine in cluster: 4
6	Type of Land	: Raiyati Land
7	Project Cost	: 48.0 Lakhs
8	EMP Budget	: Capital: 36.73Lakhs Recurring: 8.47Lakhs
9	New or Expansion	: New
10	Mineable Reserves	: 5,58,923 Cum 15,09,092 Tonnes
11	Mine Life	: 9.9 Years say 10 Years
12	Man power	: 20 persons
13	Water Requirement	: Total water requirement is 10.70 KLD=0.70 KLD (Drinking & Domestic Uses) + 2.0 (Plantation) KLD + 8.0 KLD (Dust Suppression).
14	Water Source	: by Authorised hired water tankers
15	DG Set / power	: 25 KVA (Temporary setup for Backup)
16	Crusher	: NA
17	Nearest Water Body	: Kairabani Dam is about 11.94 km in the WSW direction.
18	Nearest Habitation	: Labapara is about 210 m in S direction.(EMP Submitted)
19	Nearest Rail Station	: PakdahaHarinsing Railway Station is approx. 4.70 km away from lease area in NNE Direction.

20	Nearest Airport	:	SidoKanhur Airport is about 29.24 km in W direction		
21	Nearest Forest	:	Forest	Distance	Direction
			Simanijor R.F.	1.6	N
			Daldali R.F.	2	NE
			Kusumghati P.F.	1.61	WSW
			Karkata P.F.	3.73	W
			Pur Pahar P.F.	3.79	SW
22	Road & Highways	:	(NH-114A), Dumka-Rampurhat Rd is 2.42 Km in NE direction.		
23	Nearest Approach Road	:	Approach Road is about 953m in E direction		

CO-ORDINATES

S. No	Latitude	Longitude
1	24°12'1.895"N	87°33'13.087"E
2	24°12'0.505"N	87°33'13.014"E
3	24°12'0.015"N	87°33'13.699"E
4	24°11'59.266"N	87°33'14.205"E
5	24°11'59.092"N	87°33'14.856"E
6	24°11'58.594"N	87°33'15.631"E
7	24°11'58.380"N	87°33'16.224"E
8	24°11'58.491"N	87°33'17.109"E
9	24°11'59.113"N	87°33'18.265"E
10	24°11'59.504"N	87°33'20.204"E
11	24°11'59.835"N	87°33'20.763"E
12	24°12'0.858"N	87°33'21.025"E
13	24°12'1.428"N	87°33'20.868"E
14	24°12'2.248"N	87°33'21.104"E
15	24°12'1.875"N	87°33'18.506"E
16	24°12'1.855"N	87°33'17.303"E
17	24°12'2.201"N	87°33'16.256"E
18	24°12'1.766"N	87°33'15.191"E
19	24°12'1.916"N	87°33'14.026"E

LAND DETAILS

Khata no.	Plot no.
5	65 & 66
7	67

STATUTORY CLEARANCES

1	LOI / Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Officer, Dumka vide letter no. 582/M, dated 08.04.2025.
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2	CO	:	The CO, Shikaripara vide letter no. 281/Ra., dated 28.03.2025 has mentioned the plot no. of the project is not recorded as "Jungle-Jhari" in R.S. Khatiyani & Register II. During the appraisal it was seen from the KML that habitation at a distance of 210 meters from mining lease area.
3	DMO Cluster	:	DMO, Dumka vide memo no. 724/M, dated 21.05.2025 certified that 02 other mining lease area (4.34 Acre & 4.00 Acre) and 01 Lol (2.51 Acre) exists within 500 meters radius from proposed project site and total area is 15.70 Acre.
4	DFO Wild Life	:	DFO, Wildlife Division, Hazaribag vide letter no. 355, dated 03.03.2025 certified that the proposed project site is outside Eco Sensitive Zone of Parasnath & Topchanchi Wildlife Sanctuary.
5	DFO Territorial	:	Divisional Forest Officer, Dumka Forest Division vide letter no. 3765, dated 20.11.2019 certified that the distance of reserved / protected forest is more than 250 meters from proposed project site.
6	DSR	:	The DMO, Dumka has certified vide memo no. 37/M, dated 15.01.2026 that this project is mentioned in approved DSR of Dumka District as a potential area (Page no. 318, Sl. no. 54).
7	Gram Sabha	:	Gram Sabha conducted on 16.02.2025.
8	Mine Plan Approval	:	Approved by DMO, Dumka vide Letter No. 26/M, dated 09.01.2026.
9	Qualified Person	:	Shri Vidya Bhushan Mishra through letter dated 19.01.2026 affirmed that the mine plan has been prepared by him.

Working Details

1	Mining Method	:	OCM & Semi-Mechanised
2	Lease Area	:	4.85 ACRES / 1.963 HA
			Life of Mine – 9.9 years say 10 years
3	Waste Generation	:	5 years– 26,257 cum
4	Stripping Ratio(t/m ³)	:	1:0.02
5	Working Days	:	300
6	Benches: size & No	:	6m x 6m
7	Highest Elevation of lease Area	:	220 m AMSL
8	Lowest Elevation of lease Area	:	201 m AMSL
9	Ultimate Working Depth	:	162 m AMSL
10	Water Table	:	150 m AMSL (51 m BGL)
11	Topography of Mine	:	Hillocks area
12	Explosive Requirement	:	42.53 Kg/Day say 43 Kg/day (External Agency)
13	Diesel/Fuel requirement	:	228 Litres per day

Year Wise Production Details

Year	Production of Stone in Cum	Production of Stone in Tonnes	Overburden in Cum	Intercalated waste in Cum	Total Waste in cum
1st	52,178	1,40,880	12052	2746	14,798
2nd	52,790	1,42,532	0	2778	2778
3rd	53,314	1,43,948	0	2806	2806
4th	54,975	1,48,431	0	2893	2893
5th	56,635	1,52,915	0	2981	2981
Total	2,69,891	7,28,706	12,052	14,205	26,257

Land Use

LAND USE PATTERN			
Land Utilization	Existing	First to Fifth Years	After Life of Mine
Excavation	0.287	0.875 (0.073ha area backfilled & restore as safety zone)	1.530 (0.231 ha area shall be reclaimed, 1.299ha converted in to water reservoir)
Waste Dump	0.00	0.138 (comes under quarry)	Nil (comes under quarry)
Road	0.059	0.024 (comes under quarry)	Nil (comes under quarry)
Infrastructure	0.0	0.0	0.0
Safety Zone Plantation	0.0	0.433	0.433
Total	0.346	1.470	1.963
Unused area	1.617	0.493 (comes under quarry)	0.00
Total Lease Area	1.963		

ENVIRONMENT MANAGEMENT

Green Belt Development

Year	Place of Plantation	Spacing b/w plants	Total No. of Plants	Area Cover in Square Meters	Total Area in Ha.	Species
1st	Safety Zone	2.0 x 2.0	693	4330	0.433	Pipal Bargad Palash Fruit Bearing Trees Mango, Jackfruit, Guava, Jamun
	Haul Road	3.0 x 3.0	1272	953 M Approach Road 953/3=318 Plants 318 x 4row = 1272 Plant		
	Reclaimed area	2.5 x 2.5	370	---	0.231	
	Compensatory planation	2.5 x 2.5	80	Plantation will be done with the help of local panchayat		
2nd	Care & Protection	---	---	---	---	
3rd	Care & Protection	---	---	---	---	
4th	Care & Protection	---	---	---	---	

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5th	Care & Protection	---	---	---	---
Total			2415	4330	0.664

In accordance with Office Memorandum No. F.No. IA3-22/3/2024-IA.III (E-241594), dated 24.07.2024, issued by the Ministry of Environment, Forest and Climate Change (MoEF&CC), out of the total 2415 trees proposed to be planted in the designated green belt area—both within and outside the lease boundary—10% (approximately 242 saplings) shall be earmarked under the national tree plantation campaign "Ek Ped Ma Ke Naam."

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Environment Management Budget

S. NO.	Particulars	Budget Provisions (Rs)	
		Capital	Recurring
Water Demand			
1(a)	Overhead water sprinkling Cost for 300 days for 8.0 KLD @5 KL tanker capacity, Rupees 500/- per tanker	1,00,000	2,40,000
	Green belt Cost for 300 days for 2.0 KLD @5 KL tanker capacity, Rupees 500/- per tanker		60,000
	& One dedicated tanker of 5 KL for Greenbelt Management	10,00,000	50,000
1(b)	Handling of sewage water	0	33,600
2	Prepare & Maintenance of approach road (Max. Road length 953 m, Width 4.0 m) @ 500Rs. /Meter.	4,76,500	20,000
3	Monitoring (Air, Water, Soil & Noise)	Nil	1,00,000
4	Settling tank 2 in no's (LBH 12 m* 7 m* 4 m) & Garland drains	2,00,000	30,000
5	Wire Fence 609 m x 300 /- meter	1,82,700	20,000
6	Settling tank & Garland drain	2,00,000	50,000
Plantation Scheme			
Plantation in consultation with DFO & Gram Panchayat and conversion to Grazing land as far as possible.			
6	Green belt development safety zone 7.5mtr, reclaimed area, Compensatory plantation and alongthe road (for each plants including hedges and fences and tree guard at approach roads) 2415 No. of plants x 500 Rs.	12,07,500	2,00,000
Solid Waste Management			
7	Bins 2 Nos.	1,500	4,000
8	Transport of Dry Waste	5,000	
9	Vehicle Maintenance +PUC Certification	Nil	25,000
Total EMP Budget		33,73,200	8,32,600

Additional Blasting EMP Budget

BLASTING			
		Capital	Recurring
1	Training and Awareness of personnel during Blasting operations	50,000	0
2	Provision of safe distance from the Project site for the settlements		
	• Blasting shelters and Sirens	50,000	5,000
	• Portable Drop Arm Barrier	2,00,000	10,000
Total cost		3,00,000	15,000

Endangered species of flora, fauna & Schedule-I

Based on the preliminary study conducted during the baseline data generation phase, along with consultations with local residents and relevant authorities, no endangered species of flora or fauna, including those listed under Schedule-I of the Wildlife (Protection) Act, 1972, were observed within the designated 10 km study area.

Organization Chart for Environment Management Cell

Environment Monitoring Cell

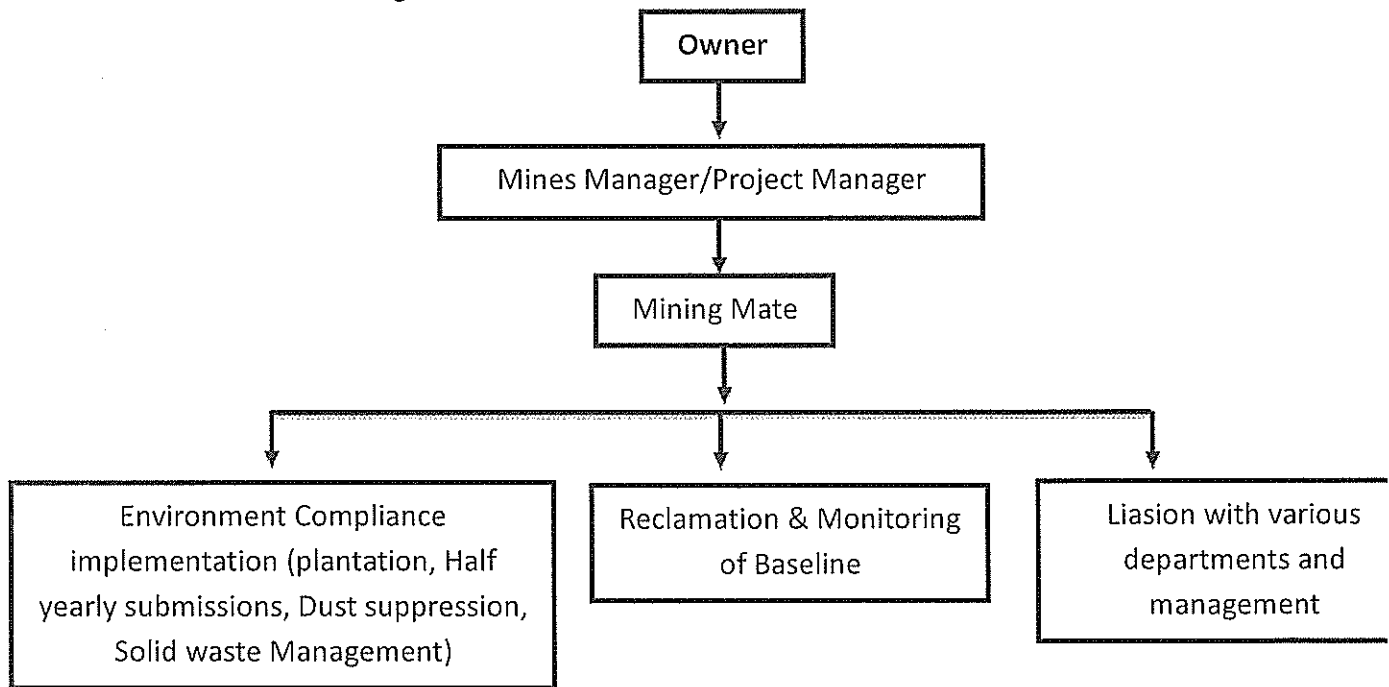


Fig: Organization Chart for Environment Management Cell

FUNCTIONS OF ENVIRONMENT MONITORING CELL

- Supervision: Managed by Mines Manager with a qualified technical team.
- Personnel: Includes skilled, semi-skilled, unskilled, and other third parties.
- Responsibilities:
 - ✓ Implement environmental control measures.
 - ✓ Oversee reclamation planning and management.
 - ✓ Manage air and water pollution control.
 - ✓ Liaise with state and central statutory agencies.

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✓ Develop greenbelt areas.

- Performance Review: Assess corporate environmental performance and report non-compliances.
- Remedial Actions: Suggest and implement actions for exceeding pollution limits.
- Coordination:

Collect health statistics for workers and local population.

Act as a bridge for project implementation and Project Authorities

Facilitate afforestation efforts.

Environment Monitoring Plan (post operation)

Monitoring Parameters and Frequency of Monitoring

S. no	Monitoring Parameters	No. of Locations	Frequency of Monitoring
1	Ambient Air: Ambient Air Quality at appropriate location for PM10, PM2.5, SO2, NOx in the vicinity of the mine area. In the surrounding area covering project site only.	3 Stations	Six Monthly
2	Water: Surface water sample in the vicinity of the Project area.	2 Surface water 2 Ground water	Six Monthly
3	Noise: Day & Night level Noise Monitoring.	4 stations	Six Monthly
4	Soil: Soil Monitoring, Qualitative and quantitative testing/analysis to check the soil fertility, porosity, texture, water holding capacity, etc.	2 station	Six Monthly

BASELINE Findings:

Study period: October 2025- December 2025

Parameter	No. of locations	Baseline Findings
AAQM	8	PM ₁₀ ranged from 76.7 µg/m ³ to 85.9 µg/m ³ , while PM _{2.5} concentrations varied between 35.0 µg/m ³ and 40.0 µg/m ³ . The levels of SO ₂ were found to be in the range of 5.5 µg/m ³ to 13.6 µg/m ³ , whereas NO ₂ concentrations ranged from 15.1 µg/m ³ to 18.7µg/m ³ .
ANQM	5	Noise Level during Day Time – 38.4 dB (A) to 59.9 dB (A) Noise Level during Night Time – 26.7 dB(A) to 36.4 dB (A)

SQM	5	In the study area, variations in the pH of the soil were found to be neutral (7.52 to 7.84). Electrical conductivity (EC) is a measure of the soluble salts and ionic activity in the soil. In the collected soil samples, the conductivity ranged from 19.6-23.6 μ mhos/cm.
WQM	GWQM (5) SWQM (5)	Groundwater and surface water quality in the study area was assessed against IS:10500 standards. The pH of groundwater (7.59–7.80) and surface water (7.15–7.22) remained within acceptable limits. TDS levels in groundwater (332.8–462.4 mg/l) and surface water (445.5–462.9 mg/l) were within desirable limits. Chlorides, hardness, and fluoride in both water sources were found within prescribed standards. Heavy metals were below detectable limits. Overall, groundwater is fit for consumption, while surface water complies with CPCB Category-C standards and is suitable for drinking after conventional treatment and disinfection.

Environment Management Practices to be followed:

Aspect	Mitigation Measures / Control Measures
Solid Waste Management	The waste encountered during the mining operation is mainly 26,257Cum during Plan period gritty soil removed will be dumped at south-west side with suitable precaution. Some quantity of the removed gritty soil would also be used for road dressing and plantation. After conceptual period mined out area of quarry will be reclaimed to the extent possible.
Air Quality Management	<ul style="list-style-type: none"> • Wet drilling and use of sharp drill bits to minimize dust generation. • Controlled blasting using optimum explosive charge during favorable weather conditions. • Regular maintenance of diesel equipment and vehicles to reduce emissions. • Water sprinkling on haul roads, loading/unloading points, and working areas. • All transport vehicles will have valid PUC certificates. • Greenbelt and roadside plantation to act as dust and noise barriers.
Water Quality Management	<ul style="list-style-type: none"> • Mining will be confined only above the Ground Water Table (GWT). • Rainwater accumulated in the pit will be collected and pumped out regularly during monsoon. • Settling sump will be provided to desilt pumped out of mine-pit and collected through garland drain before discharge into natural drainage. • Garland and foot drains will be constructed around the quarry to control surface runoff. • Sewage from rest shelters will be treated through septic tank-soak

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	<p>pit systems.</p> <ul style="list-style-type: none"> • Foot drain would be provided around the external dump, if any.
Noise Quality Management	<ul style="list-style-type: none"> • Mining activities will be restricted to daytime and carried out with controlled blasting techniques. • Acoustic enclosures and mufflers will be provided for drilling and DG set operations. • Regular maintenance of mining machinery to minimize vibration and noise. • Greenbelt development around the lease boundary to attenuate noise propagation. • Use of delayed blasting technique to minimize the adverse impact of vibration.
Soil Quality Management	<ul style="list-style-type: none"> • Topsoil will be carefully removed and stored separately for future use in plantation and reclamation. • Garland drains and retaining walls will prevent soil erosion and siltation. • Spillage of oil or fuel will be avoided; impervious flooring and oil traps provided near storage areas • Post-mining, the area will be rehabilitated using stored topsoil and native vegetation
Flora & Fauna management	<ul style="list-style-type: none"> • No tree felling will be undertaken without obtaining permission from the competent authority. • Greenbelt and plantation will be developed using native species along approach roads and lease periphery (7.5m Safety Zone). • Dust suppression measures will minimize impact on surrounding vegetation
Socio Economy:	<ul style="list-style-type: none"> • Priority employment to local people in mining and ancillary activities. • Community development initiatives such as tree plantation drives, road maintenance, and local infrastructure support. • Awareness programs on safety, hygiene, and environmental protection
Monitoring & Reporting:	<ul style="list-style-type: none"> • Periodic monitoring of air, water (ground & surface), noise, and soil quality as per CPCB and SPCB guidelines. • All monitoring reports will be submitted to statutory authorities as per the compliance schedule. • Corrective measures will be taken immediately if any deviation from standards is observed.
Risk & Hazard	<p>Activities which are likely to create risk are: Temporary Storage of Explosives, Charging of Explosives, Blasting, Drilling, Bench Formation, Loading / Unloading, Transportation</p> <p>Proposed Preventive measures:</p> <ul style="list-style-type: none"> ▪ Overall slope angles of benches will be maintained at 45°. ▪ Unmanageable heights are not created. ▪ Loose sides are properly dressed. ▪ No loose stone or debris will be permitted to remain on the top of the bench or side of any excavation (Regulation 106(4) of MMR 1961). ▪ No undercutting of any face or sides will be permitted so as to cause any

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	<p>overhanging (Regulation 106(5) of MMR 1961)</p> <ul style="list-style-type: none"> ▪ It will be ensured that the drilling equipment is suitable for the job. ▪ The person in charge of the drilling machine is competent to carry out the drilling operation; part of the training includes instructions to always face towards the open edge of the bench so that any inadvertent backward step is away from the edge. ▪ Provision of portable rail fencing between the drilling operations and the edge of the bench ▪ Provision to attach a safety line to the drilling rig and provide a harness for the driller to wear. ▪ Restricted access to the area to all persons except those necessary for the drilling operation. ▪ Wet drilling will be carried out by constantly injecting a jet of water at the drill bit inside the hole, which prevents dust generation. ▪ In case due to any reason, wet drilling is not possible (due to non-availability of water), exhaust/ vacuum system will be provided which removes the dust from the drill hole continuously and discharges the same in a dust collector specially provided for the purpose. ▪ Drilling machine shall be fitted with dust suppression, collection and disposal arrangement.
<p>Blasting & Handling of Explosives</p>	<ul style="list-style-type: none"> ▪ Blast hole geometry shall be properly designed. ▪ Blast site shall be wetted before and after blasting operations are completed. ▪ Only optimum quantity of permissible explosives shall be used so that the vibrations do not damage the structures/houses if the quarrying operations are close to human habitation. ▪ Blasting shall be conducted only during favourable weather conditions and only during the day time and permissible hours. ▪ While carrying out blasting operations near habitations, wide publicity will be given in the local area through announcement and other available media so that local people become aware of the blasting activities being undertaken in the area and take appropriate precautions. ▪ The vibrations should be monitored periodically in consultation with the local Mining authorities. ▪ Use of explosives is specialist work. Planning for a round of shots is necessary to ensure that the face is properly surveyed, holes correctly drilled, direction logged, the weight of explosive suitable for good fragmentation and the continuity of the initiator are but a few of the steps necessary to ensure its safe use. ▪ Proper and safe storage of explosives in approved and Licensed Magazine. ▪ Proper security system to prevent theft/ pilferage, unauthorized entry into Magazine area and checking authorized persons to prevent carrying of match box, lights, mobile phones, cigarette or Bidi etc. will be put in place. ▪ Explosives shall be conveyed in special containers. ▪ Explosives and detonators shall not be carried in the same container. ▪ The holes which have been charged with explosives will not be left unattended till blasting is completed.

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Health Hazards	Health hazards should be interpreted as being harmful dust and noise which is emitted during surface mining operations. All suitable steps and precautions will be undertaken to ensure minimum health hazard. Provision of use of Personal Protective Equipment (PPE) will be kept. The PPE shall be of good make and quality, wherever possible ISI certified, suitable for the hazard e.g. a dust respirator fitted with the correct filter to capture the particulate hazardous dust and maintained to recommended standards. As personal protective equipment only affords limited protection it will only be used as a last resort and as an interim arrangement until other steps are taken to reduce the risk of personal injury to an acceptable level
Accident Prevention	<ul style="list-style-type: none"> ▪ Mine road shall be made smooth regularly with a road roller. ▪ Mine road will be made sufficiently wide to keep two-way traffic. Regular water sprinkling will be done on mine road and haul road to avoid suspension of dust. ▪ All transportation within the mine lease area should be carried out directly under the supervision and control of management. ▪ The vehicles will be maintained in good working condition and checked thoroughly at least once a month by the competent person authorized for the purpose by the management. ▪ Navigation signs will be provided at each and every turning point up to the main road (wherever required). ▪ To avoid danger while reversing the vehicles especially at working place/loading points, stopper should be posted to properly guide reversing/spotting operating.

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District Survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- i. If any tree felling than necessary permission shall be taken from the competent authority.

- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.
- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.
- l. Personal protective equipments such as clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

Based on the information contained in the documents submitted and the presentation made before the State Level Expert Appraisal Committee (SEAC) during its meetings held during 17, 18, 19, 20 & 21.01.2026, the Committee recommends in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 for issuing of ToR to SEIAA for undertaking detailed EIA / EMP study as mentioned in Annexure III alongwith following specific condition :-

- I. In compliance of OM no. F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "Ek Ped Ma Ke Naam" and the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.
- II. The detailed EMP is to be prepared for the Habitation existing within an area of 500 meter radius of proposed project boundary. This EMP is to be included in EIA report.

3. Proposed development of Azim Premji Medical College & Hospital by Azim Premji Foundation at Mauza: Itki Thakurgaon, Thana no. : 102, Distt.: Ranchi, Jharkhand.

(Proposal No : SIA/JH/INFRA2 /560349/2025)

Name of the consultant : Rian Enviro Private Limited, Patna, Bihar.

This is a new project which has been taken for appraisal on 19.01.2026.

Project Sector: 8(a) Building and Construction Projects , Category: B2.

Application for Environment Clearance (EC) as per EIA notification, 2006.



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Salient Features of the Project

Particular	Details
Project Name	Proposed development of Azim Premji Medical College & Hospital at Plot no. 2387, Khata no.: 489, Mauza: Itki Thakurgaon, Tehsil: Itki, Ranchi, Jharkhand by Azim Premji Foundation
Proponent	Azim Premji Foundation
Type of Building	Medical College & Hospital
Coordinate	23°20'56.66"N, 85°7'24.42"E
Mauza	Itki Thakurgaon
District	Ranchi
State	Jharkhand
Ground Coverage Permissible	50%
Ground Coverage Consume	27.43% (i.e. 36788.34 Sq.m.)
Plot Area	134118.59 Sqm.
Total Built-Up Area	80595.07 Sqm.
No. of Floor	B+G+6
Total Green area Provided @30.69 %	41155.63 Sqm.
Greenbelt area Provided @ 17.87%	23963.47 Sqm.
Green Cover area Provided @ 12.82%	17192.16 Sqm
No. of Building Block	Teaching Hospital, Medical College, Engineering Yard + BMW + MGPS Plant Room, LMO, Dormitory.
Municipal Solid Waste	624 Kg/day Bio-degradable (40% of MSW): 374 Kg/day Non-Biodegradable (60% of MSW): 250 Kg/day
Construction and Demolition Waste (During Construction Phase)	5228 Tonnes
Bio-Medical Waste	298 kg/day
Population	6328 including floating population
Parking	4-Wheeler Parking- 507 2-Wheeler Parking-623
Power Requirement	3.5 MV
Energy Saving	25 %
Power Back-up	(2 x 2000 KVA)
Renewal Energy (Solar)	5 %
RWH Pits	9 Nos.

Total Water Demand	383 KLD
Total Fresh Water Demand	177 KLD
Total Treated Water Demand	206 KLD
Treated Water discharge into Municipal Drain	0 KLD
Volume of Waste Water	258 KLD
Capacity of STP	310 KLD
Capacity of ETP	25 KLD
Project Cost	736 Crores
LMO Capacity	1.05 KL of liquid equivalent

LAND DETAILS

Khata no.	Plot no.
489	2387

STATUTORY CLEARANCES

1	Land Docs	:	Lease agreement : Azim Premji Foundation for Development.
2	DFO Territorial	:	DFO, Ranchi Forest Division vide letter no. 83, dated 09.01.2025 certified that the distance of reserved / protected forest is more than 250 meters from project site.
3	DFO Wildlife	:	DFO, Wildlife Division, Ranchi vide letter no. 916, dated 12.11.2024 certified that proposed project site is out side Eco Sensitive Zone of Palkot Wildlife Sanctuary.
4	CO certificate	:	The CO, Itki, Ranchi vide letter no. 316 (ii), dated 14.08.2024 has mentioned the plot no. of the project is not recorded as "Jungle - Jhari" in R.S. Khatiyar.
5	AAI NOC	:	Airport authority of India issued NOC vide NOC ID no. RANC /EAST /B/ 110624/1331640, dated 13.11.2024 valid up to 12.11.2032.
6	Building Plan approval	:	Conceptual Plan submitted.
7	Fire Department	:	Fire Advisory has been issued by Fire Department, Jharkhand,

		Ranchi, vide memo no. 981/Tech./2025, dated 05.02.2025.
8	CGWA	: No Objection Certificate (NOC) for Ground Water Abstraction issued by CGWA vide NOC No. NOC/INF/JH/2025/8971/N, dated 11.08.2025 valid up to 10.08.2030.

Coordinates of the Project Boundary

S.no.	Latitude	Longitude
1	23°20'56.66"	85°7'24.42"
2	23°20'54.01"	85°7'33.14"
3	23°20'48.58"	85°7'31.47"
4	23°20'47.05"	85°7'31.16"
5	23°20'44.68"	85°7'31.04"
6	23°20'44.05"	85°7'31.02"
7	23°20'43.41"	85°7'31.32"
8	23°20'42.26"	85°7'31.34"
9	23°20'39.75"	85°7'31.39"
10	23°20'42.14"	85°7'19.87"
11	23°20'43.17"	85°7'19.47"
12	23°20'50.57"	85°7'22.04"
13	23°20'51.24"	85°7'22.33"

Connectivity & Environment Sensitivity Area

Nearest Highway/Roads	Itki Road NH43
Nearest Junction	Itki - Train station Piska - Train station
Nearest Railway Station	Tangerbansli - Train station
Nearest Airport	Birsa Munda Airport, Ranchi
Reserve Forest/ Zoo	Protected Forest near Malti Protected Forest near Kundi
Water Bodies	Upper stretch of south Koel river
Defence Installation	Not within 15 Km
Social Infrastructure	St. Agnes Girls High School (0.15 Km) Modern English School (0.02 Km) Itki Public School (0.52 Km) Government Middle School Edchoro Nagri (3.50 Km)

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	Government Hospital – Hospital Itki (0.19 Km) Lievens Hospital (8.62 Km)
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Detailed Area Statement

Sr. No.	Particulars	
1.	Total Plot area	134118.59 Sqm.
2.	Total Built-up area	80595.07 Sqm.
3.	Total Proposed Ground Coverage @27.43%	36788.34 Sqm.
4.	Greenbelt area @17.87%	23963.47 Sqm.
5.	Road Area @30.31%	40647.84 Sqm.
6.	Landscape area / Green Cover area @12.82%	17192.16 Sqm.
7.	Paved area @11.58%	15526.78 Sqm.
8.	Maximum Height of the Building (m)	Approx. 28 m.
9.	Stories	B+G+6
10.	Basement	1
11.	Total Parking Provided	Four Wheelers: 507 Nos. Two Wheelers: 623 Nos.

Built-up area of Proposed Blocks

S. No.	DESCRIPTION	TOTAL AREA (SQM)
1	Teaching Hospital	20,442.00
2	Medical College	47,990.15
3	Engineering Yard + BMW + MGPS Plant Room	7,952.92
4	STP + OWC	900.00
5	LMO	208.00
6	Dormitory	3,102.00
	Total Area	80,595.07

Block wise Built-up area Details

Floor	Built-up Area Hospital	Built-up Area Medical College	Built-up Area Engineering Yard	Built-up Area Dormitory
Basement	-	7,117.28	1843.04	-
Ground	-	5,027.02	1838.91	940
1 st Floor	20,442.00	6,747.00	1522.62	940

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2 nd Floor	47,990.15	5,074.59	1854.72	940
3 rd Floor	7,952.92	5,074.59	-	-
4 th Floor	900.00	5,074.59	-	-
5 th Floor	208.00	5,074.59	-	-
6 th Floor	-	4,437.75	-	-
Terrace	3,102.00	-	85.32	-
Mumnty floor	-	-	85.32	-
NET Floor Area	-	43,627.41	7,229.93	2820
Façade Area (ADD 10%)	-	4,362.74	722.99	282
TOTAL	20,442 Sqm.	47990.15 Sqm.	7,952.92 Sqm.	3102 Sqm.

Calculation of Population

POPULATION ESTIMATION

Construction Phase: 500 labors will attend during construction phase.

Operation Stage

Sl. No.	Description	Total Population
1	Beds-238 (Emergency/Trauma Care, Private Beds, OTs, Maternity & Pediatric facilities and ICUs)	238
2	Service Beds (Emergency/Trauma care, OT's Pre & Post Op, Radiology)	33
3	Patient relative	271
4	OPDs (With patient + relative)	2000
5	Staff	1071
6	Visitors other than patient visitors	355
7	Medical College 255 admission-Students (UG+PG)	1065
8	Teaching & Non-teaching staffs	200
9	Miscellaneous (Cleaners, Maintenance etc.)	25
10	Visitors	127
11	Nursing College admissions Students (UG+PG)	440
12	Teaching & Non-teaching staffs	65
13	Miscellaneous (Cleaners, Maintenance etc.)	10
14	Visitors	51
15	Allied College 100 admission Students	200
16	Teaching & Non-teaching staffs	30
17	Miscellaneous (Cleaners, Maintenance etc.)	5
18	Visitors	23
19	Engineering Yard Staff	10
20	Dormitory (Phase-02A) Beds	100
21	Visitors	10

Sl. No.	Description	Total Population
	Total	6328

Parking Details

Sr. No.	Description	Number
1	SURFACE PARKING	
a	4 Wheeler Parking	233
b	2 Wheeler Parking	178
c	Bus Parking	6
d	Ambulance Parking	5
2	MEDICAL COLLEGE-BASEMENT	
a	4 Wheeler Parking	81
b	2 Wheeler Parking	107
3	CONNECTING BASEMENT	
a	4 Wheeler Parking	182
b	2 Wheeler Parking	338
4	TOTAL BASEMENT PARKING	
	4 Wheeler	263
	2 Wheeler	445
	GRAND TOTAL	
	4 WHEELER PARKING	507
	2 WHEELER PARKING	623

Calculation of Greenbelt

Total Plot Area	134118.59 Sqm.
Greenbelt area Provided @ 17.87%	23963.47 Sqm.
Landscape area / Green Cover area Provided @ 12.82%	17192.16 Sqm.
Total Green area @30.69 %	41155.63 Sqm.
Total no. of trees to be planted	5990 Nos.

**Water Demand
During Construction Phase**

S. No.	Type Population	Details	Flushing Use		Domestic Use		Total water requirement	Total wastewater
			LPCD	Total Water Req. in Ltr.	LPCD	Total Water Req. in Ltr.		
1.	Construction Labour	500	20	10000	25	12500	22500	20500
2	Staff	10	20	200	25	250	450	400
3	Anti smog gun / water						5000	

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	for sprinkling							
4	Curing & Landscaping						5000	
	Total	510		10200 10 KLD		12750 13 KLD	32950 Say 33 KLD	20900 20.9; 21 KLD
Mobile STP Capacity= 25 KLD								

Source –Ground Water

During Operational Phase

(Flow to ETP)

S. No.	Description	Floor	Total Population	Water Required	Cold Water Requirement				Total Water requirement	Flow To ETP
					Domestic		Flushing			
					LPCD	LPD	LPCD	LPD	LPD	LPD
1	Hospital Block	G+5								
a	Laundry			(20800 Liter)		20800	20800	16640
b	CSSD (Central Sterile Supply Department)			(5000 Liter)		5000	5000	4000
	Total (KLD)					26			26	21

ETP: Parameters for inlet and outlet

S. No	Parameters	Expected wastewater characteristics	Treated wastewater characteristics
1	pH	6.5-9.5	6.5-8.5
2	BOD	Upto 350mg/l	Less than 50 mg/l
3	Suspended solids	300 mg/l	Less than 100 mg/l
4	COD	Upto 500 mg/l	Less than 250 mg/l

Operation Phase: Flow to STP

S. No.	Description	Floor	Total Population	Water Required	Cold Water Requirement				Total Water requirement	Flow To STP
					Domestic		Flushing			
					LPCD	LPD	LPCD	LPD	LPD	LPD
1	Hospital Block	G+5								

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a	Beds-238 (Emergency/Trauma Care, Private Beds, OTs, Maternity & Pediatric facilities and ICUs)		238	315	205	48790	110	26180	74970	65212
b	Service Beds (Emergency/Trauma care, OT's Pre & Post Op, Radiology)		33	315	205	6765	110	3630	10395	9042
c	OPD (With patient + relative)		2000	15	5	10000	10	20000	30000	28000
d	Staff		1071	45	25	26775	20	21420	48195	42840
e	Kitchen			(3000 liter as per PHE tab)		3000			3000	2400
f	Visitors other than patient visitors		355	15	5	1775	10	3550	5325	4970
	Total					99105		74780	171885	152464
2	Academic Block (Medical College)	B+G+6								
2.A	Medical College 255 admissions- Students (UG+PG)		1065	45	25	26625	20	21300	47925	42600
a	Teaching & Non-teaching staffs		200	45	25	5000	20	4000	9000	8000
b	Miscellaneous (cleaners, maintenance etc.)		25	45	25	1250	20	1000	2250	2000
c	Visitors		127	15	5	635	10	1270	1905	1778
	Total					33510		27570	61080	54378
2.B	Nursing College 120 admissions Students (UG+PG)		440	45	25	11000	20	8800	19800	17600
a	Teaching & Non-teaching staffs		65	45	25	1625	20	1300	2925	2600
b	Miscellaneous (cleaners, maintenance etc.)		10	45	25	250	20	200	450	400
c	Visitors		51	15	5	255	10	510	765	714
						13130		10810	23940	21314
2.C	Allied College 100 admission Students		200	45	25	5000	20	4000	9000	8000
a	Teaching & Non-teaching staffs		30	45	25	750	20	600	1350	1200

b	Miscellaneous (Cleaners, Maintenance etc.)		5	45	25	125	20	100	225	200
c	Visitors		23	15	5	115	10	230	345	322
	Total									
3	Engineering Yard (Phase-02A)	B+G +2								
	Staffs if any		10	45	25	250	20	200	450	400
4	Dormitory (Phase- 02A)	G+2								
a	No. of Beds		100	100	70	7000	30	3000	10000	8600
b	Visitors		10	15	5	50	10	100	150	140
	Sub Total					7050		3100	10150	8740
	Total					15104 5		11646 0	267505	237296
	IN KLD					151 KLD		116 KLD	267 KLD	237 KLD

Operation Phase: Flow to STP and ETP

IN KLD (STP)					151 KLD		116 KLD	267 KLD	237 KLD
IN KLD (ETP)					26 KLD			26 KLD	21KLD
Grand Total					177 KLD		116 KLD	293KLD	258KLD
Horticulture @ 2.19 liters /sqm								90 KLD	
One Time water requirement								383 KLD	

STP: Waste water generated is ~258 KLD, which will be treated in the onsite STP of capacity 20% more than the waste water generated i.e. 310 KLD of MBR technology and ETP of 25 KLD. The treated water available is 206 KLD (which is of 80 % total waste water entering in the STP) and it will be recycled and re-used 116 KLD for flushing, 90 KLD for irrigation of landscape area. It fully complies with ZLD requirements. This results in a total dry sludge generation of 73 kg/day.

ETP: ETP treated water will be sent to STP for further treatment.

The treated water will be reused for

Flushing – 116 KLD

Landscaping - 90 KLD

During Monson (Rainy day) of 90 KLD extra treated water will be used in house ramp, floor cleaning etc.

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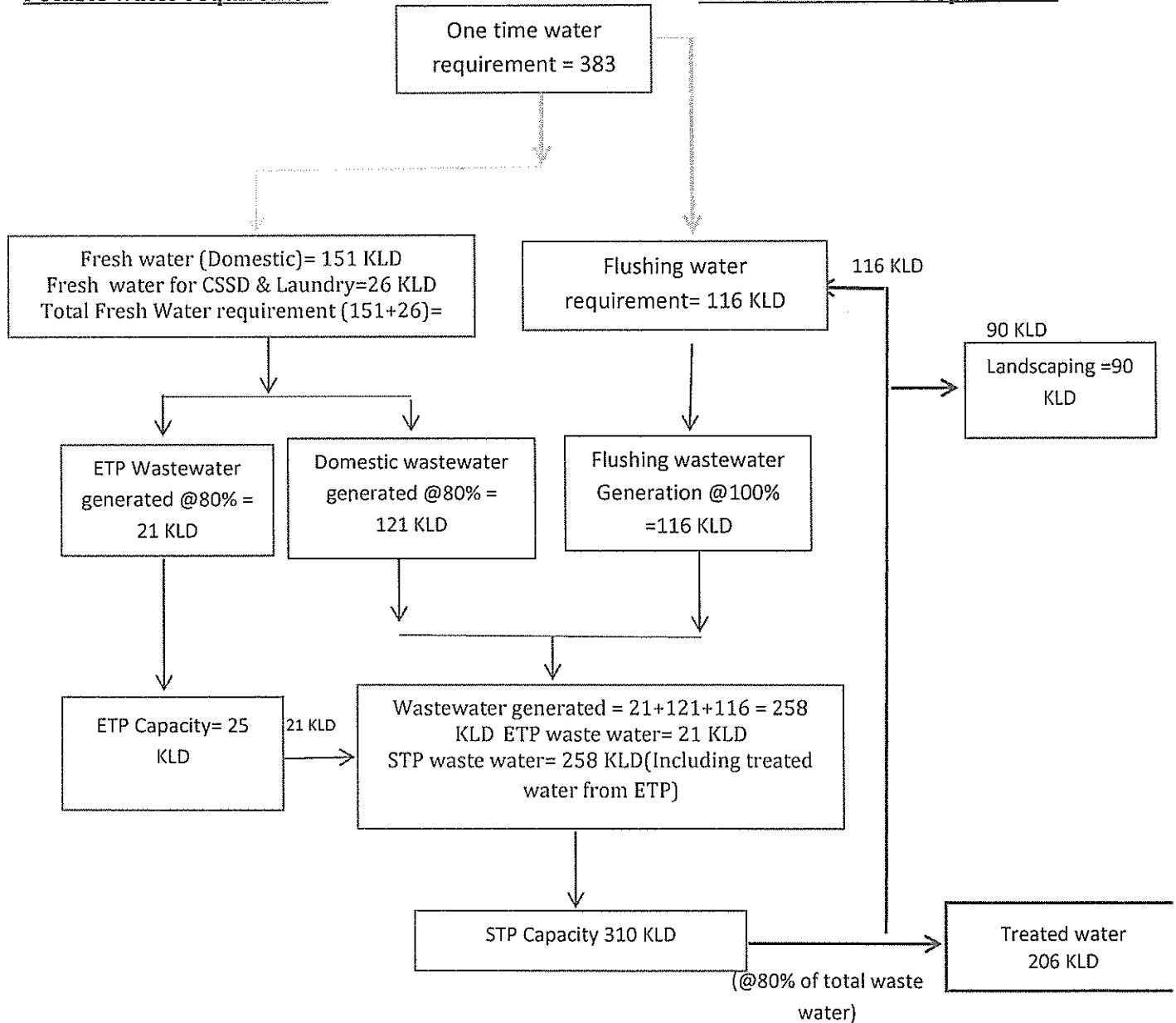
STP: Parameters for inlet and outlet

S. No	Parameters	Expected wastewater characteristics	Treated wastewater characteristics
1	pH	6.5-8.5	5.5-9
2	BOD	Upto 350mg/l	Less than 10 mg/l
3	Suspended solids	250mg/l	Less than 20 mg/l
4	COD	Upto 450 mg/l	Less than 50 mg/l

Water Balance

Potable water requirement

Non-Potable water requirement



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Details of Wastewater Generation and STP Capacity

Details	Wastewater (KLD)
Water requirement for domestic purpose	151
Wastewater to be generated from domestic use (@ 80% of domestic water requirement)	121
Water requirement for CSSD & Laundry	26
ETP Waste water generated	21
Water requirement for Flushing Purpose	116
Wastewater to be generated from Flushing @ 100% of flushing requirement)	116
Total Wastewater generated	258
STP capacity	310
ETP capacity	25

Solid waste Generation details

Sl. No.	Description	Total Population	Unit rate Waste Generation	Waste (Kg/day)	Bio-degradable (Kg/day)	Non-biodegradable (Kg/day)
1	Patient relative	271	0.45 Kg/person	121.95	73.17	48.78
2	OPDs (With patient + relative)	2000	0.05 Kg/person	100	60	40
3	Staff	1071	0.1 Kg/person	107.1	64.26	42.84
4	Visitors other than patient visitors	355	0.1 Kg/person	35.5	21.3	14.2
5	Medical College 255 admission-Students (UG+PG)	1065	0.1 Kg/person	106.5	63.9	42.6
6	Teaching & Non-teaching staffs	200	0.1 Kg/person	10	6	4
7	Miscellaneous (Cleaners, Maintenance etc.)	25	0.1 Kg/person	1.25	0.75	0.5
8	Visitors	127	0.05 Kg/person	12.7	7.62	5.08
9	Nursing College 120 admissions Students (UG+PG)	440	0.1 Kg/person	44	26.4	17.6
10	Teaching & Non-teaching staffs	65	0.1 Kg/person	6.5	3.9	2.6

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11	Miscellaneous (Cleaners, Maintenance etc.)	10	0.1 Kg/person	1.01	0.606	0.404
12	Visitors	51	0.05 Kg/person	5.05	3.03	2.02
13	Allied College 100 admission Students	200	0.1 Kg/person	20	12	8
14	Teaching & Non-teaching staffs	30	0.1 Kg/person	3	1.8	1.2
15	Miscellaneous (Cleaners, Maintenance etc.)	5	0.1 Kg/person	0.46	0.276	0.184
16	Visitors	23	0.05 Kg/person	2.3	1.38	0.92
17	Engineering Yard Staff	10	0.1 Kg/person	1	0.6	0.4
18	Dormitory (Phase-02A) Beds	100	0.45 Kg/person	45	27	18
19	Visitors	10	0.05 Kg/person	1	0.6	0.4
Total Solid Waste				624.32	374.592	249.728
Round Off				624	374	250

Bio Medical Waste Generation details

Sl. No.	Description	Total Population	Unit rate Waste Generation	Waste (Kg/day)
1	Beds-238 (Emergency/Trauma Care, Private Beds, OTs, Maternity & Pediatric facilities and ICUs)	238	1 kg/bed	238
2	Service Beds (Emergency/Trauma care, OT's Pre & Post Op, Radiology)	33	1 kg/bed	33
Bio Medical waste generation (Kg/day)				271
OPD Medical waste (Kg/day)				27.1
Total Bio Medical waste (Kg/day)				298

Total Waste Generation Summary

SI No	Waste Type	Quantity	Management Method
1	Municipal Solid Waste	624 kg/day	Segregation, OWC, recycling & municipal disposal
2	Biodegradable Waste	374 kg/day	On-site composting (OWC)
3	Non-biodegradable Waste	250 kg/day	Recycling & municipal disposal
4	Biomedical Waste	298 kg/day	Authorized CBWTF
5	C&D Waste	5,228 tonnes	Reuse, recycling & authorized disposal

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6	E-Waste	5 Kg/Day	Authorized recyclers
7	Hazardous Waste	12.5 Kg/day	Authorized recyclers

Solid Waste Management

Construction Phase

Solid Waste generated during construction phase would include top soil, brick bats, pieces of reinforcing roads, pieces of wood boards & waste of other construction material, cans of paints electrical wire, etc.

Top Soil would be separately stored at pre-defined location within the site & preserved for landscaping. Sub – Soil would be stored for reuse in road making, plinth filling, etc.

Brickbats waste of concrete would also be stored for road construction, etc. Surplus C & D waste would be handed over to Municipal Solid Waste Management Facility. E-Waste & Hazardous waste (cans of paints- would be collected in separates containers. Recyclable wastes including bags, packing, pcs of steel rods sold to rag pickers.

