सत्यमेव जयते

File No: EC/SEIAA/2025-26/3995/2025

Government of India

Ministry of Environment, Forest and Climate Change

(Issued by the State Environment Impact Assessment Authority(SEIAA), JHARKHAND)

***

Dated: **25/02/2026**

To,

Kailash Chandra Kandpal
Azim Premji Foundation for development
134, Doddakannelli, Next to Wipro Corporate Office, Sarjapur Road, Bengaluru., BENGALURU URBAN, KARNATAKA, 560035
ramamurthy.rao@gmail.com

Subject: Grant of EC under the provision of the EIA Notification 2006-regarding.

Sir/Madam,

This is in reference to your application for Grant of EC under the provision of the EIA Notification 2006-regarding in respect of project 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 submitted to Ministry vide proposal number SIA/JH/INFRA2/560349/2025 dated 03/12/2025.

2. The particulars of the proposal are as below:

(i) EC Identification No.	EC25C0000JH5400770N
(ii) File No.	EC/SEIAA/2025-26/3995/2025
(iii) Clearance Type	EC
(iv) Category	B2
(v) Project/Activity Included Schedule No.	8(a) Building / Construction
(vii) Name of Project	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
(viii) Name of Company/Organization	Azim Premji Foundation for development
(ix) Location of Project (District, State)	RANCHI, JHARKHAND
(x) Issuing Authority	SEIAA
(xi) Applicability of General Conditions	no
(xii) Applicability of Specific Conditions	no

Plot/Survey Khasra Nos.: 2387

3. In view of the particulars given in the Para 1 above, the project proposal interalia including Form-1(Part A and B) were submitted to the Ministry for an appraisal by the State Environment Impact AssessmentAuthority(SEIAA) Appraisal Committee (SEIAA) in the Ministry under the provision of EIA notification 2006 and its subsequent amendments.

4. The above-mentioned proposal has been considered by State Environment Impact AssessmentAuthority(SEIAA) Appraisal Committee of SEIAA in the meeting held on 10/02/2026. The minutes of the meeting and all the Application and documents submitted [(viz. Form-1 Part A, Part B, Part C EIA, EMP)] are available on PARIVESH portal which can be accessed by scanning the QR Code above.

5. The brief about configuration of plant/equipment, products and byproducts and salient features of the project along with environment settings, as submitted by the Project proponent in Form-1 (Part A, B and C)/EIA & EMP Reports/presented during SEIAA are annexed to this EC as Annexure (1).

6. The SEIAA, in its meeting held on 10/02/2026, based on information & clarifications provided by the project proponent and after detailed deliberations recommended the proposal for grant of EC under the provision of EIA Notification, 2006 and as amended thereof subject to stipulation of specific and general conditions as detailed in Annexure (2).

7. The SEIAA has examined the proposal in accordance with the Environment Impact Assessment (EIA) Notification, 2006 & further amendments thereto and after accepting the recommendations of the State Environment Impact AssessmentAuthority(SEIAA) Appraisal Committee hereby decided to grant EC for instant proposal of M/s. Kailash Chandra Kandpal under the provisions of EIA Notification, 2006 and as amended thereof.

8. The Ministry reserves the right to stipulate additional conditions, if found necessary.

9. The EC to the aforementioned project is under provisions of EIA Notification, 2006. It does not tantamount to approvals/consent/permissions etc. required to be obtained under any other Act/Rule/regulation. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes, as applicable, to the project.

10. This issues with the approval of the Competent Authority.

Copy To
N/A

Annexure 1

Standard EC Conditions for (Building / Construction)

1. Statutory Compliance

S. No	EC Conditions
1.1	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.
1.2	The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc. as per National Building Code including protection measures from lightening etc.
1.3	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.

S. No	EC Conditions
1.4	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
1.5	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.
1.6	The project proponent shall obtain the necessary permission for drawl of ground water / surface water required for the project from the competent authority.
1.7	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.
1.8	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.
1.9	The provisions of the Solid Waste Management Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste Management Rules, 2016, shall be followed.
1.10	The project proponent shall follow the ECBC/ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.