Operational Phase

Municipal Solid Waste Management

1. Biodegradable Waste

- Includes kitchen and horticulture waste
- Collected in green-colored bins
- Handed over to municipal authorities as per SWM Rules, 2016
- For waste generation ≥ 100 kg/day, on-site organic waste converter is provided

2. Non-Biodegradable Waste

Consists of:

- Recyclable waste
- Non-recyclable combustible waste
- Sanitary waste
- Non-recyclable inert waste
- Includes metal, glass, debris, waste oils, sanitary waste

a) Recyclables

- Includes plastic, metal, glass, etc.
- Separated in white colored bins
- Handed over to local authorized waste pickers/recyclers as per:
- SWM Rules, 2016
- Plastic Waste Management Rules, 2016

b) Non-Recyclable Waste

- Includes debris, sanitary waste, etc.
- Segregated in black colored bins
- Disposed in the bins of urban local bodies as per SWM Rules, 2016

Estimated quantity of municipal solid waste Community building & residential building

During operational phase of buildings municipal solid waste would be generated. They would be

stored in different colour bins.

- | | |
|---------------------------|----------|
| ✓ Recyclable Waste | - white |
| ✓ Non-Biodegradable Waste | - Blue |
| ✓ Bio-Degradable Waste | -Green |
| ✓ E-Waste | - Yellow |
| ✓ Hazardous Waste | - Red |

Recyclable Wastes would be handed to rag pickers.

Bio-Degradable Waste would be treated in OWC and the product will be utilize as fertilizer.

E-Waste & Hazardous Wastes would be handed over to authorized recyclers

C&D waste Management Plan

- Construction waste will be segregated at source into reusable, recyclable, and non-recyclable categories.
- Excavated earth will be reused within the project site for backfilling and landscaping to the maximum extent possible.
- Reusable materials such as steel, wood, and bricks will be stored separately and reused or sold to authorized recyclers.
- Recyclable C&D waste will be handed over to authorized C&D waste recycling agencies as per Construction and Demolition Waste Management Rules, 2016.
- Non-recyclable inert waste will be transported to designated disposal sites identified by the local authority.

Radio Active Waste Management: Radio-active waste will be managed as per Atomic Energy (Safe disposal of radioactive wastes) Rules, 1987 Disposal of Solid Radioactive Waste — An AERB certified, trained and authorized Agency, License and NOCs are already obtained.

Hazardous & E-Waste Management

Stored in labeled, secured containers

Disposed through SPCB-authorized recyclers

Waste oil sent to authorized reprocessors

(As per Hazardous & Other Wastes Rules, 2016 and E-Waste Rules, 2016)

Bio-Medical Waste Management

Total Bio-Medical Waste Generated: 298 kg/day

Source: Hospital wards, ICUs, OTs, emergency unit, OPDs, laboratories, CSSD

Segregation

Segregation at source as per BMW Rules, 2016

Color coding:

Yellow: Anatomical & soiled waste

Red: Contaminated recyclable waste

White (Translucent): Sharps

Blue: Glassware & metallic implants

Non-chlorinated bags used

Collection & Storage

Daily collection using covered, leak-proof trolleys

Temporary storage in designated BMW room

Storage time < 48 hours

Treatment & Disposal

Entire BMW handed over to SPCB-authorized CBWTF

Treatment through incineration/autoclaving/shredding

No on-site treatment proposed

Rainwater Harvesting cum Recharge Pit

9 Nos. Rainwater Harvesting pits are proposed. Rain water from roof tops will be drained through rain water vertical down take pipes. These vertical down take pipes shall be located at suitable locations inside the shafts or periphery of the building. The terrace will be sloped. The down take pipes will be connected to the storm water network and then to Rainwater Harvesting Pits.

Input Data			Unit	Reference
Catchment Area		Value		
1	Rooftop Area of Building/shed	36788.34	Sqm.	
2	Green Belt Area & Green Cover	41155.63	Sqm.	
3	Road & Paved area	56174.62	Sqm.	
	Total	134118.59		
Run off Coefficient, c				
	Rooftop Area of Building/shed	0.85		RWH in India, MoEF&CC, e-book 2016
	Green Belt Area	0.15		RWH in India, MoEF&CC, e-book 2016
	Open Area	0.15		
Rainfall				
	Average Annual Rainfall	1316	mm/year	CGWA Ranchi
	Hourly Peak Rainfall Intensity, I	45	mm/hour	
	Peak Time taken	15	minutes	
Total Volume of Water to be Captured on Annual Basis				
	Rooftop Area of Building/shed	41151.44	cu-m/year	$Q = A * c * I$
	Green Belt Area	8124.12	cu-m/year	
	Open Area	11088.87	cu-m/year	
Runoff Calculation for the Peak Rainfall, Q				
	Rooftop Area of Building/shed	351.79	cu-mtr/hour	RWH in India, MoEF&CC, e-book 2016
	Green Belt Area	69.45	cu-mtr/hour	
	Open Area	94.79	cu-mtr/hour	
	Total	516.03	cu-mtr/hour	

Annual Recharge Potential				
	Recharge Potential	60364.43	cu-m/year	
	Rainy Season	June-September		IMD
Design of Recharge Structure for Peak Flow				
Calculation for one Pit				
	Diameter of Pit	4	mtr	
	Depth of the Pit	5	mtr	
	Volume of the Pit	62.83	cu-mtr	
	Number of Pits Required to store the peak discharge	8.2		
	Say	9		

Energy Conservation Measures

Building Name	Max. (KW)	Daily consumption (kW-h)	Yearly consumption (kw-h)	Total Solar (KW)	KWh Saved per day	KWh Saved per Year	% Saving
Medical College and Hospital	3598	28783.66	10506036.24	360	1440	525600	5%
Other energy saving measures							
Description	Max. Demand (kW)	Daily Consumption (kW-h) considering 8 hrs operation	Annual Diversity	Annual Consumption (Kw-h) per annum	% savings	kW-h Saved per Annum	Savings due to
Lighting	332	2657	1	969905	30	290971	Use of LED Light, sensor operated light, Light Fittings instead of conventional light fixtures.
Façade & External Lighting	45	360	1	131400	30	39420	Use of LED Light, timer based, Light Fittings instead of

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							conventional light fixtures.
Ventilation Load	294	2350	1	857919	10	85792	Use of IE5 Motors & Use VFD
Plumbing Water Pumps	129	643	1	234695	20	46939	Use of IE5 Motors & Use VFD
CHILLER	774	6188	1	2258620	20	451724	Use of BEE Certified Motors & Use VFD
CHILLER PLANT PUMPS & COOLING TOWER	510	4080	1	1489200	20	297840	Use of IE5 Motors & Use VFD
Total kwh	2,083			59,41,739		12,12,686	
% Savings Through NON Renewable Energy						20.4%	
Project Total Demand Load						3598	
Project Total Kwh						10506036	
Renewable energy through PV cells installed at Terrace (650 Solar Panel)	362	1448	1			528520	
% Savings Through Renewable Energy						5%	
Total %							

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Savings Through Renewable + Non renewable source.:						25%	
--	--	--	--	--	--	-----	--

Total Energy Saving : 20% of the Conventional Demand
Total Energy Generation : 5% of the Net Demand
Total Energy Saved : 25%

Note - Solar-based lighting will be used for common areas, signages, entry gates, boundary walls, etc., reducing energy consumption and promoting sustainability

Organization Structure

Organizational Structure:

Introduction

The Environmental Management Plan (EMP) Cell has been established to ensure environmental sustainability and compliance with regulatory requirements for the building construction project. This project aims to minimize environmental harm, promote sustainable practices, ensure compliance with regulations, and foster community engagement and transparency. The EMP Cell will provide a framework for identifying, assessing, and mitigating potential environmental impacts associated with the Construction activities.

Environmental Policy

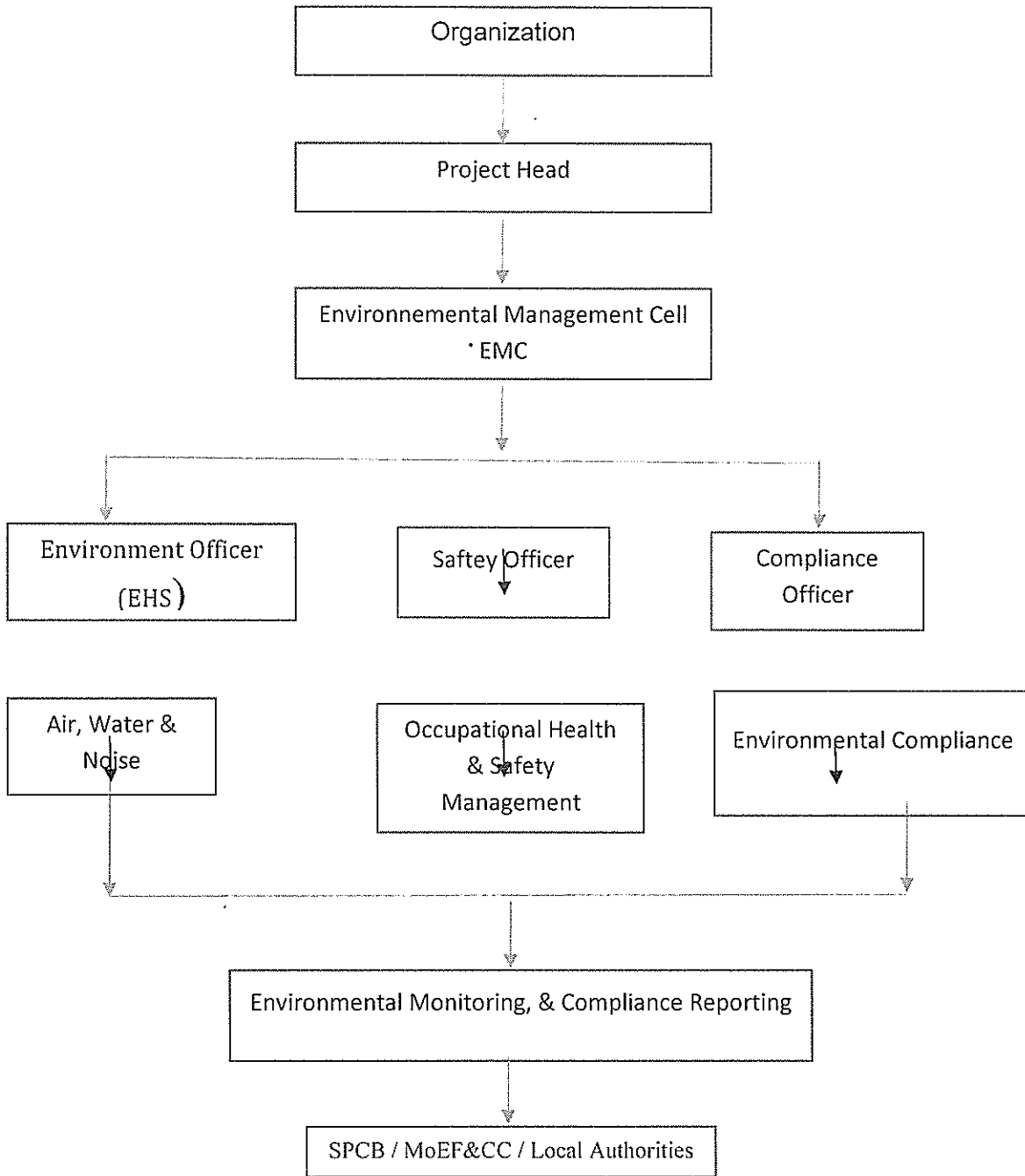
Our company is committed to:

- Minimizing environmental harm through responsible Construction practices
- Promoting sustainable practices to conserve natural resources
- Ensuring compliance with regulatory requirements and industry standards
- Fostering community engagement and transparency through open communication

EMP Cell Objectives

The EMP Cell objectives are:

- To implement environmental mitigation measures as per approved EMP
- To ensure compliance with Environmental Clearance (EC) conditions
- To monitor air, water, noise, and waste management practices
- To ensure occupational health and safety of workers
- To maintain records and submit compliance reports to authorities



Monitoring Plan

Construction Phase:

S. No.	Type	Locations	Parameters	Period and Frequency	Total cost in (Rs. in Lacs)
1.	Ambient Air Quality Monitoring	As per requirement	SO ₂ , NO ₂ , PM ₁₀ , PM _{2.5} and CO	Once in a Six month.	0.40
2.	Ambient Noise Monitoring	As per requirement	Noise level L _{eq} both during day time and night time	Once in a Six month.	0.25
3.	Water Quality Testing	(i) Any operati	Drinking water parameters as	Once in a Six month.	0.25

	(Portability testing)	onal bore well (ii) One of the Drinking Water Point	per IS 10500:2005.		
4.	Soil Environment	As per requirement	PH, Electrical Conductivity (EC) Moisture content, Texture.	Once in a Six month.	0.25
Total Costs in Lakhs					1.15 Lakhs

Operation Phase:

S. No.	Type	Locations	Parameters	Period and Frequency	Total cost in (Rs. in Lacs)
1.	Ambient Air Quality + Stack Monitoring	As per requirement	SO ₂ , NO ₂ , PM10, PM2.5 and CO	Once in a Six month.	0.40
2.	Ambient Noise Monitoring	As per requirement	Noise level L_{eq} both during day time and night time	Once in a Six month.	0.25
3.	Water Quality Testing (Potability testing)	(i)Any operational borewell (ii)One of the Drinking Water Point	Drinking water parameters as per IS 10500:2012.	Once in a Six month.	0.25
4.	Treated Wastewater Quality	Inlet and outlet of the STP and ETP	Parameters for assessing compliance with standards for recycling and horticulture use	Once in a month.	1.50
5.	Soil Environment	As per requirement	PH, Electrical Conductivity (EC) Moisture content, Texture.	Once in a Six month.	0.25
Total Costs in Lakhs					2.65 Lakhs

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Environmental Management Cost – Construction

Sr. No.	Component	Particulars	Capital Investment (Lakhs)	Recurring Expenditure per Annum (Lakhs)
1.	Air	Anti-Smoke Gun	5.0	1.5
2.	Water	Mobile STP	10	2.5
3.	Solid and C&D Waste and its Management	Stack yard and its management	3.0	2.0
4.	Environment Monitoring & Management	Environment Monitoring as per monitoring plan ➤ Construction of wind breaking wall ➤ Green Curtains on under construction building	5.0	2.0
5.	Green Belt	Development and maintenance of green belt	10	2.0
Total (Rs.)			33	10

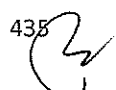
Environmental Management Cost – Operation

Sr. No.	Component	Particulars	Capital Investment (Lakhs)	Recurring Expenditure per Annum (Lakhs)
1.	Air	Stack emission control for 2 DG Sets	8.0	4.0
2.	Water	Sewage Treatment Plant (STP) Effluent Treatment Plant (STP)	90.0 25.0	10
3.	Rain Water Harvesting	Installation of RWH System & Annual Cleaning of RWH tank	35.0	5.0
4.	Solid waste Area and its Management	Purchase of Containers for Storage of Waste & OWC of 400 kg/day	12.0	8.0
5.	Environment Monitoring & Management	Environment Monitoring as per monitoring plan	0.00	4.0
6.	Green Belt	Development and maintenance of green belt i.e.- Trees to be planted, 5990 No.	30.0	5.0
7.	Others	Energy saving devices, miscellaneous Electrical Vehicle Charging point	40 10	10
Total (Rs.)			250	46

Based on the presentation made and information provided, the Committee decided that the proposal for Proposed development of Azim Premji Medical College & Hospital by Azim Premji Foundation at Mauza: Itki Thakurgaon, Thana no. : 102, Distt.: Ranchi, Jharkhand is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure –II alongwith the following specific conditions :

- I. In compliance of Office Memorandum no. IA-J-11013/20/2025-IA-P, dated 25.11.2025 of MoEF&CC, Govt. of India, the PAs will mandatorily obtain the Environmental Safeguard to be implemented from Jharkhand State Pollution Control Board within 30 days of issuance of EC or 31.01.2026 which ever is earlier.
- II. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign “*Ek Ped Ma Ke Naam*” and the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.
- III. The proposed oxygen plant shall be set up after obtaining all applicable clearances / permissions.
- IV. Ground water to be drawn for use in the project only after obtaining permission from the Competent Authority.
- V. Environment management system including organization structure to be drawn to ensure compliance of EC conditions stipulated based on principles of Continual Improvement and periodical management review.
- VI. All raw material to be stored only under covered shed.
- VII. PAs to offset (upto 20%) consumption of conventional energy sources by promoting use of solar energy, passive energy utilization, optimum fenestration, shading effect and heat islands.
- VIII. Developers to promote solar energy generation not less than 05 % of connected load.
- IX. Trees should be developed & maintained not less than 15% of project area.
- X. Organic Waste Converter (OWC) to be installed of sufficient capacity such that all organic waste (bio degradable) generated is composted at source only.
- XI. Developers/Company to install STP of sufficient capacity such that all the sewer produced is treated and reused.
- XII. Developers/Company to install Rain water harvesting structures such that all the roof top water runoff is collected and harvested including reuse on 100% basis.
- XIII. Developers/Company to conduct and submit carbon footprint and carbon sequestration study report including mitigation measures as a part of EC compliance.



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- XIV. Water runoff originating from open non constructed areas of project premises to be harvested /guided in such a way that it does not create water logging condition outside.
- XV. Sufficient number of EV fast charging points to be installed.
- XVI. MSW Collection centre should be located in isolated and preferably unmanned area. Movement of the vehicle carrying waste should be under tarpaulin covered condition only. Route of vehicle should be such that it avoids residential areas as far as practical.
- XVII. ISO 14k EMS system standard to be followed for implementation of EMPs with MRM in place for feedback to Sr management.

4. Proposed Residential Building "Highland Park" by M/s ACE Securities and Developers Private Limited at Village : Bargain, Distt.: Ranchi, Jharkhand.

(Proposal No : SIA/JH/INFRA2 /564545/2026)

Name of the consultant : Rian Enviro Private Limited, Patna, Bihar.

This is a new project which has been taken for appraisal on 19.01.2026.

Project Sector: 8(a) Building and Construction Projects , Category: B2.

Application for Environment Clearance (EC) as per EIA notification, 2006.

M/s ACE Securities and Developers Private Limited has Proposed Residential building "Highland Park" at Village- Bargain, District-Ranchi, State- Jharkhandon the total land area measuring 6102.45 Sqm and total built up area is 38723.67 Sqm.

SalientFeatures of the Project

Particulars	
Latitude	23°24'14.41"N
Longitude	85°22'1.92"E
Total Plot area	6102.45 Sqm.
Permissible FAR @ 3.5	21358.58 Sqm.
Platinum Rating @ 7% (Green House)	1495.10 Sqm.
Total Permissible FAR @ 3.745	22853.68 Sqm.

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Particulars		
Proposed FAR @ 3.738		22809.46 Sqm.
Non FAR Area (Amenities, Basement, etc.)		15914.21 Sqm.
Total Built-up Area		38723.67 Sqm.
Parking required		3352 Sqm.
Proposed parking		4110 Sqm.
Surface Parking area		150.00 Sqm.
Permissible Ground Coverage @50%		3051.23 Sqm.
Proposed Ground Coverage		2128.30 Sqm.
Miscellaneous (Paved, Ramp, STP, etc.)		197.38 Sqm.
Greenbelt area Provided @16%		976.39 Sqm.
Green Cover area @13.02%		794.75 Sqm.
Road Area		1855.63 Sqm.
Swimming Pool (Capacity)		136.28 Cum.
Total No. of Dwelling Units		176 Nos.
Rain Water Harvesting Pits		3 Nos.
Number of Tower		Tower A, B, C and Club House
Basement		02 Nos.
Stories		B1+B2+G+16
Maximum Height of the Building		51 m
Power Requirement		1510 KW
Power Backup DG capacity		1200 KVA (3X400)
Total Water Requirement		110 KLD
Fresh/Domestic Water Requirement		71 KLD
Reuse of Recycled Water		48 KLD
Waste water Generated		95 KLD
STP Capacity		120 KLD
Solid Waste Generated (Operational)		483 Kg/day
Biodegradable Waste (Operational)		193 Kg/day
Non-Biodegradable Waste (Operational)		290 Kg/day
Total Cost of the project (Rs.)		70.00 Cr.
EMP Budget		During Construction: Capital: 48 Lakhs Recurring: 15 Lakhs Operational Cost: Capital: 232 Lakhs Recurring: 30 Lakhs
Connectivity	Ranchi Junction Railway	Approx. 7.00 Km towards

Particulars		
	Station	SSW
	Mesra Railway station	Approx. 5.50 Km towards ENE
	Tatisilwai Railway Station	Approx. 8.00 Km towards ESE
	Birsa Munda Airport, Ranchi	Approx. 10.00 km towards SSW

LAND DETAILS

Khata no.	Plot no.
112, 15, 28, 132 & 119	1235, 1286, 1288, 1233 (P) & 1236 (P)

Land Summary

Sl. No.	Document Type	Khata No	Plot No.	Area (in decimal)	Area in Sqm
1	Development Agreement	112	1235	56	3459.97
		15	1286	10.5	
		28	1288	19	
2	Development Agreement	15	P-1286	10.5	424.90
3	Development Agreement	132	P-1233	12.9	522.02
4	Development Agreement	132	P-1233	12.9	522.02
5	Development Agreement	119	P-1236	29	1173.54
Total				150.8	6102.47

STATUTORY CLEARANCES

1	Land Docs	:	Lease agreement : ACE Securities and Developers Private Limited for Development.
2	DFO Territorial	:	DFO, Ranchi Forest Division vide letter no. 2712, dated 13.09.2025 certified that the distance of reserved / protected forest is more than 250 meters from project site.
3	DFO Wildlife	:	DFO, Wildlife Division, Ranchi vide letter no. 388, dated 17.06.2025 certified that proposed project site is out side Eco Sensitive Zone of Palkot Wildlife Sanctuary.
4	CO certificate	:	The CO, Baragai, Ranchi vide letter no. 500 (ii), dated 11.06.2025 has mentioned the plot no. of the project is not recorded as "Jungle - Jhari" in R.S. Khatiyar & Register II.

5	AAI NOC	:	Airport authority of India issued NOC vide NOC ID no. RANC /EAST /B/ 102924/1314401, dated 05.11.2024.
6	Building Plan approval	:	Conceptual Plan submitted.
7	Fire Department	:	Fire Advisory has been issued by Fire Department, Jharkhand, Ranchi, vide memo no. 6885/Tech./2025, dated 25.09.2025.

Details of Site Surroundings and Connectivity

Connectivity & Site Surroundings			
S. No.	Description		Distance and Direction
1.	Nearest Junction	Ranchi Junction Railway Station	Approx. 7.00 Km towards SSW
	Nearest Railway Stations	Mesra Railway station	Approx. 5.50 Km towards ENE
		Tatisilwai Railway Station	Approx. 8.00 Km towards ESE
2.	Nearest Airport	Birsa Munda Airport, Ranchi	Approx. 10.00 km towards SSW
3.	Nearest Village	Bargain	Adjacent to site
		Bariatu	Approx. 0.97 Km towards SW
		Ohdar	Approx. 2.00 Km towards East
4.	Nearest Highway/Roads	Bargain Road	Adjacent to site towards East
		Booty Road	Approx. 0.30 Km towards South
		SH 20	Approx. 2.25 Km towards East
5.	Nearest School & College	Govt. Urdu Middle School, Bargain	Approx. 0.75 Km towards East
		Govt. Middle School, Shankar Nagar	Approx. 1.85 Km towards West
		Govt. Middle School, Sarhul	Approx. 3.50 Km towards SW
		Ranchi Women's College	Approx. 3.00 Km towards SW
		St. Anne's Intermediate College	Approx. 3.25 Km towards SW
6.	Nearest Hospital	Bhagwan Mahavir Manipal Hospital	Approx. 1.00 Km towards SE
		RIMS	Approx. 1.50 Km towards SW
		Urban Primary Health Care Centre	Approx. 0.60 Km towards NNE

Connectivity & Site Surroundings			
S. No.	Description		Distance and Direction
7.	Places of worship	Maha Mrityunjay Temple	Approx. 2.00 Km towards ESE
		Mohammadi Masjid	Approx. 0.50 Km towards North
		Seventh Day Adventist Church	Approx. 0.30 Km towards SSE
8.	Water Bodies	Jhumar River	Approx. 3.75 Km towards ENE
		Kanke Lake	Approx. 5.25 Km towards West
		Ranchi Lake	Approx. 6.50 Km towards SW
9.	Nearest Town	Ranchi	Approx. 6.50 Km towards SSW
10.	Protected Forest/ Zoo	Protected Forest, Baram	Approx. 9.25 Km towards SSE
11.	Defense	Army Western Cantonment	Approx. 3.50 Km towards ESE

Coordinate of the Project Boundary

S. No.	Latitude	Longitude
1	23° 24' 15.918" N	85° 22' 1.878" E
2	23° 24' 15.700" N	85° 22' 3.374" E
3	23° 24' 15.101" N	85° 22' 3.694" E
4	23° 24' 13.668" N	85° 22' 2.945" E
5	23° 24' 13.503" N	85° 22' 2.348" E
6	23° 24' 13.217" N	85° 22' 1.675" E
7	23° 24' 12.840" N	85° 22' 1.445" E
8	23° 24' 12.410" N	85° 22' 1.202" E
9	23° 24' 12.536" N	85° 22' 0.976" E
10	23° 24' 12.920" N	85° 22' 1.254" E
11	23° 24' 13.099" N	85° 22' 0.539" E
12	23° 24' 14.106" N	85° 22' 0.960" E
13	23° 24' 14.308" N	85° 21' 59.889" E
14	23° 24' 15.251" N	85° 22' 0.380" E
15	23° 24' 15.255" N	85° 22' 1.046" E
16	23° 24' 15.068" N	85° 22' 1.272" E
17	23° 24' 15.038" N	85° 22' 1.758" E
18	23° 24' 16.545" N	85° 22' 3.789" E
19	23° 24' 16.462" N	85° 22' 3.968" E

DetailedAreaStatement

Sl. No.	Particulars	Details
1.	Total Plot area	6102.45 Sqm.
2.	Permissible FAR @ 3.5	21358.58 Sqm.
3.	Platinum Rating @ 7% (Green House)	1495.10 Sqm.
4.	Total Permissible FAR @ 3.745	22853.68 Sqm.
5.	Proposed FAR @3.738	22809.46 Sqm.
6.	Non FAR Area (Amenities, Basement, etc.)	15914.21 Sqm.
7.	Total Built-up Area	38723.67 Sqm.
8.	Parking required	3352 Sqm.; 4-Wheeler: 240 ECS & Two-wheeler: 176 Nos.
9.	Proposed parking	4110 Sqm.; 4-Wheeler: 279 ECS & Two-wheeler: 311Nos.
10.	Surface Parking area	150.00 Sqm.
11.	Permissible Ground Coverage @50%	3051.23 Sqm.
12.	Proposed Ground Coverage	2128.30 Sqm.
13.	Mislleneous (Paved, Ramp, STP, etc.)	197.38 Sqm.
14.	Greenbelt area Provided @16%	976.39 Sqm.
15.	Green Cover area @13.02%	794.75 Sqm.
16.	Road Area	1855.63 Sqm.

Proposed Block Built-up area details

Floor	Block A (S+16)		Block B (S+16)		Block C (S+10)		CLUB (G+03)		Basement
	FAR	BUA	FAR	BUA	FAR	BUA	FAR	BUA	BUA
Basement 1									3860.16
Basement 2									3860.16
Ground	18.11	795.49	18.11	795.49	15.04	321.25	211.62	216.07	
1 st	594.63	729.05	594.63	729.05	334.80	395.69	211.62	216.07	
2 nd	593.87	791.33	593.87	791.33	334.80	395.69	211.62	216.07	
3 rd	594.63	729.05	594.63	729.05	334.80	395.71	82.24	216.09	
4 th	593.87	791.33	593.87	791.33	334.80	395.71			
5 th	594.63	729.05	594.63	729.05	334.80	395.69			
6 th	593.87	791.33	593.87	791.33	334.80	395.69			
7 th	594.63	729.05	594.63	729.05	334.80	395.69			
8 th	593.87	791.33	593.87	791.33	334.80	395.69			
9 th	594.63	729.05	594.63	729.05	334.80	395.69			
10 th	593.87	791.33	593.87	791.33	334.80	395.69			

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11 th	594.63	729.05	594.63	729.05					
12 th	593.87	791.33	593.87	791.33					
13 th (Duplex Lower)	594.63	729.05	594.63	729.05					
14 th (Duplex Upper)	559.83	777.28	559.83	777.28					
15 th (PH Lower)	594.63	729.05	594.63	729.05					
16 th (PH Lower)	466.46	777.28	466.46	777.28					
Total	9364.66	12930.43	9364.66	12930.43	3363.04	4278.19	717.10	864.30	7720.32

Calculation of Population

Block	Total Dwelling Units / Area	Unit Population	Population
Residential Block	176	9/6/5	990
Visitors	10% of Residential Population		99
Community Hall Seating capacity	116		116
Club House (Indoor Games, Gym & Yoga)	1581.4 sqm	Considering 1 person per 10 Sqm. of BUA	158
Total Population			1363

Parking Details

Details	Number	Area in Sqm
Parking Required for residential (Car)	209	2613
Parking Provided for residential (Car)	248	3100
Visitors Parking Required for residential (Car)	31	387.5
Visitors Parking Provided for residential (Car)	31	387.5
Total Parking Required for Car	240	3000
Total Parking Provided for residential (Car)	279	3487.5
Two wheeler Parking Required	176	352
Two wheeler Parking Provided	311	622

Calculation of Greenbelt

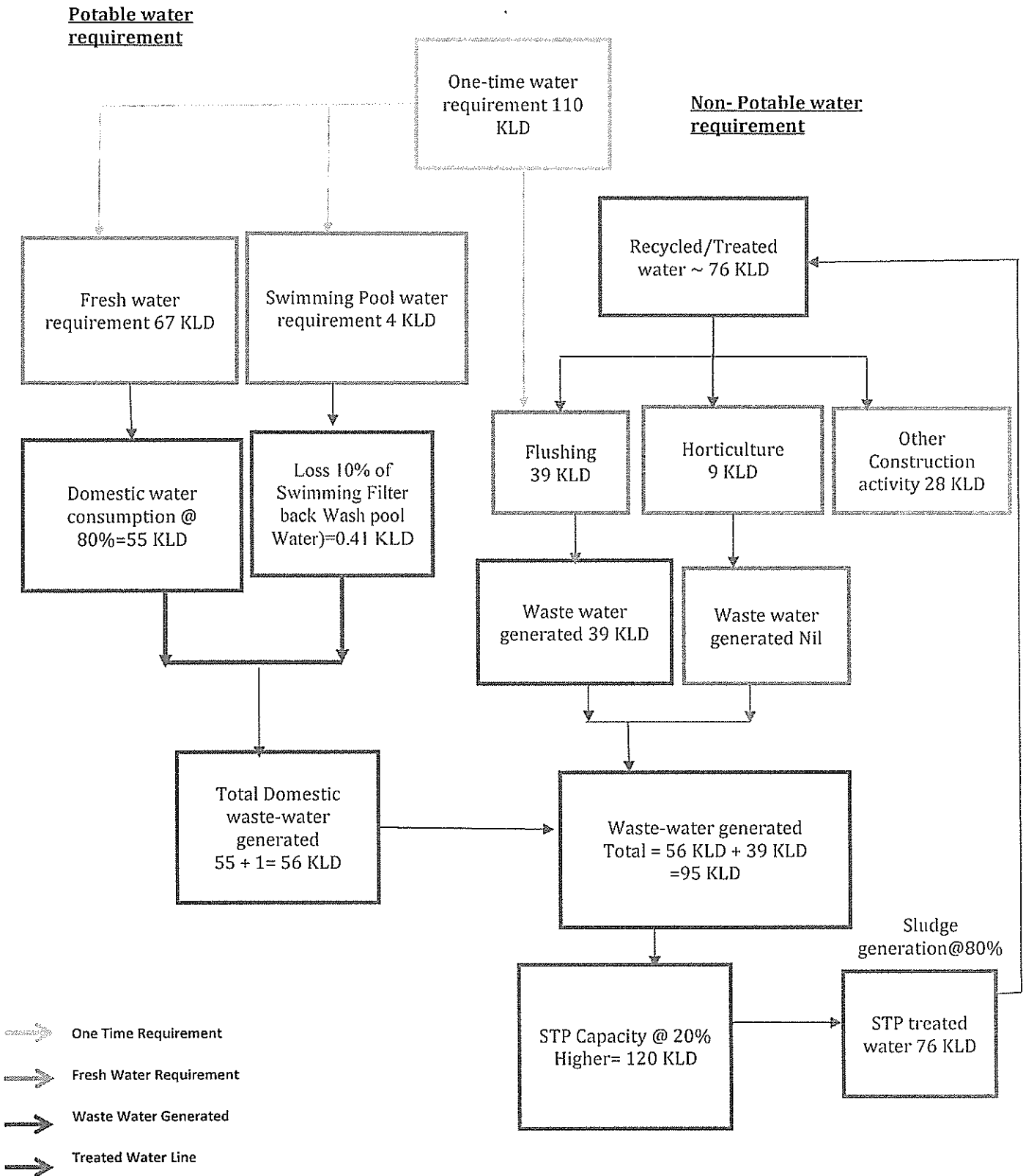
GREEN AREA DETAIL		
Total Plot Area	6102.45	Sqm.
Total Green area provided @ 29.02 % of Plot Area	1771.14	Sqm.
Green Belt area @16% of Plot area	976.39	Sqm.
Green Cover area @13.02% of plot area	794.75	Sqm.
Total No. of Trees will be Planted	244	nos.

10% of the total number of trees will be planted under the "Ek Ped Maa Ke Naam" campaign.

Details of Water Requirement

Description	No. of units / Capacity	Population	Unit water consumption (lpcd)	Total water required (Litres)	Fresh water required (Litres)	Flushing (Litres)	Total Wastewater (kld) (80% of domestic +100% Total flushing+ Loss 10% of Swimming Filter back Wash pool Water)
Main Dwelling Units (Residential)	176	990	100 (65+35)	99000	64350	34650	86130
Visitors (10% of the residential population)		99	15 (10+5)	1485	990	495	1287
Community Hall Seating capacity	1	116	15 (10+5)	1740	1160	580	1508
Club House (Indoor Games, Gym & Yoga)	Considering 1 person per 10 Sqm. of BUA	158	45(25+20)	7110	3950	3160	6320
Swimming Pool	136.28 Cu.	3% daily make-up water		4.09	4.09	...	0.41
Subtotal I				109339	70454	38885	95245
				IN KLD	110	71	39
Reuse of treated water							
Horticulture	1771.14	5 ltr/Sqm.		9			
Flushing				39			

Water Balance



Details of Wastewater Generation and STP Capacity

Details	Water (KLD)
Water requirement for domestic purpose	71

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Wastewater to be generated from domestic use (@ 80% of domestic water requirement)	~56
Water requirement for Swimming Pool	4
Loss 10% of Swimming pool filter Back Wash.	~0.41
Water requirement for Flushing Purpose	~39
Wastewater to be generated from Flushing (@ 100% of flushing requirement)	~39
Total Wastewater generated	~95
STP capacity 20% higher than total waste water	120

STP: Waste water generated is ~95 KLD, which will be treated in the onsite STP of capacity 20% more than the waste water generated i.e. 120 KLD of MBR technology. The treated water available is 76 KLD (which is of 80 % total waste water entering in the STP) and it will be recycled and re-used 39 KLD for flushing, 9KLD for irrigation of landscape area and 28 KLD for other Construction. It fully complies with ZLD requirements. The total dry sludge generation will be 28 kg/day.

Solid waste Generation details

S. No.	Category of Solid Waste	Waste Generation Rate	Formula	Total Population	Waste Generated (Kg/day)	Bio-degradable (Kg/day)	Non-biodegradable (Kg/day)
1	Main Dwelling Units (Residential)	0.3 to 0.6 kg/cap/day	Total Population*0.45	990	445.5	178.2	267.30
2	Visitors (10% of the residential population)	0.05 to 0.2 kg/cap/day	Total Population*0.1	99	9.9	3.96	5.94
3	Community Hall	0.1 to 0.3 kg/cap/day	Total Population*0.1	116	11.6	4.64	6.96
4	Club House (Indoor Games, Gym & Yoga)	0.1 to 0.3 kg/cap/day	Total Population*0.1	158	15.8	6.32	9.48
	Total (Kg/day)				483	193	290

Total Waste Generation Summary

Sl No	Waste Type	Quantity	Management Method
1	Municipal Solid Waste	483 kg/day	Segregation, OWC, recycling &

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			municipal disposal
2	Biodegradable Waste	193 kg/day	On-site composting (OWC)
3	Non-biodegradable Waste	290 kg/day	Recycling & municipal disposal
5	C&D Waste	1936 tonnes	Reuse, recycling & authorized disposal
6	E-Waste	4.2 Kg/Day	Authorized recyclers
7	Hazardous Waste	8.4 Kg/day	Authorized recyclers

Solid Waste Management

Construction Phase

Solid Waste generated during construction phase would include top soil, brick bats, pieces of reinforcing roads, pieces of wood boards & waste of other construction material, cans of paints electrical wire, etc.

Top Soil would be separately stored at pre-defined location within the site & preserved for landscaping. Sub – Soil would be stored for reuse in road making, plinth filling, etc.

Brickbats waste of concrete would also be stored for road construction, etc. Surplus C & D waste would be handed over to Municipal Solid Waste Management Facility. E-Waste & Hazardous waste (cans of paints- would be collected in separates containers. Recyclable wastes including bags, packing, pcs of steel rods sold to rag pickers.

Operational Phase

Municipal Solid Waste Management

1. Biodegradable Waste

- Includes kitchen and horticulture waste b
- Collected in green-colored bins
- Handed over to municipal authorities as per SWM Rules, 2016
- For waste generation ≥ 100 kg/day, on-site organic waste converter is provided

2. Non-Biodegradable Waste

Consists of:

- Recyclable waste
- Non-recyclable combustible waste
- Sanitary waste
- Non-recyclable inert waste
- Includes metal, glass, debris, waste oils, sanitary waste

a) Recyclables

- Includes plastic, metal, glass, etc.
- Separated in white colored bins
- Handed over to local authorized waste pickers/recyclers as per:
- SWM Rules, 2016

- Plastic Waste Management Rules, 2016

b) Non-Recyclable Waste

- Includes debris, sanitary waste, etc.
- Segregated in black colored bins
- Disposed in the bins of urban local bodies as per SWM Rules, 2016

Estimated quantity of municipal solid waste Community building & residential building

During operational phase of buildings municipal solid waste would be generated. They would be stored in different colour bins.

- | | | |
|---|-------------------------|----------|
| ✓ | Recyclable Waste | - white |
| ✓ | Non-Biodegradable Waste | - Blue |
| ✓ | Bio-Degradable Waste | -Green |
| ✓ | E-Waste | - Yellow |
| ✓ | Hazardous Waste | - Red |

Recyclable Wastes would be handed to rag pickers.

Bio-Degradable Waste would be treated in OWC and the product will be utilize as fertilizer.

E-Waste & Hazardous Wastes would be handed over to authorized recyclers

C&D waste Management Plan

- Construction waste will be segregated at source into reusable, recyclable, and non-recyclable categories.
- Excavated earth will be reused within the project site for backfilling and landscaping to the maximum extent possible.
- Reusable materials such as steel, wood, and bricks will be stored separately and reused or sold to authorized recyclers.
- Recyclable C&D waste will be handed over to authorized C&D waste recycling agencies as per Construction and Demolition Waste Management Rules, 2016.
- Non-recyclable inert waste will be transported to designated disposal sites identified by the local authority.

Radio Active Waste Management: Radio-active waste will be managed as per Atomic Energy (Safe disposal of radioactive wastes) Rules, 1987 Disposal of Solid Radioactive Waste — An AERB certified, trained and authorized Agency, License and NOCs are already obtained.

Hazardous & E-Waste Management

Stored in labeled, secured containers

Disposed through SPCB-authorized recyclers

Waste oil sent to authorized reprocessors

(As per Hazardous & Other Wastes Rules, 2016 and E-Waste Rules, 2016)

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Energy Conservation Measures

S. No.	Net Energy saved (weighted Average Calculation)	
1.	Solar Based lighting will be done in the common areas, Signages, entry gates and boundary walls etc. @ 4 %	72 KVA
2.	LED Based lighting will be done in the dwelling units	23.23 KVA
3.	Usage of energy efficient Lift (VVVF non gear lifts)	30 KVA
	Total Energy saved	125.23 KVA
	Total Energy consumption	1800 KW
	Total Energy saving	6.95 %

Note - Solar-based lighting will be used for common areas, signages, entry gates, boundary walls, etc., reducing energy consumption and promoting sustainability

Organization Structure

Organizational Structure:

Introduction

The Environmental Management Plan (EMP) Cell has been established to ensure environmental sustainability and compliance with regulatory requirements for the building construction project. This project aims to minimize environmental harm, promote sustainable practices, ensure compliance with regulations, and foster community engagement and transparency. The EMP Cell will provide a framework for identifying, assessing, and mitigating potential environmental impacts associated with the Construction activities.

Environmental Policy

Our company is committed to:

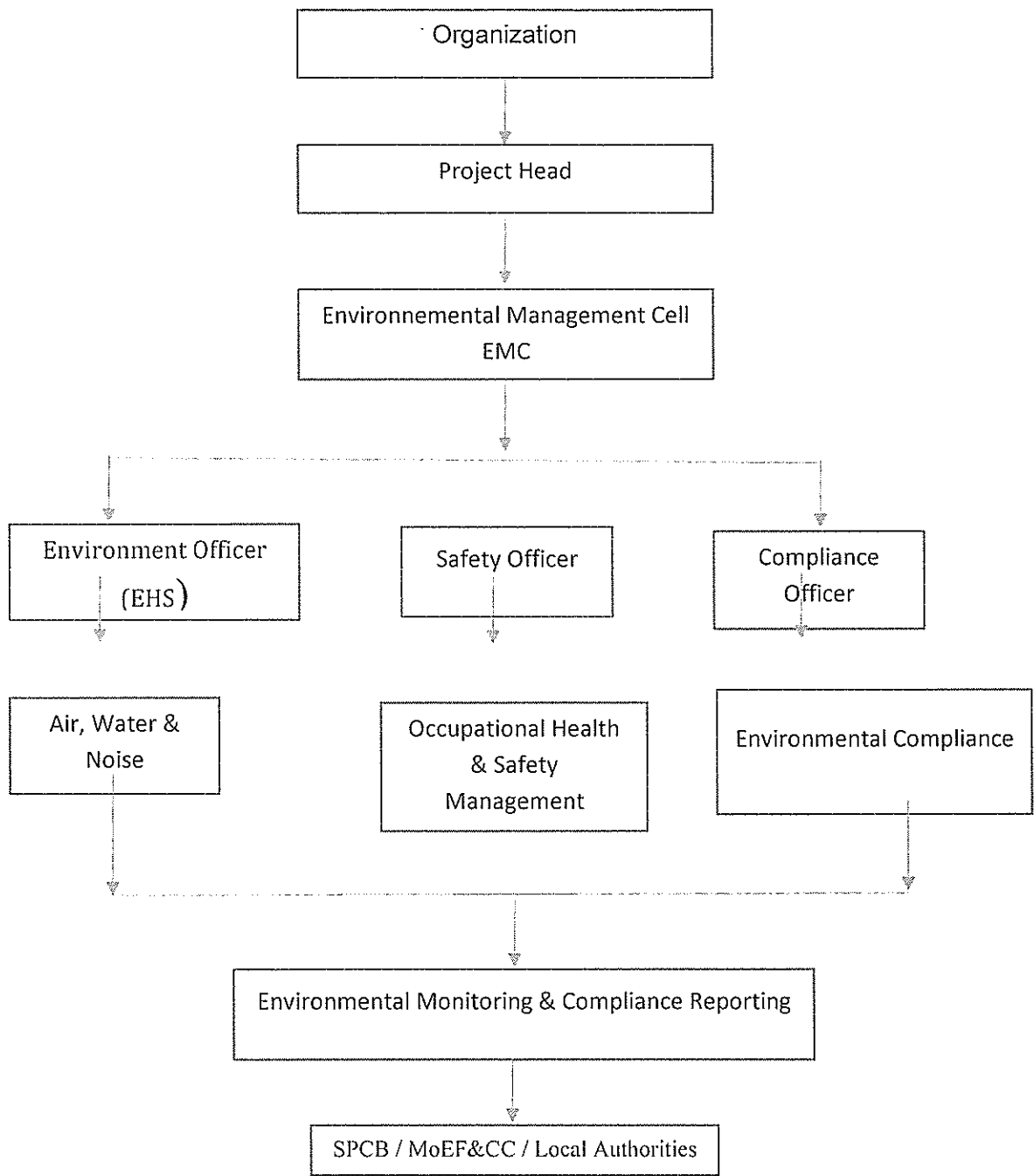
- Minimizing environmental harm through responsible Construction practices
- Promoting sustainable practices to conserve natural resources
- Ensuring compliance with regulatory requirements and industry standards
- Fostering community engagement and transparency through open communication

EMP Cell Objectives

The EMP Cell objectives are:

- To implement environmental mitigation measures as per approved EMP
- To ensure compliance with Environmental Clearance (EC) conditions
- To monitor air, water, noise, and waste management practices
- To ensure occupational health and safety of workers
- To maintain records and submit compliance reports to authorities





Monitoring Plan

Construction Phase:

S. No.	Type	Locations	Parameters	Period and Frequency	Total cost in (Rs. in Lacs)
1.	Ambient Air Quality Monitoring	As per requirement	SO ₂ , NO ₂ , PM ₁₀ , PM _{2.5} and CO	Once in a Six month.	0.40
2.	Ambient Noise Monitoring	As per requirement	Noise level L _{eq} both during day time and night time	Once in a Six month.	0.25
3.	Water Quality	(i) Any	Drinking water	Once in a Six	0.25

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	Testing (Portability testing)	operational bore well (ii) One of the Drinking Water Point	parameters as per IS 10500:2005.	month.	
4.	Soil Environment	As per requirement	PH, Electrical Conductivity (EC) Moisture content, Texture.	Once in a Six month.	0.25
Total Costs in Lakhs					1.15 Lakhs

Operation Phase:

S. No.	Type	Locations	Parameters	Period and Frequency	Total cost in (Rs. in Lacs)
1.	Ambient Air Quality + Stack Monitoring	As per requirement	SO ₂ , NO ₂ , PM10, PM2.5 and CO	Once in a Six month.	0.30
2.	Ambient Noise Monitoring	As per requirement	Noise level L _{eq} both during day time and night time	Once in a Six month.	0.25
3.	Water Quality Testing (Potability testing)	(i)Any operational borewell (ii)One of the Drinking Water Point	Drinking water parameters as per IS 10500:2012.	Once in a Six month.	0.25
4.	Treated Wastewater Quality	Inlet and outlet of the STP and ETP	Parameters for assessing compliance with standards for recycling and horticulture use	Once in a month.	1.50
5.	Soil Environment	As per requirement	PH, Electrical Conductivity (EC) Moisture content, Texture.	Once in a Six month.	0.25
Total					2.55 Lakhs

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Environmental Management Cost – Construction Phase

Sr. No.	Component	Particulars	Capital Investment (Lakhs)	Recurring Expenditure per Annum (Lakhs)
6.	Air	Anti-Smog Gun (1 No.)	5.0	3.0
7.	Water	Mobile STP, etc.	10.0	2.5
8.	Solid and C&D Waste and its Management	Stack yard and its management	3.0	2.0
9.	Environment Monitoring & Management	Environment Monitoring as per monitoring plan ➤ Construction of wind breaking wall ➤ Green Curtains on under construction building	20.0	3.0
10.	Green Belt	Development and maintenance of green belt	10.0	2.5
Total (Rs.)			48.0	15.0

Environmental Management Cost – Operation Phase

Sr. No.	Component	Particulars	Capital Investment (Lakhs)	Recurring Expenditure per Annum (Lakhs)
8.	Air	Stack emission control for 3 DG Sets	5.0	2.0
9.	Water	Sewage Treatment Plant (STP)	80.0	10.0
10.	Rain Water Harvesting	Installation of RWH System & Annual Cleaning of RWH tank	10.0	2.0
11.	Solid waste Area and its Management	Purchase of Containers for Storage of Waste (300 Kg/day)	25.0	3.0
12.	Environment Monitoring & Management	Environment Monitoring as per monitoring plan	0.0	2.5
13.	Green Belt	Development and maintenance of green belt Trees to be planted, 244 no.	12	2.5
14.	Others	Energy saving devices, miscellaneous i.e. Solar	50.0	5.0
		Electrical Vehicle Charging point	50.0	3.0

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Sr. No.	Component	Particulars	Capital Investment (Lakhs)	Recurring Expenditure per Annum (Lakhs)
Total (Rs.)			232	30

Based on the presentation made and information provided, the Committee decided that the proposal for Proposed Residential Building "Highland Park" by M/s ACE Securities and Developers Private Limited at Village : Bargain, Distt.: Ranchi, Jharkhand is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure –II alongwith the following specific conditions :

- I. In compliance of Office Memorandum no. IA-J-11013/20/2025-IA-P, dated 25.11.2025 of MoEF&CC, Govt. of India, the PAs will mandatorily obtain the Environmental Safeguard to be implemented from Jharkhand State Pollution Control Board within 30 days of issuance of EC or 31.01.2026 which ever is earlier.
- II. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "EkPed Ma KeNaam" and the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.
- III. Ground water to be drawn for use in the project only after obtaining permission from the Competent Authority.
- IV. Environment management system including organization structure to be drawn to ensure compliance of EC conditions stipulated based on principles of Continual Improvement and periodical management review.
- V. All raw material to be stored only under covered shed.
- VI. PAs to offset (upto 20%) consumption of conventional energy sources by promoting use of solar energy, passive energy utilization, optimum fenestration, shading effect and heat islands.
- VII. Developers to promote solar energy generation not less than 04 % of connected load.
- VIII. Trees should be developed & maintained not less than 15% of project area.
- IX. Organic Waste Converter (OWC) to be installed of sufficient capacity such that all organic waste (bio degradable) generated is composted at source only.
- X. Developers/Company to install STP of sufficient capacity such that all the sewer produced is treated and reused.
- XI. Developers/Company to install Rain water harvesting structures such that all the roof top water runoff is collected and harvested including reuse on 100% basis.

- XII. Developers/Company to conduct and submit carbon footprint and carbon sequestration study report including mitigation measures as a part of EC compliance.
- XIII. Water runoff originating from open non constructed areas of project premises to be harvested /guided in such a way that it does not create water logging condition outside.
- XIV. Sufficient number of EV fast charging points to be installed.
- XV. MSW Collection centre should be located in isolated and preferably unmanned area. Movement of the vehicle carrying waste should be under tarpaulin covered condition only. Route of vehicle should be such that it avoids residential areas as far as practical.
- XVI. ISO 14k EMS system standard to be followed for implementation of EMPs with MRM in place for feedback to Sr management.

5. **Khairidih Stone Mine of M/s Warish Stone (Partner : Md. Shahid Ali), Village : Khairidih, Thana : Dhanwar, Distt. : Giridih, Jharkhand (1.82 Ha).**

(Proposal no.: SIA/JH/MIN/ 531846 /2025)

This is an existing project which has been listed for re-appraisal on 19.01.2026. Earlier EC was issued by the then DEIAA, Giridih vide letter no. 109/EC/DEIAA/Giridih, dated 11.05.2017.

Regional Office, Ranchi, MoEF&CC, Govt. of India has issued a Certified Compliance Report (CCR) vide F. No. 111-19/ROR-2025/448, dated 30.07.2025 wherein 20 conditions of the earlier EC are stated to be not complied or partially complied.

Project Authorities stated that they have submitted an Action Taken Report in compliance of the CCR as above.

PAs have been asked to obtain a fresh CCR from Regional Office, Ranchi, MoEF&CC, Govt. of India after having submitted the Action Taken Report.

Accordingly, this proposal will be taken up for consideration after compliance of the above.



Day 4 : 20th January, 2026 [Tuesday]

Consideration of proposals :

1. Barkaloro Brick Soil Mining of M/s Bhumi Bricks (Prop. : Smt. Sabita Devi), Village : Barkaloro, Thana : Gumla, Distt. : Gumla, Jharkhand (0.441 Ha).

(Proposal No : SIA/JH/MIN/ 565683/2026)

Name of the consultant : Visiontek Consultancy Services Pvt. Ltd., Bhubaneswar, Odisha.

This is a new project which has been taken for appraisal on 20.01.2026.

Project Sector: 1(a) Mining of Minerals, Category: B2.

Application for Environmental Clearance (EC).

EC Application for: Proposed Capacity – 1200 cum per year (600000 Bricks per year)

Project and Location Details:

#	Parameter	Details	
1	Project Name	Barkalora Brick Soil Mining	
2	Lessee:	M/s Bhumi Bricks Proprietor - Smt. Sabita Devi	
3	Lessee Address	Village- Barkalora, Thana- Gumla, District- Gumla, Jharkhand	
4	Lease Area	1.09 acres	0.441 ha
5	Type of Land	Non-Forest Raiyati Land	
6	Project Cost	Rs. 13.00 Lakhs	
7	EMP Budget	Capital: Rs. 0.50 lakhs	Recurring : Rs. 2.05 Lakhs
8	New or Expansion	New	
9	Total Reserves	8,820 cum	
10	Mineable Reserves	6,000 cum	
11	Mine Life	5 Years	
12	Manpower	10	
13	Water Requirement	1.93 KLD	
14	Water Source	By authorised water tankers	
15	DG Set / power	No	
16	Crusher	No crusher	
17	Nearest Water Body	Khatwa river – 3.50 km; SW	
18	Nearest Habitation	Barkalora Village – 400 m, S – EMP Submitted	
19	Road & Highways	Village Road – 30 m; N NH 143 A – 830 m; W	
20	Nearest Rail Station	Lohardaga Railway Station – 39.41 km; NE	
21	Nearest Airport	Birsamunda Airport – 82.90 Km; NE	
22	Forest (PF/RF/Open)	Divisional Forest Officer, Gumla certified that the distance of	

Jungle)	reserved / protected forest is more than 250 meters from proposed project site.
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CO-ORDINATES:

Sl. No.	LATITUDE	LONGITUDE
1	23°07'23.50" N	84°32'35.84" E
2	23°07'22.88" N	84°32'35.08" E
3	23°07'23.35" N	84°32'34.65" E
4	23°07'24.66" N	84°32'33.03" E
5	23°07'25.60" N	84°32'32.07" E
6	23°07'25.87" N	84°32'32.93" E
7	23°07'26.40" N	84°32'33.57" E
8	23°07'26.06" N	84°32'33.69" E
9	23°07'25.44" N	84°32'34.43" E
10	23°07'24.69" N	84°32'35.20" E
11	23°07'24.43" N	84°32'34.78" E

LAND DETAILS

Khata no.	Plot no.
66	139 (P) & 140 (P)

STATUTORY CLEARANCES

1	LOI / Lease docs	:	Land agreement made.
2	CO	:	The CO, Gumla (Sadar) vide letter no. 988, dated 18.01.2025 has mentioned the plot no. of the project is not recorded as "Jungle-Jhari" in R.S. Khatiyani & Register II. During the appraisal it was seen from the KML that habitation at a distance of 400 meters from mining lease area. For which detailed Environmental Management Plan has been prepared and submitted.
3	DMO Cluster	:	DMO, Gumla vide memo no. 1287/M, dated 19.12.2025 certified that no other mining lease area exists within 500 meters radius from proposed project site.
4	DFO Wild Life	:	DFO, Wildlife Division, Ranchi vide memo no. 109, dated 06.02.2020 certified that the proposed project site is outside Eco

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			Sensitive Zone of Palkot Wildlife Sanctuary.
5	DFO Territorial	:	Divisional Forest Officer, Gumla Forest Division vide letter no. 368, dated 25.01.2018 certified that the distance of reserved / protected forest is more than 250 meters from proposed project site.
6	DSR	:	<p>The DSR for Gumla was approved by the Sub-Divisional Committee on 23.08.2023 and submitted to SEIAA for approval on 23.08.2023.</p> <p>However, DC-cum-District Magistrate, Gumla vide letter no. 1054/M, dated 03.10.2025 requested to consider the said project proposal as part of approved District Survey Report & further requested that this project may be taken up for consideration for grant of EC.</p> <p>The Committee accepted the request of the DC-cum-District Magistrate, Gumla as permission was granted after the approval of DSR.</p>
7	Gram Sabha	:	Gram Sabha conducted on 26.09.2024.
8	Mine Plan Approval	:	Approved by DMO, Gumla vide Letter No. 103/M, dated 25.01.2025.
9	Qualified Person	:	Md. Tauseef Warsi through letter dated 19.01.2026 affirmed that the mine plan has been prepared by him.

Working Details:

1	Mining Method	:	Opencast manual method of mining
2	Quarry Area	:	0.344 ha. Life of Mine – 5 years
3	Waste Generation	:	No Waste Generation
4	Stripping Ratio	:	01:01
5	Working Days	:	200
6	Benches: size & No	:	No Benches
7	Site Elevation	:	626 to 628 m amsl
8	Working Depth	:	624 to 626 m amsl
9	Water Table	:	595 to 610 m amsl
10	Topography of Mine	:	Area is gentle slope

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11	Explosive Requirement	:	NA
12	Diesel/Fuel requirement	:	NA

Production Details:

Year	Production of Recoverable Soil (volume in Cum)	Topsoil Removal (volume in Cum)	Production of Bricks Block in Nos.
1 st Year	1,200	137	6,00,000
2 nd Year	1,200	137	6,00,000
3 rd Year	1,200	137	6,00,000
4 th Year	1,200	137	6,00,000
5 th Year	1,200	137	6,00,000
Total	6,000	685	30,00,000

Land Use Pattern:

Category	Existing Land Use (ha)	Proposed Land Use (ha)	Land Used at Conceptual Stage (ha)
Mining Activities	0.00	0.344	0.344 Grass Cultivation
Safety Zone/ Berm Area	0.00	0.068	0.068 Plantation
Road/Topsoil	0.00	0.029	0.029
Balance/Unutilized Area	0.441	0.000	
Total Applied Area	0.441	0.441	0.441

Greenbelt:

Sl. No.	Area /Length covered	No. of sapling planted	Expected survival rate	Tree/ Shrubs survives	Budget proposed for plantation (in Rupees)	Type of Pollution Tolerant tree species
In Safety Zone						
1.	0.068 ha	170	85%	145	25,500	Agave nectar

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Sl. No.	Area /Length covered	No. of sapling planted	Expected survival rate	Tree/ Shrubs survives	Budget proposed for plantation (in Rupees)	Type of Pollution Tolerant tree species
				Shrubs		<i>Cassia torra</i>
On Transport Road						
2.	300 m	20	85%	16 Trees	5,000	<i>Bougainvillea</i> <i>Nerium Oleander</i> <i>Cascabela Thevetia</i> <i>Cassia fistula</i> <i>Caesalpinia</i> <i>Pulcherrima</i>
3	Post Mining 0.344 ha	860	90%	775 Grass	20,000	<i>Dhubh, Guinea</i>
Total					50,500	--

- Total No. of Trees – 20 nos.
 - Total No. of Shrubs – 170 nos.
 - Total No. of Grass – 860 nos.
- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

In compliance of OM no. F. No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India 10% Plantation of total sapling shall be carried out in earmarked green belt area as the part of tree plantation campaign "Ek Ped Ma Ke Naam".

Solid Waste Management

- Topsoil Generation will be 685 Cum. during the plan period. The topsoil shall be used for progressive backfilling during mining operation.

Water Pollution Control Measures:

1. Mining operation will be restricted to the depth of 2 m from surface level.
2. Quality of dug well will be monitored, in order to ensure the quality of water is not affected.

Air and Noise Pollution Control Measures:

1. Dust suppression measures like spraying / sprinkling of water to keep the surface wet.

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2. Overloading of the truck / tractor trolleys will not be done.
1. Tractors-trolleys will be well maintained and PUC certified.
2. Timely maintenance of vehicles and their silencers to minimize vibration and sound.
3. Minimum use of horns in the village area and silence zone (if any) as applicable.

Project Cost:

Sl. No.	Head	Capital Cost (INR in Lakhs)
1	Land Compensation	1.00
2	Tools & Moulds	10.00
3	Miscellaneous	2.00
Total		13.00

Environment Management Plan Budget:

Sl. No.	Item Description	For Mines & Allied activities	
		Capital Investment (INR in Lakhs)	Recurring Cost/Yr. (INR in Lakhs)
1	Water Sprinkling & Dust Suppression	-	1.50
2	Berm & Other Plantation	0.50	0.10
3	Occupational Health & Safety	-	0.20
4	Habitation (Nearby Village)	-	0.25
TOTAL		0.50	2.05
5. Environmental Monitoring			
5.A	Air Quality Monitoring – at 2 locations for PM, SO _x & NO _x twice a year	0.12	
5.B	Water Quality Monitoring – for 10 parameters, 2 locations; twice a year	0.10	
5.C	Noise level Monitoring – at 2 locations; twice a year	0.08	
TOTAL		0.30	

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The district survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.

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- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project. Authorities and all necessary steps will be taken in this regard.
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- i. It is proposed to remove topsoil before excavating soil for brick making. It will be used for raising plantation around the mining or levelling of land.

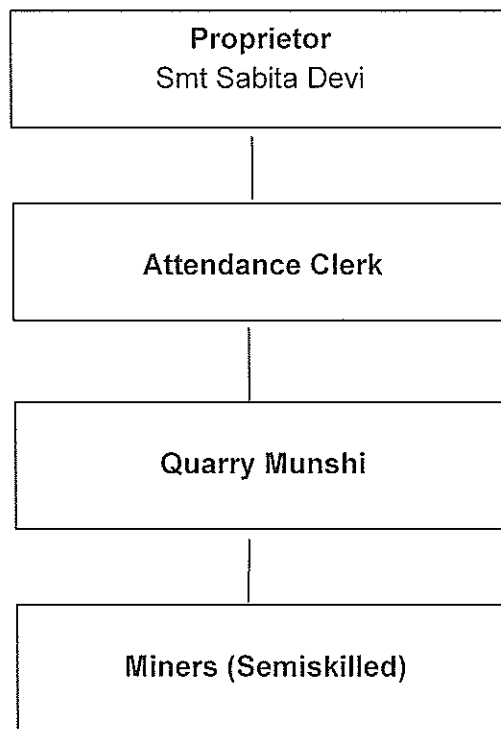
Environment Management Plan

Particular	Mitigation Measures
Removal of Topsoil	Topsoil will be stored temporarily and will later be used for making bund walls and spreading over the excavation plot.
Pit formation - excavation	<ul style="list-style-type: none"> • Mining operations will be carried out as per mining rules systematically and scientifically. • Mining operation will be carried making terraces/benches. The heights and width of each bench will be 1 m x 1 m. • Stabilization of slope will be done by planting species having extensive root system, so as to bind the soil. • Species will be planted across the slope so as to arrest the soil movement, due to wind and water erosion.
Siltation of fertile soil from adjoining farms into the pit	<ul style="list-style-type: none"> • Loss of fertile topsoil from adjoining farms will be arrested by the bund wall/berm. • Plantation of bio vegetative species along the berm to act as a fence/barrier • Stabilization of slope by planting soil binding species.
Change of land use from agricultural to mining	<ul style="list-style-type: none"> • It is temporary (for a period of 5 years) • Mining will be done only up to a depth of 2 m only and leveled flat to make it fit for cultivation. • Agricultural practices will be resumed after mining

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Air Environment	<ul style="list-style-type: none"> • Sprinkling of water as and when required on the transport road for dust suppression. • Plantation is carried out on along the transport roads. • Proper maintenance of vehicles will be done to minimize the pollutants
Noise Environment	<ul style="list-style-type: none"> • Timely maintenance of vehicles to minimize vibration and sound. • Noise will be controlled by selecting well-maintained vehicles wherever possible. • Minimum use of horns and speed limit of 10 km/h.
Impact on flora-fauna & nearby population	<ul style="list-style-type: none"> • Sprinkling of water as and when required on the transport road for dust suppression. • Plantation is carried out on along the transport roads.

Organizational Structure of Environment Management Cell:



The EMP cell is committed to ensuring environmental sustainability and compliance with regulatory requirements for the Soil mining project. With a clear structure, roles, and responsibilities, the EMP Cell is equipped with to manage environmental impacts and promote sustainable practices.

This EC has been considered on the request of the DC, Gumla. However, the DC must ensure that the area over which the permission is granted is meeting all the guideline as required for approval of the DSR and also to take concurrence from the Sub-Divisional Committee. The lease is to be granted only after taking concurrence of the Sub-Divisional Committee.

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Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Barkaloro Brick Soil Mining of M/s Bhumi Bricks (Prop. : Smt. Sabita Devi), Village : Barkaloro, Thana : Gumla, Distt. : Gumla, Jharkhand (0.441 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I along with following specific conditions :

- I. In compliance of Office Memorandum no. IA-J-11013/20/2025-IA-P, dated 25.11.2025 of MoEF&CC, Govt. of India, the PAs will mandatorily obtain the Environmental Safeguard to be implemented from Jharkhand State Pollution Control Board within 30 days of issuance of EC or 31.01.2026 which ever is earlier.
- II. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "Ek Ped Ma Ke Naam" and the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.
- III. The Deputy Commissioner through District Mining Officer will ensure that the mines owner of the respective leases to complete the plantation and maintenance in a time bound manner.
- IV. Suitable plant species of not less than 2 M height to be planted equal to twice the area of saplings proposed in Safety zone. This is to be planted in land available near mines and outside safety zone. This will be in addition to plantation in safety zone. Newly planted saplings to be maintained for minimum 3 years with Geo-Tagged photographs.
- V. Dedicated water tanker to be provided for mine. The tanker to be used for spraying water on haul road and for irrigating newly planted saplings only. Sprinkling to be done such that the haul road is kept moistened all the time with Geo-Tagged photographs.
- VI. Pre employment Occupational health check up for employees to be done and thereafter at annual interval for PLFT, Audiometry and other required tests .Summary findings of same to submitted along with 6 monthly compliance.
- VII. Ensure use of Quality PPEs equivalent not less than 3M make. Records of same to be maintained and submitted with 6 monthly compliance report with Geo-Tagged photographs.
- VIII. Keep vulnerable areas unmanned. Ensure rotation of duties. Records to be maintained and submitted with 6 monthly compliance report.
- IX. Failing of any of terms & conditions mentioned in EC can lead to revocation / cancellation of EC.

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2. Amendment in EC of Piparwar UG (Phase I) (0.87 MTPA) Piparwar area of M/s Central Coalfields Ltd., Village : Benti, Mangardaha, Kichto, Thena & Bijain, Tehsil : Tandwa, Distt. : Chatra, Jharkhand (464.69 Ha).

(Proposal No : SIA/JH/CMIN/ 564933/2026)

The proposal was granted conditional EC for carrying out developmental activities over the non forest land vide SEIAA letter no. EC/SEIAA/2024-25/3146/2024/318, dated 21.10.2024. This EC was issued alongwith the condition that the Project Authorities will seek amendment in EC after obtaining diversion of Forest Land under the Forest (Conservation) Act, 1980 / Van (SANRAKSHAN EVAM SAMVARDHAN) Adhiniyam, 1980.

The total project area 464.69 Ha which is as follows :

Sl. No.	Particular	Area (in Ha)
1.	Tenancy land	185.79
2.	GMK land	108.32
3.	GMA land	4.63
4.	Notified forest land	128.14
5.	GM JJ Land	37.81
6.	Total	464.69

The PAs have obtained the forest diversion for the notified forest land area of 128.14 Ha.


No forest diversion has been obtained for GM JJ land of 37.81 Ha.

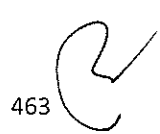
The PAs have applied for consideration for amended EC over mine lease area of 426.88 Ha after excluding 37.81 Ha of GM JJ land.

The approved mine plan submitted is for an area of 464.69 Ha including GM JJ land of 37.81 Ha.

Hence, the PAs are requested to submit a revised and approved mine plan for the area of 426.88 Ha.

It will be taken up for consideration after submission of the above.

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3. Amendment in EC of Giddi 'A' OCP (1.00 MTPA) Argada Area of M/s Central Coalfields Ltd., South Karanpura Coalfield, Distt. : Hazaribag, Jharkhand (187.98 Ha).

(Proposal No : SIA/JH/CMIN/ 565753/2026)

Name of the consultant: CMPDI, Kanke Road, Ranchi

This is an amendment project which has been taken for appraisal on 20.01.2026.

Project Sector: 1(a) Mining of Minerals (Coal) as per EIA Notification, 2006, Category: B1.
Application for amendment in Environmental Clearance (EC).

This project was granted EC under violation category by MoEF&CC, Govt. of India vide File no. 23-245/2018-IA.III (V), dated: 24.03.2023.

The PAs have submitted a Bank Guarantee of 851.80 Lakh to JSPCB towards implementation of activities under Damage Remediation Plan and Community Resource Augmentation Plan with the timeline of completion within 19.02.2026.

The PAs have submitted that due to some constraining factors the completion of Damage Remediation Plan and Community Resource Augmentation Plan could not be done.

The PAs have sought for extension of 02 years for completion of the Damage Remediation Plan and Community Resource Augmentation Plan and also extension of validity of the Bank Guarantee submitted to JSPCB.

The Committee deliberated on the issue and are satisfied with the reason provided by the PAs for non completion of Damage Remediation Plan and Community Resource Augmentation Plan within 19.02.2026.

Hence, the Committee recommends for extension of the timeline for completion of the work of Damage Remediation Plan and Community Resource Augmentation Plan and also the validity of the Bank Guarantee by a period of 02 years i.e. up to 19.02.2028.

PROJECT AND LOCATION DETAILS:

SN	Parameter	Details	
1	Project Name	: Giddi 'A' OCP	
2	Project Proponent	: Randhir Kumar Singh, Project Officer, Giddi A OCP	
3	Address	: Project Officer, Giddi A OCP, Argada Area, Central Coalfields Limited, Block Dadi	
4	Area	: Ha: 187.98 ha	Acres: 464.31 Acres
5	Type of Land	: Forest Land: 73.94 Ha, Non-Forest Land: 114.04 Ha	
6	Project Cost	: 10298 Lakh	
9	Proposal	: Amendment in EC	
10	Mineable Reserves	: Coal: 2.76 million Tonnes	OB: 5.61 M cum
11	Mine Life	: 05 years	

12	Man power	:	449
13	Water Requirement	:	996 KL/Day
14	Water Source	:	Mine seepage & rain water stored in mine sump
15	DG Set / power	:	8 MW from DVC Substation
16	Crusher	:	No
17	Water Body	:	Damodar River (0.1 KM)
18	Nearest Habitation	:	Giddi Colony (0.1 KM)
19	Railway Station	:	Sayal (10 KM)
20	Nearest Air Port	:	Ranchi (60 KM)
21	Nearest Forest	:	Within Project boundary
22	Road & Highways	:	State Highway No 2

CO-ORDINATES:

1	Latitude	From 23° 40' 56"N	To 23° 41' 58"N
2	Longitude	From 85° 20' 46"E	To 85° 21' 56"E

STATUTORY CLEARANCES :

1	Land Docs.	:	Land has been acquired under Nationalisation and CB Act vide SO notification 252 dt 15.01.1958.
2	CO	:	The CO, Dari, Hazaribag vide letter no. 568 (B), dated 02.12.2025 has mentioned the plot no. of the project is recorded as "Jungle- Jhari" in R.S. Khatiyon & Register II.
3	DFO Wild Life	:	DFO, Wildlife Division, Hazaribagh vide letter no. 123, dated 19.01.2026 certified that the said project is outside Eco Sensitive Zone of Hazaribag Wildlife Sanctuary.
4	DFO Territorial	:	DFO, Ramgarh Forest Division vide letter no. 42, dated 07.01.2026 certified that the proposed plot is within the notified forest boundary.
5	Previous EC	:	Previous EC was granted by MoEF&CC, Govt. of India vide File no. 23-245/2018-IA.III (V), dated: 24.03.2023 (under violation category).
6	Consent to Establish (CTE)	:	CTE granted by JSPCB vide Ref. no. JSPCB/HO/RNC/CTE-15446447/2023/283, dated 27.04.2023.
7	Consent to Operate (CTO)	:	CTO granted by JSPCB vide Ref. no. JSPCB/HO/RNC/CTO-20712224/2025/648, dated 31.03.2025 valid up to 31.03.2026.

8	Mine Plan Approval	:	Mining Plan approved by Company Secretary, Central Coalfields Ltd. vide Ref No.: - CS/BM/507/2021/301, Dated: 18.10.2021
9	Previous ToR	:	Previous ToR was granted by MoEF&CC, Govt. of India vide No: 23-245/2018-IA.(III)(V) Dated: 25.09.2019
10	NOC from CGWA	:	NOC for Ground Water Abstraction vide NOC no. CGWA/NOC/MIN/REN/1/2025/11664, dated 30.05.2025 valid up to 02.12.2025. Application submitted for renewal of NOC submitted to CGWA
11	Forest Clearance	:	Forest Land involved is 73.94 Ha, which has been obtained, Stage I vide MoEF&CC vide file no: 8-73/2003-FC Dt.08.06.2004 for 232.42 Ha.

Working Details :

1	Mineable Reserve (Mte)	:	2.76
2	OB (Mcum)	:	5.61
3	Stripping Ratio (cum/te)	:	2.03
4	Life (Years)	:	5
5	Dip of seams (Degree)	:	14 Degree -22 Degree
6	Strike Length (km)	:	0.45
7	Maximum depth (m)	:	90
8	Seams Considered	:	7 no. of seams (Sirka, Sirka-A, Argada, Argada-A, Argada-B, Argada-C, and Argada-D)
9	Minimum Seam Thickness (m)	:	2
10	Maximum Seam Thickness (m)	:	16.30
11	Grade of Coal	:	G-5, G-7, G-8
12	Area of Excavation	:	29.97 Ha
13	Method of Mining	:	Open cast mining with Shovel-Dumper operation
14	Coal Evacuation	:	Through CCL Sidings (Giddi and Saunda B Siding)

Proposed Calendar Program as per EC:

Year	Coal Production in MTY	OB in Mcum	Stripping Ratio
1	0.25	1.21	2.03
2	0.50	1.15	
3	0.75	1.52	
4	1.00	1.46	
5	0.26	0.27	
Total	2.76	5.61	

PLOT DETAILS:

Village	Thana No	Khata No	Plot No
Gidi, Kurkuta	36,35	3, 9, 10, 11, 13, 18, 20, 21, 22, 23, 26, 27, 28, 29, 30, 32, 34, 35, 36, 37, 40,	117, 118, 225, 226, 227, 754, 245, 246, 256, 257, 258, 259, 260, 261, 265, 266, 267, 268, 269, 271, 107, 126, 384, 385, 386, 387, 390, 391, 392, 393,

		42, 43, 45, 48, 49, 50, 52, 53, 55, 56, 59, 62, 64, 65, 67, 68, 73, 74, 76, 79, 82, 83, 84, 86	394, 99, 240, 241, 242, 243, 244, 251, 196, 747, 140, 141, 152, 153, 154, 157, 175, 176, 182, 187, 188, 192, 140/735, 729, 153/728, 154/727, 161/725, 161, 163, 158, 159, 163/722, 175/723, 175/739, 188/740, 192/743, 156, 162, 174, 177, 178, 179, 232, 235, 253, 254, 255, 180, 164, 724, 165, 166, 167, 172, 166/718, 166/719, 164/721, 100, 101, 106, 108, 119, 131, 111, 262, 190, 191, 335, 336, 98, 190/745, 269/803, 193, 190/742, 193/744, 145, 150, 155/733, 112, 317, 331, 332, 195/748, 195/749, 233, 234, 195, 318, 319, 320, 321, 129, 113, 114, 654, 293, 294, 295, 297, 799, 189/614, 189/615, 184, 189, 292, 94, 95/635, 312, 88, 337, 333, 334, 89, 90, 92, 61/616, 103, 109, 115, 151, 184/741, 148, 147, 311/760, 238, 279, 280, 281, 283, 284, 287, 110, 120, 121, 127, 128, 522, 523, 524, 634, 658, 134, 194, 237, 400, 401, 275, 402, 502, 725, 726, 727, 723, 724, 750, 753, 322, 239, 247, 248, 249, 250, 263, 264, 272, 274, 276, 277, 714, 715, 139, 142, 143, 144, 146, 149, 155, 160, 168, 169, 136, 135, 296, 286, 288, 289, 282, 278, 171, 170, 720, 200, 805, 821, 370, 388, 389, 395, 396, 82, 694, 96, 105, 116, 717, 186, 726, 185, 183, 181, 125, 704, 338, 51, 398, 400, 402, 502, 133, 668, 74, 75, 76, 77, 78, 79, 134, 231, 273, 236, 270, 323, 122, 123, 93, 95, 97, 102, 80, 83, 84, 85, 86, 87, 91, 130, 521, 525, 613, 617, 621, 622, 623, 626, 633, 650, 651, 104, 124, 670, 659, 401, 671, 680, 682, 138, 669, 683, 688, 722, 728, 228, 229, 230, 776, 313, 314, 315, 316, 719, 720, 774, 324, 197, 734, 732, 731, 716, 198, 736, 737, 738, 746, 137, 173, 801, 290, 291, 252, 285, 763, 775, 762, 802, 804, 814, 815, 816, 817, 818, 819, 820, 822, 371, 372, 373, 374, 813, 811, 812, 810, 809, 808, 807, 806, 375, 376, 379, 134, 231, 338, 51, 199, 662, 660, 201, 691, 398, 786, 669, 397, 382, 383, 380, 381, 378, 377, 719, 133, 720, 722
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Land Acquisition:

Land is acquired under Nationalisation and CB Act vide SO notification 252 dated 15.01.1958.

Land Type Breakup as per EC:

SN	Particular	Area (in Ha)
1	Forest Land	73.94
2	GMK Land	31.85
3	Tenancy Land	82.19

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	Total Project Area	187.98
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Land Use During Mining as per EC:

SN	Particulars	Area (Ha)
1	Quarry	29.97
2	External OB Dump	28.87
3	Old waterlogged quarry	15.13
4	Backfilling in the Old Worked out Quarry	7.69
5	Infrastructure	7.36
6	Road	3.39
7	Nala	1.13
8	Old stabilized and reclaimed dumps	10.31
9	Plantation on Safety Zone /Greenbelt	14.04
10	Undisturbed land	70.09
	Total	187.98

Proposed Post Mining Land Use as per EC

SN	During Mining		Post Mining	
	Particulars	Area (Ha)	Particulars	Area (Ha)
1	Quarry	29.97	Water filled Quarry	29.97
2	External OB Dump	28.87	Existing External OB Dump (No further Dumping Proposed)	18.87
3	Old waterlogged quarry	15.13	Proposed Dumping into old water logged Quarry	15.13
4	Backfilling in the Old Worked out Quarry	7.69	Void Filled with water	0.40
			Reclaimed over old worked out quarry	7.29
5	Infrastructure	7.36	Infrastructure including stockyard	7.36
6	Road	3.39	Road	3.39
7	Nala	1.13	Nala/Stream & water Body	1.13
8	Old stabilized and reclaimed dumps	10.31	Old Stabilised and reclaimed dumps	10.31
9	Plantation on Safety Zone /Greenbelt	14.04	Plantation on Safety Zone/ Greenbelt	14.04
10	Undisturbed land	70.09	Undisturbed land	80.09

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	Total	187.98	Total	187.98
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Total EIA/EMP Expenditure:

Head	Activity	Capital Cost in Rs. Lakhs	Recurring Cost in Rs Lakh per year
Air Pollution prevention measures	Wind Barriers along north and south-eastern quarry boundary	210	65
	Plantation on dumps, safety belt & green belt, embankment along Damodar river.	412.51	
	Fixed sprinkling system of on Haul Road	15	
	Black Topping of Permanent Haul Road	150	
	Mobile Water Sprinklers with Fog Canons	200	
Water Pollution & Conservation Measures	Sewage Treatment Plant at the existing colony	200	30
	Toe wall and garland drain/ catch drain	200	
	Sedimentation Tank	30	
	Rain Water Harvesting Structures	20	
	Renovation of ETP (Oil & Grease Trap)	20	
Flora-Fauna Conservation	Conservation Measures for schedule-I species	80	30
Total		1537.51	125

Provision of Action Plan of Public Hearing:

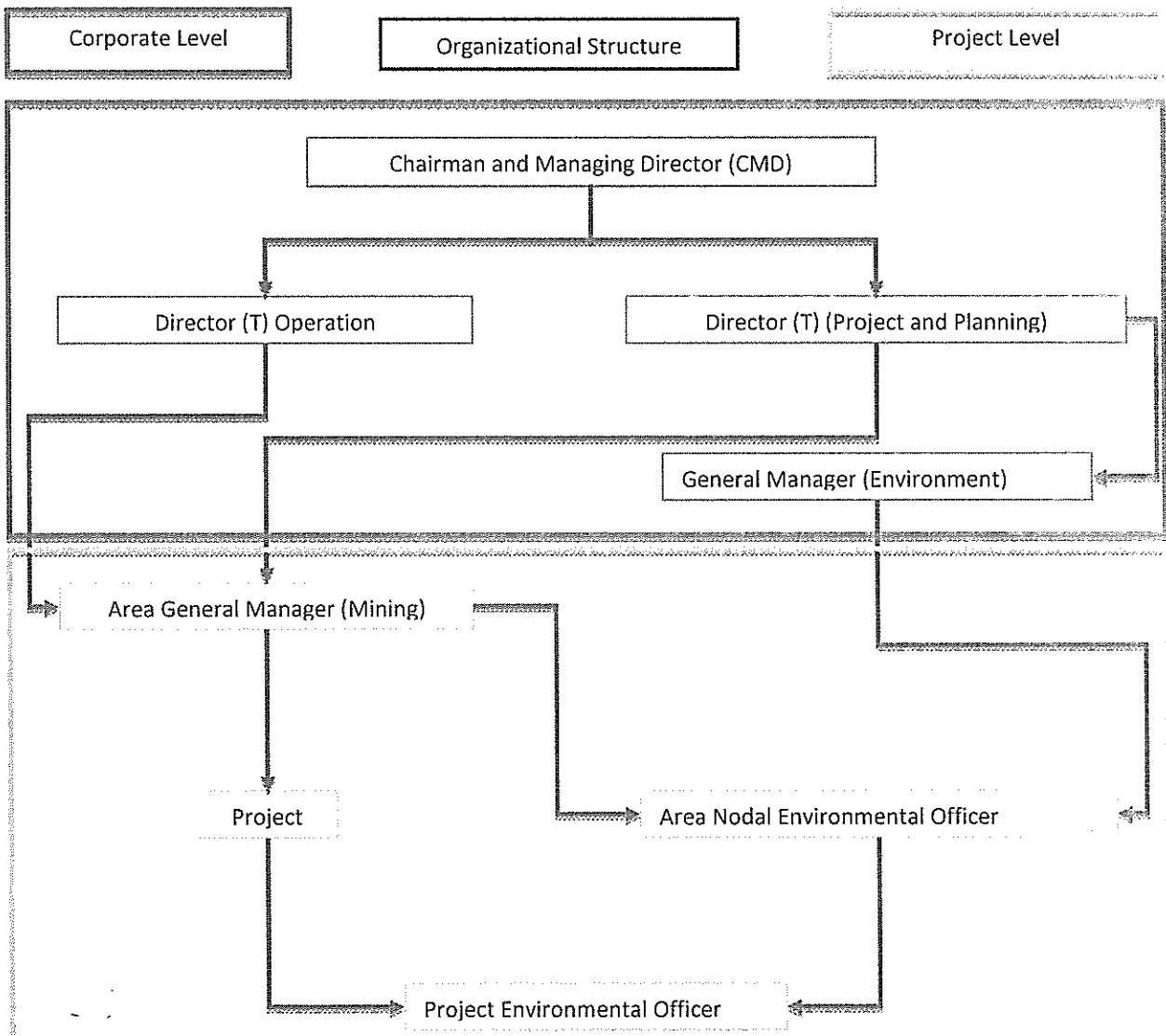
- Public consultation including public hearing was conducted 26.10.2021 at the designated site, At Argada Officers Club, Post-Giddi-A, HazaribagDistthrough JSPCB as per the provisions/procedure contained in the EIA notification, 2006.
- A detailed compliance of issues raised in PH along with additional budgetary provision and timeline for Rs. 207.07Lakh has been prepared and submitted as below:

SN	Proposed Action Taken	Budgetary Provision in Lakh
1	PCC Road construction will be taken up from Urimari road to	27.07

	Kendiya Tola of Length 350 m	
2	Develop a Play-ground near Shishu vidya Mandir, Tehratand including Levelling of ground, Stage, Boundary wall.	90
3	02 nos. R.O. Plant at Giddi Ka & 02 nos. R.O. Plant at Giddi Ga Panchayat	90
Total Action Plan for PH Cost		207.07

Environmental Cell & Organization Chart:

The organizational structure for environmental management operates at two levels: Corporate Level (policy formulation and strategic oversight) and Project Level (implementation and compliance). At the corporate level, the CMD, Directors (Tech.), and General Manager (Environment) provide oversight to ensure regulatory adherence. The Project Level, led by the Area General Manager (Mining), includes Project Officers and Environmental Officers responsible for on-site execution. This structure enables effective coordination, compliance with environmental regulations, and sustainable washery practices. An organization chart showing the hierarchy is submitted below:



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PROPOSED MODIFICATION IN ACTIVITIES OF DAMAGE REMEDIATION PLAN (DRP)& NATURAL AND COMMUNITY RESOURCE AUGMENTATION PLAN IN EXISTING EC OF GIDDI A OCP:

Details of DRP:

SN	Head	ACTIVITIES & ALLOCATED FUND AS PER EXISTING EC			PROPOSED MODIFICATION IN ACTIVITIES TO BE UNDERTAKEN BY CCL			
		Activity under in Damage Remediation Plan (DRP) in Existing EC	Original Budget proposed in Rs Lakh	Fund Utilized for carrying out the work till 31.12.25	Reason of Delay	Present Status	Revised Budget proposed to be Utilized	Timeline of Completion
1	Water Environment	Construction & installation of RO Plants (12 nos.) for supply of treated drinking water at 4 Revenue villages namely: Giddi 'Ka', Giddi 'Kha', Giddi 'Ga' and Kanki Panchayat with annual maintenance contract.	300	0	Estimate processed on Mar-2024. Delay due to re-framing of BOQ and eligibility criteria to attract bidders. Work Tendered on 26-05-2025.	Work Award in Progress	250	Mar-27
2		Deepening and pitch bouldering of existing pond in Tehratand village	40	0	Tender published on June-2024 Work awarded on Aug-2024 Delay due to local site hindrance	Work Awarded	18.60	Jun-26
3		Additional Water Sampling for analysis of Ground water at 3 locations namely Tehratandvillage, Kurkutta village and Kendiya village @ once in a quarter	3.5	1.50	Balance amount proposed to be utilized in other activities of DRP	Work Awarded Sampling completed for 2 years	0.54	Mar-27
4		Renovation of ghat (Steps) along River Damodar at Shiv Mandir and beautification by Avenue plantation	36	8.12	Balance amount proposed to be utilized in other activities of DRP	Work Completed	-	Complete

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5	Ecology	Distribution of 10,000 Fruit bearing plants in nearby villages viz. Jamuna Tola, Kurkutta, Tehratand, Kalai Tola, Giddi Basti etc.,	15	1.50	Additional activity is proposed within this head Balance amount proposed to be utilized in other activities of DRP	Distribution of 10,000 Fruit bearing plants completed <u>Additional Activity Proposed</u> Distribution of 10,000 saplings to nearby villages	3.0	June-26
6	Air & Noise Environment	Additional Health Camps to monitor the respiratory and E&T health status of nearby villages. 1. Diabetic Camp (Quarterly) 2. Hypertension Camp (Quarterly) 3. Cancer Detection Camp (Quarterly) 4. Anaemia Detection Camp (Quarterly) 5. Cataract Detection and Treatment (Quarterly)	46.8	0	Activities were re-aligned to ensure no-overlapping with CSR	Tender under preparation	10	Aug-26
7		Additional avenue plantation (2.1 km) along with gabions and maintenance in subsequent years on village road connecting Giddi Basti and Project.	40	0	Earlier proposals submitted to State Forrest Dept. could not be taken up due to local hindrance	Proposal submitted to State Forest Dept. for undertaking the work in Monsoon of 2026	40	Dec-26
8	Land Environment	Providing colour coded bins in schools & hospitals in nearby Villages	5	0	Delay due to re-framing of BOQ and eligibility criteria to attract bidders	Proposal approved. Pending with MM Dept for procurement	5	Jul-26
9	Socio-Economic	Skill development training programme for Motor Driving and Sewing to approx. 100 persons per year	20	-	Activities were re-aligned to ensure no-overlapping with CSR	Currently in Tendering Process in GeM portal	20	Jul-26
10		Construction of 4 no.s of toilet at Tehratand community Hall	20	10.07	Balance amount proposed to be utilized in other activities	Work completed <u>New Activity Proposed</u> Construction of Common toilets at 3 different	45	Mar-27

					locations		
11	Organizing Football & Volleyball Events	18	-	Activities were re-aligned to ensure no-overlapping with CSR	Tender under preparation	6	Dec-26
12	Construction of 2 no.s Community Halls(20m x 50 m) at Giddi Ka Panchayat (Kali Mandir Ground) &Giddi Kha Panchayat (Near Hanuman Chowk	150	-	Additional time required due to land issues. Estimate processed on 23-01-2024. Approved on 11-04-2025. Tendered on 26-04-2025.	Tender Published. Work Award in Progress	231	Mar-27
13	Providing Computers at Madhya Vidyalay&ShramikUchhVidyalayGiddi 'Ka', Balika VidyalayGiddi 'Kha', Saraswati Sishu Vidya Mandir Giddi 'Ga', Saraswati Vidya Mandir Officers Colony (Total 35 nos.)	10.50	-	Delay due to re-framing of BOQ and eligibility criteria to attract bidders	Tender under preparation.	11	Aug-26
14	Construction of Boundary wall at Shishu Vidya Mandir (900 Ft. length and 6 ft. height)	50	18.60	Balance amount proposed to be utilized in other activities	Work completed <u>New Activity Proposed</u> Renovation of DAV School	65	Complete
15	Additional awareness programs on Environmental protection	5	-	It will be completed by extended time period.	Tender under preparation	5	Dec-26
Total Cost of DRP		759.80	39.79			720.14	

Details of NCRAP:

SN	Head	ACTIVITIES & ALLOCATED FUND AS PER EXISTING EC				PROPOSED MODIFICATION IN ACTIVITIES TO BE UNDERTAKEN BY CCL		
		Activity under in Damage Remediation Plan (DRP) in Existing EC	Original Budget proposed in	Fund Utilized for carrying out the work	Reason of Delay	Present Status	Revised Budget proposed to be	Timeline Completi

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			Rs Lakh	till 31.12.25			Utilized	
1	NRAP	Renovation of 4 no.s of wells at Giddi "Kha" Panchayat	2	2.11	No Delay	Completed	--	--
2	CRAP	Providing solar lamps (50 Watt) for street lighting at 5 Revenue Villages (100 Nos Approx.)	15	-	Activity delayed due to overlap with CSR Activity	Tender under preparation	15	Jul-26
3		Arrangement of smart classes at nearby schools of Giddi A OCP	15	-	Increase in cost due to upgrading of scope of work	New Activity Proposed: Distribution of Smart Boards at Schools	54	Aug-26
4		Construction of RWH at 4 no.s of schools in adjacent villages:	40	6.76	No Delay Balance amount proposed to be utilized in other activities	Completed	--	--
5		Construction of Shelter at Samshan Ghat	20	5.50	No Delay Balance amount proposed to be utilized in other activities	Completed New Activity Proposed: Construction of permanent cremation fixture structure at Shamshan Ghat of Gidi	9	Mar-27
Total Fund of NCRAP			92	14.37			78	

SUMMARY OF DRP & CRAP: EXISTING & PROPOSED

SN	Activity Approved in DRP & CRAP in Existing EC	Allocated Fund in the existing EC (Rs in Lakhs)	Fund Already utilized till 31.12.2025	Revised Budget proposed to be Utilized after proposed Modification in the existing EC(Rs. in Lakhs)	Total proposed expenditure (Rs. in Lakhs)
1.	Cost of Damage Remediation Plan	759.80	39.79	720.14	759.93
2.	Cost of Community Resources	92	14.37	78	92.37

	Augmentation Plan			
	Total Cost of DRP & CRAP	851.80	54.16	798.14
				852.30

Based on the presentation made and information provided, the Committee decided that the proposal for Giddi 'A' OCP (1.00 MTPA) Argada Area of M/s Central Coalfields Ltd., South Karanpura Coalfield, Distt. : Hazaribag, Jharkhand (187.98 Ha) is recommended for grant of amended EC for extension of the timeline for completion of the work of Damage Remediation Plan and Community Resource Augmentation Plan and also the validity of the Bank Guarantee by a period of 02 years i.e. up to 19.02.2028. All other terms and conditions of the earlier EC letter no. File no. 23-245/2018-IA.III (V), dated: 24.03.2023 shall remain the same.

4. Chhota Gutibera Stone Deposit of M/s Khatu Shyam Ji Mines (Partner : Shri Nitin Kumar & Others), Village : Chhota Gutibera, Tehsil : Mandro, Distt. : Sahibganj, Jharkhand (2.792 Ha).

(Proposal no.: SIA/JH/MIN/ 565195 /2026)

Name of the consultant : Crystal Consultants, Ranchi, Jharkhand.

This is a new project which has been taken for appraisal on 20.01.2026.

Project Sector: 1(a) Mining of Minerals, Category: B2.

Application for Environmental Clearance (EC).