Additional EC Conditions

N/A

Annexure 2

Details of Products & By-products

Name of the product /By-product	Product / By-product	Quantity	Unit	Mode of Transport / Transmission	Remarks (eg. CAS number)
Built-up area	Built-up area	80595.07	Sqm	Road	

State Level Environment Impact Assessment Authority, Jharkhand
Nursery Complex, Near Dhurwa Bus Stand, Dhurwa, Ranchi. Jharkhand-834 004
E-mail: msseiaa.jhk@gmail.com / website: www.jseiaa.in

Letter No. : **EC/SEIAA/2025-26/3995/2025/** Ranchi, Date :

To: **Shri Kailash Chandra Kandpal,**
State Head,
Azim Premji Foundation For Development,
134 Doddakanneli, Sarjapur Road,
Bangalore : 560035.

Sub. : Environmental Clearance for the project **"Proposed development of Azim Premji Medical College & Hospital by Azim Premji Foundation at Mauza: Itki Thakurgaon, Thana no. : 102, District : Ranchi, Jharkhand. (Proposal No : SIA/JH/INFRA2 /560349/2025) – regarding.**

Ref. : Your application no. Nil, dated – 19.11.2025.

It is in reference to the project **"Proposed development of Azim Premji Medical College & Hospital by Azim Premji Foundation at Mauza: Itki Thakurgaon, Thana no. : 102, District : Ranchi, Jharkhand"** submitted by you for seeking prior Environmental Clearances (EC).

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.

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	50%

Permissible	
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. Khatiyan.
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"

S.no.	Latitude	Longitude
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 Nearest Railway Station	Itki - Train station Piska - Train 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) Government Hospital – Hospital Itki (0.19 Km) Lievens Hospital (8.62 Km)

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
1st Floor	20,442.00	6,747.00	1522.62	940
2nd Floor	47,990.15	5,074.59	1854.72	940
3rd Floor	7,952.92	5,074.59	-	-
4th Floor	900.00	5,074.59	-	-
5th Floor	208.00	5,074.59	-	-
6th Floor	-	4,437.75	-	-
Terrace	3,102.00	-	85.32	-
Mummty 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
	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 for sprinkling						5000	
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	Flow To ETP
					Domestic		Flushing		Water requirement	Dom - 80%
				LPCD	LPCD	LPD	LPCD	LPD	LPD	LPD
1	**Hospital Block**	G+5								
a	Laundary			(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	Flow To STP
					Domestic		Flushing		Water requirement	Dom-80%
				LPCD	LPCD	LPD	LPCD	LPD	LPD	LPD
1	**Hospital Block**	G+5								

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					**151045**		**116460**	**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.