EC Application for: Proposed Capacity –86777 Cum per year or 234297 Tonnes per year

Project and Location Details:

Sl	Parameter	Details
1	Project Name	: CHHOTA GUTIBERA STONE DEPOSIT
2	Lessee:	: M/s Khatu Shyam Ji Mines Partner- Sri Nitin Kumar & Others
3	Lessee Address	: Flat No.-504 Ganga- 2, Jamalpur City, Beli Road Danapur, District- Patna, Bihar
4	Lease Area	: 2.792 Ha. 6.90 Acre
5	Type of Land	: Non-Forest Raiyati Land
6	Project Cost	: Capital : Rs. 1,90,66,600.00

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7	EMP Budget	:	Capital : Rs. 21,44,700.00	Recurring : Rs.12,90,170 .00 per year
8	New or Expansion	:	New	
9	Mineable Reserves	:	8,50,972 Cum	22,97,624 Tonnes
10	Mine Life	:	10 Years	
11	Man power	:	22	
12	Water Requirement	:	29.36 KLD	
13	Water Source	:	By authorised hired water tankers	
14	DG Set / power	:	-	
15	Crusher	:	No crusher	
16	Nearest Water Body	:	Ganga (12 km)	
17	Nearest Habitation	:	In the KML (satellite) image, a few houses are observed approximately 250m away from the project site on the northern side. In compliance with Office Memorandum No. Z-11013/57/2014-IA.II(M) dated 29.10.2014 issued by the MoEF&CC, a detailed EMP has also been submitted to mitigate the impact of mining activities on these habitations.	
18	Nearest Rail Station	:	Karamtola Railway Station (5 Km)	
19	Nearest Air Port	:	Bhagalpur Airport (52.14 Km)	
20	Nearest Forest	:	More than 250m as per DFO certificate	
21	Road & Highways	:	NH-33-Sahibganj-Barharwa (5.5 Km)	
22	Approach Road	:	At a distance of 900 meter	

CO-ORDINATES

Pillar ID	Latitude	Longitude
1	25° 13' 1.451" N	87° 31' 43.217" E
2	25° 13' 0.218" N	87° 31' 44.985" E
3	25° 12' 57.545" N	87° 31' 43.752" E
4	25° 12' 55.763" N	87° 31' 39.572" E
5	25° 12' 57.175" N	87° 31' 37.571" E
6	25° 12' 56.161" N	87° 31' 36.392" E
7	25° 12' 58.888" N	87° 31' 33.582" E
8	25° 13' 0.327" N	87° 31' 34.021" E
9	25° 13' 0.684" N	87° 31' 35.898" E
10	25° 12' 58.381" N	87° 31' 38.352" E
11	25° 12' 59.286" N	87° 31' 40.353" E
12	25° 12' 58.477" N	87° 31' 40.284" E
13	25° 12' 58.600" N	87° 31' 41.326" E
14	25° 13' 0.252" N	87° 31' 42.278" E

LAND DETAILS

Khata no.	Plot no.
17	151 (P) & 152 (P)
34	153
10	154 (P)
28	155
29	156 & 177 (P)
42	157 (P)

STATUTORY CLEARANCES

1	LOI / Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Officer, Sahibganj vide letter no. 2078/M, dated 22.12.2025.
2	CO	:	The CO, Mandro vide memo no. 473/Ra., dated 01.08.2025 has mentioned the plot no. of the project is not recorded as "Jungle-Jhari" in R.S. Khatiyan & Register II. During the appraisal it was seen from the KML that habitation at a distance of 330 meters from mining lease area. For which detailed Environmental Management Plan has been prepared and submitted.
3	DMO Cluster	:	DMO, Sahibganj vide memo no. 183/M, dated 10.01.2026 certified that no other mining lease area exists within 500 meters radius from proposed project site.
4	DFO Wild Life	:	DFO – cum- Incharge Wildlife Sanctuary, Udhwa (Sahibganj) vide letter no. 1668, dated 02.06.2025 certified that the proposed project site is outside Eco Sensitive Zone of Udhwa Bird Sanctuary.
5	DFO Territorial	:	Divisional Forest Officer, Sahibganj Forest Division vide letter no. 1667, dated 02.06.2025 certified that the distance of reserved / protected forest is more than 250 meters from proposed project site.
6	DSR	:	The DMO, Sahibganj has certified vide memo no. 208/M, dated 17.01.2026 that this project is mentioned in approved DSR of Sahibganj District as a potential area (Page no. 186).
7	Gram Sabha	:	Gram Sabha conducted on 11.02.2025.
8	Grid certificate	:	DMO, Sahibganj vide memo no. 1520/M, dated 20.08.2025 certified that said project falls under grid no. 12 and production is within the over all permissible production limit. The DMO also

		stated that this certificate is issued in the light of order passed by Hon'ble NGT on 22.12.2021 in OA No. 23/2017/EZ, O.A. no. 776/2018 and O.A. no. 373/2019. It also states this certificate is issued in compliance of report of Expert Committee.
9	Mine Plan Approval	: Approved by DMO, Sahibganj vide Letter No. 184/M, dated 10.01.2026.
10	Qualified Person	: Shri Vidya Bhushan Mishra was present in the meeting and affirmed that the mine plan has been prepared by him.

Working Details

1	Mining Method	: Semi-mechanized "OTFM" Method
2	Quarry Area	: 2.114 Ha.
3	Waste Generation	: 31592 cum
4	Stripping Ratio	: 1:0.03
5	Working Days	: 300
6	Benches: size & No	: 6m to 6m and 10 in numbers
7	Elevation of Mine	: 242 m AMSL to 203 m AMSL
8	Ground Level Elevation	: 203 m AMSL
9	Ultimate Working Depth	: 177 m AMSL
10	Water Table	: 125 m AMSL
11	Topography of Mine	: Undulating Hillocks
12	Explosive Requirement	: 78 kg/day
13	Diesel/Fuel requirement	: 469 litre/day

Production Details

Year	Production of stone in Cum	Production of stone in Tonnes	Overburden in cum	Intercalated waste in Cum	Total Waste in Cum
1st Year	82262	222108	9328	4330	13658
2nd Year	83934	226623	0	4418	4418
3rd Year	84436	227977	0	4444	4444
4th Year	85606	231137	0	4506	4506
5th Year	86777	234297	0	4567	4567
Total	423016	1142143	9328	22264	31592

Land Use

Pattern of Utilization	Existing Land Use (Ha)	At the end of Plan period (Ha)	Conceptual stage (in Ha)		
			Public use	Water body	Plantation
Quarry	0.865	0.867	0.0	0.819	1.295
Waste Dump	0.0	0.145	0.0	0.0	0.0
Road	0.022	0.051	0.0	0.0	0.0
Safety Zone	0.0	0.678 (0.185 Ha backfilled area)	0.0	0.0	0.678
Crusher	0.0	0.448	0.0	0.0	0.0
Total Area in Use	0.887	2.189	0.0	0.819	1.973
<i>Unused Area</i>	1.905	0.603			0.0
Total Applied Area	2.792	2.792			2.792

ENVIRONMENT MANAGEMENT

Green Belt Development

Plantation				
Location	Area (Ha.) or Length (m)	No. of tree	Calculation	Timeline
Safety Zone	0.678	1085	1600 tree per hectare	1st Year
Approach Road	900	1800	2m X 2m spacing	1st year
Dead Bench	0.961	1538	1600 tree per hectare	End of Min
Backfilled area (level upto surface)	0.334	535	1600 tree per hectare	End of Min
TOTAL		4958		

As per MoEF&CC OM No. F.No. IA3-22/3/2024-IA.III dated 24.07.2024, 10% of the proposed green belt shall be developed under the "Ek Ped Maa Ke Naam" plantation campaign.

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Cost Estimates

The mining plan for the project has estimated the requirement of equipments needed for mining operations. The capital cost has been estimated on basis of this provision. Estimated capital cost on plants & machineries are given below :

Budgetary Provision (in Lakhs) of Project Cost			Capital	Recurring
Particulars			Capital	Recurring
Land			0.00	172479.29
Infrastructure			700000.00	0.00
Mining Equipment			0.00	9200000.00
Equipment	Quantity	Rent per year		
Crusher			15000000.00	
Dumper	3	2000000		
Wagon Drill	1	1000000		
Water Sprinkler	1	600000		
Portable Pump	2	100000		
Rock Breaker	1	800000		
Excavator	1	800000		
Water Facility for Domestic Purpose "0.88" KLD (Annual Water Demand "264"KL @4L per Tanker, total number of tanker required ("66") and per tanker cost @Rs. 500)			0.00	33000.00
Statutory Clearances			500000.00	0.00
Mine Closure Cost for Plantation of "2073" number of tree @Rs.300 per tree for plant & @Rs. 50 per tree for maintenance			621900.00	0.00
Mine Closure Cost for fencing around mine			100000.00	0.00
Environment Management Plan (EMP) Cost			2144700.00	1290170.00
Total			19066600.00	10695649.29

Environment Management Budget

Budgetary Provision (in Lakhs) of Environment Management Plan (EMP)			Capital	Recurring
Particulars			Capital	Recurring
Plantation of "2885" number of trees @Rs.300 per tree for plant & @Rs. 50 per tree for maintenance			865500.00	144250.00
Water Facility for Horticulture "17.31" KLD & Dust Suppression "11.168" KLD (Annual Water Demand "8543.4"KL @4L per Tanker, total number of tanker required ("2136") and per tanker cost @Rs. 500)			0.00	1068000.00
Garland Drain & Desiltation Pond			279200.00	27920.00
Environment Monitoring & Compliance			0.00	50000.00
To prevent the impact of mining activities on these habitations, we will comply with the Office Memorandum No. Z-11013/57/2014-IA.II (M) dated 29/10/2014 issued by the Ministry of Environment, Forests and Climate Change (MoEF & CC)			1000000	0
Total			2144700.00	1290170.00

Environment Monitoring Plan (post operation)

Monitoring Parameters and Frequency of Monitoring

S. no	Monitoring Parameters	No. of Locations	Frequency of
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			Monitoring
1	Ambient Air: Ambient Air Quality at appropriate location for PM10, PM2.5, SO2, NOx in the vicinity of the mine area. In the surrounding area covering project site only.	3 Stations	Six Monthly
2	Water: Surface water sample in the vicinity of the Project area.	2 Surface water 2 Ground water	Six Monthly
3	Noise: Day & Night level Noise Monitoring.	4 stations	Six Monthly
4	Soil: Soil Monitoring, Qualitative and quantitative testing/analysis to check the soil fertility, porosity, texture, water holding capacity, etc.	2 station	Six Monthly

Environment Management Practices to be followed:

Aspect	Mitigation Measures / Control Measures
Solid Waste Management	<ul style="list-style-type: none"> The stone deposit is overlain by about 2 m of intermixed soil (overburden); stone recovery is ~95%, generating only 5% intercalated waste. During the plan period, 31,592 m³ in-situ, 39,490 m³ loose, and 33,566.5 m³ compacted waste will be generated. Years 1–3: Waste will be used for backfilling in the excavated safety zone; Years 4–5: surplus waste will be temporarily dumped in the southern part covering 0.145 ha, with a garland drain and sedimentation tank for runoff management. In-situ waste expands by 1.25 times when excavated and is later compacted during dumping/backfilling to about 85% of loose volume using a dozer.
Air Quality Management	<ul style="list-style-type: none"> Wet drilling and use of sharp drill bits to minimize dust generation. Controlled blasting using optimum explosive charge during favorable weather conditions. Regular maintenance of diesel equipment and vehicles to reduce emissions. Water sprinkling on haul roads, loading/unloading points, and working areas. All transport vehicles will have valid PUC certificates. Greenbelt and roadside plantation to act as dust and noise barriers.
Water Quality Management	<ul style="list-style-type: none"> Mining will be confined only above the Ground Water Table (GWT). Rainwater accumulated in the pit will be collected and pumped out regularly during monsoon. Settling sump will be provided to desilt pumped out of mine-pit and collected through garland drain before discharge into natural drainage. Garland and foot drains will be constructed around the quarry to control surface runoff.

	<ul style="list-style-type: none"> • Sewage from rest shelters will be treated through septic tank–soak pit systems. • Foot drain would be provided around the external dump, if any.
Noise Quality Management	<ul style="list-style-type: none"> • Mining activities will be restricted to daytime and carried out with controlled blasting techniques. • Acoustic enclosures and mufflers will be provided for drilling and DG set operations. • Regular maintenance of mining machinery to minimize vibration and noise. • Greenbelt development around the lease boundary to attenuate noise propagation. • Use of delayed blasting technique to minimize the adverse impact of vibration.
Soil Quality Management	<ul style="list-style-type: none"> • Topsoil will be carefully removed and stored separately for future use in plantation and reclamation. • Garland drains and retaining walls will prevent soil erosion and siltation. • Spillage of oil or fuel will be avoided; impervious flooring and oil traps provided near storage areas • Post-mining, the area will be rehabilitated using stored topsoil and native vegetation
Flora & Fauna management	<ul style="list-style-type: none"> • No tree felling will be undertaken without obtaining permission from the competent authority. • Greenbelt and plantation will be developed using native species along approach roads and lease periphery (7.5m Safety Zone). • Dust suppression measures will minimize impact on surrounding vegetation
Socio Economy:	<ul style="list-style-type: none"> • Priority employment to local people in mining and ancillary activities. • Community development initiatives such as tree plantation drives, road maintenance, and local infrastructure support. • Awareness programs on safety, hygiene, and environmental protection
Monitoring & Reporting:	<ul style="list-style-type: none"> • Periodic monitoring of air, water (ground & surface), noise, and soil quality as per CPCB and SPCB guidelines. • All monitoring reports will be submitted to statutory authorities as per the compliance schedule. • Corrective measures will be taken immediately if any deviation from standards is observed.
Risk & Hazard	<p>Activities which are likely to create risk are: Temporary Storage of Explosives, Charging of Explosives, Blasting, Drilling, Bench Formation, Loading / Unloading, Transportation</p> <p>Proposed Preventive measures:</p> <ul style="list-style-type: none"> ▪ Overall slope angles of benches will be maintained at 45°. ▪ Unmanageable heights are not created. ▪ Loose sides are properly dressed. ▪ No loose stone or debris will be permitted to remain on the top of the bench or side of any excavation (Regulation 106(4) of MMR 1961).

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	<ul style="list-style-type: none"> ▪ No undercutting of any face or sides will be permitted so as to cause any overhanging (Regulation 106(5) of MMR 1961) ▪ It will be ensured that the drilling equipment is suitable for the job. ▪ The person in charge of the drilling machine is competent to carry out the drilling operation; part of the training includes instructions to always face towards the open edge of the bench so that any inadvertent backward step is away from the edge. ▪ Provision of portable rail fencing between the drilling operations and the edge of the bench ▪ Provision to attach a safety line to the drilling rig and provide a harness for the driller to wear. ▪ Restricted access to the area to all persons except those necessary for the drilling operation. ▪ Wet drilling will be carried out by constantly injecting a jet of water at the drill bit inside the hole, which prevents dust generation. ▪ In case due to any reason, wet drilling is not possible (due to non-availability of water), exhaust/ vacuum system will be provided which removes the dust from the drill hole continuously and discharges the same in a dust collector specially provided for the purpose. ▪ Drilling machine shall be fitted with dust suppression, collection and disposal arrangement.
<p>Blasting & Handling of Explosives</p>	<ul style="list-style-type: none"> ▪ Blast hole geometry shall be properly designed. ▪ Blast site shall be wetted before and after blasting operations are completed. ▪ Only optimum quantity of permissible explosives shall be used so that the vibrations do not damage the structures/houses if the quarrying operations are close to human habitation. ▪ Blasting shall be conducted only during favourable weather conditions and only during the day time and permissible hours. ▪ While carrying out blasting operations near habitations, wide publicity will be given in the local area through announcement and other available media so that local people become aware of the blasting activities being undertaken in the area and take appropriate precautions. ▪ The vibrations should be monitored periodically in consultation with the local Mining authorities. ▪ Use of explosives is specialist work. Planning for a round of shots is necessary to ensure that the face is properly surveyed, holes correctly drilled, direction logged, the weight of explosive suitable for good fragmentation and the continuity of the initiator are but a few of the steps necessary to ensure its safe use. ▪ Proper and safe storage of explosives in approved and Licensed Magazine. ▪ Proper security system to prevent theft/ pilferage, unauthorized entry into Magazine area and checking authorized persons to prevent carrying of match box, lights, mobile phones, cigarette or Bidi etc. will be put in place. ▪ Explosives shall be conveyed in special containers. ▪ Explosives and detonators shall not be carried in the same container.

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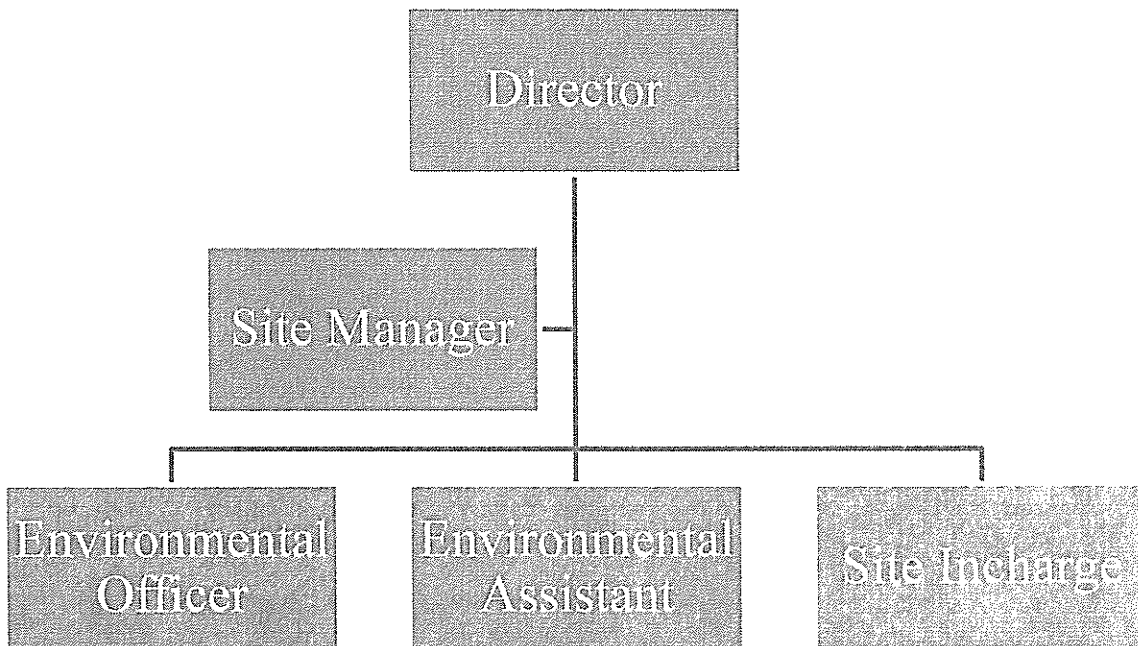
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	<ul style="list-style-type: none"> ▪ The holes which have been charged with explosives will not be left unattended till blasting is completed.
Health Hazards	<p>Health hazards should be interpreted as being harmful dust and noise which is emitted during surface mining operations. All suitable steps and precautions will be undertaken to ensure minimum health hazard. Provision of use of Personal Protective Equipment (PPE) will be kept. The PPE shall be of good make and quality, wherever possible ISI certified, suitable for the hazard e.g. a dust respirator fitted with the correct filter to capture the particulate hazardous dust and maintained to recommended standards. As personal protective equipment only affords limited protection it will only be used as a last resort and as an interim arrangement until other steps are taken to reduce the risk of personal injury to an acceptable level</p>
Accident Prevention	<ul style="list-style-type: none"> ▪ Mine road shall be made smooth regularly with a road roller. ▪ Mine road will be made sufficiently wide to keep two-way traffic. Regular water sprinkling will be done on mine road and haul road to avoid suspension of dust. ▪ All transportation within the mine lease area should be carried out directly under the supervision and control of management. ▪ The vehicles will be maintained in good working condition and checked thoroughly at least once a month by the competent person authorized for the purpose by the management. ▪ Navigation signs will be provided at each and every turning point up to the main road (wherever required). ▪ To avoid danger while reversing the vehicles especially at working place/loading points, stopper should be posted to properly guide reversing/spotting operating.

Organizational Structure of Environment Management Cell:



EMP Cell structure

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The EMP Cell is committed to ensuring environmental sustainability and compliance with regulatory requirements for the Stone Mining Project. With a clear structure, roles, and responsibilities, the EMP Cell is equipped to manage environmental impacts and promote sustainable practices.

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District Survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- i. If any tree felling than necessary permission shall be taken from the competent authority.
- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.
- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.
- l. Personal protective equipments such as clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Chhota Gutibera Stone Deposit of M/s Khatu Shyam Ji Mines (Partner : Shri Nitin Kumar & Others), Village : Chhota Gutibera, Tehsil : Mandro, Distt. : Sahibganj, Jharkhand (2.792 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I along with following specific conditions :

- l. In compliance of Office Memorandum no. IA-J-11013/20/2025-IA-P, dated 25.11.2025 of MoEF&CC, Govt. of India, the PAs will mandatorily obtain the Environmental

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Safeguard to be implemented from Jharkhand State Pollution Control Board within 30 days of issuance of EC or 31.01.2026 whichever is earlier.

- II. The mine will come in operation only after obtaining permission from DGMS for controlled and delayed blasting.
- III. That the Deputy Commissioner, Sahibganj will ensure compliance of the order passed by Hon'ble NGT in OA No. 23/2017/EZ, O.A. no. 776/2018 and O.A. no. 373/2019 in the matter of Syed Arshad Nasar Vs Union of India with Ramchandra Chaurasia Vs State of Jharkhand with Pradeep Kumar Singh Vs State of Jharkhand before grant of mining lease.
- IV. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "EkPed Ma KeNaam" and the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.
- V. The Deputy Commissioner through District Mining Officer will ensure that the mines owner of the respective leases to complete the plantation and maintenance in a time bound manner.
- VI. Suitable plant species of not less than 2 M height to be planted equal to twice the area of saplings proposed in Safety zone. This is to be planted in land available near mines and outside safety zone. This will be in addition to plantation in safety zone. Newly planted saplings to be maintained for minimum 3 years with Geo-Tagged photographs.
- VII. Dedicated water tanker to be provided for mine. The tanker to be used for spraying water on haul road and for irrigating newly planted saplings only. Sprinkling to be done such that the haul road is kept moistened all the time with Geo-Tagged photographs.
- VIII. Pre employment Occupational health check up for employees to be done and thereafter at annual interval for PLFT, Audiometry and other required tests. Summary findings of same to be submitted along with 6 monthly compliance.
- IX. Ensure use of Quality PPEs equivalent not less than 3M make. Records of same to be maintained and submitted with 6 monthly compliance report with Geo-Tagged photographs.
- X. Keep vulnerable areas unmanned. Ensure rotation of duties. Records to be maintained and submitted with 6 monthly compliance report.
- XI. Failing of any of terms & conditions mentioned in EC can lead to revocation / cancellation of EC.



5. Bindri Bandarkola Stone Deposit of M/s Trilok Mining and Constructions (Partner : Shri Ajay Kumar Singh & Others), Village : Bindri Bandarkola, Tehsil : Borio, Distt. : Sahibganj, Jharkhand (2.83 Ha).

(Proposal no.: SIA/JH/MIN/ 565208 /2026)

Name of the consultant : Crystal Consultants, Ranchi, Jharkhand.

This is a new project which has been taken for appraisal on 20.01.2026.

Project Sector: 1(a) Mining of Minerals, Category: B2.

Application for Environmental Clearance (EC).

EC Application for: Proposed Capacity – 69683 cum per year or 195113Tonnes per year.

Project and Location Details:

Sl	Parameter	Details	
1	Project Name	Bindri Bandarkola Stone Deposit	
2	Lessee:	M/S Trilok Mining And Constructions Partners :- Sri Ajay Kumar Singh & Others	
3	Lessee Address	At : Near Hanuman Mandir, Kachhi Balihari, Kusunda, District – Dhanbad, Pin – 828116, Jharkhand	
4	Lease Area	2.83 Ha.	7.0 Acre
5	Type of Land	Non-Forest Raiyati Land	
6	Project Cost	Capital : Rs. 2546000.00	
7	EMP Budget	Capital : Rs. 622000.00	Recurring : Rs. 813800.00 per year
8	New or Expansion	New	
9	Mineable Reserves	696567 Cum	1950389 Tonnes
10	Mine Life	10 Years	
11	Man power	43	
12	Water Requirement	19.82 KLD	
13	Water Source	By authorised hired water tankers	
14	DG Set / power	-	
15	Crusher	No crusher	
16	Nearest Water Body	Morang Nadi (2.95 Km)	
17	Nearest Habitation	Bhukunda village – 1.15 Km (West- North)	
18	Nearest Rail Station	Taljhari Railway Station (8.44 Km)	
19	Nearest Air Port	Netaji Subhash Chandra Bose International Airport 279.61 Km	
20	Nearest Forest	Nearest forest is 263 m away as per Divisional Forest Officer,	

			Sahibganj reserved / protected forest is more than 250 meter from proposed project site.
21	Road & Highways	:	NH-33 – 11.10 Km
22	Approach Road	:	At a distance of 181 meter

CO-ORDINATES

PILLAR NO	LATITUDE	LONGITUDE
P1	N25°04'27.121"	E87°39'33.030"
P2	N25°04'26.936"	E87°39'35.641"
P3	N25°04'25.712"	E87°39'36.901"
P4	N25°04'24.404"	E87°39'38.246"
P5	N25°04'23.103"	E87°39'39.584"
P6	N25°04'22.073"	E87°39'38.076"
P7	N25°04'21.072"	E87°39'36.609"
P8	N25°04'20.293"	E87°39'35.469"
P9	N25°04'19.492"	E87°39'34.295"
P10	N25°04'20.654"	E87°39'33.739"
P11	N25°04'21.636"	E87°39'33.267"
P12	N25°04'22.270"	E87°39'32.850"
P13	N25°04'23.345"	E87°39'31.970"
P14	N25°04'24.657"	E87°39'32.337"
P15	N25°04'26.072"	E87°39'32.733"

LAND DETAILS

Khata no.	Plot no.
14	434 (P)

STATUTORY CLEARANCES

1	LOI / Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Officer, Sahibganj vide letter no. 2021/M, dated 09.12.2025.
2	CO	:	The CO, Borio, Sahibganj vide letter no. 478/Ra., dated 29.05.2025 has mentioned the plot no. of the project is not recorded as "Jungle- Jhari" in R.S. Khatiyani & Register II.
3	DMO Cluster	:	DMO, Sahibganj vide memo no. 11/M, dated 08.01.2026 certified that no other mining lease area exists within 500 meters radius from proposed project site.
4	DFO Wild Life	:	DFO – cum- Incharge Wildlife Sanctuary, Udhwa (Sahibganj) vide letter no. 2287, dated 07.08.2025 certified that the proposed

			project site is outside Eco Sensitive Zone of Udhwa Bird Sanctuary.
5	DFO Territorial	:	Divisional Forest Officer, Sahibganj Forest Division vide letter no. 2286, dated 07.08.2025 certified that the distance of reserved / protected forest is more than 250 meters from proposed project site.
6	DSR	:	The DMO, Sahibganj has certified vide memo no. 12/M, dated 08.01.2026 that this project is mentioned in approved DSR of Sahibganj District as a potential area (Page no. 200).
7	Gram Sabha	:	Gram Sabha conducted on 24.05.2025.
8	Grid certificate	:	DMO, Sahibganj vide memo no. 1930/M, dated 20.11.2025 certified that said project falls under grid no. 55 and Hon'ble NGT does not decided the production capacity of that Grid. The DMO also stated that this certificate is issued in the light of order passed by Hon'ble NGT on 22.12.2021 in OA No. 23/2017/EZ, O.A. no. 776/2018 and O.A. no. 373/2019. It also states this certificate is issued in compliance of report of Expert Committee.
9	Mine Plan Approval	:	Approved by DMO, Sahibganj vide Letter No. 13/M, dated 08.01.2026.
10	Qualified Person	:	Shri P.K. Sen was present in the meeting and affirmed that the mine plan has been prepared by him.

Working Details

1	Mining Method	:	Semi-mechanized "OTFM" Method
2	Quarry Area	:	2.35 Ha. Life of Mine – 10 years
3	Waste Generation	:	43599 cum
4	Stripping Ratio	:	1:0.04
5	Working Days	:	300
6	Benches: size & No	:	6m to 6m and 9 in numbers
7	Elevation of Mine	:	220 m AMSL to 182 m AMSL
8	Ground Level Elevation	:	182m AMSL
9	Ultimate Working Depth	:	156 m AMSL
10	Water Table	:	145 m AMSL
11	Topography of Mine	:	Area represents gently sloping land.
12	Explosive Requirement	:	65 kg/day (To be handle by licensed external Agency)
13	Diesel/Fuel	:	390 litre/day

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requirement		
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Production Details

Year	Production of Stone		Removal of Gritty Soil Stone		Intercalated Waste
	in Cum	In Tonnes	in Cum	In Tonnes	In Cum
1 st	69608	194901	8379	12570	3663
2 nd	69630	194965	5187	7781	3665
3 rd	69650	195021	4921	7382	3666
4 th	69682	195109	6783	10175	3667
5 th	69683	195113	000	000	3668
Total	348263	975109	25270	37908	18329

Land Use

Type of Land	Present Land Use (in Ha)	At the End of plan period (in Ha)	At the end of Mine (in Ha)	Conceptual Period (in Ha)		
				Public use	Water Body	Plantation
Quarry	Nil	2.33 (Including temporary dumped area 0.583 Ha.)	2.35 (Including backfill 0.79 Ha.)	---	1.05	1.30 (Dead bench plantation)
Greenbelt within Safety Barrier	Nil	0.48	0.48	---	---	0.48
Road	0.006	Nil merged with quarry & safety barrier)	Nil merged with quarry & safety barrier)	---	---	---
Total Area In use	0.006	2.81	2.83	---	1.05	1.78
Balanced Area unused	2.824	0.02	Nil	---	---	---
Total Applied Area	2.83	2.83	2.83	2.83		

ENVIRONMENT MANAGEMENT

Green Belt Development

Plantation				
Location	Area (Ha.) or Length (m)	No. of tree	Calculation	Timeline
Safety Zone	0.480	768	1600 tree per	1st Year

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			hectare	
Approach Road	181	362	2m X 2m spacing	1st year
Dead Bench	1.300	2080	1600 tree per hectare	End of Mine
TOTAL		3210		

As per MoEF&CC OM No. F.No. IA3-22/3/2024-IA.III dated 24.07.2024, 10% of the proposed green belt shall be developed under the "Ek Ped Maa Ke Naam" plantation campaign.

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Cost Estimates

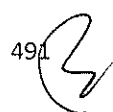
The mining plan for the project has estimated the requirement of equipment's needed for mining operations. The capital cost has been estimated on basis of this provision. Estimated capital cost on plants & machineries are given below :

Budgetary Provision (in Lakhs) of Project Cost			Capital	Recurring
Particulars				
Land			0.00	174826.7
Infrastructure			700000.00	0.0
Mining Equipment			0.00	17400000.0
<i>Equipment</i>	<i>Quantity</i>	<i>Rent per year</i>		
Tipper	4	2000000		
Wagon Drill	2	1000000		
Jack Hammer	2	600000		
Compressor	1	1000000		
Water Sprinkler	2	600000		
Rock Breaker	2	800000		
Excavator	3	800000		
Water Facility for Domestic Purpose "1.72" KLD (Annual Water Demand "516"KL @4L per Tanker, total number of tanker required ("129") and per tanker cost @Rs. 500)			0.00	64500.0
Statutory Clearances			500000.00	0.0
Mine Closure Cost for Plantation of "2080" number of tree @Rs.300 per tree for plant & @Rs. 50 per tree for maintenance			624000.00	0.0
Mine Closure Cost for fencing around mine			100000.00	0.0
Environment Management Plan (EMP) Cost			622000.00	813800.0
Total			2546000.00	18453126.7

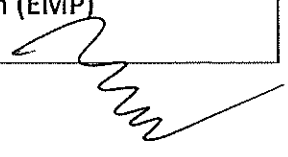
Environment Management Budget

Budgetary Provision (in Lakhs) of Environment Management Plan (EMP)

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Particulars	Capital	Recurring
Plantation of "1130" number of trees @Rs.300 per tree for plant & @Rs. 50 per tree for maintenance	339000.00	56500.00
Water Facility for Horticulture "6.78" KLD & Dust Suppression "11.32" KLD (Annual Water Demand "5430"KL @4L per Tanker, total number of tanker required ("1358") and per tanker cost @Rs. 500)	0.00	679000.00
Garland Drain & Desiltation Pond	283000.00	28300.00
Environment Monitoring & Compliance	0.00	50000.00
Total	622000.00	813800.00

Environment Monitoring Plan (post operation)

Monitoring Parameters and Frequency of Monitoring

S. no	Monitoring Parameters	No. of Locations	Frequency of Monitoring
1	Ambient Air: Ambient Air Quality at appropriate location for PM10, PM2.5, SO2, NOx in the vicinity of the mine area. In the surrounding area covering project site only.	3 Stations	Six Monthly
2	Water: Surface water sample in the vicinity of the Project area.	2 Surface water 2 Ground water	Six Monthly
3	Noise: Day & Night level Noise Monitoring.	4 stations	Six Monthly
4	Soil: Soil Monitoring, Qualitative and quantitative testing/analysis to check the soil fertility, porosity, texture, water holding capacity, etc.	2 station	Six Monthly

Environment Management Practices to be followed:

Aspect	Mitigation Measures / Control Measures
Solid Waste Management	<ul style="list-style-type: none"> • Total Waste Generation: 43,599 m³. • Year 1: Gritty soil and intercalated waste will be removed and temporarily dumped in the north-east part of the quarry area with protective measures such as parapet wall and garland drain. • Years 2–5: Gritty soil and/or intercalated waste along with previously dumped material will be temporarily dumped within the quarry in a phased manner at designated locations. • Conceptual Period: All intercalated waste and temporarily dumped material generated during the plan period will be backfilled into the exhausted quarry.
Air Quality Management	<ul style="list-style-type: none"> • Wet drilling and use of sharp drill bits to minimize dust generation. • Controlled blasting using optimum explosive charge during favorable weather conditions.

	<ul style="list-style-type: none"> • Regular maintenance of diesel equipment and vehicles to reduce emissions. • Water sprinkling on haul roads, loading/unloading points, and working areas. • All transport vehicles will have valid PUC certificates. • Greenbelt and roadside plantation to act as dust and noise barriers.
Water Quality Management	<ul style="list-style-type: none"> • Mining will be confined only above the Ground Water Table (GWT). • Rainwater accumulated in the pit will be collected and pumped out regularly during monsoon. • Settling sump will be provided to desilt pumped out of mine-pit and collected through garland drain before discharge into natural drainage. • Garland and foot drains will be constructed around the quarry to control surface runoff. • Sewage from rest shelters will be treated through septic tank-soak pit systems. • Foot drain would be provided around the external dump, if any.
Noise Quality Management	<ul style="list-style-type: none"> • Mining activities will be restricted to daytime and carried out with controlled blasting techniques. • Acoustic enclosures and mufflers will be provided for drilling and DG set operations. • Regular maintenance of mining machinery to minimize vibration and noise. • Greenbelt development around the lease boundary to attenuate noise propagation. • Use of delayed blasting technique to minimize the adverse impact of vibration.
Soil Quality Management	<ul style="list-style-type: none"> • Topsoil will be carefully removed and stored separately for future use in plantation and reclamation. • Garland drains and retaining walls will prevent soil erosion and siltation. • Spillage of oil or fuel will be avoided; impervious flooring and oil traps provided near storage areas • Post-mining, the area will be rehabilitated using stored topsoil and native vegetation
Flora & Fauna management	<ul style="list-style-type: none"> • No tree felling will be undertaken without obtaining permission from the competent authority. • Greenbelt and plantation will be developed using native species along approach roads and lease periphery (7.5m Safety Zone). • Dust suppression measures will minimize impact on surrounding vegetation
Socio Economy:	<ul style="list-style-type: none"> • Priority employment to local people in mining and ancillary activities.

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	<ul style="list-style-type: none"> • Community development initiatives such as tree plantation drives, road maintenance, and local infrastructure support. • Awareness programs on safety, hygiene, and environmental protection
Monitoring & Reporting:	<ul style="list-style-type: none"> • Periodic monitoring of air, water (ground & surface), noise, and soil quality as per CPCB and SPCB guidelines. • All monitoring reports will be submitted to statutory authorities as per the compliance schedule. • Corrective measures will be taken immediately if any deviation from standards is observed.
Risk & Hazard	<p>Activities which are likely to create risk are: Temporary Storage of Explosives, Charging of Explosives, Blasting, Drilling, Bench Formation, Loading / Unloading, Transportation</p> <p>Proposed Preventive measures:</p> <ul style="list-style-type: none"> ▪ Overall slope angles of benches will be maintained at 45°. ▪ Unmanageable heights are not created. ▪ Loose sides are properly dressed. ▪ No loose stone or debris will be permitted to remain on the top of the bench or side of any excavation (Regulation 106(4) of MMR 1961). ▪ No undercutting of any face or sides will be permitted so as to cause any overhanging (Regulation 106(5) of MMR 1961) ▪ It will be ensured that the drilling equipment is suitable for the job. ▪ The person in charge of the drilling machine is competent to carry out the drilling operation; part of the training includes instructions to always face towards the open edge of the bench so that any inadvertent backward step is away from the edge. ▪ Provision of portable rail fencing between the drilling operations and the edge of the bench ▪ Provision to attach a safety line to the drilling rig and provide a harness for the driller to wear. ▪ Restricted access to the area to all persons except those necessary for the drilling operation. ▪ Wet drilling will be carried out by constantly injecting a jet of water at the drill bit inside the hole, which prevents dust generation. ▪ In case due to any reason, wet drilling is not possible (due to non-availability of water), exhaust/ vacuum system will be provided which removes the dust from the drill hole continuously and discharges the same in a dust collector specially provided for the purpose. ▪ Drilling machine shall be fitted with dust suppression, collection and disposal arrangement.

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<p>Blasting & Handling of Explosives</p>	<ul style="list-style-type: none"> ▪ Blast hole geometry shall be properly designed. ▪ Blast site shall be wetted before and after blasting operations are completed. ▪ Only optimum quantity of permissible explosives shall be used so that the vibrations do not damage the structures/houses if the quarrying operations are close to human habitation. ▪ Blasting shall be conducted only during favourable weather conditions and only during the day time and permissible hours. ▪ While carrying out blasting operations near habitations, wide publicity will be given in the local area through announcement and other available media so that local people become aware of the blasting activities being undertaken in the area and take appropriate precautions. ▪ The vibrations should be monitored periodically in consultation with the local Mining authorities. ▪ Use of explosives is specialist work. Planning for a round of shots is necessary to ensure that the face is properly surveyed, holes correctly drilled, direction logged, the weight of explosive suitable for good fragmentation and the continuity of the initiator are but a few of the steps necessary to ensure its safe use. ▪ Proper and safe storage of explosives in approved and Licensed Magazine. ▪ Proper security system to prevent theft/ pilferage, unauthorized entry into Magazine area and checking authorized persons to prevent carrying of match box, lights, mobile phones, cigarette or Bidi etc. will be put in place. ▪ Explosives shall be conveyed in special containers. ▪ Explosives and detonators shall not be carried in the same container. ▪ The holes which have been charged with explosives will not be left unattended till blasting is completed.
<p>Health Hazards</p>	<p>Health hazards should be interpreted as being harmful dust and noise which is emitted during surface mining operations. All suitable steps and precautions will be undertaken to ensure minimum health hazard. Provision of use of Personal Protective Equipment (PPE) will be kept. The PPE shall be of good make and quality, wherever possible ISI certified, suitable for the hazard e.g. a dust respirator fitted with the correct filter to capture the particulate hazardous dust and maintained to recommended standards. As personal protective equipment only affords limited protection it will only be used as a last resort and as an interim arrangement until other steps are taken to reduce the risk of personal injury to an acceptable level</p>
<p>Accident Prevention</p>	<ul style="list-style-type: none"> ▪ Mine road shall be made smooth regularly with a road roller. ▪ Mine road will be made sufficiently wide to keep two-way traffic.

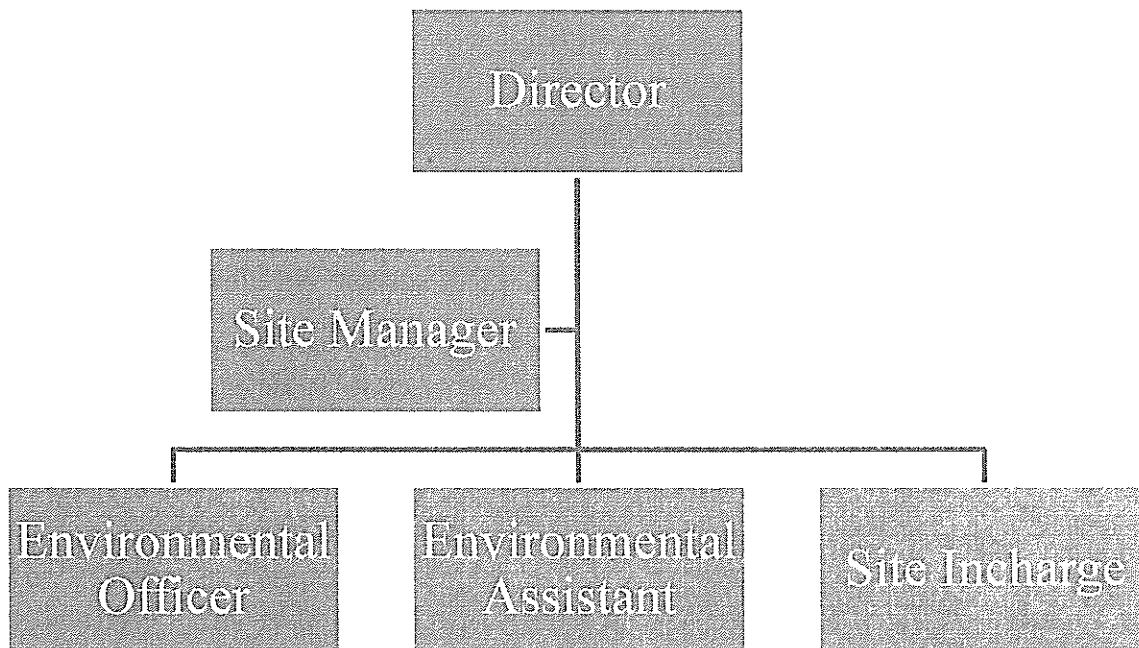
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	<p>Regular water sprinkling will be done on mine road and haul road to avoid suspension of dust.</p> <ul style="list-style-type: none"> ▪ All transportation within the mine lease area should be carried out directly under the supervision and control of management. ▪ The vehicles will be maintained in good working condition and checked thoroughly at least once a month by the competent person authorized for the purpose by the management. ▪ Navigation signs will be provided at each and every turning point up to the main road (wherever required). ▪ To avoid danger while reversing the vehicles especially at working place/loading points, stopper should be posted to properly guide reversing/spotting operating.
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Organizational Structure of Environment Management Cell:



EMP Cell structure

The EMP Cell is committed to ensuring environmental sustainability and compliance with regulatory requirements for the Stone Mining Project. With a clear structure, roles, and responsibilities, the EMP Cell is equipped to manage environmental impacts and promote sustainable practices.

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District Survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard

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- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- i. If any tree felling than necessary permission shall be taken from the competent authority.
- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.
- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.
- l. Personal protective equipments such as clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Bindri Bandarkola Stone Deposit of M/s Trilok Mining and Constructions (Partner : Shri Ajay Kumar Singh & Others), Village : Bindri Bandarkola, Tehsil : Borio, Distt. : Sahibganj, Jharkhand (2.83 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I along with following specific conditions :

- I. In compliance of Office Memorandum no. IA-J-11013/20/2025-IA-P, dated 25.11.2025 of MoEF&CC, Govt. of India, the PAs will mandatorily obtain the Environmental Safeguard to be implemented from Jharkhand State Pollution Control Board within 30 days of issuance of EC or 31.01.2026 which ever is earlier.
- II. That the Deputy Commissioner, Sahibganj will ensure compliance of the order passed by Hon'ble NGT in OA No. 23/2017/EZ, O.A. no. 776/2018 and O.A. no. 373/2019 in the matter of Syed Arshad Nasar Vs Union of India with Ramchandra Chaurasia Vs State of Jharkhand with Pradeep Kumar Singh Vs State of Jharkhand before grant of mining lease.
- III. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "EkPed Ma KeNaam" and the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.
- IV. The Deputy Commissioner through District Mining Officer will ensure that the mines owner of the respective leases to complete the plantation and maintenance in a

time bound manner.

- V. Suitable plant species of not less than 2 M height to be planted equal to twice the area of saplings proposed in Safety zone. This is to be planted in land available near mines and outside safety zone. This will be in addition to plantation in safety zone. Newly planted saplings to be maintained for minimum 3 years with Geo-Tagged photographs.
- VI. Dedicated water tanker to be provided for mine. The tanker to be used for spraying water on haul road and for irrigating newly planted saplings only. Sprinkling to be done such that the haul road is kept moistened all the time with Geo-Tagged photographs.
- VII. Pre employment Occupational health check up for employees to be done and thereafter at annual interval for PLFT, Audiometry and other required tests .Summary findings of same to submitted along with 6 monthly compliance.
- VIII. Ensure use of Quality PPEs equivalent not less than 3M make. Records of same to be maintained and submitted with 6 monthly compliance report with Geo-Tagged photographs.
- IX. Keep vulnerable areas unmanned. Ensure rotation of duties. Records to be maintained and submitted with 6 monthly compliance report.
- X. Failing of any of terms & conditions mentioned in EC can lead to revocation / cancellation of EC.

6. Bindri Bandarkola Stone Deposit of M/s Terra Gem Mineral Resources Pvt. Ltd. (Director : Shri Navnit Kumar), Village : Bindri Bandarkola, Tehsil : Borio, Distt. : Sahibganj, Jharkhand (2.938 Ha).

(Proposal no.: SIA/JH/MIN/ 565622 /2026)

Name of the consultant : Crystal Consultants, Ranchi, Jharkhand.

This is a new project which has been taken for appraisal on 20.01.2026.

Project Sector: 1(a) Mining of Minerals, Category: B2.

Application for Environmental Clearance (EC).

EC Application for: Proposed Capacity –53718 Cum per year or 150410 Tonnes per year

Project and Location Details:

Sl	Parameter	Details	
1	Project Name	: BINDERI BANDARKOLA STONE DEPOSIT	
2	Lessee:	: M/s Terra Gem Mineral Resources Pvt. Ltd. Director – Sri Navnit Kumar	
3	Lessee Address	: At Village – Nimgachhi, P.O. & Thana – Mirzachauki, District – Sahebganj, Pin Code – 813208, State – Jharkhand.	
4	Lease Area	: 2.938 Ha.	7.26 Acre
5	Type of Land	: Non-Forest Raiyati Land	
6	Project Cost	: Capital : Rs. 36,04,400.00	
7	EMP Budget	: Capital : Rs. 11,67,400.00	Recurring : Rs. 13,20,980.00 per year
8	New or Expansion	: New	
9	Mineable Reserves	: 5,37,240 Cum	15,04,273 Tonnes
10	Mine Life	: 10 Years	
11	Man power	: 35	
12	Water Requirement	: 30.62 KLD	
13	Water Source	: By authorised hired water tankers	
14	DG Set / power	: -	
15	Crusher	: No crusher	
16	Nearest Water Body	: Morang Nadi (2.06 km)	
17	Nearest Habitation	: Binderi Bandarkola Village (1.17 Km)	
18	Nearest Rail Station	: Kalian Chak Railway Station (10.18 Km)	
19	Nearest Air Port	: Netaji Subhash Chandra Bose International Airport (277.87 Km)	
20	Nearest Forest	: More than 250m as per DFO certificate	
21	Road & Highways	: NH-33 (14.28 Km)	
22	Approach Road	: At a distance of 1000 meter	

CO-ORDINATES

Pillar No	Latitude	Longitude
P1	N25°02'57.078"	E87°37'58.231"
P2	N25°02'58.095"	E87°37'59.154"
P3	N25°02'58.108"	E87°38'01.087"
P4	N25°02'58.120"	E87°38'02.918"
P5	N25°02'59.153"	E87°38'04.252"
P6	N25°03'00.005"	E87°38'05.348"
P7	N25°03'00.844"	E87°38'06.422"
P8	N25°03'00.137"	E87°38'07.483"

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P9	N25°02'59.431"	E87°38'08.545"
P10	N25°02'58.501"	E87°38'09.048"
P11	N25°02'57.630"	E87°38'09.518"
P12	N25°02'56.697"	E87°38'08.086"
P13	N25°02'55.764"	E87°38'06.651"
P14	N25°02'55.134"	E87°38'05.676"
P15	N25°02'54.464"	E87°38'04.631"
P16	N25°02'55.147"	E87°38'02.957"
P17	N25°02'55.816"	E87°38'01.321"
P18	N25°02'56.461"	E87°37'59.741"

LAND DETAILS

Khata no.	Plot no.
46	596 (P)
33	597 (P)

STATUTORY CLEARANCES

1	LOI / Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Officer, Sahibganj vide letter no. 2039/M, dated 13.12.2025.
2	CO	:	The CO, Borio, Sahibganj vide letter no. 812/Ra., dated 14.10.2024 has mentioned the plot no. of the project is not recorded as "Jungle- Jhari" in R.S. Khatiyon & Register II.
3	DMO Cluster	:	DMO, Sahibganj vide memo no. 2041/M, dated 13.12.2025 certified that no other mining lease area exists within 500 meters radius from proposed project site.
4	DFO Wild Life	:	DFO – cum- Incharge Wildlife Sanctuary, Udhwa (Sahibganj) vide letter no. 1822, dated 24.06.2025 certified that the proposed project site is outside Eco Sensitive Zone of Udhwa Bird Sanctuary.
5	DFO Territorial	:	Divisional Forest Officer, Sahibganj Forest Division vide letter no. 1821, dated 24.06.2025 certified that the distance of reserved / protected forest is more than 250 meters from proposed project site.
6	DSR	:	The DMO, Sahibganj has certified vide memo no. 2043/M, dated 13.12.2025 that this project is mentioned in approved DSR of Sahibganj District as a potential area (Page no. 200).
7	Gram Sabha	:	Gram Sabha conducted on 09.10.2024.

8	Grid certificate	:	DMO, Sahibganj vide memo no. 1640/M, dated 02.09.2025 certified that said project falls under grid no. 55 and Hon'ble NGT does not decided the production capacity of that Grid. The DMO also stated that this certificate is issued in the light of order passed by Hon'ble NGT on 22.12.2021 in OA No. 23/2017/EZ, O.A. no. 776/2018 and O.A. no. 373/2019. It also states this certificate is issued in compliance of report of Expert Committee.
9	Mine Plan Approval	:	Approved by DMO, Sahibganj vide Memo No. 202/M, dated 15.01.2026.
10	Qualified Person	:	Shri P.K. Sen was present in the meeting and affirmed that the mine plan has been prepared by him.

Working Details

1	Mining Method	:	Semi-mechanized "OTFM" Method
2	Quarry Area	:	2.368 Ha.
3	Waste Generation	:	48317 cum
4	Stripping Ratio	:	1:0.06
5	Working Days	:	300
6	Benches: size & No	:	6m to 6m and 15 in numbers
7	Elevation of Mine	:	226 m AMSL to 148 m AMSL
8	Ground Level Elevation	:	148 m AMSL
9	Ultimate Working Depth	:	133 m AMSL
10	Water Table	:	125 m AMSL to 120 m AMSL
11	Topography of Mine	:	Hillocks
12	Explosive Requirement	:	50.1 kg/day
13	Diesel/Fuel requirement	:	300.6 litre/day

Production Details

Year	Production of Stone (cum)	Production of Stone (tonnes)	Removal of Gritty Soil (cum)	Removal of Gritty Soil (tonnes)	Intercalated Waste (cum)
1st	53693	150339	13034	19552	2826
2nd	53711	150392	5187	7781	2827
3rd	53718	150410	7049	10574	2828
4th	53711	150392	4522	6784	2827
5th	53718	150410	4389	6584	2828
Total	268551	751943	34181	51275	14136

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Land Use

Pattern of Utilization	Existing Land Use (Ha)	At the end of Plan period (Ha)	Conceptual stage (in Ha)		
			Public use	Waterbody	Plantation
Quarry	0.0	2.368	0.0	0.0	2.368 <i>Including</i> 0.547 <i>(Backfilled Area) +</i> 1.821 <i>(Dead Bench)</i>
Mobile Crusher	0.0	0.030	0.0	0.0	0.0
Road	0.009	0.014	0.0	0.0	0.0
Safety Zone	0.0	0.570	0.0	0.0	0.570
Total Area in Use	0.009	2.662	0.0	0.0	2.938
<i>Unused Area</i>	2.929	0.276	0.0		
Total Applied Area	2.938	2.938	2.938		

ENVIRONMENT MANAGEMENT

Green Belt Development

Plantation				
Location	Area (Ha.) or Length (m)	No. of tree	Calculation	Timeline
Safety Zone	0.570	912	1600 tree per hectare	1st Year
Approach Road	1000.000	2000	2m X 2m spacing	1st year
Dead Bench	1.821	2914	1600 tree per hectare	End of Mine
Backfilled area (level upto surface)	0.547	876	1600 tree per hectare	End of Mine
TOTAL		6702.00		

As per MoEF&CC OM No. F.No. IA3-22/3/2024-IA.III dated 24.07.2024, 10% of the proposed green belt shall be developed under the "Ek Ped Maa Ke Naam" plantation campaign.

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

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Cost Estimates

The mining plan for the project has estimated the requirement of equipments needed for mining operations. The capital cost has been estimated on basis of this provision. Estimated capital cost on plants & machineries are given below :

Budgetary Provision (in Lakhs) of Project Cost			Capital	Recurring
Particulars				
Land			0.00	181498.62
Infrastructure			700000.00	0.00
Mining Equipment			0.00	13600000.00
<i>Equipment</i>	<i>Quantity</i>	<i>Rent per year</i>		
Tipper	3	2000000		
Wagon Drill	1	1000000		
Jack Hammer	2	600000		
Compressor	1	1000000		
Water Tanker	2	600000		
Rock Breaker	2	800000		
Excavator	2	800000		
Water Facility for Domestic Purpose "1.4" KLD (Annual Water Demand "420"KL @4L per Tanker, total number of tanker required ("105") and per tanker cost @Rs. 500)			0.00	52500.00
Statutory Clearances			500000.00	0.00
Mine Closure Cost for Plantation of "3790" number of tree @Rs.300 per tree for plant & @Rs. 50 per tree for maintenance			1137000.00	0.00
Mine Closure Cost for fencing around mine			100000.00	0.00
Environment Management Plan (EMP) Cost			1167400.00	1320980.00
Total			3604400.00	15154978.62

Environment Management Budget

Budgetary Provision (in Lakhs) of Environment Management Plan (EMP)			Capital	Recurring
Particulars				
Plantation of "2912" number of trees @Rs.300 per tree for plant & @Rs. 50 per tree for maintenance			873600.00	145600.00
Water Facility for Horticulture "17.472" KLD & Dust Suppression "11.752" KLD (Annual Water Demand "8767.2"KL @4L per Tanker, total number of tanker required ("2192") and per tanker cost @Rs. 500)			0.00	1096000.00
Garland Drain & Desiltation Pond			293800.00	29380.00
Environment Monitoring & Compliance			0.00	50000.00
Total			1167400.00	1320980.00

Environment Monitoring Plan (post operation)

Monitoring Parameters and Frequency of Monitoring

S. no	Monitoring Parameters	No. of	Frequency
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		Locations	of Monitoring
1	Ambient Air: Ambient Air Quality at appropriate location for PM10, PM2.5, SO2, NOx in the vicinity of the mine area. In the surrounding area covering project site only.	3 Stations	Six Monthly
2	Water: Surface water sample in the vicinity of the Project area.	2 Surface water 2 Ground water	Six Monthly
3	Noise: Day & Night level Noise Monitoring.	4 stations	Six Monthly
4	Soil: Soil Monitoring, Qualitative and quantitative testing/analysis to check the soil fertility, porosity, texture, water holding capacity, etc.	2 station	Six Monthly

Environment Management Practices to be followed:

Aspect	Mitigation Measures / Control Measures
Solid Waste Management	<ul style="list-style-type: none"> • Total waste generation: 48,317 m³ during the plan period. • Years 1–3: Gritty soil and intercalated waste will be removed and temporarily dumped at the eastern side and existing dump yard with protective measures such as parapet wall and garland drain. • Years 4–5: Generated waste along with previously dumped material will be temporarily dumped within the quarry at designated locations. • Conceptual period: All gritty soil, intercalated waste, and temporarily dumped material will be backfilled into the exhausted quarry.
Air Quality Management	<ul style="list-style-type: none"> • Wet drilling and use of sharp drill bits to minimize dust generation. • Controlled blasting using optimum explosive charge during favorable weather conditions. • Regular maintenance of diesel equipment and vehicles to reduce emissions. • Water sprinkling on haul roads, loading/unloading points, and working areas. • All transport vehicles will have valid PUC certificates. • Greenbelt and roadside plantation to act as dust and noise barriers.
Water Quality Management	<ul style="list-style-type: none"> • Mining will be confined only above the Ground Water Table (GWT). • Rainwater accumulated in the pit will be collected and pumped out regularly during monsoon. • Settling sump will be provided to desilt pumped out of mine-pit and collected through garland drain before discharge into natural drainage.

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	<ul style="list-style-type: none"> • Garland and foot drains will be constructed around the quarry to control surface runoff. • Sewage from rest shelters will be treated through septic tank–soak pit systems. • Foot drain would be provided around the external dump, if any.
Noise Quality Management	<ul style="list-style-type: none"> • Mining activities will be restricted to daytime and carried out with controlled blasting techniques. • Acoustic enclosures and mufflers will be provided for drilling and DG set operations. • Regular maintenance of mining machinery to minimize vibration and noise. • Greenbelt development around the lease boundary to attenuate noise propagation. • Use of delayed blasting technique to minimize the adverse impact of vibration.
Soil Quality Management	<ul style="list-style-type: none"> • Topsoil will be carefully removed and stored separately for future use in plantation and reclamation. • Garland drains and retaining walls will prevent soil erosion and siltation. • Spillage of oil or fuel will be avoided; impervious flooring and oil traps provided near storage areas • Post-mining, the area will be rehabilitated using stored topsoil and native vegetation
Flora & Fauna management	<ul style="list-style-type: none"> • No tree felling will be undertaken without obtaining permission from the competent authority. • Greenbelt and plantation will be developed using native species along approach roads and lease periphery (7.5m Safety Zone). • Dust suppression measures will minimize impact on surrounding vegetation
Socio Economy:	<ul style="list-style-type: none"> • Priority employment to local people in mining and ancillary activities. • Community development initiatives such as tree plantation drives, road maintenance, and local infrastructure support. • Awareness programs on safety, hygiene, and environmental protection
Monitoring & Reporting:	<ul style="list-style-type: none"> • Periodic monitoring of air, water (ground & surface), noise, and soil quality as per CPCB and SPCB guidelines. • All monitoring reports will be submitted to statutory authorities as per the compliance schedule. • Corrective measures will be taken immediately if any deviation from standards is observed.
Risk & Hazard	<p>Activities which are likely to create risk are: Temporary Storage of Explosives, Charging of Explosives, Blasting, Drilling, Bench Formation, Loading / Unloading, Transportation</p> <p>Proposed Preventive measures:</p> <ul style="list-style-type: none"> ▪ Overall slope angles of benches will be maintained at 45°. ▪ Unmanageable heights are not created.

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	<ul style="list-style-type: none"> ▪ Loose sides are properly dressed. ▪ No loose stone or debris will be permitted to remain on the top of the bench or side of any excavation (Regulation 106(4) of MMR 1961). ▪ No undercutting of any face or sides will be permitted so as to cause any overhanging (Regulation 106(5) of MMR 1961) ▪ It will be ensured that the drilling equipment is suitable for the job. ▪ The person in charge of the drilling machine is competent to carry out the drilling operation; part of the training includes instructions to always face towards the open edge of the bench so that any inadvertent backward step is away from the edge. ▪ Provision of portable rail fencing between the drilling operations and the edge of the bench ▪ Provision to attach a safety line to the drilling rig and provide a harness for the driller to wear. ▪ Restricted access to the area to all persons except those necessary for the drilling operation. ▪ Wet drilling will be carried out by constantly injecting a jet of water at the drill bit inside the hole, which prevents dust generation. ▪ In case due to any reason, wet drilling is not possible (due to non-availability of water), exhaust/ vacuum system will be provided which removes the dust from the drill hole continuously and discharges the same in a dust collector specially provided for the purpose. ▪ Drilling machine shall be fitted with dust suppression, collection and disposal arrangement.
<p>Blasting & Handling of Explosives</p>	<ul style="list-style-type: none"> ▪ Blast hole geometry shall be properly designed. ▪ Blast site shall be wetted before and after blasting operations are completed. ▪ Only optimum quantity of permissible explosives shall be used so that the vibrations do not damage the structures/houses if the quarrying operations are close to human habitation. ▪ Blasting shall be conducted only during favourable weather conditions and only during the day time and permissible hours. ▪ While carrying out blasting operations near habitations, wide publicity will be given in the local area through announcement and other available media so that local people become aware of the blasting activities being undertaken in the area and take appropriate precautions. ▪ The vibrations should be monitored periodically in consultation with the local Mining authorities. ▪ Use of explosives is specialist work. Planning for a round of shots is necessary to ensure that the face is properly surveyed, holes correctly drilled, direction logged, the weight of explosive suitable for good fragmentation and the continuity of the initiator are but a few of the steps necessary to ensure its safe use. ▪ Proper and safe storage of explosives in approved and Licensed Magazine. ▪ Proper security system to prevent theft/ pilferage, unauthorized entry into Magazine area and checking authorized persons to prevent

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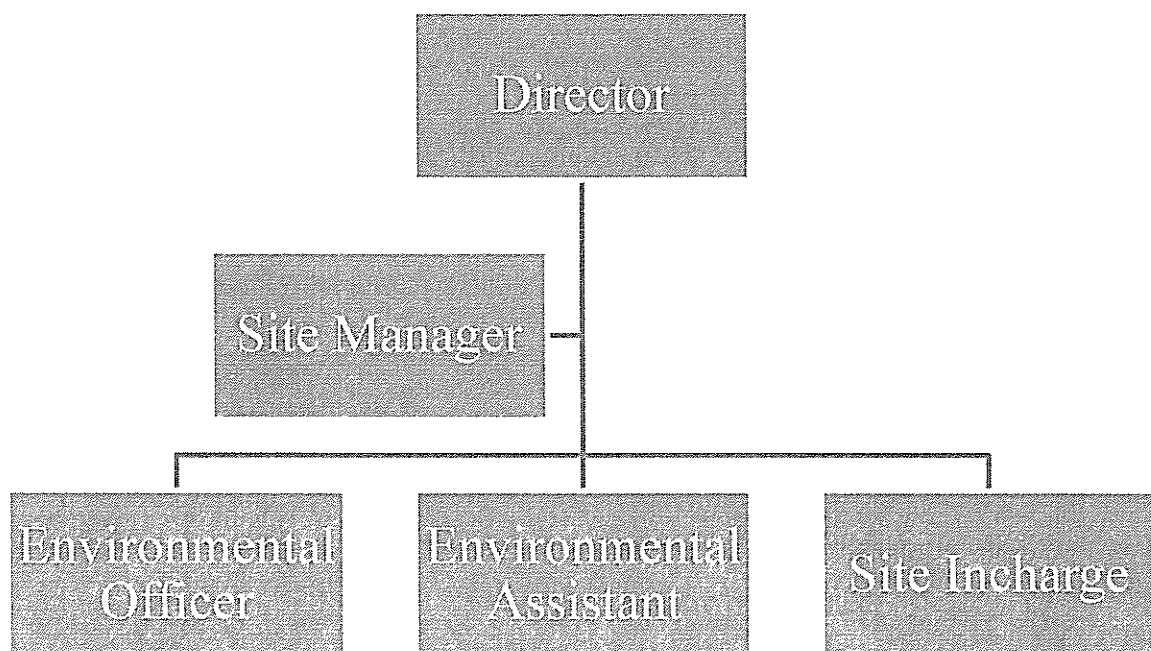
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	<p>carrying of match box, lights, mobile phones, cigarette or Bidi etc. will be put in place.</p> <ul style="list-style-type: none"> ▪ Explosives shall be conveyed in special containers. ▪ Explosives and detonators shall not be carried in the same container. ▪ The holes which have been charged with explosives will not be left unattended till blasting is completed.
Health Hazards	<p>Health hazards should be interpreted as being harmful dust and noise which is emitted during surface mining operations. All suitable steps and precautions will be undertaken to ensure minimum health hazard. Provision of use of Personal Protective Equipment (PPE) will be kept. The PPE shall be of good make and quality, wherever possible ISI certified, suitable for the hazard e.g. a dust respirator fitted with the correct filter to capture the particulate hazardous dust and maintained to recommended standards. As personal protective equipment only affords limited protection it will only be used as a last resort and as an interim arrangement until other steps are taken to reduce the risk of personal injury to an acceptable level</p>
Accident Prevention	<ul style="list-style-type: none"> ▪ Mine road shall be made smooth regularly with a road roller. ▪ Mine road will be made sufficiently wide to keep two-way traffic. Regular water sprinkling will be done on mine road and haul road to avoid suspension of dust. ▪ All transportation within the mine lease area should be carried out directly under the supervision and control of management. ▪ The vehicles will be maintained in good working condition and checked thoroughly at least once a month by the competent person authorized for the purpose by the management. ▪ Navigation signs will be provided at each and every turning point up to the main road (wherever required). ▪ To avoid danger while reversing the vehicles especially at working place/loading points, stopper should be posted to properly guide reversing/spotting operating.

Organizational Structure of Environment Management Cell:



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EMP Cell structure



The EMP Cell is committed to ensuring environmental sustainability and compliance with regulatory requirements for the Stone Mining Project. With a clear structure, roles, and responsibilities, the EMP Cell is equipped to manage environmental impacts and promote sustainable practices.

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District Survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- i. If any tree felling than necessary permission shall be taken from the competent authority.
- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.
- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.
- l. Personal protective equipments such as clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Bindri Bandarkola Stone Deposit of M/s Terra Gem Mineral Resources Pvt. Ltd. (Director : Shri Navnit Kumar), Village : Bindri Bandarkola, Tehsil : Borio, Distt. : Sahibganj, Jharkhand (2.938 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I along with following specific conditions :

- I. In compliance of Office Memorandum no. IA-J-11013/20/2025-IA-P, dated 25.11.2025 of MoEF&CC, Govt. of India, the PAs will mandatorily obtain the Environmental Safeguard to be implemented from Jharkhand State Pollution Control Board within 30 days of issuance of EC or 31.01.2026 which ever is earlier.
- II. That the Deputy Commissioner, Sahibganj will ensure compliance of the order passed by Hon'ble NGT in OA No. 23/2017/EZ, O.A. no. 776/2018 and O.A. no. 373/2019 in the matter of Syed Arshad Nasar Vs Union of India with Ramchandra Chaurasia Vs State of Jharkhand with Pradeep Kumar Singh Vs State of Jharkhand before grant of mining lease.
- III. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "EkPed Ma KeNaam" and the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.
- IV. The Deputy Commissioner through District Mining Officer will ensure that the mines owner of the respective leases to complete the plantation and maintenance in a time bound manner.
- V. Suitable plant species of not less than 2 M height to be planted equal to twice the area of saplings proposed in Safety zone. This is to be planted in land available near mines and outside safety zone. This will be in addition to plantation in safety zone. Newly planted saplings to be maintained for minimum 3 years with Geo-Tagged photographs.
- VI. Dedicated water tanker to be provided for mine. The tanker to be used for spraying water on haul road and for irrigating newly planted saplings only. Sprinkling to be done such that the haul road is kept moistened all the time with Geo-Tagged photographs.
- VII. Pre employment Occupational health check up for employees to be done and thereafter at annual interval for PLFT, Audiometry and other required tests .Summary findings of same to submitted along with 6 monthly compliance.
- VIII. Ensure use of Quality PPEs equivalent not less than 3M make. Records of same to be maintained and submitted with 6 monthly compliance report with Geo-Tagged photographs.
- IX. Keep vulnerable areas unmanned. Ensure rotation of duties. Records to be maintained and submitted with 6 monthly compliance report.
- X. Failing of any of terms & conditions mentioned in EC can lead to revocation / cancellation of EC.

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7. Pirhamo Stone Deposit of M/s Power Mech Projects Ltd., Village : Pirhamo, Anchal : Mohanpur, Distt. : Deoghar, Jharkhand (1.364 Ha).

(Proposal no.: SIA/JH/MIN/ 564608 /2026)

Name of the consultant : Crystal Consultants, Ranchi, Jharkhand.

This is a new project which has been taken for appraisal on 20.01.2026.

Project Sector: 1(a) Mining of Minerals, Category: B2.

Application for Environmental Clearance (EC).

EC Application for: Proposed Capacity –72356 cum per year or 195361 Tonnes per year

Project and Location Details:

Sl	Parameter	Details	
1	Project Name	: Pirhamo Stone Deposit	
2	Lessee:	: M/S Power Mech Projects Ltd., Manager-Sri B. Vasudeva Rao	
3	Lessee Address	: Plot No.77, Jubilee Enclave, Opposite hitex, District-Madhapur, Hyderabad-500081.	
4	Lease Area	: 1.364 Ha.	3.37 Acre
5	Type of Land	: Non-Forest Raiyati Land	
6	Project Cost	: Capital : Rs. 1936600.00	
7	EMP Budget	: Capital : Rs. 503700.00	Recurring : Rs. 513690.00 per year
8	New or Expansion	: New	
9	Mineable Reserves	: 255064 Cum	688672 Tonnes
10	Mine Life	: 5 Years	
11	Man power	: 21	
12	Water Requirement	: 11.64 KLD	
13	Water Source	: By authorised hired water tankers	
14	DG Set / power	: -	
15	Crusher	: No crusher	
16	Nearest Water Body	: Dibjor River (3.1 km)	
17	Nearest Habitation	: In the KML (satellite) image, a few houses are observed approximately 490m away from the project site on the south-east side. In compliance with Office Memorandum No. Z-11013/57/2014-IA.II(M) dated 29.10.2014 issued by the MoEF&CC, a detailed EMP has also been submitted to mitigate the impact of mining activities on these habitations.	
18	Nearest Rail Station	: Mohanpur railway station which is about 8Km from the applied lease area.	

19	Nearest Air Port	:	Deoghar Airport, (24.3 Km)
20	Nearest Forest	:	Divisional Forest Officer, Deoghar certified that the distance of reserved / protected forest is more than 250 meter from proposed project site.
21	Road & Highways	:	NH-133, Saiyahat-Morang Road at about 2.3km on eastern side
22	Approach Road	:	At a distance of 174 meter

CO-ORDINATES

PILLAR NO	LATITUDE	LONGITUDE
P1	24° 32' 32.1643" N	86° 51' 04.3499" E
P2	24° 32' 31.5977" N	86° 51' 06.4450" E
P3	24° 32' 29.2817" N	86° 51' 06.0066" E
P4	24° 32' 27.9523" N	86° 51' 05.9452" E
P5	24° 32' 27.7906" N	86° 51' 06.0082" E
P6	24° 32' 26.5666" N	86° 51' 04.5434" E
P7	24° 32' 26.4521" N	86° 51' 04.4974" E
P8	24° 32' 26.5175" N	86° 51' 04.1673" E
P9	24° 32' 26.6805" N	86° 51' 03.9313" E
P10	24° 32' 27.5003" N	86° 51' 02.5805" E
P11	24° 32' 27.5452" N	86° 51' 02.5805" E
P12	24° 32' 27.6318" N	86° 51' 02.6470" E
P13	24° 32' 27.7921" N	86° 51' 02.6959" E
P14	24° 32' 29.1529" N	86° 51' 02.7927" E
P15	24° 32' 29.1986" N	86° 51' 02.8387" E
P16	24° 32' 30.1574" N	86° 51' 03.1202" E
P17	24° 32' 30.2765" N	86° 51' 03.2330" E
P18	24° 32' 30.3400" N	86° 51' 03.2242" E
P19	24° 32' 30.3439" N	86° 51' 03.1200" E
P20	24° 32' 30.5844" N	86° 51' 03.1554" E
P21	24° 32' 31.1400" N	86° 51' 03.4739" E

P22	24° 32' 32.1288" N	86° 51' 04.2335" E
P23	24° 32' 32.1643" N	86° 51' 04.3499" E

LAND DETAILS

Khata no.	Plot no.
13	366 (P) & 369 (P)
26	367 (P) & 370 (P)
3	368 (P)

STATUTORY CLEARANCES

1	LOI / Lease docs	:	The Letter of Intent (LoI) has been issued by Assistant Mining Officer, Deoghar vide letter no. 1071/M, dated 31.10.2025.
2	CO	:	The CO, Mohanpur vide letter no. 852/Ra., dated 05.07.2025 has mentioned the plot no. of the project is not recorded as "Jungle-Jhari" in R.S. Khatiyani & Register II. During the appraisal it was seen from the KML that habitation at a distance of 490 meters from mining lease area. For which detailed Environmental Management Plan has been prepared and submitted.
3	DMO Cluster	:	DMO, Deoghar vide memo no. 1153/M, dated 03.12.2025 certified that 01 other LoI (5.93 Acre) exists within 500 m radius from proposed project site and total area is 9.30 Acre.
4	DFO Wild Life	:	DFO, Wildlife Division, Hazaribag vide letter no. 1230, dated 09.07.2025 certified that the proposed project site is outside Eco Sensitive Zone of Parasnath & Topchanchi Wildlife Sanctuary.
5	DFO Territorial	:	Divisional Forest Officer, Deoghar Forest Division vide letter no. 765, dated 21.07.2025 certified that the distance of reserved / protected forest is more than 250 meters from proposed project site.
6	DSR	:	The DMO, Deoghar has certified vide memo no. 1153/M, dated 03.12.2025 that this project is mentioned in approved DSR of Deoghar District as a potential zone - I.
7	Gram Sabha	:	Gram Sabha conducted on 01.07.2025.
8	Mine Plan Approval	:	Mining Plan approved by The Assistant Director, Geology, District Geological Office, Deoghar vide Memo No. 153/G, dated

		03.12.2025.
9	Qualified Person :	Shri Vidya Bhushan Mishra was present in the meeting and affirmed that the mine plan has been prepared by him.

Working Details

1	Mining Method	:	Semi-mechanized "OTFM" Method
2	Quarry Area	:	1.025
3	Waste Generation	:	38491 cum
4	Stripping Ratio	:	1:0.06
5	Working Days	:	300
6	Bench: size & No	:	6m to 6m and 7 in numbers
7	Elevation of Mine	:	254 m AMSL to 249 m AMSL
8	Ground Level Elevation	:	249 m AMSL
9	Ultimate Working Depth	:	210 m AMSL
10	Water Table	:	180 m RL
11	Topography of Mine	:	The applied lease area represents a small hillock
12	Explosive Requirement	:	81 kg/day
13	Diesel/Fuel requirement	:	391 litre/day

Production Details

Year	Production of stone in Cum	Production of stone in Tonnes	Overburden in cum	Intercalated waste in Cum	Total Waste in Cum
1st Year	72230	195022	20724	3802	24526
2nd Year	72356	195361	0	3808	3808
3rd Year	36617	98865	0	1782	1782
4th Year	44392	119857	4488	2336	6824
5th Year	29469	79566	0	1551	1551
Total	255064	688672	25212	1551	38491

Land Use

Land Utilization	Existing Land use (Ha)	At the end of plan period (Ha)	At Conceptual period (Ha)
Excavation	0.0	1.025 (0.049ha area shall be Backfilled)	1.025 (0.049ha area shall be Backfilled, 0.750 ha converted in to water reservoir & 0.2271ha shall)

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			be left as dead benches)
Safety Zone Plantation	0.0	0.339	0.339
Total	0.0	1.364	1.364
Unused Area	1.364	0.0	0.0
Total Lease Area	1.364		

ENVIRONMENT MANAGEMENT

Green Belt Development

Plantation				
Location	Area (Ha.) or Length (m)	No. of tree	Calculation	Timeline
Safety Zone	0.339	543	1600 tree per hectare	1st Year
Approach Road	174	348	2m X 2m spacing	1st year
Dead Bench	0.227	364	1600 tree per hectare	End of Mine
Backfilled area (level upto surface)	0.049	79	1600 tree per hectare	End of Mine
TOTAL		1334		

As per MoEF&CC OM No. F.No. IA3-22/3/2024-IA.III dated 24.07.2024, 10% of the proposed green belt shall be developed under the "Ek Ped Maa Ke Naam" plantation campaign.

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Cost Estimates

The mining plan for the project has estimated the requirement of equipments needed for mining operations. The capital cost has been estimated on basis of this provision.

Estimated capital cost on plants & machineries are given below :

Budgetary Provision (in Lakhs) of Project Cost		
Particulars	Capital	Recurring
Land	0.00	84262.81
Infrastructure	700000.00	0.00
Mining Equipment	0.00	9200000.00
<i>Equipment</i>	<i>Quantity</i>	<i>Rent per year</i>
Dumper	3	2000000
Compressor	1	1000000
Water Sprinkler	1	600000

Rock Breaker	1	800000	
Excavator	1	800000	
Water Facility for Domestic Purpose "0.84" KLD (Annual Water Demand "252"KL @4L per Tanker, total number of tanker required ("63") and per tanker cost @Rs. 500)		0.00	31500.00
Statutory Clearances		500000.00	0.00
Mine Closure Cost for Plantation of "443" number of tree @Rs.300 per tree for plant & @Rs. 50 per tree for maintenance		132900.00	0.00
Mine Closure Cost for fencing around mine		100000.00	0.00
Environment Management Plan (EMP) Cost		503700.00	513690.00
Total		1936600.00	9829452.80

Environment Management Budget

Budgetary Provision (in Lakhs) of Environment Management Plan (EMP)		
Particulars	Capital	Recurring
Plantation of "891" number of trees @Rs.300 per tree for plant & @Rs. 50 per tree for maintenance	267300.00	44550.00
Water Facility for Horticulture "5.346" KLD & Dust Suppression "5.456" KLD (Annual Water Demand "3240.6"KL @4L per Tanker, total number of tanker required ("811") and per tanker cost @Rs. 500)	0.00	405500.00
Garland Drain & Desiltation Pond	136400.00	13640.00
To prevent the impact of mining activities on these habitations, we will comply with the Office Memorandum No. Z-11013/57/2014-IA.II (M) dated 29/10/2014 issued by the Ministry of Environment, Forests and Climate Change (MoEF & CC)	1000000	
Environment Monitoring & Compliance	0.00	50000.00
Total	503700.00	513690.00

Environment Monitoring Plan (post operation)

Monitoring Parameters and Frequency of Monitoring

S. no	Monitoring Parameters	No. of Locations	Frequency of Monitoring
1	Ambient Air: Ambient Air Quality at appropriate location for PM10, PM2.5, SO2, NOx in the vicinity of the mine area. In the surrounding area covering project site only.	3 Stations	Six Monthly
2	Water: Surface water sample in the vicinity of the Project area.	2 Surface water 2 Ground water	Six Monthly

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3	Noise: Day & Night level Noise Monitoring.	4 stations	Six Monthly
4	Soil: Soil Monitoring, Qualitative and quantitative testing/analysis to check the soil fertility, porosity, texture, water holding capacity, etc.	2 station	Six Monthly

Environment Management Practices to be followed:

Aspect	Mitigation Measures / Control Measures
Solid Waste Management	<ul style="list-style-type: none"> • The lease area has a 2 m overburden of intermixed soil with about 95% stone recovery, generating only 5% intercalated waste. • Total waste generation during the plan period is 38,491 m³ (in-situ), out of which 23,095 m³ will be used for approach and haul road maintenance. • The remaining waste will be temporarily dumped up to the 3rd year and backfilled in the exhausted quarry from the 4th year onwards, covering 0.049 ha. • Waste volume increases on excavation and is later compacted during dumping/backfilling; garland drain and sedimentation tank will be provided for runoff management.
Air Quality Management	<ul style="list-style-type: none"> • Wet drilling and use of sharp drill bits to minimize dust generation. • Controlled blasting using optimum explosive charge during favorable weather conditions. • Regular maintenance of diesel equipment and vehicles to reduce emissions. • Water sprinkling on haul roads, loading/unloading points, and working areas. • All transport vehicles will have valid PUC certificates. • Greenbelt and roadside plantation to act as dust and noise barriers.
Water Quality Management	<ul style="list-style-type: none"> • Mining will be confined only above the Ground Water Table (GWT). • Rainwater accumulated in the pit will be collected and pumped out regularly during monsoon. • Settling sump will be provided to desilt pumped out of mine-pit and collected through garland drain before discharge into natural drainage. • Garland and foot drains will be constructed around the quarry to control surface runoff. • Sewage from rest shelters will be treated through septic tank-soak pit systems. • Foot drain would be provided around the external dump, if any.
Noise Quality Management	<ul style="list-style-type: none"> • Mining activities will be restricted to daytime and carried out with controlled blasting techniques. • Acoustic enclosures and mufflers will be provided for drilling and DG set operations. • Regular maintenance of mining machinery to minimize vibration and noise. • Greenbelt development around the lease boundary to attenuate noise propagation. • Use of delayed blasting technique to minimize the adverse impact

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	of vibration.
Soil Quality Management	<ul style="list-style-type: none"> • Topsoil will be carefully removed and stored separately for future use in plantation and reclamation. • Garland drains and retaining walls will prevent soil erosion and siltation. • Spillage of oil or fuel will be avoided; impervious flooring and oil traps provided near storage areas • Post-mining, the area will be rehabilitated using stored topsoil and native vegetation
Flora & Fauna management	<ul style="list-style-type: none"> • No tree felling will be undertaken without obtaining permission from the competent authority. • Greenbelt and plantation will be developed using native species along approach roads and lease periphery (7.5m Safety Zone). • Dust suppression measures will minimize impact on surrounding vegetation
Socio Economy:	<ul style="list-style-type: none"> • Priority employment to local people in mining and ancillary activities. • Community development initiatives such as tree plantation drives, road maintenance, and local infrastructure support. • Awareness programs on safety, hygiene, and environmental protection
Monitoring & Reporting:	<ul style="list-style-type: none"> • Periodic monitoring of air, water (ground & surface), noise, and soil quality as per CPCB and SPCB guidelines. • All monitoring reports will be submitted to statutory authorities as per the compliance schedule. • Corrective measures will be taken immediately if any deviation from standards is observed.
Risk & Hazard	<p>Activities which are likely to create risk are: Temporary Storage of Explosives, Charging of Explosives, Blasting, Drilling, Bench Formation, Loading / Unloading, Transportation</p> <p>Proposed Preventive measures:</p> <ul style="list-style-type: none"> ▪ Overall slope angles of benches will be maintained at 45°. ▪ Unmanageable heights are not created. ▪ Loose sides are properly dressed. ▪ No loose stone or debris will be permitted to remain on the top of the bench or side of any excavation (Regulation 106(4) of MMR 1961). ▪ No undercutting of any face or sides will be permitted so as to cause any overhanging (Regulation 106(5) of MMR 1961) ▪ It will be ensured that the drilling equipment is suitable for the job. ▪ The person in charge of the drilling machine is competent to carry out the drilling operation; part of the training includes instructions to always face towards the open edge of the bench so that any inadvertent backward step is away from the edge. ▪ Provision of portable rail fencing between the drilling operations and the edge of the bench ▪ Provision to attach a safety line to the drilling rig and provide a harness for the driller to wear.

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	<ul style="list-style-type: none"> ▪ Restricted access to the area to all persons except those necessary for the drilling operation. ▪ Wet drilling will be carried out by constantly injecting a jet of water at the drill bit inside the hole, which prevents dust generation. ▪ In case due to any reason, wet drilling is not possible (due to non-availability of water), exhaust/ vacuum system will be provided which removes the dust from the drill hole continuously and discharges the same in a dust collector specially provided for the purpose. ▪ Drilling machine shall be fitted with dust suppression, collection and disposal arrangement.
Blasting & Handling of Explosives	<ul style="list-style-type: none"> ▪ Blast hole geometry shall be properly designed. ▪ Blast site shall be wetted before and after blasting operations are completed. ▪ Only optimum quantity of permissible explosives shall be used so that the vibrations do not damage the structures/houses if the quarrying operations are close to human habitation. ▪ Blasting shall be conducted only during favourable weather conditions and only during the day time and permissible hours. ▪ While carrying out blasting operations near habitations, wide publicity will be given in the local area through announcement and other available media so that local people become aware of the blasting activities being undertaken in the area and take appropriate precautions. ▪ The vibrations should be monitored periodically in consultation with the local Mining authorities. ▪ Use of explosives is specialist work. Planning for a round of shots is necessary to ensure that the face is properly surveyed, holes correctly drilled, direction logged, the weight of explosive suitable for good fragmentation and the continuity of the initiator are but a few of the steps necessary to ensure its safe use. ▪ Proper and safe storage of explosives in approved and Licensed Magazine. ▪ Proper security system to prevent theft/ pilferage, unauthorized entry into Magazine area and checking authorized persons to prevent carrying of match box, lights, mobile phones, cigarette or Bidi etc. will be put in place. ▪ Explosives shall be conveyed in special containers. ▪ Explosives and detonators shall not be carried in the same container. ▪ The holes which have been charged with explosives will not be left unattended till blasting is completed.
Health Hazards	<p>Health hazards should be interpreted as being harmful dust and noise which is emitted during surface mining operations. All suitable steps and precautions will be undertaken to ensure minimum health hazard. Provision of use of Personal Protective Equipment (PPE) will be kept. The PPE shall be of good make and quality, wherever possible ISI certified, suitable for the hazard e.g. a dust respirator fitted with the correct filter to capture the particulate hazardous dust and maintained to recommended standards. As personal protective equipment only affords limited protection it will only be used as a last resort and as an interim arrangement until other steps are taken to reduce the risk of</p>

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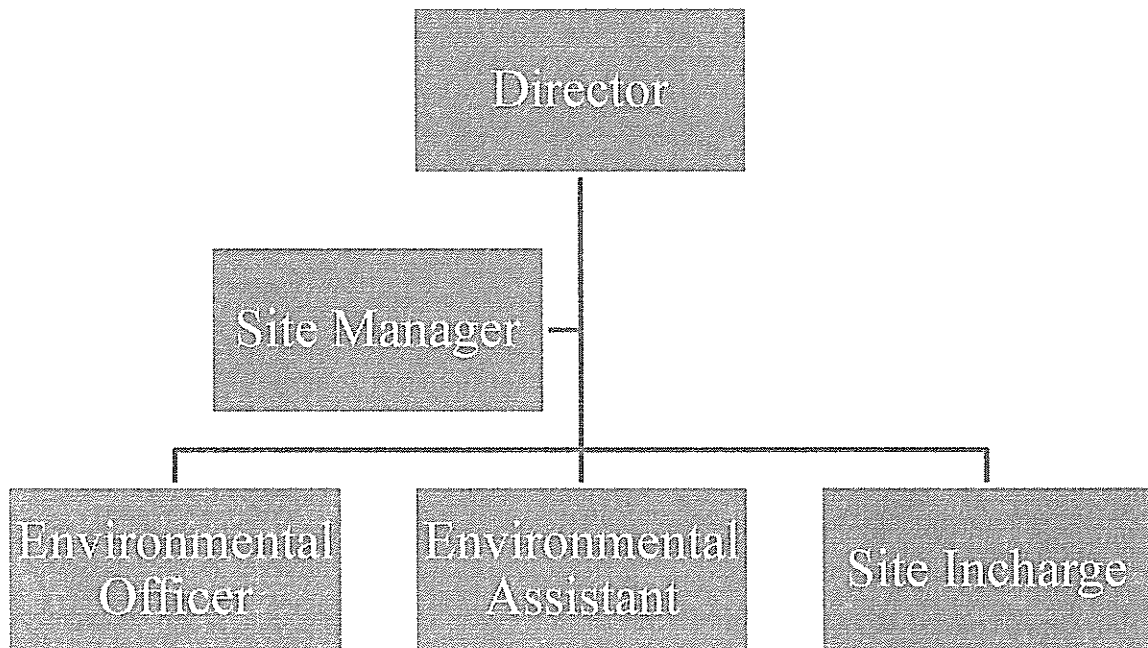
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	personal injury to an acceptable level
Accident Prevention	<ul style="list-style-type: none"> ▪ Mine road shall be made smooth regularly with a road roller. ▪ Mine road will be made sufficiently wide to keep two-way traffic. Regular water sprinkling will be done on mine road and haul road to avoid suspension of dust. ▪ All transportation within the mine lease area should be carried out directly under the supervision and control of management. ▪ The vehicles will be maintained in good working condition and checked thoroughly at least once a month by the competent person authorized for the purpose by the management. ▪ Navigation signs will be provided at each and every turning point up to the main road (wherever required). ▪ To avoid danger while reversing the vehicles especially at working place/loading points, stopper should be posted to properly guide reversing/spotting operating.

Organizational Structure of Environment Management Cell:



EMP Cell structure

The EMP Cell is committed to ensuring environmental sustainability and compliance with regulatory requirements for the Stone Mining Project. With a clear structure, roles, and responsibilities, the EMP Cell is equipped to manage environmental impacts and promote sustainable practices.

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District Survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.

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- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- i. If any tree felling than necessary permission shall be taken from the competent authority.
- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.
- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.
- l. Personal protective equipments such as clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Pirhamo Stone Deposit of M/s Power Mech Projects Ltd., Village : Pirhamo, Anchal : Mohanpur, Distt. : Deoghar, Jharkhand (1.364 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I along with following specific conditions :

- I. In compliance of Office Memorandum no. IA-J-11013/20/2025-IA-P, dated 25.11.2025 of MoEF&CC, Govt. of India, the PAs will mandatorily obtain the Environmental Safeguard to be implemented from Jharkhand State Pollution Control Board within 30 days of issuance of EC or 31.01.2026 which ever is earlier.
- II. The mine will come in operation only after obtaining permission from DGMS for controlled and delayed blasting.
- III. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "EkPed Ma KeNaam" and the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.
- IV. The Deputy Commissioner through District Mining Officer will ensure that the mines owner of the respective leases to complete the plantation and maintenance in a time bound manner.

- V. Suitable plant species of not less than 2 M height to be planted equal to twice the area of saplings proposed in Safety zone. This is to be planted in land available near mines and outside safety zone. This will be in addition to plantation in safety zone. Newly planted saplings to be maintained for minimum 3 years with Geo-Tagged photographs.
- VI. Dedicated water tanker to be provided for mine. The tanker to be used for spraying water on haul road and for irrigating newly planted saplings only. Sprinkling to be done such that the haul road is kept moistened all the time with Geo-Tagged photographs.
- VII. Pre employment Occupational health check up for employees to be done and thereafter at annual interval for PLFT, Audiometry and other required tests .Summary findings of same to submitted along with 6 monthly compliance.
- VIII. Ensure use of Quality PPEs equivalent not less than 3M make. Records of same to be maintained and submitted with 6 monthly compliance report with Geo-Tagged photographs.
- IX. Keep vulnerable areas unmanned. Ensure rotation of duties. Records to be maintained and submitted with 6 monthly compliance report.
- X. Failing of any of terms & conditions mentioned in EC can lead to revocation / cancellation of EC.

8. Balutunda Stone Mine of Shri Harmeet Singh, Village : Balutunda, Anchal : Dumri, Distt. : Giridih, Jharkhand (1.997 Ha).

(Proposal no.: SIA/JH/MIN/ 564898 /2026)

Name of the consultant : Crystal Consultants, Ranchi, Jharkhand.

This is a new project which has been taken for appraisal on 20.01.2026.

Project Sector: 1(a) Mining of Minerals, Category: B2.

Application for Environmental Clearance (EC).

EC Application for: Proposed Capacity – 69113 Cum per Year or 186604 Tonnes per Year

Project and Location Details:

Sl	Parameter	Details
1	Project Name	: Balutunda Stone Deposit
2	Lessee:	: Proprietor – Sri Harmeet Singh

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3	Lessee Address	:	S/O Late Bugar Singh Ward No.-07, Post - Inderwa P.S +Dist.-Koderma	
4	Lease Area	:	1.997 Ha	4.9350 Acre
5	Type of Land	:	Non-Forest Raiyati Land	
6	Project Cost	:	Capital: Rs. 2093400.00	
7	EMP Budget	:	Capital: Rs. 600200.00	Recurring: Rs. 736720.00 per year
8	New or Expansion	:	New	
9	Mineable Reserves	:	661557 cum	1786205 Tonnes
10	Mine Life	:	10 Years	
11	Man power	:	23	
12	Water Requirement	:	16.92 KLD	
13	Water Source	:	By authorised hired water tankers	
14	DG Set / power	:	-	
15	Crusher	:	No crusher	
16	Nearest Water Body	:	Jamuniya river at a distance of 2.5 km in West direction	
17	Nearest Habitation	:	Balutunda Village at a distance of 0.69 Km in West direction.	
18	Nearest Rail Station	:	Nimiaghat railway station at a distance of 2.2 Km.	
19	Nearest Air Port	:	Deoghar Airport at a distance of 128 Km	
20	Nearest Forest	:	Divisional Forest Officer, Giridih certified that the distance of reserved / protected forest is more than 250 meter from proposed project site.	
21	Road & Highways	:	NH-19 (Gobindpur- Dumri Road) at about 1Km on North-Eastern side.	
22	Approach Road	:	At a distance of 253 metres.	