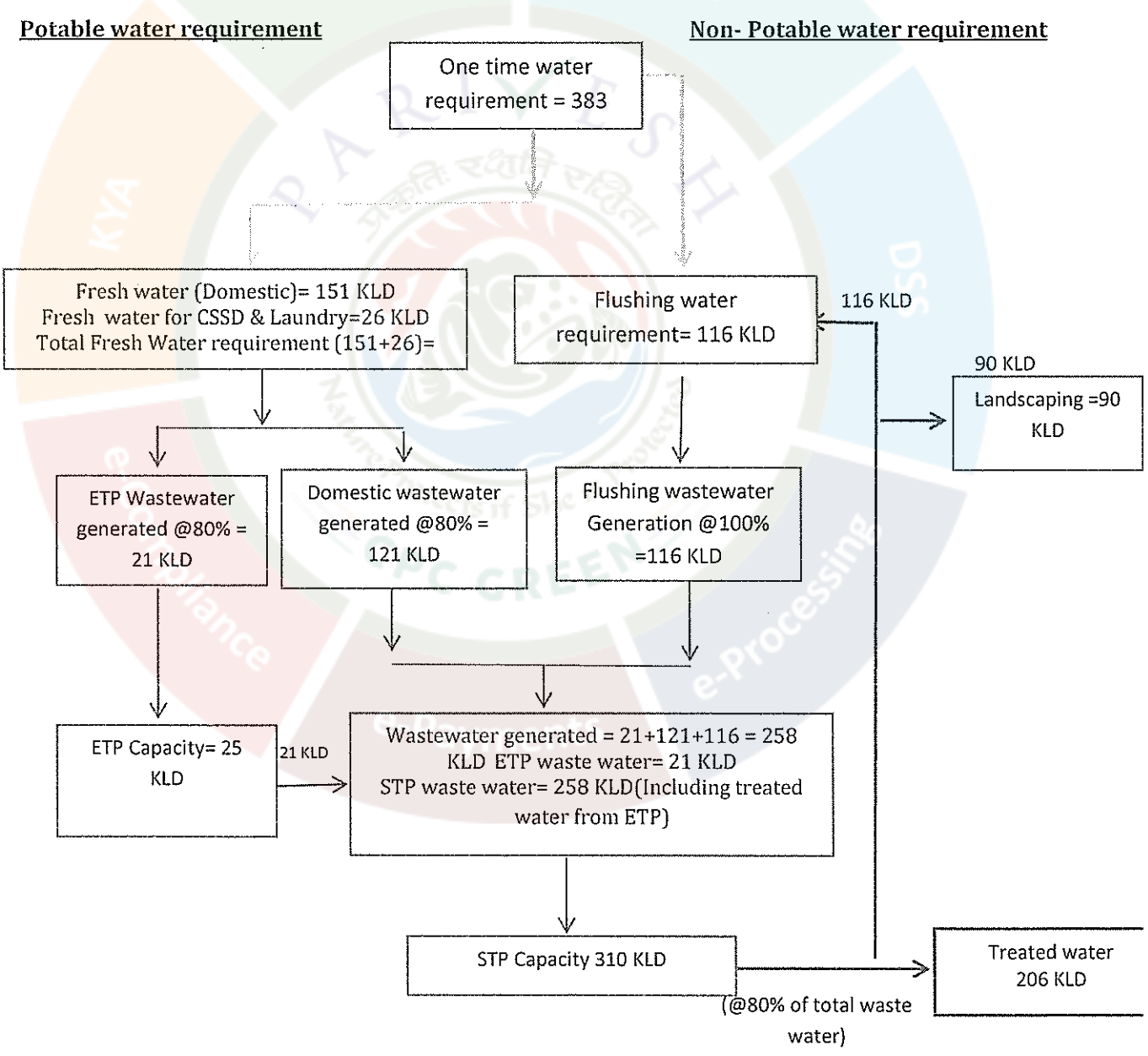
ETP: ETP treated water will be sent to STP for further treatment.
The treated water will be reused for
Flushing – 116 KLD
Landscaping - 90 KLD

During Monson (Rainy day) of 90 KLD extra treated water will be used in house ramp, floor cleaning etc.

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



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

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

Sl 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
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, senor operated light, Light Fittings instead of conventional light fixtures.
Façade &	45	360	1	131400	30	39420	Use of LED Light, timer

External Lighting							based, Light Fittings instead of 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						**5%**	