CO-ORDINATES

PILLAR ID	LONGITUDE	LATITUDE	PILLAR ID	LONGITUDE	LATITUDE
P1	86°03'58.53064"E	23°57'00.36979"N	P33	86°04'04.64869"E	23°56'55.45147"N
P2	86°03'59.01376"E	23°57'00.35078"N	P34	86°04'04.48828"E	23°56'55.46699"N
P3	86°03'59.25794"E	23°57'00.33948"N	P35	86°04'04.45836"E	23°56'55.07110"N
P4	86°03'59.57744"E	23°57'00.04777"N	P36	86°04'04.12795"E	23°56'54.81100"N
P5	86°04'00.14714"E	23°56'59.59288"N	P37	86°04'03.81950"E	23°56'54.74893"N

P6	86°04'00.61986"E	23°56'59.17924"N	P38	86°04'03.58982"E	23°56'54.79915"N
P7	86°04'00.89504"E	23°56'59.18093"N	P39	86°04'03.43639"E	23°56'54.66059"N
P8	86°04'00.89735"E	23°56'59.31056"N	P40	86°04'03.22612"E	23°56'54.61199"N
P9	86°04'01.26415"E	23°56'59.32655"N	P41	86°04'02.75617"E	23°56'54.88440"N
P10	86°04'01.59787"E	23°56'59.17744"N	P42	86°04'02.50064"E	23°56'55.01836"N
P11	86°04'01.78072"E	23°56'59.13366"N	P43	86°04'02.33850"E	23°56'54.91414"N
P12	86°04'02.21974"E	23°56'58.93847"N	P44	86°04'02.28677"E	23°56'55.08413"N
P13	86°04'02.54125"E	23°56'58.73014"N	P45	86°04'01.98826"E	23°56'55.20106"N
P14	86°04'02.79898"E	23°56'58.60291"N	P46	86°04'01.92702"E	23°56'55.12326"N
P15	86°04'02.70782"E	23°56'58.32136"N	P47	86°04'01.76894"E	23°56'55.24102"N
P16	86°04'03.56430"E	23°56'57.75490"N	P48	86°04'01.36970"E	23°56'55.31086"N
P17	86°04'03.42415"E	23°56'57.45674"N	P49	86°04'00.73088"E	23°56'55.52254"N
P18	86°04'03.31676"E	23°56'57.29438"N	P50	86°04'00.10920"E	23°56'55.78739"N
P19	86°04'03.37786"E	23°56'57.12958"N	P51	86°03'59.42308"E	23°56'55.95662"N
P20	86°04'03.19951"E	23°56'56.93406"N	P52	86°03'59.07085"E	23°56'56.12654"N
P21	86°04'03.17129"E	23°56'56.79964"N	P53	86°03'58.64285"E	23°56'56.42074"N
P22	86°04'04.11931"E	23°56'56.67065"N	P54	86°03'58.84574"E	23°56'57.02802"N
P23	86°04'04.72588"E	23°56'56.58810"N	P55	86°03'59.00677"E	23°56'57.28193"N
P24	86°04'05.24950"E	23°56'56.55646"N	P56	86°03'59.00616"E	23°56'57.36466"N
P25	86°04'05.26278"E	23°56'56.45274"N	P57	86°03'58.48736"E	23°56'57.52331"N
P26	86°04'05.53544"E	23°56'56.28664"N	P58	86°03'58.07628"E	23°56'56.64937"N
P27	86°04'05.75821"E	23°56'55.89229"N	P59	86°03'57.51335"E	23°56'56.83351"N
P28	86°04'05.54052"E	23°56'55.74077"N	P60	86°03'57.91122"E	23°56'57.77466"N
P29	86°04'05.60770"E	23°56'55.50893"N	P61	86°03'58.31190"E	23°56'58.72240"N
P30	86°04'05.55218"E	23°56'55.42256"N	P62	86°03'57.96724"E	23°56'58.87975"N
P31	86°04'05.25252"E	23°56'55.43794"N	P63	86°03'58.24775"E	23°56'59.62168"N
P32	86°04'04.87402"E	23°56'55.35823"N			

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LAND DETAILS

Khata no.	Plot no.
48	1010 (P) & 980 (P)
19	981 (P) & 1011 (P)
56	1000 (P)
11	1049 (P)
50	1048 (P)

STATUTORY CLEARANCES

1	LOI/Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Office, Giridih, vide letter no. 695/M dated 29.07.2025.
2	CO	:	The CO, Dumri (Giridih) vide letter no. 227, dated 20.03.2025 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in Khatiyani.
3	DMO Cluster	:	DMO, Giridih vide memo no. 821/M, dated 30.08.2025 certified that one other LoI (6.145 acre) exists within 500 m radius from proposed project site and total area is 11.08 Acre.
4	DFO Wild Life	:	Divisional Forest Officer, Wildlife Division, Hazaribag vide letter no. 2200, dated 17.10.2024 certified that the proposed project site is outside Eco Sensitive Zone of Parasnath & Topchanchi Wildlife Sanctuary.
5	DFO Territorial	:	DFO, Giridih East Forest Division vide letter no. 3494, dated 29.10.2024 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
6	DSR	:	This project is mentioned in approved DSR of Giridih District (Sl. no. 155, Page no. 72).
7	Gram Sabha	:	Gram Sabha conducted on 27.03.2025.
8	Mine Plan Approval	:	Mine plan approved by The Assistant Director, Geology, District Geological Office, Bokaro vide memo no. 195, dated 12.09.2025.
9	Qualified Person	:	Shri Vidya Bhushan Mishra was present in the meeting and affirmed that the mine plan has been prepared by him.

Working Details

1	Mining Method	:	Semi-mechanized "OTFM" Method
2	Quarry Area	:	1.479 Ha. Life of Mine – 10 years
3	Waste Generation	:	51008 cum
4	Stripping Ratio	:	1:0.06
5	Working Days	:	300
6	Benches: size & No	:	6m to 6m and 8 in numbers
7	Elevation of Mine	:	288 m AMSL to 281 m AMSL
8	Ground Level Elevation	:	281 m AMSL
9	Ultimate Working Depth	:	236 m AMSL
10	Water Table	:	225 m AMSL
11	Topography of Mine	:	Area represents gently sloping land.
12	Explosive Requirement	:	78 kg/day
13	Diesel/Fuel requirement	:	373 litre/day

Production Details

Year	Production of Stone in cum	Production of Stone in Tonnes	Overburden in cum	Intercalated waste in cum	Total Waste in cum
1 st Year	64719	174741	31500	3406	34906
2 nd Year	65788	177626	1875	3463	5338
3 rd Year	67213	181474	0	3538	3538
4 th Year	68163	184039	0	3588	3588
5 th Year	69113	186604	0	3638	3638
Total	334996	904484	33375	17633	51008

Land Use

Land Utilization	Existing Land use (Ha)	At the end of plan Period (Ha)	At Conceptual period (Ha)
Excavation	0.00	1.114	1.479 (0.186ha area shall be Backfilled, 1.077ha converted in to water reservoir & 0.216 ha shall be left as dead benches)
Waste Dump	0.00	0.265	Nil (comes under quarry)
Road	0.00	0.004	0.00
Safety Zone Plantation	0.00	0.518	0.518
Total	0.00	1.901	1.997
Unused Area	1.997	0.096	0.00
Total Lease Area	1.997		

ENVIRONMENT MANAGEMENT

Green Belt Development

Plantation				
Location	Area (Ha.) or Length (m)	No. of tree	Calculation	Timeline
Safety Zone	0.518	829	1600 tree per hectare	1st Year
Approach Road	253	506	2m X 2m spacing	1st year
Dead Bench	0.216	346	1600 tree per hectare	End of Mine
Backfilled area (level upto surface)	0.186	298	1600 tree per hectare	End of Mine
TOTAL		1979		

As per MoEF&CC OM No. F.No. IA3-22/3/2024-IA.III dated 24.07.2024, 10% of the proposed green belt shall be developed under the “Ek Ped Maa Ke Naam” plantation campaign.

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Project Cost

Budgetary Provision (in Lakhs) of Project Cost			Capital	Recurring
Particulars				
Land			0.00	123367.17
Infrastructure			700000.00	0.00
Mining Equipment			0.00	11000000.00
<i>Equipment</i>	<i>Quantity</i>	<i>Rent per year</i>		
Dumper	3	2000000		
Wagon Drill	1	1000000		
Compressor	1	1000000		
Water Sprinkler	1	600000		
Rock Breaker	1	800000		
Excavator	2	800000		
Water Facility for Domestic Purpose "0.92" KLD (Annual Water Demand "276"KL @4L per Tanker, total number of tanker required ("69") and per tanker cost @Rs. 500)			0.00	34500.00
Statutory Clearances			500000.00	0.00
Mine Closure Cost for Plantation of "644" number of tree @Rs.300 per tree for plant & @Rs. 50 per tree for maintenance			193200.00	0.00
Mine Closure Cost for fencing around mine			100000.00	0.00

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Environment Management Plan (EMP) Cost	600200.00	736720.00
Total	2093400.00	11894587.00

Environment Management Budget

Budgetary Provision (in Lakhs) of Environment Management Plan (EMP)		
Particulars	Capital	Recurring
Plantation of "1335" number of trees @Rs.300 per tree for plant & @Rs. 50 per tree for maintenance	400500.00	66750.00
Water Facility for Horticulture "8.01" KLD & Dust Suppression "7.988" KLD (Annual Water Demand "4799.4"KL @4L per Tanker, total number of tanker required ("1200") and per tanker cost @Rs. 500)	0.00	600000.00
Garland Drain & Desiltation Pond	199700.00	19970.00
Environment Monitoring & Compliance	0.00	50000.00
Total	600200.00	736720.00

Environment Monitoring Plan (post operation)

Monitoring Parameters and Frequency of Monitoring

S. no	Monitoring Parameters	No. of Locations	Frequency of Monitoring
1	Ambient Air: Ambient Air Quality at appropriate location for PM10, PM2.5, SO2, NOx in the vicinity of the mine area. In the surrounding area covering project site only.	3 Stations	Six Monthly
2	Water: Surface water sample in the vicinity of the Project area.	2 Surface water 2 Ground water	Six Monthly
3	Noise: Day & Night level Noise Monitoring.	4 stations	Six Monthly
4	Soil: Soil Monitoring, Qualitative and quantitative testing/analysis to check the soil fertility, porosity, texture, water holding capacity, etc.	2 station	Six Monthly

Environment Management Practices to be followed:

Aspect	Mitigation Measures / Control Measures
Solid Waste Management	<ul style="list-style-type: none"> • The lease area has a 2 m overburden of intermixed soil with about 95% stone recovery, resulting in only 5% intercalated waste. • During the plan period, 51,008 m³ in-situ waste will be generated, of which 28,054 m³ will be used for approach and haul road maintenance. • The remaining waste (22,954 m³ in-situ / 28,692 m³ loose / 24,388.20 m³ compacted) will be temporarily dumped in the north-western part of the lease area, covering about 0.265 ha.

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	<ul style="list-style-type: none"> • A garland drain and sedimentation tank will be provided around the OB dump to collect and treat surface runoff before natural discharge.
Air Quality Management	<ul style="list-style-type: none"> • Wet drilling and use of sharp drill bits to minimize dust generation. • Controlled blasting using optimum explosive charge during favorable weather conditions. • Regular maintenance of diesel equipment and vehicles to reduce emissions. • Water sprinkling on haul roads, loading/unloading points, and working areas. • All transport vehicles will have valid PUC certificates. • Greenbelt and roadside plantation to act as dust and noise barriers.
Water Quality Management	<ul style="list-style-type: none"> • Mining will be confined only above the Ground Water Table (GWT). • Rainwater accumulated in the pit will be collected and pumped out regularly during monsoon. • Settling sump will be provided to desilt pumped out of mine-pit and collected through garland drain before discharge into natural drainage. • Garland and foot drains will be constructed around the quarry to control surface runoff. • Sewage from rest shelters will be treated through septic tank–soak pit systems. • Foot drain would be provided around the external dump, if any.
Noise Quality Management	<ul style="list-style-type: none"> • Mining activities will be restricted to daytime and carried out with controlled blasting techniques. • Acoustic enclosures and mufflers will be provided for drilling and DG set operations. • Regular maintenance of mining machinery to minimize vibration and noise. • Greenbelt development around the lease boundary to attenuate noise propagation. • Use of delayed blasting technique to minimize the adverse impact of vibration.
Soil Quality Management	<ul style="list-style-type: none"> • Topsoil will be carefully removed and stored separately for future use in plantation and reclamation. • Garland drains and retaining walls will prevent soil erosion and siltation. • Spillage of oil or fuel will be avoided; impervious flooring and oil traps provided near storage areas • Post-mining, the area will be rehabilitated using stored topsoil and native vegetation
Flora & Fauna management	<ul style="list-style-type: none"> • No tree felling will be undertaken without obtaining permission from the competent authority. • Greenbelt and plantation will be developed using native species along approach roads and lease periphery (7.5m Safety Zone). • Dust suppression measures will minimize impact on surrounding vegetation
Socio Economy:	<ul style="list-style-type: none"> • Priority employment to local people in mining and ancillary activities.

		<ul style="list-style-type: none"> • Community development initiatives such as tree plantation drives, road maintenance, and local infrastructure support. • Awareness programs on safety, hygiene, and environmental protection
Monitoring & Reporting:		<ul style="list-style-type: none"> • Periodic monitoring of air, water (ground & surface), noise, and soil quality as per CPCB and SPCB guidelines. • All monitoring reports will be submitted to statutory authorities as per the compliance schedule. • Corrective measures will be taken immediately if any deviation from standards is observed.
Risk & Hazard		<p>Activities which are likely to create risk are: Temporary Storage of Explosives, Charging of Explosives, Blasting, Drilling, Bench Formation, Loading / Unloading, Transportation</p> <p>Proposed Preventive measures:</p> <ul style="list-style-type: none"> ▪ Overall slope angles of benches will be maintained at 45°. ▪ Unmanageable heights are not created. ▪ Loose sides are properly dressed. ▪ No loose stone or debris will be permitted to remain on the top of the bench or side of any excavation (Regulation 106(4) of MMR 1961). ▪ No undercutting of any face or sides will be permitted so as to cause any overhanging (Regulation 106(5) of MMR 1961) ▪ It will be ensured that the drilling equipment is suitable for the job. ▪ The person in charge of the drilling machine is competent to carry out the drilling operation; part of the training includes instructions to always face towards the open edge of the bench so that any inadvertent backward step is away from the edge. ▪ Provision of portable rail fencing between the drilling operations and the edge of the bench ▪ Provision to attach a safety line to the drilling rig and provide a harness for the driller to wear. ▪ Restricted access to the area to all persons except those necessary for the drilling operation. ▪ Wet drilling will be carried out by constantly injecting a jet of water at the drill bit inside the hole, which prevents dust generation. ▪ In case due to any reason, wet drilling is not possible (due to non-availability of water), exhaust/ vacuum system will be provided which removes the dust from the drill hole continuously and discharges the same in a dust collector specially provided for the purpose. ▪ Drilling machine shall be fitted with dust suppression, collection and disposal arrangement.
Blasting & Handling of Explosives		<ul style="list-style-type: none"> ▪ Blast hole geometry shall be properly designed. ▪ Blast site shall be wetted before and after blasting operations are completed. ▪ Only optimum quantity of permissible explosives shall be used so that the vibrations do not damage the structures/houses if the quarrying operations are close to human habitation. ▪ Blasting shall be conducted only during favourable weather

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	<p>conditions and only during the day time and permissible hours.</p> <ul style="list-style-type: none"> ▪ While carrying out blasting operations near habitations, wide publicity will be given in the local area through announcement and other available media so that local people become aware of the blasting activities being undertaken in the area and take appropriate precautions. ▪ The vibrations should be monitored periodically in consultation with the local Mining authorities. ▪ Use of explosives is specialist work. Planning for a round of shots is necessary to ensure that the face is properly surveyed, holes correctly drilled, direction logged, the weight of explosive suitable for good fragmentation and the continuity of the initiator are but a few of the steps necessary to ensure its safe use. ▪ Proper and safe storage of explosives in approved and Licensed Magazine. ▪ Proper security system to prevent theft/ pilferage, unauthorized entry into Magazine area and checking authorized persons to prevent carrying of match box, lights, mobile phones, cigarette or Bidi etc. will be put in place. ▪ Explosives shall be conveyed in special containers. ▪ Explosives and detonators shall not be carried in the same container. ▪ The holes which have been charged with explosives will not be left unattended till blasting is completed.
Health Hazards	<p>Health hazards should be interpreted as being harmful dust and noise which is emitted during surface mining operations. All suitable steps and precautions will be undertaken to ensure minimum health hazard. Provision of use of Personal Protective Equipment (PPE) will be kept. The PPE shall be of good make and quality, wherever possible ISI certified, suitable for the hazard e.g. a dust respirator fitted with the correct filter to capture the particulate hazardous dust and maintained to recommended standards. As personal protective equipment only affords limited protection it will only be used as a last resort and as an interim arrangement until other steps are taken to reduce the risk of personal injury to an acceptable level</p>
Accident Prevention	<ul style="list-style-type: none"> ▪ Mine road shall be made smooth regularly with a road roller. ▪ Mine road will be made sufficiently wide to keep two-way traffic. Regular water sprinkling will be done on mine road and haul road to avoid suspension of dust. ▪ All transportation within the mine lease area should be carried out directly under the supervision and control of management. ▪ The vehicles will be maintained in good working condition and checked thoroughly at least once a month by the competent person authorized for the purpose by the management. ▪ Navigation signs will be provided at each and every turning point up to the main road (wherever required). ▪ To avoid danger while reversing the vehicles especially at working place/loading points, stopper should be posted to properly guide reversing/spotting operating.

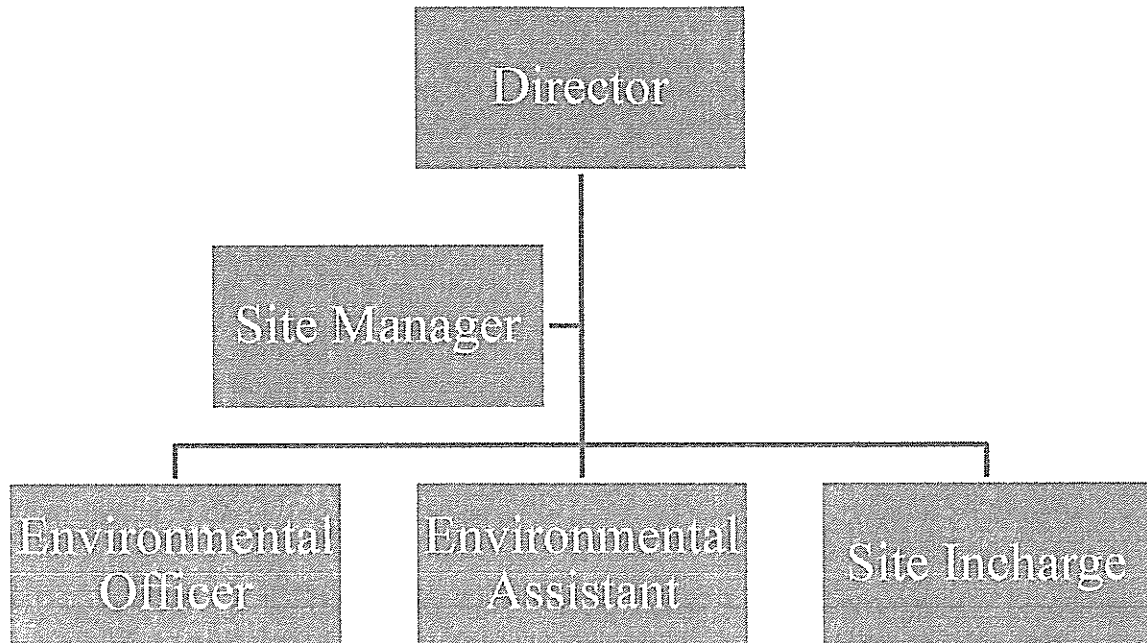
Organizational Structure of Environment Management Cell:

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EMP Cell structure

The EMP Cell is committed to ensuring environmental sustainability and compliance with regulatory requirements for the Stone Mining Project. With a clear structure, roles, and responsibilities, the EMP Cell is equipped to manage environmental impacts and promote sustainable practices.

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District Survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- i. If any tree felling than necessary permission shall be taken from the competent authority.
- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.
- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.

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- I. Personal protective equipments such as clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

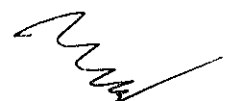
Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Balutunda Stone Mine of Shri Harmeet Singh, Village : Balutunda, Anchal : Dumri, Distt. : Giridih, Jharkhand (1.997 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I along with following specific conditions :

- I. In compliance of Office Memorandum no. IA-J-11013/20/2025-IA-P, dated 25.11.2025 of MoEF&CC, Govt. of India, the PAs will mandatorily obtain the Environmental Safeguard to be implemented from Jharkhand State Pollution Control Board within 30 days of issuance of EC or 31.01.2026 which ever is earlier.
- II. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "EkPed Ma KeNaam" and the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.
- III. The Deputy Commissioner through District Mining Officer will ensure that the mines owner of the respective leases to complete the plantation and maintenance in a time bound manner.
- IV. Suitable plant species of not less than 2 M height to be planted equal to twice the area of saplings proposed in Safety zone. This is to be planted in land available near mines and outside safety zone. This will be in addition to plantation in safety zone. Newly planted saplings to be maintained for minimum 3 years with Geo-Tagged photographs.
- V. Dedicated water tanker to be provided for mine. The tanker to be used for spraying water on haul road and for irrigating newly planted saplings only. Sprinkling to be done such that the haul road is kept moistened all the time with Geo-Tagged photographs.
- VI. Pre employment Occupational health check up for employees to be done and thereafter at annual interval for PLFT, Audiometry and other required tests .Summary findings of same to submitted along with 6 monthly compliance.
- VII. Ensure use of Quality PPEs equivalent not less than 3M make. Records of same to be maintained and submitted with 6 monthly compliance report with Geo-Tagged photographs.
- VIII. Keep vulnerable areas unmanned. Ensure rotation of duties. Records to be maintained and submitted with 6 monthly compliance report.
- IX. Failing of any of terms & conditions mentioned in EC can lead to revocation / cancellation of EC.

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9. Stone Mine of M/s Shubham Engineering Stone Company (Partner : Shri Duryodhan Mahto), Village : Dumriatand, Kulgo, Tehsil : Dumri, Distt. : Giridih, Jharkhand (3.71 Ha).

(Proposal no.: SIA/JH/MIN/ 532062 /2025)

Name of the consultant : Crystal Consultants, Ranchi, Jharkhand.

Application for Environmental Clearance (EC) (re-appraisal of Environment Clearance issued by DEIAA, Giridih).

The project has been granted EC by DEIAA, Giridih vide letter no. 57/EC/DEIAA/Giridih, dated 18.03.2017 for a capacity of 187506 TPA.

As per O.M. dated 28th April 2023 issued by MOEF & CC projects which have been granted EC by DEIAA are to be reappraised by SEIAA / SEAC.

This is re-appraisal of the EC issued by DEIAA, Giridih which has been taken up for consideration on 20.01.2026. As per O.M. dated 12.12.18 issued by MOEF & CC projects fall in category B2.

Dust suppression is being carried out on regular basis.

As per compliance report of JSPCB regarding previous EC, plantation has been done in safety zone.

Production detail as per letter no. 344/M, dated 27.03.2025 by DMO, Giridih is within the permissible limit of EC.

The compliance report of previous EC has been issued by Member Secretary, JSPCB, Ranchi vide Ref. No. 3021, dated 14.11.2025.

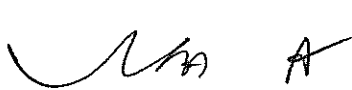
The SEAC has found that the certification of the compliance of the conditions of previous EC is not appropriate regarding status of execution of compliance as no details have been provided. Hence, the Committee decided to obtain a self certified compliance report along with the supporting details as evidence of execution.

The self certified compliance report has been submitted and also presented before the Committee.

EC Application for: Proposed Capacity – 62500cum/year or 187500 TPA

Project and Location Details:

Sl	Parameter	Details
1	Project Name	: KULGO STONE MINE
2	Lessee:	: M/S Shubham Engineering Stone Company Partnership Firm: C/O Sri Duryodhan Mahto
3	Lessee Address	: GT Road, Jamtara, Near Chiraiya More, P.O & PS - Dumri, District Giridih, State -Jharkhand-815301
4	Lease Area	: 3.71 Ha. 9.18 Acre
5	Type of Land	: Non-Forest Raiyati Land
6	Project Cost	: Capital : Rs. 3287800.00



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7	EMP Budget	:	Capital : Rs. 1087800.00	Recurring : Rs. 1209400.00 per year
8	New or Expansion	:	Re-appraisal of DEIAA EC	
9	Mineable Reserves	:	2171700 Tonnes	
10	Mine Life	:	Up to the lease period i.e. 25.07.2017 to 24.07.2027.	
11	Man power	:	10	
12	Water Requirement	:	27.58 KLD	
13	Water Source	:	By authorised hired water tankers	
14	DG Set / power	:	-	
15	Crusher	:	No crusher	
16	Nearest Water Body	:	Tambagudiyo river (2.19 km)	
17	Nearest Habitation	:	In the KML (satellite) image, a few houses are observed approximately 340 m away from the project site on the north - west side. In compliance with Office Memorandum No. Z-11013/57/2014-IA.II(M) dated 29.10.2014 issued by the MoEF&CC, a detailed EMP has also been submitted to mitigate the impact of mining activities on these habitations.	
18	Nearest Rail Station	:	Topchanchi Railway Station (5Km)	
19	Nearest Air Port	:	Ranchi Airport – 180 Km	
20	Nearest Forest	:	Divisional Forest Officer, Giridih certified that the distance of reserved / protected forest is more than 250 meter from proposed project site.	
21	Road & Highways	:	NH-2 at a distance of 1 Km	
22	Approach Road	:	At a distance of 20 meters.	

CO-ORDINATES

SL. NO	LONGITUDE	LATITUDE
1	85°59'32.41673"	24°00'36.14076"
2	85°59'32.71571"	24°00'35.98790"
3	85°59'33.04291"	24°00'35.81971"
4	85°59'33.75748"	24°00'35.69022"
5	85°59'34.27498"	24°00'35.65001"
6	85°59'34.85944"	24°00'35.60454"
7	85°59'34.86739"	24°00'35.27442"
8	85°59'35.32812"	24°00'35.03225"

9	85°59'36.21588"	24°00'34.67250"
10	85°59'36.63308"	24°00'34.61072"
11	85°59'36.84167"	24°00'34.82370"
12	85°59'37.27439"	24°00'35.02170"
13	85°59'37.55263"	24°00'34.90189"
14	85°59'38.13655"	24°00'34.51273"
15	85°59'38.63796"	24°00'34.17854"
16	85°59'38.94580"	24°00'33.97338"
17	85°59'38.54728"	24°00'33.43741"
18	85°59'38.53291"	24°00'32.87819"
19	85°59'38.73217"	24°00'32.54400"
20	85°59'38.93852"	24°00'31.29800"
21	85°59'39.25284"	24°00'30.13812"
22	85°59'39.52122"	24°00'29.07983"
23	85°59'39.63466"	24°00'28.48100"
24	85°59'39.56363"	24°00'27.98158"
25	85°59'39.81188"	24°00'27.36385"
26	85°59'39.89177"	24°00'26.72780"
27	85°59'39.36444"	24°00'25.89851"
28	85°59'38.80223"	24°00'25.16447"
29	85°59'38.15930"	24°00'24.32498"
30	85°59'38.01430"	24°00'24.90898"
31	85°59'37.44780"	24°00'25.50744"
32	85°59'37.41821"	24°00'25.69648"
33	85°59'36.84289"	24°00'26.22607"
34	85°59'36.37810"	24°00'26.98862"
35	85°59'36.01824"	24°00'27.50238"
36	85°59'35.40732"	24°00'28.08216"
37	85°59'34.64088"	24°00'28.80950"
38	85°59'34.20460"	24°00'28.31630"
39	85°59'33.70567"	24°00'28.67404"
40	85°59'33.25348"	24°00'28.99825"
41	85°59'33.28490"	24°00'29.05351"
42	85°59'33.18245"	24°00'29.22314"
43	85°59'33.35932"	24°00'29.59596"
44	85°59'33.46325"	24°00'29.95794"
45	85°59'33.53248"	24°00'30.49204"
46	85°59'33.48024"	24°00'30.88742"
47	85°59'33.22990"	24°00'31.58071"
48	85°59'33.00734"	24°00'32.17169"
49	85°59'32.74044"	24°00'32.69336"
50	85°59'32.50727"	24°00'33.27016"

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51	85°59'33.01890"	24°00'33.61133"
52	85°59'33.52254"	24°00'33.24758"
53	85°59'33.76306"	24°00'33.02550"
54	85°59'33.92477"	24°00'32.70398"
55	85°59'33.77227"	24°00'32.44493"
56	85°59'33.73739"	24°00'32.11351"
57	85°59'34.14797"	24°00'31.69897"
58	85°59'34.38049"	24°00'31.90266"
59	85°59'34.92089"	24°00'31.65246"
60	85°59'35.24338"	24°00'31.76122"
61	85°59'35.07047"	24°00'32.30176"
62	85°59'34.90649"	24°00'32.81454"
63	85°59'35.22829"	24°00'32.60747"
64	85°59'35.54174"	24°00'32.40580"
65	85°59'35.72848"	24°00'32.60056"
66	85°59'36.02134"	24°00'32.87347"
67	85°59'36.13236"	24°00'33.04451"
68	85°59'36.13376"	24°00'33.22775"
69	85°59'36.32906"	24°00'33.39936"
70	85°59'36.63636"	24°00'33.66403"
71	85°59'36.88163"	24°00'33.87528"
72	85°59'36.79584"	24°00'34.06828"
73	85°59'36.48944"	24°00'34.45078"
74	85°59'36.01612"	24°00'34.62574"
75	85°59'35.55431"	24°00'34.76462"
76	85°59'35.22458"	24°00'34.89408"
77	85°59'34.84640"	24°00'35.11872"
78	85°59'34.71425"	24°00'34.76945"
79	85°59'34.60610"	24°00'34.59067"
80	85°59'34.29092"	24°00'34.29698"
81	85°59'34.08018"	24°00'33.93947"
82	85°59'33.76025"	24°00'34.25994"

LAND DETAILS

Khata no.	Plot no.
83, 95, 88 & 148	3036, 3037, 3039, 3051, 3049 (P), 3040, 3052 & 3054

STATUTORY CLEARANCES

1	LOI / Lease docs	:	Lease deed 25.07.2017 to 24.07.2027.
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2	CO	:	The CO, Dumri (Giridih) vide letter no. 629, dated 24.06.2016 has mentioned the plot no. of the project is not recorded as "Jungle-Jhari" in R.S. Khatiyani. During the appraisal it was seen from the KML that habitation at a distance of 428 meter, 348 meter, 340 meter and 363 meter from mining lease area. For which detailed Environmental Management Plan has been prepared and submitted.
3	DMO Cluster	:	DMO, Giridih vide memo no. 234/M, dated 27.03.2025 certified that 01 other mining lease area (3.00 Acre) exists within 500 m radius from proposed project site and total area is 12.18 Acre.
4	DFO Wild Life	:	DFO, Wildlife Division, Hazaribag vide letter no. 301, dated 25.02.2025 certified that the proposed project site is outside Eco Sensitive Zone of Parasnath & Topchanchi Wildlife Sanctuary.
5	DFO Territorial	:	Divisional Forest Officer, Giridih East Forest Division vide letter no. 1732, dated 23.08.2016 certified that the distance of forest is more than 250 meters from proposed project site.
6	DSR	:	This project is mentioned in approved DSR of Giridih District (Sl. no. 33, Page no. 35).
7	Gram Sabha	:	Gram Sabha conducted on 01.09.2016.
8	Mine Plan / Scheme Approval	:	<ul style="list-style-type: none"> i. Mining Plan approved by Assistant Mining Officer, Giridih vide Letter No. 3255/M, dated 07.10.2016. ii. Mining scheme approved by Additional Director, Geology, Hazaribag vide Letter No. 624/G, dated 20.07.2021.
9	Previous Environmental Clearance (EC)	:	Previous EC granted by DEIAA, Giridih vide letter no. 57/EC/DEIAA/Giridih, dated 18.03.2017.
10	Compliance report of EC	:	The compliance report of previous EC has been issued by Member Secretary, JSPCB, Ranchi vide Ref. No. 3021, dated 14.11.2025.
11	Consent to Establish (CTE)	:	CTE issued by JSPCB vide Ref. no. JSPCB/HO/RNC/CTE-2077877 /2018 /558, dated 25.05.2018.
12	Consent to Operate (CTO)	:	CTO issued by JSPCB vide ref. no. : JSPCB/RO/HZB/CTO-13176399 /2022/68, dated 18.05.2022.
13	Production Report	:	Production report issued by DMO, Giridih vide letter no. 344/M, dated 27.03.2025.
14	Qualified Person	:	Dr. Amarjeet Kumar Singh through e-mail dated 20.01.2026

		affirmed that the mining scheme has been prepared by him.
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Working Details

1	Mining Method	:	Semi-mechanized "OTFM" Method
2	Quarry Area	:	2.38 Ha. / 5.87 Acres
			Life of Mine – Up to the lease period i.e. 25.07.2017 to 24.07.2027.
3	Stripping Ratio	:	1:0.06
4	Working Days	:	300
5	Benches: size & No	:	6m to 6m and 4 in numbers
6	Elevation of Mine	:	313 m AMSL to 310 m AMSL
7	Ground Level Elevation	:	310 m AMSL
8	Ultimate Working Depth	:	275 m AMSL
9	Water Table	:	260 m AMSL
10	Topography of Mine	:	Hill Land
11	Explosive Requirement	:	89kg/day
12	Diesel/Fuel requirement	:	375 litre/day

PRODUCTION DETAILS

Year	Volume of Stone (m ³)	Year-wise Excavation (Tonnes)
2021–22	62,500	187,500
2022–23	62,500	187,500
2023–24	62,500	187,500
2024–25	62,500	187,500
2025–26	62,500	187,500
Total	312,500	937,500

LAND USE

Pattern of Utilization	Existing Land Use (Ha)	At End of Plan Period (Ha)	Conceptual Stage (Ha.)		
			Water Body	Other	Plantation
Excavation	0.000	2.375	2.375	0.000	0.000
Road	0.000	0.032	0.000	0.032	0.000
Infrastructure	0.000	0.008	0.000	0.008	0.000

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Safety Zone	0.000	1.226	0.000	0.000	1.226
Garland Drain	0.000	0.040	0.000	0.040	0.000
Settling Tank	0.000	0.032	0.040	0.000	0.032
Total Area in Use	0.000	3.714	2.375	0.081	1.258
Unused Area	3.714	0.000	0.000	0.000	0.000
Total Lease Area	3.714				

ENVIRONMENT MANAGEMENT

Green Belt Development

Plantation				
Location	Area (Ha.) or Length (m)	No. of tree	Calculation	Timeline
Safety Zone	1.260	2016	1600 tree per hectare	1st Year
Approach Road	20	40	2m X 2m spacing	1st year
TOTAL		2056		

As per MoEF&CC OM No. F.No. IA3-22/3/2024-IA.III dated 24.07.2024, 10% of the proposed green belt shall be developed under the "Ek Ped Maa Ke Naam" plantation campaign.

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Environment Management Budget

Budgetary Provision (in Lakhs) of Project Cost		
Particulars	Capital	Recurring
Land	0.00	229189.89
Infrastructure	700000.00	0.00
Mining Equipment	0.00	12500000.00
<i>Equipment</i>	<i>Quantity</i>	<i>Rent per year</i>
Dumper	5	2000000
Compressor	1	1000000
Water Sprinkler	1	600000
Portable Pump	1	100000
Excavator	1	800000
Water Facility for Domestic Purpose "0.4" KLD (Annual Water Demand "120"KL @4L per Tanker, total number of tankers required ("30") and per tanker cost @Rs. 500)	0.00	15000.00
Statutory Clearances	500000.00	0.00

Mine Closure Cost for Plantation of "0" number of trees @Rs.300 per tree for plant & @Rs. 50 per tree for maintenance	0.00	0.00
Mine Closure Cost for fencing around mine	100000.00	0.00
Environment Management Plan (EMP) Cost	1087800.00	1209400.00
Total	3287800.00	13953589.89

Environment Monitoring Plan (post operation)

Budgetary Provision (in Lakhs) of Environment Management Plan (EMP)		
Particulars	Capital	Recurring
Plantation of "2056" number of trees @Rs.300 per tree for plant & @Rs. 50 per tree for maintenance	616800.00	102800.00
Water Facility for Horticulture "12.336" KLD & Dust Suppression "14.84" KLD (Annual Water Demand "8152.8"KL @4L per Tanker, total number of tanker required ("2039") and per tanker cost @Rs. 500)	0.00	1019500.00
Garland Drain & Desiltation Pond	371000.00	37100.00
To prevent the impact of mining activities on these habitations, we will comply with the Office Memorandum No. Z-11013/57/2014-IA.II (M) dated 29/10/2014 issued by the Ministry of Environment, Forests and Climate Change (MoEF & CC)	1000000.00	0
Environment Monitoring & Compliance	0.00	50000.00
Total	1087800.00	1209400.00

Monitoring Parameters and Frequency of Monitoring

S. no	Monitoring Parameters	No. of Locations	Frequency of Monitoring
1	Ambient Air: Ambient Air Quality at appropriate location for PM10, PM2.5, SO2, NOx in the vicinity of the mine area. In the surrounding area covering project site only.	3 Stations	Six Monthly
2	Water: Surface water sample in the vicinity of the Project area.	2 Surface water 2 Ground water	Six Monthly
3	Noise: Day & Night level Noise Monitoring.	4 stations	Six Monthly
4	Soil: Soil Monitoring, Qualitative and quantitative testing/analysis to check the soil fertility, porosity, texture, water holding capacity, etc.	2 station	Six Monthly

Environment Management Practices to be followed:

Aspect	Mitigation Measures / Control Measures
Solid Waste	Currently, there is no solid waste, as all waste was excavated and

Management	managed during the plan period.
Air Quality Management	<ul style="list-style-type: none"> • Wet drilling and use of sharp drill bits to minimize dust generation. • Controlled blasting using optimum explosive charge during favorable weather conditions. • Regular maintenance of diesel equipment and vehicles to reduce emissions. • Water sprinkling on haul roads, loading/unloading points, and working areas. • All transport vehicles will have valid PUC certificates. • Greenbelt and roadside plantation to act as dust and noise barriers.
Water Quality Management	<ul style="list-style-type: none"> • Mining will be confined only above the Ground Water Table (GWT). • Rainwater accumulated in the pit will be collected and pumped out regularly during monsoon. • Settling sump will be provided to desilt pumped out of mine-pit and collected through garland drain before discharge into natural drainage. • Garland and foot drains will be constructed around the quarry to control surface runoff. • Sewage from rest shelters will be treated through septic tank-soak pit systems. • Foot drain would be provided around the external dump, if any.
Noise Quality Management	<ul style="list-style-type: none"> • Mining activities will be restricted to daytime and carried out with controlled blasting techniques. • Acoustic enclosures and mufflers will be provided for drilling and DG set operations. • Regular maintenance of mining machinery to minimize vibration and noise. • Greenbelt development around the lease boundary to attenuate noise propagation. • Use of delayed blasting technique to minimize the adverse impact of vibration.
Soil Quality Management	<ul style="list-style-type: none"> • Topsoil will be carefully removed and stored separately for future use in plantation and reclamation. • Garland drains and retaining walls will prevent soil erosion and siltation. • Spillage of oil or fuel will be avoided; impervious flooring and oil traps provided near storage areas • Post-mining, the area will be rehabilitated using stored topsoil and native vegetation
Flora & Fauna management	<ul style="list-style-type: none"> • No tree felling will be undertaken without obtaining permission from the competent authority. • Greenbelt and plantation will be developed using native species along approach roads and lease periphery (7.5m Safety Zone). • Dust suppression measures will minimize impact on surrounding vegetation
Socio Economy:	<ul style="list-style-type: none"> • Priority employment to local people in mining and ancillary activities. • Community development initiatives such as tree plantation drives, road maintenance, and local infrastructure support. • Awareness programs on safety, hygiene, and environmental

		protection
Monitoring & Reporting:		<ul style="list-style-type: none"> ● Periodic monitoring of air, water (ground & surface), noise, and soil quality as per CPCB and SPCB guidelines. ● All monitoring reports will be submitted to statutory authorities as per the compliance schedule. ● Corrective measures will be taken immediately if any deviation from standards is observed.
Risk & Hazard		<p>Activities which are likely to create risk are: Temporary Storage of Explosives, Charging of Explosives, Blasting, Drilling, Bench Formation, Loading / Unloading, Transportation</p> <p>Proposed Preventive measures:</p> <ul style="list-style-type: none"> ▪ Overall slope angles of benches will be maintained at 45°. ▪ Unmanageable heights are not created. ▪ Loose sides are properly dressed. ▪ No loose stone or debris will be permitted to remain on the top of the bench or side of any excavation (Regulation 106(4) of MMR 1961). ▪ No undercutting of any face or sides will be permitted so as to cause any overhanging (Regulation 106(5) of MMR 1961) ▪ It will be ensured that the drilling equipment is suitable for the job. ▪ The person in charge of the drilling machine is competent to carry out the drilling operation; part of the training includes instructions to always face towards the open edge of the bench so that any inadvertent backward step is away from the edge. ▪ Provision of portable rail fencing between the drilling operations and the edge of the bench ▪ Provision to attach a safety line to the drilling rig and provide a harness for the driller to wear. ▪ Restricted access to the area to all persons except those necessary for the drilling operation. ▪ Wet drilling will be carried out by constantly injecting a jet of water at the drill bit inside the hole, which prevents dust generation. ▪ In case due to any reason, wet drilling is not possible (due to non-availability of water), exhaust/ vacuum system will be provided which removes the dust from the drill hole continuously and discharges the same in a dust collector specially provided for the purpose. ▪ Drilling machine shall be fitted with dust suppression, collection and disposal arrangement.
Blasting & Handling of Explosives		<ul style="list-style-type: none"> ▪ Blast hole geometry shall be properly designed. ▪ Blast site shall be wetted before and after blasting operations are completed. ▪ Only optimum quantity of permissible explosives shall be used so that the vibrations do not damage the structures/houses if the quarrying operations are close to human habitation. ▪ Blasting shall be conducted only during favourable weather conditions and only during the day time and permissible hours. ▪ While carrying out blasting operations near habitations, wide publicity will be given in the local area through announcement and

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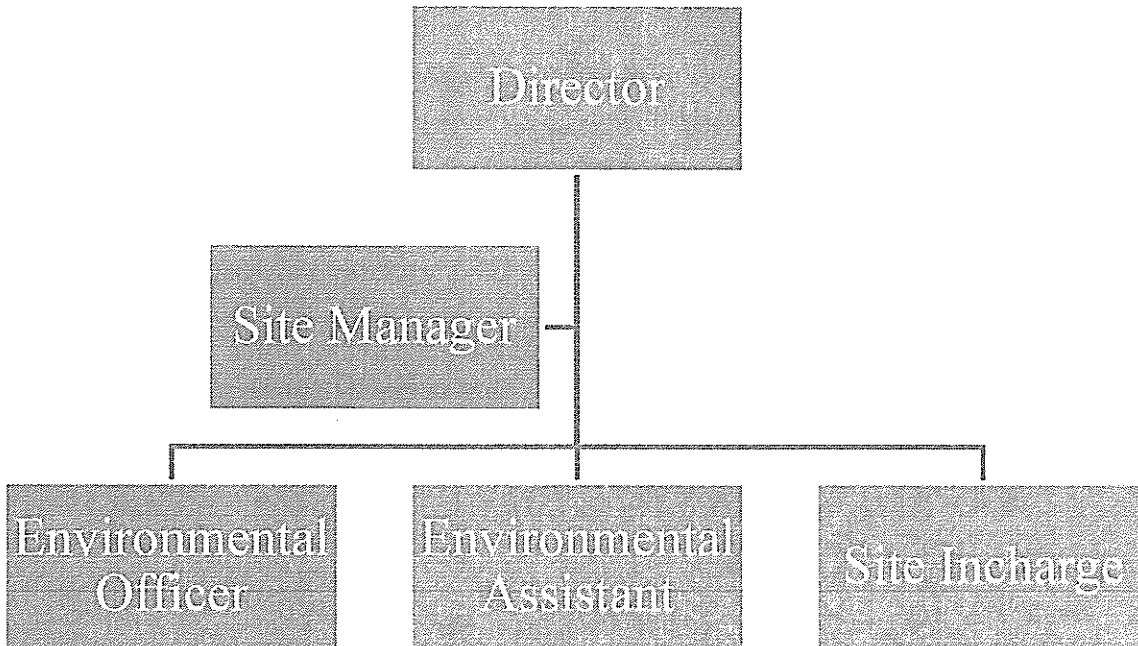
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	<p>other available media so that local people become aware of the blasting activities being undertaken in the area and take appropriate precautions.</p> <ul style="list-style-type: none"> ▪ The vibrations should be monitored periodically in consultation with the local Mining authorities. ▪ Use of explosives is specialist work. Planning for a round of shots is necessary to ensure that the face is properly surveyed, holes correctly drilled, direction logged, the weight of explosive suitable for good fragmentation and the continuity of the initiator are but a few of the steps necessary to ensure its safe use. ▪ Proper and safe storage of explosives in approved and Licensed Magazine. ▪ Proper security system to prevent theft/ pilferage, unauthorized entry into Magazine area and checking authorized persons to prevent carrying of match box, lights, mobile phones, cigarette or Bidi etc. will be put in place. ▪ Explosives shall be conveyed in special containers. ▪ Explosives and detonators shall not be carried in the same container. ▪ The holes which have been charged with explosives will not be left unattended till blasting is completed.
Health Hazards	<p>Health hazards should be interpreted as being harmful dust and noise which is emitted during surface mining operations. All suitable steps and precautions will be undertaken to ensure minimum health hazard. Provision of use of Personal Protective Equipment (PPE) will be kept. The PPE shall be of good make and quality, wherever possible ISI certified, suitable for the hazard e.g. a dust respirator fitted with the correct filter to capture the particulate hazardous dust and maintained to recommended standards. As personal protective equipment only affords limited protection it will only be used as a last resort and as an interim arrangement until other steps are taken to reduce the risk of personal injury to an acceptable level</p>
Accident Prevention	<ul style="list-style-type: none"> ▪ Mine road shall be made smooth regularly with a road roller. ▪ Mine road will be made sufficiently wide to keep two-way traffic. Regular water sprinkling will be done on mine road and haul road to avoid suspension of dust. ▪ All transportation within the mine lease area should be carried out directly under the supervision and control of management. ▪ The vehicles will be maintained in good working condition and checked thoroughly at least once a month by the competent person authorized for the purpose by the management. ▪ Navigation signs will be provided at each and every turning point up to the main road (wherever required). ▪ To avoid danger while reversing the vehicles especially at working place/loading points, stopper should be posted to properly guide reversing/spotting operating

Organizational Structure of Environment Management Cell:

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EMP Cell structure

The EMP Cell is committed to ensuring environmental sustainability and compliance with regulatory requirements for the Stone Mining Project. With a clear structure, roles, and responsibilities, the EMP Cell is equipped to manage environmental impacts and promote sustainable practices.

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District Survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- i. If any tree felling than necessary permission shall be taken from the competent authority.