Energy							
Total % 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

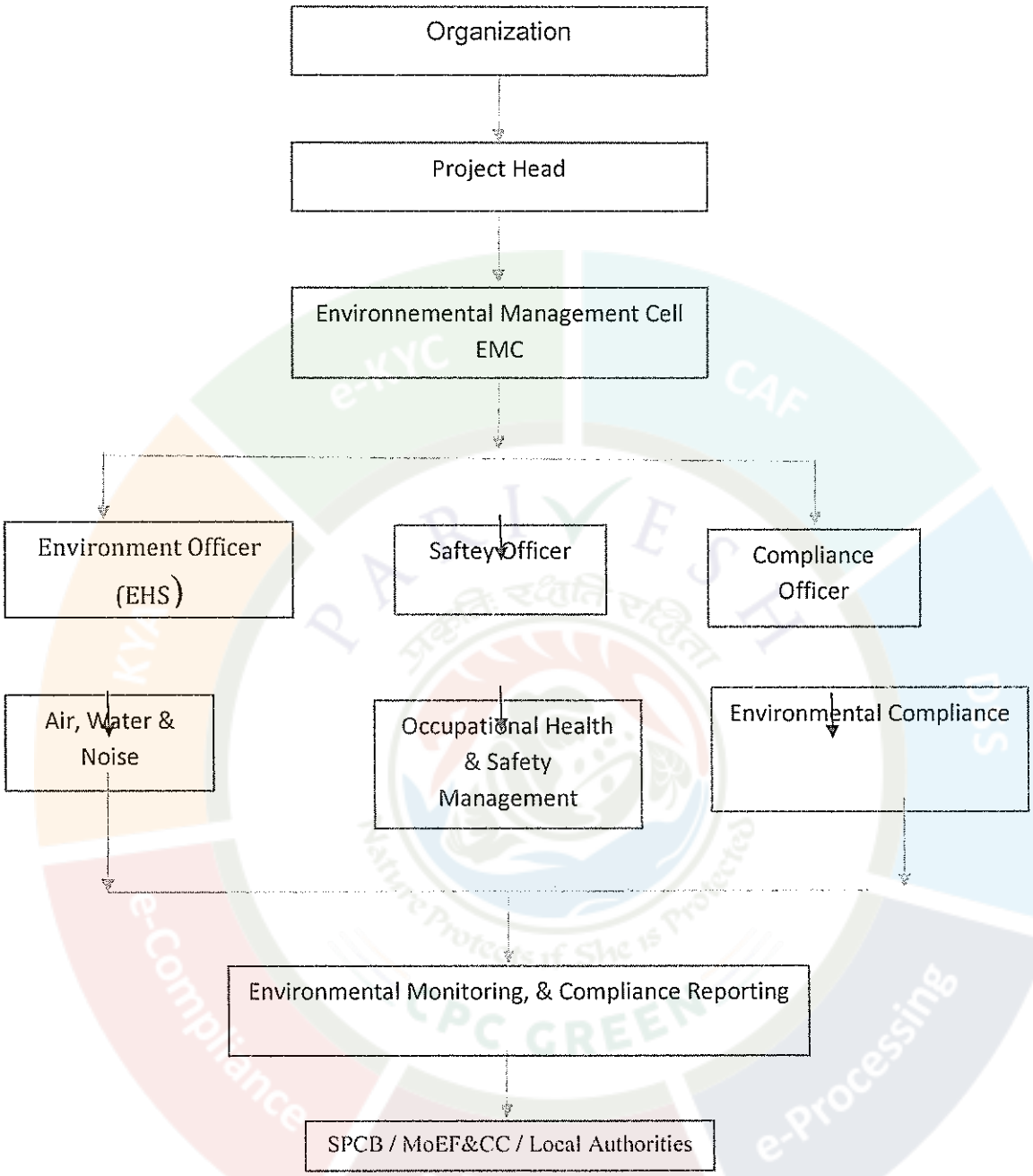
Our company is committed to:

- 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 (Portability testing)	(i) Any operational bore well (ii) One of the Drinking Water Point	Drinking water parameters as per IS 10500:2005.	Once in a Six month.	0.25
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**

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**

State Level Environment Level Impact Assessment Authority (SEIAA), Jharkhand in its **129th** meeting held on **10th & 11th February, 2026** discussed the project proposal along with recommendations made by SEAC in its **129th** meeting held on **17th, 18th, 19th, 20th and 21st January, 2026** and decided to grant EC to the project.

On the basis of recommendation of SEAC and decision of SEIAA to grant of EC, Environmental Clearance is hereby issued to the **"Proposed development of Azim Premji Medical College & Hospital by Azim Premji Foundation at Mauza: Itki Thakurgaon, Thana no. : 102, District : Ranchi, Jharkhand"** alongwith the following specific conditions as recommended by SEAC:

I. **Specific Conditions:**

i. This Environmental Clearance is valid subject to the following condition below – That this project has-

a. Obtained all legal rights to operate at concerned place.

b. Complied with all existing concerned laws of the land and

c. Complied with the decisions of SEIAA on the issue of Environmental Clearance till date.