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- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.
- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.
- l. Personal protective equipments such as clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Stone Mine of M/s Shubham Engineering Stone Company (Partner : Shri Duryodhan Mahto), Village : Dumriatand, Kulgo, Tehsil : Dumri, Distt. : Giridih, Jharkhand (3.71 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I along with following specific conditions :

- I. The production shall be restricted as per approved mining scheme or the approved mine plan at the time of EC, which ever is less.
- II. The mine will come in operation only after obtaining permission from DGMS for controlled and delayed blasting.
- III. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "EkPed Ma KeNaam" and the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>).10% of the total green belt proposed shall be allocated under this clause.
- IV. During appraisal of the project, it is seen that the project authority have not fully complied the condition of green belt development as per the previous EC. Hence, the project authorities are required to plant twice the number of trees as was required in the previous EC.The Deputy Commissioner through District Mining Officer will ensure that the mines owner of the respective leases to complete the plantation and maintenance in a time bound manner.
- V. Suitable plant species of not less than 2 M height to be planted equal to twice the area of saplings proposed in Safety zone. This is to be planted in land available near mines and outside safety zone. This will be in addition to plantation in safety zone.Newly planted saplings to be maintained for minimum 3 years with Geo-Tagged photographs.
- VI. Dedicated water tanker to be provided for mine. The tanker to be used for spraying water on haul road and for irrigating newly planted saplings only.Sprinkling to be done such that the haul road is kept moistened all the time with Geo-Tagged photographs.
- VII. Pre employment Occupational health check up for employees to be done and thereafter at annual interval for PLFT, Audiometry and other required tests . Summary findings of same to submitted along with 6 monthly compliance.
- VIII. Ensure use of Quality PPEs equivalent not less than 3M make. Records of same to be

maintained and submitted with 6 monthly compliance report with Geo-Tagged photographs.

- IX. Keep vulnerable areas unmanned. Ensure rotation of duties. Records to be maintained and submitted with 6 monthly compliance report.
- X. Failing of any of terms & conditions mentioned in EC can lead to revocation / cancellation of EC.

10. Fathepur & Dhatapara Stone Deposit of M/s Shree Guru Stone Works (Prop. : Shri Amarjit Singh), Village : Fathepur & Dhatapara, Tehsil : Barharwa, Distt. : Sahibganj, Jharkhand (4.28 Ha).

(Proposal no.: SIA/JH/MIN/ 565220 /2026)

Name of the consultant : Crystal Cosultants, Ranchi, Jharkhand.

Application for Environmental Clearance after Terms of Reference (ToR) (re-appraisal of Environment Clearance issued by DEIAA, Sahibganj).

The project has been granted EC by DEIAA, Sahibganj vide letter no. EC/DEIAA/2017-18/99, dated 06.03.2018 for a capacity of 197874 TPA.

As per O.M. dated 28th April 2023 issued by MOEF & CC projects which have been granted EC by DEIAA are to be reappraised by SEIAA / SEAC.

This is re-appraisal of the EC issued by DEIAA, Sahibganj which has been taken up for consideration on 20.01.2026. As per O.M. dated 12.12.18 issued by MOEF & CC projects fall in category B1.

The State Expert Appraisal Committee, Jharkhand deliberated the project during its 122nd meeting held on 24.03.2025 - 28.03.2025 and SEIAA, Jharkhand has approved the ToRs in 122nd meeting held on 08th & 09th April, 2025. TOR for the project was issued by SEIAA, Jharkhand vide letter no. EC/SEIAA/2024-25/3636/2024/32, dated 15.04.2025. The final EIA / EMP submitted by PP to SEAC on 13.01.2026.

Dust suppression is being carried out on regular basis.

As per compliance report of JSPCB regarding previous EC, plantation has been done in safety zone.

Production detail as per memo no. 1321/M, dated 30.12.2023 and memo no. 465/M, dated 18.03.2025 by DMO, Sahibganj is within the permissible limit of EC.



The compliance report of previous EC has been issued by JSPCB, Regional Office, Dumka vide Ref. No. 1972, dated 24.10.2024.

The SEAC has found that the certification of the compliance of the conditions of previous EC is not appropriate regarding status of execution of compliance as no details have been provided. Hence, the Committee decided to obtain a self certified compliance report along with the supporting details as evidence of execution.

The self certified compliance report has been submitted and also presented before the Committee.

EC Application for: Proposed Capacity - 67,110.70 CUM per Year or 181198.90 Tonnes/Annum

Project and Location Details:

Sl	Parameter	Details	
1	Project Name	: FATHEPUR & DHATAPARA STONE MINE	
2	Lessee:	: M/s Shree Guru Stone Works Proprietor : Sri Amarjit Singh	
3	Lessee Address	: Malgodam Road, P.O. + P.S. : Pakur, Pakur, Jharkhand	
4	Lease Area	: 4.28 Ha.	10.57 Acres
5	Type of Land	: Raiyat	
6	Project Cost	: Capital : Rs. 16,50,000.00	Recurring : Rs. 1,27,14,532.84
7	EMP Budget	: Capital : Rs. 9,50,000.00	Recurring : Rs. 12,58,300.00
8	Budgetary provision for Public Hearing	: Rs. 11,55,000.00	
9	Budgetary provision for Socio-Economic Development	: Rs. 5,00,000.00	
10	New or Expansion	: Existing (Re-appraisal)	
11	Mineable Reserves	: 19,44,608.00 Tonnes	7,20,225.18 Cum
12	Mine Life	: Up to the lease period i.e. 25.01.2019 to 24.01.2029.	
13	Man power	: 41	
14	Water Requirement	: 30.40 KLD	
15	Water Source	: Authorized Hired Water Tanker	
16	DG Set / power	: NA	
17	Crusher	: NA	
18	Nearest Water	: Ganga River (13.69 KM)	

	Body		
19	Nearest Habitation	:	Few houses at 910 m away from project site.
20	Nearest Rail Station	:	Kotalpur Railway Station (3.45 Km)
21	Nearest Air Port	:	Deoghar Airport (115 Km)
22	Nearest Forest	:	Chhota Beergaon (6.50 Km)
23	Road & Highways	:	NH 133 (6.00 Km)
24	Approach Road	:	50m

CO-ORDINATES

Pillar No.	Latitude	Longitude
1	24°45'28.81" N	87°47'44.74" E
2	24°45'29.56" N	87°47'51.35" E
3	24°45'30.84" N	87°47'52.25" E
4	24°45'36.54" N	87°47'47.46" E
5	24°45'34.28" N	87°47'44.51" E
6	24°45'32.45" N	87°47'38.92" E
7	24°45'25.32" N	87°47'38.12" E
8	24°45'25.40" N	87°47'36.02" E

LAND DETAILS

Khata no.	Plot no.
14	541 (P)
01	621 & 622
62	623 (P)
13	624 (P)
78	625 (P)
80	626 (P)
17	631

STATUTORY CLEARANCES

1	LOI / Lease docs	:	Lease deed 25.01.2019 to 24.01.2029.
2	CO	:	The CO, Barharwa (Sahibganj) vide memo no. 49/Ra., dated 27.01.2024 has mentioned the plot no. of the project is not recorded as "Jungle- Jhari" in R.S. Khatiyon & Register II.

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3	DMO Cluster	:	DMO, Sahibganj vide memo no. 535/M, dated 21.03.2025 certified that 02 other mining lease area (7.07 Acre & 8.12 Acre) exists within 500 meters radius from proposed project site and total area is 25.76 Acre.
4	DFO Wild Life	:	DFO –cum-Incharge Wildlife Sanctuary, Udhwa (Sahibganj) vide letter no. 1208, dated 19.06.2024 certified that the proposed project site is outside Eco Sensitive Zone of Udhwa Bird Sanctuary.
5	DFO Territorial	:	Divisional Forest Officer, Sahibganj Forest Division vide memo no. 1397, dated 07.10.2016 certified that the distance of forest land is more than 250 meter from proposed project site.
6	DSR	:	This project is mentioned in approved DSR of Sahibganj District (Sl. No. 103, Page no. 140).
7	Gram Sabha	:	Gram Sabha conducted on 08.03.2017.
8	Scheme / Mine Plan Approval	:	<ul style="list-style-type: none"> i. Mining plan approved by DDM, Santhal Pargana Circle, Dumka vide memo no. 344/DDM, dated 31.07.2017. ii. Mining scheme approved by Additional Director, Geology, Hazaribag vide memo no. 58/G, dated 18.02.2022.
9	Previous Environmental Clearance (EC)	:	Previous EC granted by DEIAA, Sahibganj vide letter no. EC/DEIAA/2017-18/99, dated 06.03.2018.
10	Compliance report of EC	:	The compliance report of previous EC has been issued by JSPCB, Regional Office, Dumka vide Ref. No. 1972, dated 24.10.2024.
11	Consent to Establish (CTE)	:	CTE issued by JSPCB vide Ref. no. JSPCB/HO/RNC/CTE-4887488 /2019/389, dated 27.06.2019.
12	Consent to Operate (CTO)	:	CTO issued by JSPCB vide ref. no. : JSPCB/RO/DMK/CTO-18909567 /2024/119, dated 24.04.2024.
13	Production Report	:	Production report issued by DMO, Sahibganj vide memo no. 1321/M, dated 30.12.2023 and memo no. 465/M, dated 18.03.2025.
14	Grid certificate	:	DMO, Sahibganj vide memo no. 464/M, dated 18.03.2025 certified that the proposed project site is outside of Redzone Grid 1, 3, 4 & 7.
15	Baseline Monitoring Period	:	15 th March, 2025 to 15 th June, 2025.

16	Public Hearing	:	JSPCB, Ranchi vide Ref. No. PC/PH/DMK/71/2025/3289, dated 12.12.2025 informed that Public Hearing conducted on 25.10.2025.
17	Qualified Person	:	Shri Tapan Kumar Chakravarty through e-mail dated 24.03.2025 affirmed that the mining scheme has been prepared by him.

Working Details

1	Mining Method	:	Opencast other than fully mechanized (OTFM) Method
2	Quarry Area	:	3.12 Ha. Life of Mine – Up to the lease period i.e. 25.01.2019 to 24.01.2029.
3	Waste Generation	:	5433.25 Cum
4	Stripping Ratio	:	1: 0.02
5	Working Days	:	300
6	Bench: size & No	:	3m to 3m
7	Elevation of Mine	:	47m AMSL to 54m AMSL
8	Ground Level Elevation	:	46m AMSL
9	Ultimate Working Depth	:	36.45m AMSL
10	Water Table	:	32m AMSL
11	Topography of Mine	:	Area represents gently sloping land.
12	Explosive Requirement	:	83.6 Kg Per Day
13	Diesel/Fuel requirement	:	501.6 Litre Per Day

Production Details

Year	Production of Stone in Tonnes	Production of Stone in CUM	Overburden in Cum	Intercalated Waste in Cum	Total Waste in Cum
6 th	181122.40	67082.37	5433.25	0	5433.25
7 th	181045.90	67054.04	0	0	0
8 th	181198.80	67110.67	0	0	0
9 th	181122.40	67082.37	0	0	0
10 th	181198.90	67110.70	0	0	0
Total	905688.50	335440.2	5433.25	0	5433.25

Land Use

Pattern of Utilization	Existing Land Use (Ha)	At the end of Plan period (Ha)	Conceptual Plan (Ha.)
Quarry	1.65	2.50	3.12 (Waterbody)
Road	0.30	0.20	0.01 (Waterbody)
Greenbelt	0.00	1.15	1.15 (Plantation)
Dump	0.00	0.22	0.00
Retaining Wall	0.00	0.01	0.00
Garland Drain & Sump	0.00	0.03	0.00
Total	1.95	4.11	4.28
Unused Area	2.33	0.17	0.00
Total Applied Area	4.28	4.28	4.28

ENVIRONMENT MANAGEMENT

Green Belt Development

	Area (Ha.) or Length (m)	Number of Tree	Timeline
Area of Safety Zone	1.15 Ha.	1840	1st Year
Approach Road	50 m	100	
<i>Existing Tree at the time of TOR</i>		200	
Total proposed Plantation		1740	NATIVE SPECIES

- As per MoEF&CC OM No. F.No. IA3-22/3/2024-IA.III dated 24.07.2024, 10% of the proposed green belt shall be developed under the "Ek Ped Maa Ke Naam" plantation campaign.
- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Budgetary Provision

BUDGETARY PROVISION

Particulars	Capital (INR)	Recurring (INR / Year)
Land	0	27,94,732.84
Infrastructure	7,00,000.00	0
Mining Equipment	0	86,00,000.00
Water for Domestic @Rs. 500 per Tanker 1.64 KLD X 300 Days = 492 KL 492 / 4 KL = 123 Tankers	0	61,500.00
Environment Management Plan (EMP)	9,50,000.00	12,58,300.00
Total Project Cost	16,50,000.00	1,27,14,532.84
Budgetary provision for Public Hearing	11,55,000.00	
Budgetary provision for Socio-Economic Development	5,00,000.00	
Budgetary provision for Environment Management Plan (EMP)	9,50,000.00	12,58,300.00
1740 Tree Plantation @Rs.300 per Tree for planting & @Rs.50 per tree for maintenance	5,22,000.00	87,000.00
Water Tanker @Rs. 500 per Tanker for Dust Suppression (17.12 KLD) & Horticulture (11.64 KLD) 17.12 + 11.64 = 28.76 KLD 28.76 KLD X 300 Days = 8628 KL 8628 / 4 KL = 2157 Tankers	0.00	1078500.00
Garland Drain & Parapet wall	4,28,000.00	42,800.00
Environment Monitoring & Compliance	0.00	50,000.00

Public Consultation

Some issues were raised by the participants during the public hearing. The Project Proponent assured that all the issues raised would be duly addressed.

Major Issues raised are given below;

- Drinking water scarcity, including non-functional hand pumps and the requirement for new borewells/tubewells.
- Employment and livelihood support for local villagers through continued mining activities.

- Green belt development and plantation, including enhancement of greenery around the mine area and along village roads.
- Health facilities, particularly the need for periodic health check-up camps and availability of basic medicines.
- Water management issues such as rainwater harvesting, irrigation support, surface drainage, and pond deepening/desilting.

Action Plan on issues raised during Public Hearing

Activity	Fund Allocated (INR)	FY 2025-2026	FY 2026-2027	FY 2027-2028	FY 2028-01/2029
Plantation along both side of village roads (Area – 0.5 Ha, 800 trees)	400000.00	280000.00	40000.00	40000.00	40000.00
Cost of pumping for quarry water for irrigation purpose	65000.00	50000.00	5000.00	5000.00	5000.00
Cultural programme	100000.00	25000.00	25000.00	25000.00	25000.00
1 new deep tubewell	150000.00	120000.00	10000.00	10000.00	10000.00
Repair of existing 3 tubewells	30000.00	10000.00	10000.00	10000.00	
Fencing of the quarry	100000.00	100000.00			
Installation of 10 pole mounted solar lights	250000.00	100000.00	100000.00	50000.00	
Health check-up Plan	60000.00	15000.00	15000.00	15000.00	15000.00
Total	1155000.00	700000.00	205000.00	155000.00	95000.00

SE Need based Survey detail (included in CSR)

Key Socio-Economic Observations	Workforce Characteristics	Priority Needs (Focused)	Proposed Budget (INR)	Implementation Timeline
Drinking water scarcity due to non-functional hand pumps; need for new borewells/tubewells	Local villagers dependent on mining and allied activities	Installation/repair of hand pumps and new borewells/tubewells	1,80,000	1-2 Year
Lack of educational enrichment opportunities in local schools	School-going children in project area	Donation to schools for educational materials and infrastructure	1,00,000	Short-term & ongoing (Year 1-2)
Limited employment and livelihood support	Local workforce engaged in mining	Continued mining activities and livelihood support initiatives Skill Development Programme Health Check-up Camp	1,55,000	Medium-term (Year 2-3)
Water management	Villagers	Rainwater	65,000	Short-term &

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challenges	dependent on agriculture and domestic water	harvesting, irrigation support, surface drainage, pond deepening/desilting		ongoing (Year 1-2)
Total			5,00,000	

Summary of Baseline Data

Monitoring Season : 03/03/2025 TO 02/06/2025 (pre-monsoon)

Type	Parameter
AAQ Parameter at 8 locations	PM10 = 79 µg/m ³ to 58 µg/m ³ PM2.5 = 45 µg/m ³ to 34 µg/m ³ SO2 = 16 µg/m ³ to <5.0 µg/m ³ NOx = 18 µg/m ³ to <10 µg/m ³
Noise quality at 8 locations	Daytime 62 to 45 dB(A) Nighttime 50 to 38 dB(A)
Surface water at 2 locations	pH – 7.4 to 7.8 TDS – 438 to 410 mg/l BOD – 1.7 to 1.4 mg/l DO – 5.6 to 5.2 mg/l Fluoride – 0.2 to 0.25 mg/l
Ground water at 2 locations	Turbidity – < NTU pH – 7.8 to 7.5 Total Hardness – 172 to 158 mg/l TDS – 350 to 320 mg/l Fluoride – 0.30 to 0.22 mg/l
Soil at 3 locations	pH – 6.95 to 7.0 Potash – 180 to 192 Kg/Ha. Nitrogen – 95 to 108 Kg/Ha.

Environment Monitoring Plan (post operation)

Monitoring Parameters and Frequency of Monitoring

S. no	Monitoring Parameters	No. of Locations	Frequency of Monitoring
1	Ambient Air: Ambient Air Quality at appropriate location for PM10, PM2.5, SO2, NOx in the vicinity of the mine area. In the surrounding area covering project	2 Stations	Six Monthly

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	site only.		
2	Water: Surface water sample in the vicinity of the Project area.	2 Surface water 2 Ground water	Six Monthly
3	Noise: Day & Night level Noise Monitoring.	4 stations	Six Monthly
4	Soil: Soil Monitoring, Qualitative and quantitative testing/analysis to check the soil fertility, porosity, texture, water holding capacity, etc.	2 station	Six Monthly

Management Practices to be followed:

Aspect	Mitigation Measures / Control Measures
Solid Waste Management	Total Solid Waste : 5433.25 Cum During first, second and third year gritty soil & intercalated waste will be removed, this soil and waste will be temporarily backfill within the exhausted quarry and in fourth year removed gritty soil, intercalated waste and existing temporary backfill soil will be backfilled within the lower bench of the exhausted quarry.
Air Quality Management	<ul style="list-style-type: none"> • Wet drilling and use of sharp drill bits to minimize dust generation. • Controlled blasting using optimum explosive charge during favorable weather conditions. • Regular maintenance of diesel equipment and vehicles to reduce emissions. • Water sprinkling on haul roads, loading/unloading points, and working areas. • All transport vehicles will have valid PUC certificates. • Greenbelt and roadside plantation to act as dust and noise barriers.
Water Quality Management	<ul style="list-style-type: none"> • Mining will be confined only above the Ground Water Table (GWT). • Rainwater accumulated in the pit will be collected and pumped out regularly during monsoon. • Settling sump will be provided to desilt pumped out of mine-pit and collected through garland drain before discharge into natural drainage. • Garland and foot drains will be constructed around the quarry to control surface runoff. • Sewage from rest shelters will be treated through septic tank-soak pit systems. • Foot drain would be provided around the external dump, if any.
Noise Quality Management	<ul style="list-style-type: none"> • Mining activities will be restricted to daytime and carried out with controlled blasting techniques.

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	<ul style="list-style-type: none"> • Acoustic enclosures and mufflers will be provided for drilling and DG set operations. • Regular maintenance of mining machinery to minimize vibration and noise. • Greenbelt development around the lease boundary to attenuate noise propagation. • Use of delayed blasting technique to minimize the adverse impact of vibration.
Soil Quality Management	<ul style="list-style-type: none"> • Topsoil will be carefully removed and stored separately for future use in plantation and reclamation. • Garland drains and retaining walls will prevent soil erosion and siltation. • Spillage of oil or fuel will be avoided; impervious flooring and oil traps provided near storage areas • Post-mining, the area will be rehabilitated using stored topsoil and native vegetation
Flora & Fauna management	<ul style="list-style-type: none"> • No tree felling will be undertaken without obtaining permission from the competent authority. • Greenbelt and plantation will be developed using native species along approach roads and lease periphery (7.5m Safety Zone). • Dust suppression measures will minimize impact on surrounding vegetation
Socio Economy:	<ul style="list-style-type: none"> • Priority employment to local people in mining and ancillary activities. • Community development initiatives such as tree plantation drives, road maintenance, and local infrastructure support. • Awareness programs on safety, hygiene, and environmental protection
Monitoring & Reporting:	<ul style="list-style-type: none"> • Periodic monitoring of air, water (ground & surface), noise, and soil quality as per CPCB and SPCB guidelines. • All monitoring reports will be submitted to statutory authorities as per the compliance schedule. • Corrective measures will be taken immediately if any deviation from standards is observed.
Risk & Hazard	<p>Activities which are likely to create risk are: Temporary Storage of Explosives, Charging of Explosives, Blasting, Drilling, Bench Formation, Loading / Unloading, Transportation</p> <p>Proposed Preventive measures:</p> <ul style="list-style-type: none"> ▪ Overall slope angles of benches will be maintained at 45°. ▪ Unmanageable heights are not created. ▪ Loose sides are properly dressed. ▪ No loose stone or debris will be permitted to remain on the top of the bench or side of any excavation (Regulation 106(4) of MMR 1961).

	<ul style="list-style-type: none"> ▪ No undercutting of any face or sides will be permitted so as to cause any overhanging (Regulation 106(5) of MMR 1961) ▪ It will be ensured that the drilling equipment is suitable for the job. ▪ The person in charge of the drilling machine is competent to carry out the drilling operation; part of the training includes instructions to always face towards the open edge of the bench so that any inadvertent backward step is away from the edge. ▪ Provision of portable rail fencing between the drilling operations and the edge of the bench ▪ Provision to attach a safety line to the drilling rig and provide a harness for the driller to wear. ▪ Restricted access to the area to all persons except those necessary for the drilling operation. ▪ Wet drilling will be carried out by constantly injecting a jet of water at the drill bit inside the hole, which prevents dust generation. ▪ In case due to any reason, wet drilling is not possible (due to non-availability of water), exhaust/ vacuum system will be provided which removes the dust from the drill hole continuously and discharges the same in a dust collector specially provided for the purpose. ▪ Drilling machine shall be fitted with dust suppression, collection and disposal arrangement.
<p>Blasting & Handling of Explosives</p>	<ul style="list-style-type: none"> ▪ Blast hole geometry shall be properly designed. ▪ Blast site shall be wetted before and after blasting operations are completed. ▪ Only optimum quantity of permissible explosives shall be used so that the vibrations do not damage the structures/houses if the quarrying operations are close to human habitation. ▪ Blasting shall be conducted only during favourable weather conditions and only during the day time and permissible hours. ▪ While carrying out blasting operations near habitations, wide publicity will be given in the local area through announcement and other available media so that local people become aware of the blasting activities being undertaken in the area and take appropriate precautions. ▪ The vibrations should be monitored periodically in consultation with the local Mining authorities. ▪ Use of explosives is specialist work. Planning for a round of shots is necessary to ensure that the face is properly surveyed, holes correctly drilled, direction logged, the weight of explosive suitable for good fragmentation and the continuity of the initiator are but a few of the steps necessary to ensure its safe use. ▪ Proper and safe storage of explosives in approved and Licensed Magazine. ▪ Proper security system to prevent theft/ pilferage, unauthorized entry into Magazine area and checking authorized persons to prevent carrying of match box, lights, mobile phones, cigarette or Bidi etc. will be put in place. ▪ Explosives shall be conveyed in special containers. ▪ Explosives and detonators shall not be carried in the same container.

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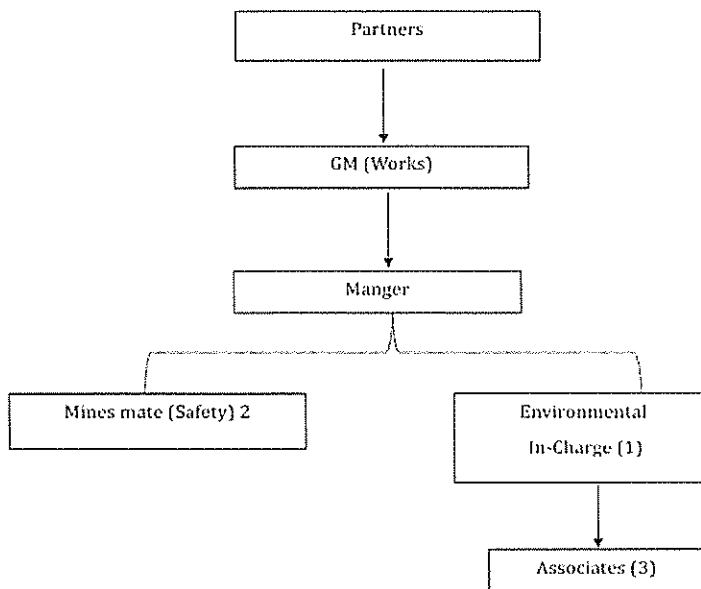
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	<ul style="list-style-type: none"> ▪ The holes which have been charged with explosives will not be left unattended till blasting is completed.
Health Hazards	<p>Health hazards should be interpreted as being harmful dust and noise which is emitted during surface mining operations. All suitable steps and precautions will be undertaken to ensure minimum health hazard. Provision of use of Personal Protective Equipment (PPE) will be kept. The PPE shall be of good make and quality, wherever possible ISI certified, suitable for the hazard e.g. a dust respirator fitted with the correct filter to capture the particulate hazardous dust and maintained to recommended standards. As personal protective equipment only affords limited protection it will only be used as a last resort and as an interim arrangement until other steps are taken to reduce the risk of personal injury to an acceptable level</p>
Accident Prevention	<ul style="list-style-type: none"> ▪ Mine road shall be made smooth regularly with a road roller. ▪ Mine road will be made sufficiently wide to keep two-way traffic. Regular water sprinkling will be done on mine road and haul road to avoid suspension of dust. ▪ All transportation within the mine lease area should be carried out directly under the supervision and control of management. ▪ The vehicles will be maintained in good working condition and checked thoroughly at least once a month by the competent person authorized for the purpose by the management. ▪ Navigation signs will be provided at each and every turning point up to the main road (wherever required). ▪ To avoid danger while reversing the vehicles especially at working place/loading points, stopper should be posted to properly guide reversing/spotting operating.

Organizational Structure of Environment Management Cell:

ORGANIZATION CHART OF ENVIRONMENTAL MONITORING CELL



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EMP Cell structure

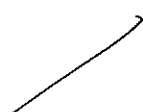
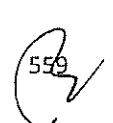
The EMP Cell is committed to ensuring environmental sustainability and compliance with regulatory requirements for the Stone Mining Project. With a clear structure, roles, and responsibilities, the EMP Cell is equipped to manage environmental impacts and promote sustainable practices.

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District Survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- i. If any tree felling than necessary permission shall be taken from the competent authority.
- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.
- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.
- l. Personal protective equipments such as clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Fathepur & Dhatapara Stone Deposit of M/s Shree Guru Stone Works (Prop. : Shri Amarjit Singh), Village : Fathepur & Dhatapara, Tehsil : Barharwa, Distt. : Sahibganj, Jharkhand (4.28 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I along with following specific conditions :

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- I. The production shall be restricted as per approved mining scheme or the approved mine plan at the time of EC, which ever is less.
- II. That the Deputy Commissioner, Sahibganj will ensure compliance of the order passed by Hon'ble NGT in OA No. 23/2017/EZ, O.A. no. 776/2018 and O.A. no. 373/2019 in the matter of Syed Arshad Nasar Vs Union of India with Ramchandra Chaurasia Vs State of Jharkhand with Pradeep Kumar Singh Vs State of Jharkhand before grant of mining lease.
- III. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "EkPed Ma KeNaam" and the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>).10% of the total green belt proposed shall be allocated under this clause.
- IV. During appraisal of the project, it is seen that the project authority have not fully complied the condition of green belt development as per the previous EC. Hence, the project authorities are required to plant twice the number of trees as was required in the previous EC.The Deputy Commissioner through District Mining Officer will ensure that the mines owner of the respective leases to complete the plantation and maintenance in a time bound manner.
- V. Suitable plant species of not less than 2 M height to be planted equal to twice the area of saplings proposed in Safety zone. This is to be planted in land available near mines and outside safety zone. This will be in addition to plantation in safety zone.Newly planted saplings to be maintained for minimum 3 years with Geo-Tagged photographs.
- VI. Dedicated water tanker to be provided for mine. The tanker to be used for spraying water on haul road and for irrigating newly planted saplings only.Sprinkling to be done such that the haul road is kept moistened all the time with Geo-Tagged photographs.
- VII. Pre employment Occupational health check up for employees to be done and thereafter at annual interval for PLFT, Audiometry and other required tests . Summary findings of same to submitted along with 6 monthly compliance.
- VIII. Ensure use of Quality PPEs equivalent not less than 3M make. Records of same to be maintained and submitted with 6 monthly compliance report with Geo-Tagged photographs.
- IX. Keep vulnerable areas unmanned. Ensure rotation of duties. Records to be maintained and submitted with 6 monthly compliance report.
- X. Failing of any of terms & conditions mentioned in EC can lead to revocation / cancellation of EC.

11. Damdami Stone Mine of M/s Maa Stone Works (Prop. : Shri Sushil Kumar Singh), Village : Damdami, Tehsil : Hussainabad, Distt. : Palamu, Jharkhand (4.86 Ha).

(Proposal no.: SIA/JH/MIN/ 563980 /2026)

Name of the consultant : Crystal Consultants, Ranchi, Jharkhand.

Application for Environmental Clearance (EC) (re-appraisal of Environment Clearance issued by DEIAA, Palamu).

The project has been granted EC by DEIAA, Palamu vide letter no. EC/DEIAA//2016-17/43, dated 17.08.2017 for a capacity 231070 Tonnes per Year for Stone and 38899 Cum per Year for Morrum.

As per O.M. dated 28th April 2023 issued by MOEF & CC projects which have been granted EC by DEIAA are to be reappraised by SEIAA / SEAC.

This is re-appraisal of the EC issued by DEIAA, Palamu which has been taken up for consideration on 20.01.2026. As per O.M. dated 12.12.18 issued by MOEF & CC projects fall in category B1.

Dust suppression is being carried out on regular basis.

As per compliance report of JSPCB regarding previous EC, plantation has been done in safety zone.

Production detail as per memo no. 1329/M, dated 23.05.2025. by DMO, Palamu is within the permissible limit of EC.

The compliance report of previous EC has been issued by Member Secretary, JSPCB, Ranchi vide Letter No. PC/EC/RNC/24/2025/3314, dated 16.12.2025.

The SEAC has found that the certification of the compliance of the conditions of previous EC is not appropriate regarding status of execution of compliance as no details have been provided. Hence, the Committee decided to obtain a self certified compliance report along with the supporting details as evidence of execution.

The self certified compliance report has been submitted and also presented before the Committee.

EC Application for Proposed Capacity – Stone 85,554 CUM / Year or 230995.80 TPA

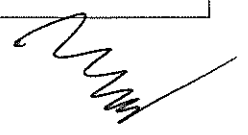
Project and Location Details:

Sl	Parameter	Details	
1	Project Name	: Damdami Stone & Morum Mine	
2	Lessee:	: M/S Maa Stone Works Proprietor: Sri Sushil Kumar Singh	
3	Lessee Address	: At- Aghaura, P.O.- Panasa, P.S. – Haidarnagar, Dist. – Palamu, Jharkhand	
4	Lease Area	: 4.86 Ha.	12.00 Acres
5	Type of Land	: Non-Forest Raiyati Land	

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6	Project Cost	:	Capital: Rs. 4645200.00
7	EMP Budget	:	Capital: Rs. 2960000.00 Recurring: Rs 1262100.00 per year
8	New or Expansion	:	Re-appraisal
9	Mineable Reserves	:	370978.00 CUM (1001918.48 Tonnes)
10	Mine Life	:	Up to the lease period i.e. 18.03.2020 to 17.03.2030.
11	Man power	:	25
12	Water Requirement	:	29.92 KLD
13	Water Source	:	By authorised hired water tankers
14	DG Set / power	:	-
15	Crusher	:	Yes (300 TPD)
16	Nearest Water Body	:	Harhi river at a distance of 1.3km from lease area on southern side
17	Nearest Habitation	:	In the KML (satellite) image, a few houses are observed approximately 430 m away from the project site on the south - west side. In compliance with Office Memorandum No. Z-11013/57/2014-IA.II(M) dated 29.10.2014 issued by the MoEF&CC, a detailed EMP has also been submitted to mitigate the impact of mining activities on these habitations.
18	Nearest Rail Station	:	Nearest railway stations is Japla railway station which is about 8 Km from the applied lease area
19	Nearest Air Port	:	Birsa Munda Airport Ranchi (247 Km)
20	Nearest Forest	:	Divisional Forest Officer, Medninar certified that the distance of reserved / protected forest is more than 250 meter from proposed project site.
21	Road & Highways	:	NH-139 Daltanganj – Aurangabad Road 17 Km from eastern side
22	Approach Road	:	53 m

CO-ORDINATES

S.No.	Longitude	Latitude
1	24°28'43.0190"E	84°03'01.8699"N
2	24°28'37.8440"E	84°03'04.5187"N
3	24°28'36.0480"E	84°03'05.6221"N
4	24°28'36.0027"E	84°03'05.6088"N
5	24°28'35.9776"E	84°03'05.5772"N
6	24°28'36.0068"E	84°03'05.4883"N
7	24°28'38.6208"E	84°03'02.6342"N
8	24°28'38.3862"E	84°03'00.8403"N
9	24°28'38.3601"E	84°02'59.9737"N
10	24°28'38.2555"E	84°02'59.4466"N
11	24°28'37.4576"E	84°02'59.4057"N
12	24°28'36.7489"E	84°02'59.2336"N

13	24°28'36.4649"E	84°02'59.3280"N
14	24°28'36.4649"E	84°03'00.7660"N
15	24°28'33.5697"E	84°03'00.8976"N
16	24°28'26.3230"E	84°03'00.5009"N
17	24°28'26.2910"E	84°02'58.8522"N
18	24°28'29.7305"E	84°02'59.1348"N
19	24°28'33.8204"E	84°02'59.3466"N
20	24°28'36.1005"E	84°02'59.5119"N
21	24°28'36.8351"E	84°02'57.2914"N
22	24°28'37.1210"E	84°02'55.4551"N
23	24°28'36.9287"E	84°02'55.3056"N
24	24°28'32.6830"E	84°02'54.8442"N
25	24°28'31.4327"E	84°02'54.8487"N
26	24°28'31.4443"E	84°02'53.1277"N
27	24°28'37.5387"E	84°02'53.0901"N
28	24°28'37.5552"E	84°02'55.2016"N
29	24°28'42.4290"E	84°03'00.8217"N
30	24°28'43.0190"E	84°03'01.8699"N

LAND DETAILS

Khata no.	Plot no.
53	177 (P)

STATUTORY CLEARANCES

1	LOI / Lease docs	:	Lease deed 18.03.2020 to 17.03.2030.
2	CO	:	The CO, Husainabad vide letter no. 622, dated 09.12.2014 has mentioned the plot no. of the project is not recorded as "Jungle-Jhari" in R.S. Khatiyani. During the appraisal it was seen from the KML that few houses at a distance of 430 meter from mining lease area. For which detailed Environmental Management Plan has been prepared and submitted.
3	DMO Cluster	:	DMO, Palamu vide memo no. 1330/M, dated 23.05.2025 certified that 05 other mining lease area (10.00 Acre, 8.90 Acre, 11.50 Acre, 6.50 Acre & 12.00 Acre) exists within 500 m radius from proposed project site and total area is 60.90 Acre.
4	DFO Wild Life	:	Deputy Director, Palamu Tiger Project, South Division, Medininagar vide letter no. 369, dated 31.05.2025 certified that the proposed project site is outside Eco Sensitive Zone of Palamu Tiger Reserve.

5	DFO Territorial	:	Divisional Forest Officer, Medinagar Forest Division vide memo no. 3036, dated 08.10.2015 certified that the distance of forest is more than 250 meters from proposed project site.
6	DSR	:	This project is mentioned in approved DSR of Palamu District (Sl. no. 37, Page no. 72).
7	Gram Sabha	:	Gram Sabha conducted on 16.08.2014.
8	Mine Plan / Scheme Approval	:	i. Mining Plan approved by Deputy Director, Mines, Daltonganj, Palamu vide Letter No. 08, dated 11.01.2017. ii. Mining scheme approved by Assistant Director, Geology, District Geological Officer, Palamu, Jharkhand vide Letter No. 90, dated 21.06.2025.
9	Previous Environmental Clearance (EC)	:	Previous EC granted by DEIAA, Palamu vide letter no. EC/DEIAA//2016-17/43, dated 17.08.2017.
10	Compliance report of EC	:	The compliance report of previous EC has been issued by Member Secretary, JSPCB, Ranchi vide Letter No. PC/EC/RNC/24/2025 /3314, dated 16.12.2025.
11	Consent to Establish (CTE)	:	i. CTE issued by JSPCB vide Ref. no. JSPCB/HO/RNC/CTE-8172166 /2020 /395, dated 10.10.2020. ii. CTE issued by JSPCB vide Ref. no. JSPCB/HO/RNC/CTE-14348240 /2022 /560, dated 14.12.2022.
12	Consent to Operate (CTO)	:	CTO issued by JSPCB vide ref. no. : JSPCB/HO/RNC/CTO-23508696 /2025/2267, dated 18.08.2025.
13	Production Report	:	Production report issued by DMO, Palamu vide memo no. 1329/M, dated 23.05.2025.
14	Qualified Person	:	Shri Vidya Bhushan Mishra was present in the meeting and affirmed that the mining scheme has been prepared by him.

Working Details

1	Mining Method	:	Semi-mechanized "OTFM" Method
2	Quarry Area	:	3.939 Ha.
3	Waste Generation	:	94795.98 CUM including 87225 cum Morrum which is sellable
4	Stripping Ratio	:	1:0.008
5	Working Days	:	300
6	Benches: size & No	:	6m to 6m and 2 in numbers

7	Elevation of Mine	:	201 m AMSL to 174 m AMSL
8	Ground Level Elevation	:	174 m AMSL
9	Ultimate Working Depth	:	165 m AML
10	Water Table	:	145 m AMSL
11	Topography of Mine	:	Hill Type Of Topography
12	Explosive Requirement	:	96 kg/day
13	Diesel/Fuel requirement	:	462 litre/day

Production Details

Year	Production of stone in Cum	Production of Stone in Tonnes	Sellable Waste Morrum in Cum	Intercalated waste in Cum	Total Waste in Cum
1 st Year	83372.52	225105.80	27225	1701.48	28926.48
2 nd Year	83113.8	224407.26	0	1696.20	1696.2
3 rd Year	85280.58	230257.57	16368	1740.42	18108.42
4 th Year	85554.00	230995.80	43632	1746.00	45378
5 th Year	33657.12	90874.22	0	686.88	686.88
Total	370978.00	1001640.65	87225	7570.98	94795.98

Land Use

Land Utilization	Existing Land use (Ha)	At the end of plan period (Ha)	At Conceptual period (Ha)
Excavation	1.767	3.939 (0.202ha area shall be backfilled, 3.137 ha area shall be converted in to water reservoir & 0.60 ha shall be left as dead benches)	3.939 (0.202ha area shall be backfilled, 3.137 ha area shall be converted in to water reservoir & 0.60 ha shall be left as dead benches)
Road	0.004	0	0.0 (comes under quarry)
Infrastructure (Crusher)	1.543	Nil (to be shifted in quarry bottom)	Nil (to be shifted in quarry bottom)

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Safety Zone	0.921	0.921	0.921
Plantation			
Total	4.235	4.860	4.860
Unused Area	0.625	0	0
Total Lease Area	4.860		

ENVIRONMENT MANAGEMENT

Green Belt Development

Plantation				
Location	Area (Ha.) or Length (m)	No. of tree	Calculation	Timeline
Safety Zone	0.921	1474	1600 tree per hectare	1st Year
Approach Road	53	106	2m X 2m spacing	1st year
Dead Bench	0.600	960	1600 tree per hectare	End of Mine
Backfilled area (level upto surface)	0.202	324	1600 tree per hectare	End of Mine
TOTAL		2864		
Existing Plantation		100		
No. of tree required		2764		

As per MoEF&CC OM No. F.No. IA3-22/3/2024-IA.III dated 24.07.2024, 10% of the proposed green belt shall be developed under the "Ek Ped Maa Ke Naam" plantation campaign.

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Cost Estimates

The mining plan for the project has estimated the requirement of equipments needed for mining operations. The capital cost has been estimated on basis of this provision. Estimated capital cost on plants & machineries are given below :

Budgetary Provision (in Lakhs) of Project Cost			Capital	Recurring
Particulars			Capital	Recurring
Land			0.00	300232.5
Infrastructure			700000.00	0.0
Mining Equipment			0.00	10000000.0
<i>Equipment</i>	<i>Quantity</i>	<i>Rent per year</i>		
Dumper	3	2000000		
Compressor	1	1000000		
Water Sprinkler	1	600000		
Rock Breaker	1	800000		
Excavator	2	800000		
Water Facility for Domestic Purpose "1" KLD (Annual Water Demand "300"KL @4L per Tanker, total number of tanker required ("75") and per tanker cost @Rs. 500)			0.00	37500.0
Statutory Clearances			500000.00	0.0
Mine Closure Cost for Plantation of "1284" number of tree @Rs.300 per tree for plant & @Rs. 50 per tree for maintenance			385200.00	0.0
Mine Closure Cost for fencing around mine			100000.00	0.0
Environment Management Plan (EMP) Cost			2960000.00	1262100.0
Total			4645200.00	11599832.0

Environment Management Budget

Budgetary Provision (in Lakhs) of Environment Management Plan (EMP)			Capital	Recurring
Particulars			Capital	Recurring
Plantation of "1580" number of trees @Rs.300 per tree for plant & @Rs. 50 per tree for maintenance			474000.00	79000.0

Water Facility for Horticulture "9.48" KLD & Dust Suppression "19.44" KLD (Annual Water Demand "8676"KL @4L per Tanker, total number of tanker required ("2169") and per tanker cost @Rs. 500)	0.00	1084500.00
Garland Drain & Desiltation Pond	486000.00	48600.00
To prevent the impact of mining activities on these habitations, we will comply with the Office Memorandum No. Z-11013/57/2014-IA.II (M) dated 29/10/2014 issued by the Ministry of Environment, Forests and Climate Change (MoEF & CC)	1000000.00	0
Environment Monitoring & Compliance	0.00	50000.00
EMP for Habitation	1000000.00	
Total	2960000.00	1262100.00

Environment Monitoring Plan (post operation)

Monitoring Parameters and Frequency of Monitoring

S. no	Monitoring Parameters	No. of Locations	Frequency of Monitoring
1	Ambient Air: Ambient Air Quality at appropriate location for PM10, PM2.5, SO2, NOx in the vicinity of the mine area. In the surrounding area covering project site only.	3 Stations	Six Monthly
2	Water: Surface water sample in the vicinity of the Project area.	2 Surface water 2 Ground water	Six Monthly
3	Noise: Day & Night level Noise Monitoring.	4 stations	Six Monthly
4	Soil: Soil Monitoring, Qualitative and quantitative testing/analysis to check the soil fertility, porosity, texture, water holding capacity, etc.	2 station	Six Monthly

Environment Management Practices to be followed:

Aspect	Mitigation Measures / Control Measures
Solid Waste Management	94795.98 CUM including 87225 cum Morrum which is sellable. In this lease area the stone deposit is covered with 3m layer of morrum. The morrum shall be sold in local market. The recovery of stone about

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	<p>98%, thus intercalated waste of only 2% (7570.98 CUM) shall be generate from mine site.</p> <p>It is anticipated that during the plan period 7570.98 CUM (in-situ), 9463.73 CUM (loose) & 8044.17 CUM (compact) waste shall be generated.</p> <p>During 1st & 2nd year of plan period the generated waste shall be temporarily dumped at western part of the lease area with maximum height of 1.67m.</p> <p>3rd Year onwards the generated waste and previously dumped waste material shall be used for backfilling of exhausted quarry in southern and western part of the lease area and it will cover 0.202 Ha.</p>
Air Quality Management	<ul style="list-style-type: none"> • Wet drilling and use of sharp drill bits to minimize dust generation. • Controlled blasting using optimum explosive charge during favorable weather conditions. • Regular maintenance of diesel equipment and vehicles to reduce emissions. • Water sprinkling on haul roads, loading/unloading points, and working areas. • All transport vehicles will have valid PUC certificates. • Greenbelt and roadside plantation to act as dust and noise barriers.
Water Quality Management	<ul style="list-style-type: none"> • Mining will be confined only above the Ground Water Table (GWT). • Rainwater accumulated in the pit will be collected and pumped out regularly during monsoon. • Settling sump will be provided to desilt pumped out of mine-pit and collected through garland drain before discharge into natural drainage. • Garland and foot drains will be constructed around the quarry to control surface runoff. • Sewage from rest shelters will be treated through septic tank-soak pit systems. • Foot drain would be provided around the external dump, if any.
Noise Quality Management	<ul style="list-style-type: none"> • Mining activities will be restricted to daytime and carried out with controlled blasting techniques. • Acoustic enclosures and mufflers will be provided for drilling and DG set operations. • Regular maintenance of mining machinery to minimize vibration and noise. • Greenbelt development around the lease boundary to attenuate noise propagation. • Use of delayed blasting technique to minimize the adverse impact of vibration.
Soil Quality Management	<ul style="list-style-type: none"> • Topsoil will be carefully removed and stored separately for future use in plantation and reclamation. • Garland drains and retaining walls will prevent soil erosion and siltation. • Spillage of oil or fuel will be avoided; impervious flooring and oil traps provided near storage areas • Post-mining, the area will be rehabilitated using stored topsoil and native vegetation

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Flora & Fauna management	<ul style="list-style-type: none"> • No tree felling will be undertaken without obtaining permission from the competent authority. • Greenbelt and plantation will be developed using native species along approach roads and lease periphery (7.5m Safety Zone). • Dust suppression measures will minimize impact on surrounding vegetation
Socio Economy:	<ul style="list-style-type: none"> • Priority employment to local people in mining and ancillary activities. • Community development initiatives such as tree plantation drives, road maintenance, and local infrastructure support. • Awareness programs on safety, hygiene, and environmental protection
Monitoring & Reporting:	<ul style="list-style-type: none"> • Periodic monitoring of air, water (ground & surface), noise, and soil quality as per CPCB and SPCB guidelines. • All monitoring reports will be submitted to statutory authorities as per the compliance schedule. • Corrective measures will be taken immediately if any deviation from standards is observed.
Risk & Hazard	<p>Activities which are likely to create risk are:</p> <p>Temporary Storage of Explosives, Charging of Explosives, Blasting, Drilling, Bench Formation, Loading / Unloading, Transportation</p> <p>Proposed Preventive measures:</p> <ul style="list-style-type: none"> ▪ Overall slope angles of benches will be maintained at 45°. ▪ Unmanageable heights are not created. ▪ Loose sides are properly dressed. ▪ No loose stone or debris will be permitted to remain on the top of the bench or side of any excavation (Regulation 106(4) of MMR 1961). ▪ No undercutting of any face or sides will be permitted so as to cause any overhanging (Regulation 106(5) of MMR 1961) ▪ It will be ensured that the drilling equipment is suitable for the job. ▪ The person in charge of the drilling machine is competent to carry out the drilling operation; part of the training includes instructions to always face towards the open edge of the bench so that any inadvertent backward step is away from the edge. ▪ Provision of portable rail fencing between the drilling operations and the edge of the bench ▪ Provision to attach a safety line to the drilling rig and provide a harness for the driller to wear. ▪ Restricted access to the area to all persons except those necessary for the drilling operation. ▪ Wet drilling will be carried out by constantly injecting a jet of water at the drill bit inside the hole, which prevents dust generation. ▪ In case due to any reason, wet drilling is not possible (due to non-availability of water), exhaust/ vacuum system will be provided which removes the dust from the drill hole continuously and discharges the same in a dust collector specially provided for the purpose.

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	<ul style="list-style-type: none"> ▪ Drilling machine shall be fitted with dust suppression, collection and disposal arrangement.
Blasting & Handling of Explosives	<ul style="list-style-type: none"> ▪ Blast hole geometry shall be properly designed. ▪ Blast site shall be wetted before and after blasting operations are completed. ▪ Only optimum quantity of permissible explosives shall be used so that the vibrations do not damage the structures/houses if the quarrying operations are close to human habitation. ▪ Blasting shall be conducted only during favourable weather conditions and only during the day time and permissible hours. ▪ While carrying out blasting operations near habitations, wide publicity will be given in the local area through announcement and other available media so that local people become aware of the blasting activities being undertaken in the area and take appropriate precautions. ▪ The vibrations should be monitored periodically in consultation with the local Mining authorities. ▪ Use of explosives is specialist work. Planning for a round of shots is necessary to ensure that the face is properly surveyed, holes correctly drilled, direction logged, the weight of explosive suitable for good fragmentation and the continuity of the initiator are but a few of the steps necessary to ensure its safe use. ▪ Proper and safe storage of explosives in approved and Licensed Magazine. ▪ Proper security system to prevent theft/ pilferage, unauthorized entry into Magazine area and checking authorized persons to prevent carrying of match box, lights, mobile phones, cigarette or Bidi etc. will be put in place. ▪ Explosives shall be conveyed in special containers. ▪ Explosives and detonators shall not be carried in the same container. ▪ The holes which have been charged with explosives will not be left unattended till blasting is completed.
Health Hazards	<p>Health hazards should be interpreted as being harmful dust and noise which is emitted during surface mining operations. All suitable steps and precautions will be undertaken to ensure minimum health hazard. Provision of use of Personal Protective Equipment (PPE) will be kept. The PPE shall be of good make and quality, wherever possible ISI certified, suitable for the hazard e.g. a dust respirator fitted with the correct filter to capture the particulate hazardous dust and maintained to recommended standards. As personal protective equipment only affords limited protection it will only be used as a last resort and as an interim arrangement until other steps are taken to reduce the risk of personal injury to an acceptable level</p>
Accident Prevention	<ul style="list-style-type: none"> ▪ Mine road shall be made smooth regularly with a road roller. ▪ Mine road will be made sufficiently wide to keep two-way traffic. Regular water sprinkling will be done on mine road and haul road to avoid suspension of dust. ▪ All transportation within the mine lease area should be carried out directly under the supervision and control of management. ▪ The vehicles will be maintained in good working condition and

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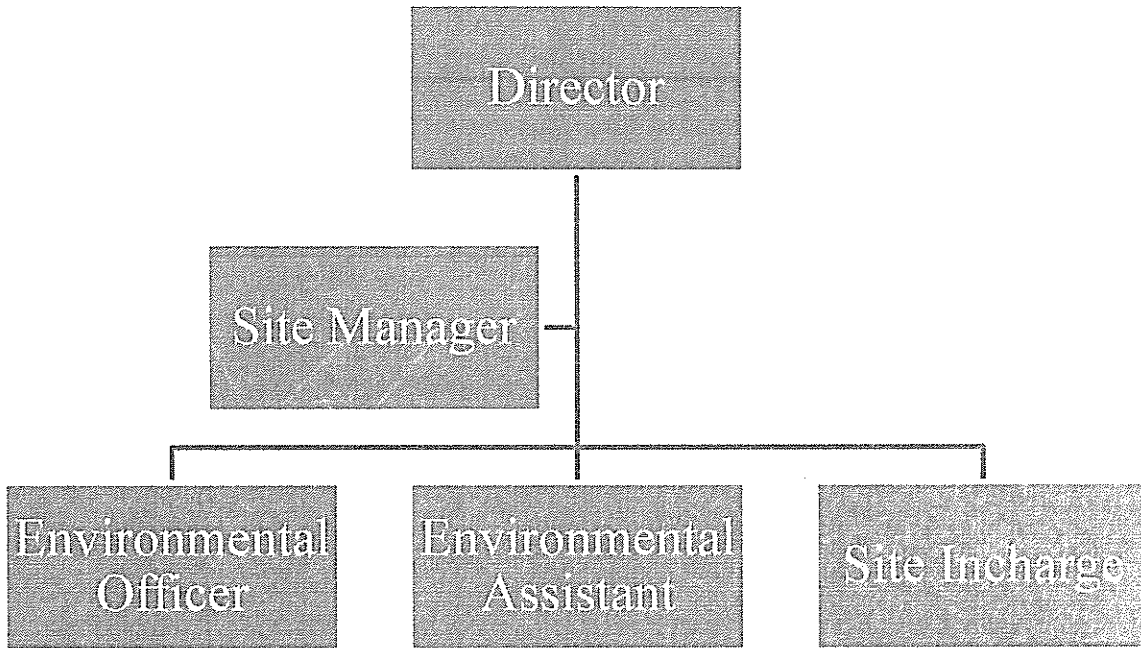
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	<p>checked thoroughly at least once a month by the competent person authorized for the purpose by the management.</p> <ul style="list-style-type: none"> ▪ Navigation signs will be provided at each and every turning point up to the main road (wherever required). ▪ To avoid danger while reversing the vehicles especially at working place/loading points, stopper should be posted to properly guide reversing/spotting operating.
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Organizational Structure of Environment Management Cell:



EMP Cell structure

The EMP Cell is committed to ensuring environmental sustainability and compliance with regulatory requirements for the Stone Mining Project. With a clear structure, roles, and responsibilities, the EMP Cell is equipped to manage environmental impacts and promote sustainable practices.

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District Survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.

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- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- i. If any tree felling than necessary permission shall be taken from the competent authority.
- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.
- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.
- l. Personal protective equipments such as clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

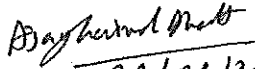
Based on the information contained in the documents submitted and the presentation made before the State Level Expert Appraisal Committee (SEAC) during its meetings held during 17, 18, 19, 20 & 21.01.2026, the Committee recommends in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 for issuing of ToR to SEIAA for undertaking detailed EIA / EMP study as mentioned in Annexure III alongwith following specific condition :-


- I. This project will be considered for grant of EC only after implementation of all the conditions of the previous EC.
- II. The production shall be restricted as per approved mining scheme or the approved mine plan at the time of EC, which ever is less.
- III. The mine will come in operation only after obtaining permission from DGMS for controlled and delayed blasting.
- IV. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "Ek Ped Ma Ke Naam" and the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>).10% of the total green belt proposed shall be allocated under this clause.
- V. During appraisal of the project, it is seen that the project authority have not fully complied the condition of green belt development as per the previous EC. Hence, the project authorities are required to plant twice the number of trees as was required in the previous EC. The Deputy Commissioner through District Mining Officer will ensure that the mines owner of the respective leases to complete the plantation and maintenance in a time bound manner.

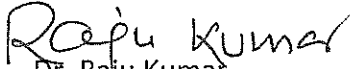
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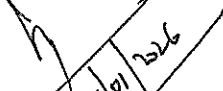
The meeting concluded with thanks to all present.


Ashok Kumar Dubey, IFS (Retd.)
Member


21/01/2026
Dr. Ajay Govind Bhatt
Member


Niranjana Lal Agarwalla
Member


Dr. Raju Kumar
Member



21/01/2026
Srikant Verma, IFS
Member Secretary


21/01/2026
Ashok Kumar Singh, IFS (Retd.)
Chairman

I. Statutory compliance

- i. This Environmental Clearance (EC) is subject to orders/ judgment of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, Common Cause Conditions as may be applicable.
- ii. In the writ petition (Civil) no. 202/1995, T.N. Godaverman Thirumulpadvs union of India and ors. the Hon'ble Supreme Court passed an order dated 03.06.2022 " National Park or Wildlife Sanctuary must have an ESZ of minimum 01 km in which the activities prescribed and prescribed in the guidelines of 09th February, 2011 shall be strictly adhered to ".
- iii. The Project proponent complies with all the statutory requirements and judgement of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India & Ors before commencing the mining operations.
- iv. The Hon'ble Supreme Court vide order dated 08.01.2020 in W.P. (Civil) No.114/2014 in the matter of Common Cause vs. Union of India has directed that the area which has been mined should be restored so that grass and other vegetation including trees can grow in the mining area for the benefit of animals.

"The mining lease holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.
- v. The State Government concerned shall ensure that mining operation shall not be commenced till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department of Mining & Geology in strict compliance of Judgement of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India & Ors.
- vi. This Environmental Clearance shall become operational only after receiving formal NBWL Clearance from MoEF&CC subsequent to the recommendations of the Standing Committee of National Board for Wildlife, if applicable to the Project.
- vii. This Environmental Clearance shall become operational only after receiving formal Forest Clearance (FC) under the provision of Forest Conservation Act, 1980, if applicable to the Project.
- viii. Project Proponent (PP) shall obtain Consent to Operate after grant of EC and effectively implement all the conditions stipulated therein. The mining activity shall not commence prior to obtaining Consent to Establish / Consent to Operate from the concerned State Pollution Control Board/Committee.



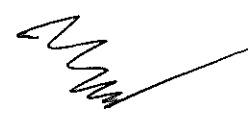
- ix. The PP shall adhere to the provision of the Mines Act, 1952, Mines and Mineral (Development & Regulation), Act, 2015 and rules & regulations made there under. PP shall adhere to various circulars issued by Directorate General Mines Safety (DGMS) and Indian Bureau of Mines from time to time.
- x. The Project Proponent shall obtain consents from all the concerned land owners, before start of mining operations, as per the provisions of MMDR Act, 1957 and rules made there under in respect of lands which are not owned by it.
- xi. The Project Proponent shall follow the mitigation measures provided in MoEF&CC's Office Memorandum No. Z-11013/57/2014-IAJI (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".
- xii. The Project Proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of surface water and from CGWA for withdrawal of ground water for the project.
- xiii. A copy of EC letter will be marked to concerned Panchayat / local NGO etc. if any, from whom suggestion / representation has been received while processing the proposal.
- xiv. State Pollution Control Board/Committee shall be responsible for display of this EC letter at its Regional office, District Industries Centre and Collector's office/ Tehsildar's Office for 30 days.
- xv. The Project Authorities should widely advertise about the grant of this EC letter by printing the same in at least two local newspapers, one of which shall be in vernacular language of the concerned area. The advertisement shall be done within 7 days of the issue of the clearance letter mentioning that the instant project has been accorded EC and copy of the EC letter is available with the State Pollution Control Board/Committee and web site of the Ministry of Environment, Forest and Climate Change ([www. Environment clearance.nic.in](http://www.Environmentclearance.nic.in)). A copy of the advertisement may be forwarded to the concerned MoEF& CC Regional Office for compliance and record.
- xvi. The Project Proponent shall inform the MoEF&CC for any change in ownership of the mining lease. In case there is any change in ownership or mining lease is transferred than mining operation shall only be carried out after transfer of EC as per provisions of the para 11 of EIA Notification, 2006 as amended from time to time.

II. Air quality monitoring and preservation

- i. The Project Proponent shall install a minimum of 3 (three) online Ambient Air Quality Monitoring Stations with 1 (one) in upwind and 2 (two) in downwind direction based on long term climatological data about wind direction such that an angle of 120° is made between the monitoring locations to monitor critical

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parameters, relevant for mining operations, of air pollution viz. PM10, PM2.5, NO2; CO and SO2 etc. as per the methodology mentioned in NAAQS Notification No. B-29016/20/90/PCUI, dated 18.11.2009 covering the aspects of transportation and use of heavy machinery in the impact zone. The ambient air quality shall also be monitored at prominent places like office building, canteen etc. as per the site condition to ascertain the exposure characteristics at specific places. The above data shall be digitally displayed within 03 months in front of the main Gate of the mine site.

- ii. Effective safeguard measures for prevention of dust generation and subsequent suppression (like regular water sprinkling, metalled road construction etc.) shall be carried out in areas prone to air pollution wherein high levels of PM10 and PM2.5 are evident such as haul road, loading and unloading point and transfer points. The Fugitive dust emissions from ail sources shall be regularly controlled by installation of required equipments/ machineries and preventive maintenance: Use of suitable water-soluble chemical dust suppressing agents may be explored for better effectiveness of dust control system. It shall be ensured that air pollution level conform to the standards prescribed by the MoEF&CC/ Central Pollution Control Board.

III. Water quality monitoring and preservation

- i. In case, immediate mining scheme envisages intersection of ground water table, then Environmental Clearance shall become operational only after receiving formal clearance from CGWA. In case, mining operation involves intersection of ground water table at a later stage, then PP shall ensure that prior approval from CGWA and MoEF&CC is in place before such mining operations. The permission for intersection of ground water table shall essentially be based on detailed hydro-geological study of the area.
- ii. Regular monitoring of the flow rate of the springs and perennial nallahs flowing in and around the mine lease shall be carried out and records maintain. The natural water bodies and or streams which are flowing in an around the village, should not be disturbed. The Water Table should be nurtured so as not to go down below the pre-mining period. In case of any water scarcity in the area, the Project Proponent has to provide water to the villagers for their use. A provision for regular monitoring of water table in open dug wall located in village should be incorporated to ascertain the impact of mining over ground water table. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.
- iii. Project Proponent shall regularly monitor and maintain records w.r.t. ground water level and quality in and around the mine lease by establishing a network of existing wells as well as new piezo-meter installations during the mining operation in consultation with Central Ground Water Authority/ State Ground Water Department. The Report on changes in Ground water level and quality shall be









submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.

- iv. The Project Proponent shall undertake regular monitoring of natural water course/ water resources/ springs and perennial nallahs existing/ flowing in and around the mine lease and maintain its records. The project proponent shall undertake regular monitoring of water quality upstream and downstream of water bodies passing within and nearby/ adjacent to the mine lease and maintain its records. Sufficient number of gullies shall be provided at appropriate places within the lease for management of water. PP shall carryout regular monitoring w.r.t. pH and included the same in monitoring plan. The parameters to be monitored shall include their water quality vis-à-vis suitability for usage as per CPCB criteria and flow rate. It shall be ensured that no obstruction and/ or alteration be made to water bodies during mining operations without justification and prior approval of MoEF&CC. The monitoring of water courses/ bodies existing in lease area shall be carried out four times in a year viz. pre- monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January) and the record of monitored data may be sent regularly to Ministry of Environment, Forest and Climate Change and its Regional Office, Central Ground Water Authority and Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board. Clearly showing the trend analysis on six-monthly basis.
- v. Quality of polluted water generated from mining operations which include Chemical Oxygen Demand (COD) in mines run-off; acid mine drainage and metal contamination in runoff shall be monitored along with Total Suspended Solids (TDS), Dissolved Oxygen (DO), pH and Total Suspended Solids (TSS). The monitored data shall be uploaded on the website of the company as well as displayed at the project site in public domain, on a display board, at a suitable location near the main gate of the Company. The circular No. J- 20012/1/2006-IAJI (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change may also be referred in this regard.
- vi. Project Proponent shall plan, develop and implement rainwater harvesting measures on long term basis to augment ground water resources in the area consultation with Central Ground Water Board/ State Groundwater Department. A report on amount of water recharged needs to be submitted to Regional Office MoEF&CC annually.
- vii. Industrial waste water (workshop and waste water from the mine) should be properly collected and treated so as to conform to the notified standards prescribed from time to time. The standards shall be prescribed through Consent to Operate (CTO) issued by concerned State Pollution Control Board (SPCB). The workshop effluent shall be treated after its initial passage through Oil and grease trap.

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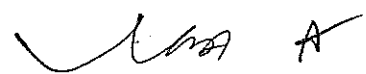
- viii. The water balance/water auditing shall be carried out and measure for reducing the consumption of water shall be taken up and reported to the Regional Office of the MoEF&CC and State Pollution Control Board/Committee.

IV. Noise and vibration monitoring and prevention

- i. The peak particle velocity at 500m distance or within the nearest habitation, whichever is closer shall be monitored periodically as per applicable DGMS guidelines.
- ii. The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day /night hours.
- iii. The Project Proponent shall take measures for control of noise levels below 85 dBA in the work environment. The workers engaged in operations of HEMM, etc. should be provided with ear plugs /muffs. All personnel including laborers working in dusty areas shall be provided with protective respiratory devices along with adequate training, awareness and information on safety and health aspects. The PP shall be held responsible in case it has been found that workers/ personals/ laborers are working without personal protective equipment.

V. Mining Plan

- i. The Project Proponent shall adhere to the working parameters of mining plan which was submitted at the time of EC appraisal wherein year-wise plan was mentioned for total excavation i.e. quantum of mineral, waste, over burden, inter burden and top soil etc.. No change in basic mining proposal like mining technology, total excavation, mineral & waste production, lease area and scope of working (viz. method of mining, overburden & dump management, O.B & dump mining, mineral transportation mode, ultimate depth of mining etc.) shall not be carried out without prior approval of the Ministry of Environment, Forest and Climate Change, which entail adverse environmental impacts, even if it is a part of approved mining plan modified after grant of EC or granted by State Govt. in the form to Short Term Permit (STP), Query license or any other name.
- ii. The Project Proponent shall get the Final Mine Closure Plan along with Financial Assurance approved from Indian Bureau of Mines/Department of Mining & Geology as required under the Provision of the MMDR Act, 1957 and Rules/ Guidelines made there under. A copy of approved final mine closure plan shall be submitted within 2 months of the approval of the same from the competent authority to the concerned Regional Office of the Ministry of Environment, Forest and Climate Change for record and verification.



- iii. The land-use of the mine lease area at various stages of mining scheme as well as at the end-of-life shall be governed as per the approved Mining Plan. The excavation vis-à-vis backfilling in the mine lease area and corresponding afforestation to be raised in the reclaimed area shall be governed as per approved mining plan. PP shall ensure the monitoring and management of rehabilitated areas until the vegetation becomes self sustaining. The compliance status shall be submitted half-yearly to the MoEF&CC and its concerned Regional Office.

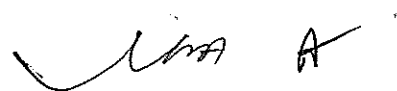
VI. Land reclamation

- i. The Overburden (O.B.) generated during the mining operations shall be stacked at earmarked OB dump site(s) only and it should not be kept active for a long period of time. The physical parameters of the OB dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the guidelines/circulars issued by D.G.M.S w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of top soil/OB dumps. The topsoil shall be used for land reclamation and plantation.
- ii. The reject/waste generated during the mining operations shall be stacked at earmarked waste dump site(s) only. The physical parameters of the waste dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the guidelines/circulars issued by DGMS w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of waste dumps.
- iii. The reclamation of waste dump sites shall be done in scientific manner as per the Approved Mining Plan cum Progressive Mine Closure Plan.
- iv. The slope of dumps shall be vegetated in scientific manner with suitable native species to maintain the slope stability, prevent erosion and surface run off. The selection of local species regulates local climatic parameters and help in adaptation of plant species to the microclimate. The gullies formed on slopes should be adequately taken care of as it impacts the overall stability of dumps. The dump mass should be consolidated with the help of dozer/ compactors thereby ensuring proper filling/ leveling of dump mass. In critical areas, use of geo textiles/ geo-membranes / clay liners / Bentonite etc. shall be undertaken for stabilization of the dump.
- v. The Project Proponent shall carry out slope stability study in case the dump height is more than 30 meters. The slope stability report shall be submitted to concerned regional office of MoEF&CC.
- vi. Catch drains, settling tanks and ponds of appropriate size shall be constructed around the mine working, mineral yards and Top Soil/OB/Waste dumps to prevent run off of water and flow of sediments directly into the water bodies (Nallah/ River/ Pond etc.). The collected water should be utilized for watering the mine area, roads, green belt development, plantation etc. The drains/ sedimentation sumps etc. shall be de-silted regularly, particularly after monsoon season, and maintained properly.

- vii. Check dams of appropriate size, gradient and length shall be constructed around mine pit and OB dumps to prevent storm run-off and sediment flow into adjoining water bodies. A safety margin of 50% shall be kept for designing of sump structures over and above peak rainfall (based on 50 years data) and maximum discharge in the mine and its adjoining area which shall also help in providing adequate retention time period thereby allowing proper settling of sediments/ silt material. The sedimentation pits/ sumps shall be constructed at the corners of the garland drains.
- viii. The top soil, if any, shall temporarily be stored at earmarked site(s) within the mine lease only and should not be kept unutilized for long. The physical parameters of the top soil dumps like height, width and angle of slope shall be governed as per the approved Mining Plan and as per the guidelines framed by DGMS w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of dumps. The topsoil shall be used for land reclamation and plantation purpose.

VII. Transportation

- i. No Transportation of the minerals shall be allowed in case of roads passing through villages/ habitations. In such cases, PP shall construct a 'bypass' road for the purpose of transportation of the minerals leaving an adequate gap (say at least 200 meters) so that the adverse impact of sound and dust along with chances of accidents could be mitigated. All costs resulting from widening and strengthening of existing public road network shall be borne by the PP in consultation with nodal State Govt. Department. Transportation of minerals through road movement in case of existing village/ rural roads shall be allowed in consultation with nodal State Govt. Department only after required strengthening such that the carrying capacity of roads is increased to handle the traffic load. The pollution due to transportation load on the environment will be effectively controlled and water sprinkling will also be done regularly. Vehicular emissions shall be kept under control and regularly monitored. Project should obtain Pollution Under Control (PUC) certificate for all the vehicles from authorized pollution testing centers.
- ii. The Main haulage road within the mine lease should be provided with a permanent water sprinkling arrangement for dust suppression. Other roads within the mine lease should be wetted regularly with tanker-mounted water sprinkling system. The other areas of dust generation like crushing zone, material transfer points, material yards etc. should invariably be provided with dust suppression arrangements. The air pollution control equipments like bag filters, vacuum suction hoods, dry fogging system etc. shall be installed at Crushers, belt-conveyors and other areas prone to air pollution. The belt conveyor should be fully covered to avoid generation of dust while transportation. PP shall take necessary measures to avoid generation of fugitive dust emissions.



VIII. Green Belt

- i. The Project Proponent shall develop greenbelt in 7.5m wide safety zone all along the mine lease boundary as per the guidelines of CPCB in order to arrest pollution emanating from mining operations within the lease. The whole Green belt shall be developed within first 5 years starting from windward side of the active mining area. The development of greenbelt shall be governed as per the EC granted by the Ministry irrespective of the stipulation made in approved mine plan.
- ii. The Project Proponent shall carryout plantation/ afforestation in backfilled and reclaimed area of mining lease, around water body, along the roadsides, in community areas etc. by planting the native species in consultation with the State Forest Department/ Agriculture Department/ Rural development department/ Tribal Welfare Department/ Gram Panchayat such that only those species be selected which are of use to the local people. The CPCB guidelines in this respect shall also be adhered. The density of the trees should be around 2500 saplings per Hectare. Adequate budgetary provision shall be made for protection and care of trees.
- iii. The Project Proponent shall make necessary alternative arrangements for livestock feed by developing grazing land with a view to compensate those areas which are coming within the mine lease. The development of such grazing land shall be done in consultation with the State Government. In this regard, Project Proponent should essentially implement the directions of the Hon'ble Supreme Court with regard to acquisition of grazing land. The sparse trees on such grazing ground, which provide mid-day shelter from the scorching sun, should be scrupulously guarded/ protected against felling and plantation of such trees should be promoted.
- iv. The Project Proponent shall undertake all precautionary measures for conservation and protection of endangered flora and fauna and Schedule-I species during mining operation, if any found or reported by the competent authority. A Wildlife Conservation Plan shall be prepared for the same clearly delineating action to be taken for conservation of flora and fauna. The Plan shall be approved by Chief Wild Life Warden of the State Govt.
- v. If any Wild Life Conservation Plan is prepared as per above clause no. iv, it shall be implemented in consultation with the State Forest and Wildlife Department. A copy of Wildlife Conservation Plan and its implementation status (annual) shall be submitted to the Regional Office of the Ministry.

IX. Public hearing and human health issues

- i. The Project Proponent shall appoint an Occupational Health Specialist for Regular as well as Periodical medical examination of the workers engaged in the mining activities, as per the DGMS guidelines. The records shall be maintained properly. PP shall also carryout Occupational health check-ups in respect of workers which

are having ailments like BP, diabetes, habitual smoking, etc. The check-ups shall be undertaken once in six months and necessary remedial/ preventive measures be taken. A status report on the same may be sent to MoEF&CC Regional Office and DGMS on half-yearly basis.

- ii. The Project Proponent must demonstrate commitment to work towards 'Zero Harm' from their mining activities and carry out Health Risk Assessment (HRA) for identification workplace hazards and assess their potential risks to health and determine appropriate control measures to protect the health and wellbeing of workers and nearby community. The proponent shall maintain accurate and systematic records of the HRA. The HRA for neighborhood has to focus on Public Health Problems like Malaria, Tuberculosis, HIV, Anaemia, Diarrhoea in children under five, respiratory infections due to bio mass cooking. The proponent shall also create awareness and educate the nearby community and workers for Sanitation, Personal Hygiene, Hand washing, not to defecate in open, Women Health and Hygiene (Providing Sanitary Napkins), hazard of tobacco and alcohol use. The Proponent shall carryout base line HRA for all the category of workers and thereafter every five years.
- iii. The Proponent shall carry out Occupational health surveillance which be a part of HRA and include Biological Monitoring where practical and feasible, and the tests and investigations relevant to the exposure (e.g. for Dust a X-Ray chest; For Noise Audiometric; for Lead Exposure Blood Lead, For Welders Full Ophthalmologic Assessment; for Manganese Miners a complete Neurological Assessment by a Certified Neurologist, and Manganese (Mn) Estimation in Blood; For Inorganic Chromium- Fortnightly skin inspection of hands and forearms by a responsible person. Except routine tests all tests would be carried out in a Lab accredited by NABH. Records of Health Surveillance must be kept for 30 years, including the results of and the records of Physical examination and tests. The record of exposure due to materials like Asbestos, Hard Rock Mining, Silica, Gold, Kaolin, Aluminium, Iron, Manganese, Chromium, Lead, Uranium need to be handed over to the Mining Department of the State in case the life of the mine is less than 30 years. It would be obligatory for the State Mines Departments to make arrangements for the safe and secure storage of the records including X-Ray. Only conventional X-Ray will be accepted for record purposes and not the digital one). X-Ray must meet ILO criteria (17 x14 inches and of good quality).
- iv. The Proponent shall maintained a record of performance indicators for workers which includes (a) there should not be a significant decline in their Body Mass Index and it should stay between 18.5 -24.9, (b) the Final Chest X-Ray compared with the base line X-Ray should not show any capacities ,(c) At the end of their leaving job there should be no Diminution in their Lung Functions Forced Expiratory Volume in one second (FEV1),Forced Vital Capacity (FVC), and the ratio) unless they are smokers which has to be adjusted, and the effect of age, (d) their hearing should not be affected. As a proof an Audiogram (first and last need to be

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presented), (e) they should not have developed any Persistent Back Pain, Neck Pain, and the movement of their Hip, Knee and other joints should have normal range of movement, (f) they should not have suffered loss of any body part. The record of the same should be submitted to the Regional Office, MoEF&CC annually along with details of the relief and compensation paid to workers having above indications.

- v. The Project Proponent shall ensure that Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects.
- vi. Project Proponent shall make provision for the housing for workers/labors or shall construct labor camps within/outside (company owned land) with necessary basic infrastructure/ facilities like fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche for kids etc. The housing may be provided in the form of temporary structures which can be removed after the completion of the project related infrastructure. The domestic waste water should be treated with STP in order to avoid contamination of underground water.
- vii. The activities proposed in Action plan prepared for addressing the issues raised during the Public Hearing shall be completed as per the budgetary provisions mentioned in the Action Plan and within the stipulated time frame. The Status Report on implementation of Action Plan shall be submitted to the concerned Regional Office of the Ministry along with District Administration.

X. Corporate Environment Responsibility (CER)

- i. The activities and budget earmarked for Corporate Environmental Responsibility (CER) as per Ministry's O.M No 22-65/2017-IA. II (M) dated 01.05.2018 or as proposed by EAC should be kept in a separate bank account. The activities proposed for CER shall be implemented in a time bound manner and annual report of implementation of the same along with documentary proof viz. photographs, purchase documents, latitude & longitude of infrastructure developed & road constructed needs to be submitted to Regional Office MoEF&CC annually along with audited statement.
- ii. Project Proponent shall keep the funds earmarked for environmental protection measures in a separate account and refrain from diverting the same for other purposes. The Year wise expenditure of such funds should be reported to the MoEF&CC and its concerned Regional Office.

XI. Miscellaneous

- i. The Project Proponent shall prepare digital map (land use & land cover) of the entire lease area once in five years purpose of monitoring land use pattern and submit a report to concerned Regional Office of the MoEF&CC.

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- ii. The Project Authorities should inform to the Regional Office regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
- iii. It shall be mandatory for the project management to submit six (06) monthly compliance report in respect of the stipulated prior environmental clearance terms and conditions in hard copies and soft copies to the regulatory authority concerned Regional Office of MoEF& CC at Ranchi and Jharkhand State Pollution Control Board (J.S.P.C.B.), Ranchi / CPCB / SEIAA.
- iv. A separate 'Environmental Management Cell' with suitable qualified manpower should be set-up under the control of a Senior Executive. The Senior Executive shall directly report to Head of the Organization. Adequate number of qualified Environmental Scientists and Mining Engineers shall be appointed and submit a report to RO, MoEF&CC.
- v. The concerned Regional Office of the MoEF&CC shall randomly monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the MoEF&CC officer(s) by furnishing the requisite data / information / monitoring reports.
- vi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- vii. The Ministry / SEIAA / SEAC may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- viii. The Ministry / SEIAA / SEAC reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- ix. The Environmental Clearance accorded shall be valid for the period of lease of the mine. The PP shall not increase production rate and alter lease area during the validity of Environmental Clearance
- x. Any appeal against this Environmental Clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under section 16 of the National Green Tribunal Act, 2010.

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I. Statutory Compliance

- i. The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
- ii. The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of fire fighting equipment etc as per National Building Code including protection measures from lightening etc.
- iii. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.
- iv. In the writ petition (Civil) no. 202/1995, T.N. Godaverman Thirumulpad vs union of India and ors. the Hon'ble Supreme Court passed an order dated 03.06.2022 " National Park or Wildlife Sanctuary must have an ESZ of minimum 01 km in which the activities prescribed and prescribed in the guidelines of 09th February, 2011 shall be strictly adhered to ".
- v. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- vi. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
- vii. The project proponent shall obtain the necessary permission for drawl of ground water / surface water required for the project from the competent authority.
- viii. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
- ix. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable, by project proponents from the respective competent authorities.
- x. The provisions of the Solid Waste (Management) Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste (Management) Rules, 2016 shall be followed.
- xi. The project proponent shall follow the ECBC/ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.
- xii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel (kerosene/gas) for cooking,

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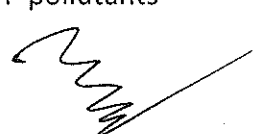


safe drinking water, medical health care, etc. The housing may be in the form of temporary structures to be removed after completion of the project.

- xiii. Provision of drinking water, waste water disposal, solid wastes management and primary health facilities shall be ensured for labour force. Proper sanitation facilities shall be provided at the construction site to prevent health related problems. Domestic as well as sanitary wastes from construction camps shall be cleared regularly.
- xiv. All the labourers to be engaged for construction works shall be screened for health and adequately treated before issue of work permits. The contractor shall ensure periodic health check-up of construction workers.
- xv. All vehicles/equipment deployed during construction phase shall be ensured in good working condition and shall conform to applicable air and noise emission standards. These shall be operated only during non-peaking hours.
- xvi. Accumulation/stagnation of water shall be avoided ensuring vector control.
- xvii. Water during construction phase should be preferred from Municipal supply.
- xviii. Unskilled construction labourers shall be recruited from the local areas.
- xix. Monitoring of ground water table and quality once in three months shall be carried out. Construction of tube wells, bore wells shall be strictly regulated.
- xx. Adequate provision shall be made to cater the parking needs. Parking spaces standards as given in "Manual on Norms and Standards for Environmental Clearance of Large Construction Projects" issued by Ministry of Environment and Forests, Government of India shall be adopted.
- xxi. Rest room facilities shall be provided for service population.
- xxii. Water body falling within premises (if any) shall not be lined or no embankment shall be cemented. The water bodies, if any, shall be kept in natural conditions without disturbing the ecological habitat.
- xxiii. Construction shall conform to the requirements of local seismic regulations. The project proponent shall obtain permission for the plans and designs including structural design, standards and specifications of all construction work from concerned authority.

II. Air quality monitoring and preservation

- i. Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.
- ii. A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.
- iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants



released (e.g. PM10 and PM25) covering upwind and downwind directions during the construction period.

- iv. Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.
- v. Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
- vi. Sand, murrum, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
- vii. Wet jet shall be provided for grinding and stone cutting.
- viii. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
- ix. All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules 2016.
- x. The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.
- xi. The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.
- xii. For indoor air quality the ventilation provisions as per National Building Code of India.

III. Water quality monitoring and preservation

- i. The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water.

- ii. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.
- iii. Total fresh water use shall not exceed the proposed requirement as provided in the project details.
- iv. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
- v. A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.
- vi. At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
- vii. Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.
- viii. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.
- ix. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
- x. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- xi. The local bye-law provisions on rain water harvesting should be followed. If local byelaw provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain water harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.
- xii. A rain water harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built up area and storage capacity of minimum one day of total fresh water requirement shall be provided. In areas where ground water recharge is not feasible, the rain water should be harvested and stored for reuse. The ground water shall not be withdrawn without approval from the Competent Authority.

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- xiii. All recharge should be limited to shallow aquifer.
- xiv. No ground water shall be used during construction phase of the project.
- xv. Any ground water dewatering should be properly managed and shall conform to the approvals and the guidelines of the CGWA in the matter. Formal approval shall be taken from the CGWA for any ground water abstraction or dewatering.
- xvi. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
- xvii. Sewage shall be treated in the STP with tertiary treatment. The treated effluent from STP shall be recycled/re-used for flushing, AC make up water and gardening. As proposed, no treated water shall be disposed in to municipal drain.
- xviii. No sewage or untreated effluent water would be discharged through storm water drains.
- xix. Onsite sewage treatment of capacity of treating 100% waste water to be installed based on the MBBR/MBR/SBR technology. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Treated waste water shall be reused on site for landscape, flushing, cooling tower, and other end-uses. Excess treated water shall be discharged as per statutory norms notified by Ministry of Environment, Forest and Climate Change. Natural treatment systems shall be promoted.
- xx. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.
- xxi. Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.

IV. Noise monitoring and prevention

- i. Ambient noise levels shall conform to residential area/commercial area/industrial area/silence zone both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.
- ii. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.



- iii. Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.

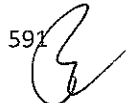
V. Energy Conservation measures

- i. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC.
- ii. Outdoor and common area lighting shall be LED.
- iii. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.
- iv. Energy conservation measures like installation of CFLs/ LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning.
- v. Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/ local building bye-laws requirement, whichever is higher.
- vi. Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.

VI. Waste Management

- i. A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project shall be obtained.
- ii. Disposal of muck during construction phase shall not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
- iii. Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials.
- iv. Organic waste compost/ Vermiculture pit/ Organic Waste Converter within the premises with a minimum capacity of 0.3 kg /person/day must be installed.




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- v. All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.
- vi. Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
- vii. Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials.
- viii. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016., Ready mixed concrete must be used in building construction.
- ix. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Rules, 2016.
- x. Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.

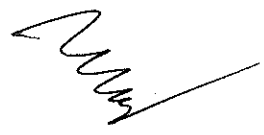
VII. Green Cover

- i. No tree can be felled/transplant unless exigencies demand. Where absolutely necessary, tree felling shall be with prior permission from the concerned regulatory authority. Old trees should be retained based on girth and age regulations as may be prescribed by the Forest Department. Plantations to be ensured species (cut) to species (planted).
- ii. A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
- iii. Where the trees need to be cut with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree that is cut) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). Area for green belt development shall be provided as per the details provided in the project document.
- iv. Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

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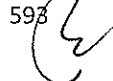
VIII. Transport

- i. A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.
 - a. Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
 - b. Traffic calming measures.
 - c. Proper design of entry and exit points.
 - d. Parking norms as per local regulation
- ii. Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.
- iii. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

IX. Human Health Issues

- i. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.
- ii. For indoor air quality the ventilation provisions as per National Building Code of India.
- iii. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- iv. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- v. Occupational health surveillance of the workers shall be done on a regular basis.
- vi. A First Aid Room shall be provided in the project both during construction and operations of the project.

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X. Corporate Environment Responsibility

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

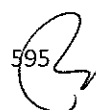
XI. Miscellaneous

- i. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEF&CC/SEIAA website where it is displayed.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as

prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

- vi. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- vii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- viii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- ix. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- x. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xi. The Ministry / SEIAA / SEAC may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xii. The Ministry / SEIAA / SEAC reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiii. It shall be mandatory for the project management to submit six (06) monthly compliance report in respect of the stipulated prior environmental clearance terms and conditions in hard copies and soft copies to the regulatory authority concerned Regional Office of MoEF & CC at Ranchi and Jharkhand State Pollution Control Board (J.S.P.C.B.), Ranchi / CPCB / SEIAA.
- xiv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under section 16 of the National Green Tribunal Act, 2010.
- xvi. The Prescribed EC is valid as per Notification no. S.O. 1807(E) dated 12.04.2022 of MoEF&CC, Govt. of India.

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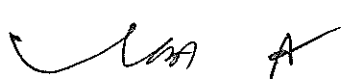


The TORs prescribed for undertaking detailed EIA study are as follows:

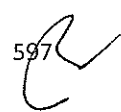
- i. Year-wise production details since 1994 should be given, clearly stating the highest production achieved in any one year prior to 1994. It may also be categorically informed whether there had been any increase in production after the EIA Notification 1994 came into force, w.r.t. the highest production achieved prior to 1994.
- ii. A copy of the document in support of the fact that the Proponent is the rightful lessee of the mine should be given.
- iii. All documents including approved mine plan, EIA and Public Hearing should be compatible with one another in terms of the mine lease area, production levels, waste generation and its management, mining technology etc. and should be in the name of the lessee.
- iv. All corner coordinates of the mine lease area, superimposed on a High Resolution Imagery/ toposheet, topographic sheet, geomorphology and geology of the area should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).
- v. Information should be provided in Survey of India Toposheet in 1:50,000 scale indicating geological map of the area, geomorphology of land forms of the area, existing minerals and mining history of the area, important water bodies, streams and rivers and soil characteristics.
- vi. Details about the land proposed for mining activities should be given with information as to whether mining conforms to the land use policy of the State; land diversion for mining should have approval from State land use board or the concerned authority.
- vii. It should be clearly stated whether the proponent Company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed operating process/procedures to bring into focus any infringement/deviation/ violation of the environmental or forest norms/ conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the Company and/or shareholders or stakeholders at large, may also be detailed in the EIA Report.
- viii. Issues relating to Mine Safety, including subsidence study in case of underground mining and slope study in case of open cast mining, blasting study etc. should be detailed. The proposed safeguard measures in each case should also be provided.
- ix. The study area will comprise of 10 km zone around the mine lease from lease periphery and the data contained in the EIA such as waste generation etc. should be for the life of the mine / lease period.



- x. Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
- xi. Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be given.
- xii. A Certificate from the Competent Authority in the State Forest Department should be provided, confirming the involvement of forest land, if any, in the project area. In the event of any contrary claim by the Project Proponent regarding the status of forests, the site may be inspected by the State Forest Department along with the Regional Office of the Ministry to ascertain the status of forests, based on which, the Certificate in this regard as mentioned above be issued. In all such cases, it would be desirable for representative of the State Forest Department to assist the Expert Appraisal Committees.
- xiii. Status of forestry clearance for the broken up area and virgin forestland involved in the Project including deposition of net present value (NPV) and compensatory afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished.
- xiv. Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.
- xv. The vegetation in the RF / PF areas in the study area, with necessary details, should be given.
- xvi. A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly, detailed mitigative measures required, should be worked out with cost implications and submitted.
- xvii. Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Ramsar site Tiger/ Elephant Reserves/(existing as well as proposed), if any, within 10 km of the mine lease should be clearly indicated, supported by a location map duly authenticated by Chief Wildlife Warden. Necessary clearance, as may be applicable to such projects due to proximity of the ecologically sensitive areas as mentioned above, should be obtained from the Standing Committee of National Board of Wildlife and copy furnished.
- xviii. A detailed biological study of the study area [core zone and buffer zone (10 km radius of the periphery of the mine lease)] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species duly authenticated, separately for core and



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buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. In case of any scheduled- I fauna found in the study area, the necessary plan alongwith budgetary provisions for their conservation should be prepared in consultation with State Forest and Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost.

- xix. Proximity to Areas declared as 'Critically Polluted' or the Project areas likely to come under the 'Aravali Range', (attracting court restrictions for mining operations), should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB or State Mining Department should be secured and furnished to the effect that the proposed mining activities could be considered.
- xx. Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agencies demarcating LTL, HTL, CRZ area, location of the mine lease w.r.t CRZ, coastal features such as mangroves, if any, should be furnished. (Note: The Mining Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority).
- xxi. R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village(s) located in the mine lease area will be shifted or not. The issues relating to shifting of village(s) including their R&R and socio-economic aspects should be discussed in the Report.
- xxii. One season (non-monsoon) [i.e. March-May (Summer Season); October-December (post monsoon season) ; December-February (winter season)] primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. The mineralogical composition of PM10, particularly for free silica, should be given.
- xxiii. Air quality modeling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of vehicles for transportation of mineral. The details of the model used and input parameters used for modeling should be provided. The air quality contours may be

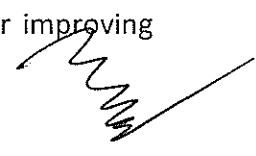
shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The wind roses showing pre-dominant wind direction may also be indicated on the map.

- xxiv. The water requirement for the Project, its availability and source should be furnished. A detailed water balance should also be provided. Fresh water requirement for the Project should be indicated.
- xxv. Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.
- xxvi. Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided.
- xxvii. Impact of the Project on the water quality, both surface and groundwater, should be assessed and necessary safeguard measures, if any required, should be provided.
- xxviii. Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided. In case the working will intersect groundwater table, a detailed Hydro Geological Study should be undertaken and Report furnished. The Report inter-alia, shall include details of the aquifers present and impact of mining activities on these aquifers. Necessary permission from Central Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished.
- xxix. Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed, if any, and the impact of the same on the hydrology should be brought out.
- xxx. Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and bgl. A schematic diagram may also be provided for the same.
- xxxi. A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the Project. Phase-wise plan of plantation and compensatory afforestation should be charted clearly indicating the area to be covered under plantation and the species to be planted. The details of plantation already done should be given. The plant species selected for green belt should have greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant to pollution.
- xxxii. Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck traffic as a result of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving

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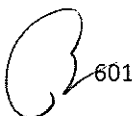
the infrastructure, if contemplated (including action to be taken by other agencies such as State Government) should be covered. Project Proponent shall conduct Impact of Transportation study as per Indian Road Congress Guidelines.

- xxxiii. Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report.
- xxxiv. Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plans and with adequate number of sections) should be given in the EIA report.
- xxxv. Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.
- xxxvi. Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.
- xxxvii. Measures of socio economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.
- xxxviii. Detailed environmental management plan (EMP) to mitigate the environmental impacts which, should inter-alia include the impacts of change of land use, loss of agricultural and grazing land, if any, occupational health impacts besides other impacts specific to the proposed Project.
- xxxix. Public Hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project.
- xl. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
- xli. The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.
- xlii. A Disaster management Plan shall be prepared and included in the EIA/EMP Report.
- xliii. Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.
- xliv. Besides the above, the below mentioned general points are also to be followed :-
 - a) Executive Summary of the EIA/EMP Report

- b) All documents to be properly referenced with index and continuous page numbering.
 - c) Where data are presented in the Report especially in Tables, the period in which the data were collected and the sources should be indicated.
 - d) Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using the MoEF & CC / NABL accredited laboratories. All the original analysis / testing reports should be available during appraisal of the Project.
 - e) Where the documents provided are in a language other than English, an English translation should be provided.
 - f) The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also be filled and submitted.
 - g) While preparing the EIA report, the instructions for the Proponents and instructions for the Consultants issued by MoEF& CC vide O.M. No. J-11013/41/2006-IA.II(I) dated 4th August, 2009, which are available on the website of this Ministry, should be followed.
 - h) Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the PFR for securing the TOR) should be brought to the attention of MoEF & CC with reasons for such changes and permission should be sought, as the TOR may also have to be altered. Post Public Hearing changes in structure and content of the draft EIA/EMP (other than modifications arising out of the P.H. process) will entail conducting the PH again with the revised documentation.
 - i) As per the circular no. J-11011/618/2010-IA.II(I) dated 30.5.2012, certified report of the status of compliance of the conditions stipulated in the environment clearance for the existing operations of the project, should be obtained from the Regional Office of Ministry of Environment, Forest and Climate Change, as may be applicable.
 - j) The EIA report should also include (i) surface plan of the area indicating contours of main topographic features, drainage and mining area, (ii) geological maps and sections and (iii) sections of the mine pit and external dumps, if any, clearly showing the land features of the adjoining area.
- xlv. After preparing the draft EIA (as per the generic structure prescribed in Appendix- III of the EIA Notification, 2006) covering the above mentioned issues, the proponent will get the public hearing conducted and take further necessary action for obtaining environmental clearance in accordance with the procedure prescribed under the EIA Notification, 2006.
- xlvi. The Prescribed ToRs is valid as per O.M. F. No. IA3-22/10/2022-IA.III[E177258], dated 08.06.2022 of MoEF&CC, Govt. of India.



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Member Secretary SEAC <seac.jhk@gmail.com>

Regarding approval of 129th MOM of SEAC held from 17 - 21.01.2026.

ashok kumar dubey <ashokrndubey@gmail.com>
To: Member Secretary SEAC <seac.jhk@gmail.com>
Cc: Ashok Kumar Dubey <ashokrndubey31.akd@gmail.com>

Thu, Jan 29, 2026 at 6:48 PM

Sir,

Acknowledge receipt of the Minutes of the 129th meeting of SEAC held from 17th January, 2026 to 21st January, 2026 in which i have joined the meeting in virtual mode on 17th to 21st January, 2026.

I have reviewed the document in detail and find it to be an accurate record of the proceedings and decisions taken. Accordingly, I hereby convey my approval of the Minutes without any modifications.

Please place this communication on record and circulate the approved Minutes to the concerned at your earliest convenience.

[Quoted text hidden]