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 proposed oxygen plant shall be set up after obtaining all applicable clearances / permissions.**

v. **Ground water to be drawn for use in the project only after obtaining permission from the Competent Authority.**

vi. **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.**

vii. **All raw material to be stored only under covered shed.**

viii. **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.**

ix. **Developers to promote solar energy generation such that it offsets not less than 05 % of connected load.**

x. **Trees should be developed & maintained not less than 15% of project area.**

xi. **Organic Waste Converter (OWC) to be installed of sufficient capacity such that all organic waste (bio degradable) generated is composted at source only.**

xii. **Developers/Company to install STP of sufficient capacity such that all the sewer produced is treated and reused.**

xiii. **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.**

xiv. **Developers/Company to conduct and submit carbon footprint and carbon sequestration study report including mitigation measures as a part of EC compliance.**

xv. **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.**

xvi. **Sufficient number of EV fast charging points to be installed.**

xvii. **After approval of Building Plan from competent Authority, it should be submitted to the SEIAA.**

xviii. **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.**

xix. **ISO 14k EMS system standard to be followed for implementation of EMPs with MRM in place for feedback to Sr management.**

xx. Install the required STP, if project start functioning before commencing or functioning of CETP of Municipal Corporation.

xxi. This Environmental Clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT, MoEF & CC and any other Court of Law, if any, as may be applicable to this project.

xxii. Environmental clearance is subject to obtaining prior clearance from forestry and Wildlife angle including clearance from standing committee of NBWL, as may be applicable to this project (in case any fauna occurs / is found in the Project area or if the area involves forest land or Wildlife habitat i.e. core zone of elephant/tiger reserve etc. and or located with in 10 km. of protected area).

xxiii. The project proponent may apply simultaneously for forest and NBWL clearance, in order to complete the formalities without undue delay, which till process on their respective merits, no rights will vest in or accrue to them unless all clearance are obtained.

xxiv. This Environmental Clearance shall be valid subject to the sustainable environmental management.

II. **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, 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.

III. **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, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.

vi. Sand, murram, 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.

IV. **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.

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.

V. 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.

VI. 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.

VII. 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.

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.

VIII. 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.

IX. 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.

X. 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.

XI. 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.

XII. 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 as per direction contained in EIA Notification, 2006 and as amended vide OM No. J-11013/5/2009-IA.II dated : 29.06.2010, OM No. F.No.J-11013/5/2011-IA.I dated : 05.08.2011 and letter No. J-11013/71/2016-IA I(M) dated : 25.10.2017 of MoEF & CC, Govt. of India.

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. The SEIAA, Jharkhand or any other competent Authority may alter modify the above conditions or stipulate any further condition in the interest of Environment Protection.

xvi. 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.

xvii. The Prescribed EC is valid as per Notification no. S.O. 1807(E) dated 12.04.2022 of MoEF & CC, Govt. of India.

Sd/-
Member Secretary
State Level Environment Impact
Assessment Authority, Jharkhand

Memo No. : **EC/SEIAA/2025-26/3995/2025/** 602 Ranchi, Date: 19-02-2026

Copy to:

1. Secretary, Department of Forests, Environment & Climate Change, Govt. of Jharkhand.
2. Deputy Commissioner, District – Ranchi, Jharkhand.

3. Divisional Forest Officer, Ranchi Forest Division, Ranchi, Jharkhand.
4. Divisional Forest Officer, Wildlife Division, Ranchi, Jharkhand.
5. Director, IA Division, Monitoring Cell, MoEF and Climate Change, Indira Paryavaran Bhavan, Jorbag Road, Aliganj, New Delhi – 110003.
6. Regional Office, Ministry of Environment, Forest and Climate Change, Govt. of India, 2nd Floor, Jharkhand State Housing Board (HQ), Harmu Chowk, Ranchi, Jharkhand – 834002.
7. Member Secretary, Jharkhand State Pollution Control Board, Ranchi.
8. Member Secretary, Jharkhand State Expert Appraisal Committee, Ranchi.
9. Website.
10. Guard file.

12/2/26

Member Secretary
State Level Environment Impact
Assessment Authority, Jharkhand

Signature Not Verified

Digitally Signed by : Smt Smitha Pankaj
Member Secretary, SEIAA

Date: 25/02/2026