State Level Environment Impact Assessment Authority, Jharkhand
Nursery Complex, Near Dhurwa Bus Stand, Dhurwa, Ranchi, Jharkhand-834004
E-mail: msseiaa.jhk@gmail.com/chr-seiaajhr@gov.in
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सत्यमेव जयते

Letter No.- **EC/SEIAA/2022-23/2763/2023/** Ranchi, Date:

To: **Shri Madan Mohan Singh (Secretary),**
Sitwanto Devi Mahila Kalyan Sansthan,
Surajpath, Baridih Basti, P.O. : Baridih,
District : East Singhbhum, Jamshedpur,
Jharkhand : 831017.

Sub: Prescribing of ToR to **"Proposed 350 bedded Hospital along with Oxygen Plant for M/s Netaji Subhas Medical College and Hospital a unit of Sitwanto Devi Mahila Kalyan Sansthan at Village: Bhatia & Halthiadih, District: Saraikela Kharsawan, Jharkhand" (Proposal No : SIA/JH/INFRA2/419242/2023) - regarding.**

Ref: Your application no.: Nil, Dated : 23.02.2023.

Sir,

The proposal was considered by the committee to determine the "Terms of Reference (TOR)" for undertaking detailed EIA study for the purpose of obtaining environmental clearance in accordance with the provisions of the EIA Notification, 2006 and amendments thereafter. For this purpose the project proponent has submitted the prescribed Form - I & PFR the proposed project falls under item 8 (a) Building and Construction Projects as per EIA Notification, 2006.

Project Category: 8 (a) Category B2 – (at par with B1 being violation case).

EC Application for Hospital building: Total built-up area of 52184.06 Sqm. (Approx. 9.5% part of the project has already been constructed).

This is a case of violation which has been taken for appraisal on 23.02.2023 in the light of OM no. F.No.22-21/2020-IA.III [E 138949] dated 28.01.2022 of MoEF & CC, Govt. of India, order passed by Hon'ble Apex Court in the matter of civil appeal no. 7576-7577 of 2021 in Electrosteel Steels Ltd. vs Union of India and SOS vide OM no. F.No. 22-21/2020-IA.III dated 07.07.2021 issued by MoEF & CC, Govt. of India.

Project is classified as Category 8 (a) as per EIA Notification as the built-up area is less than 1,50,000 sqm. and development area is less than 50 ha.

Project and Location Details:

Sl. No.	Parameters	Description
1.	Latitude	**22°48'6.97"N**

2.	Longitude	**86° 8'17.18"E**
3.	Plot Area	19243.20 Sqm. (Or 4.8 acres.)
4.	Project Cost	INR 130 Crores
5.	Built-up Area	52184.06 Sqm.
6.	Green Belt Area	5578.91 Sqm. (~28.9% of the plot area)
7.	Population	Hospital bed: 350 Nos. Attendant with patient (24 hours): 350 Nos OPD Visitors:1225 Nos All Staffs (Doctors, Nurses, Staff):210 Nos Kitchen & Pantry: 297 Nos.
8.	Water Requirement	255 KLD
9.	Fresh Water Requirement	155 KLD
10.	Reuse of Recycled Water	100 KLD
11.	Wastewater Generation	203 KLD
12.	STP Capacity	245 KLD
13.	ETP Capacity	25 KLD
14.	Total Municipal Waste	~418 kg/day Biodegradable Waste: ~ 167 Kg/day Non-Biodegradable Waste: ~251 Kg/day
15.	Power Requirement	3 MVA (JBVNL)
16.	DG Sets	750 KVA 2x125 KVA + 2x250 KVA
17.	RWH Pits	6 (11117.89 Cumec / hour)
18.	Parking	10,000 Sqm.
19.	Connecting road	NH-118: Approx. 0.27 km, towards SSE
20.	National Highway	NH-118: Approx. 0.27 km, towards SSE SH-5: Approx. 0.60 km, towards SW
21.	Nearest Railway Station	Adityapur Railway Station, (2.86 km, SE)
22.	Airport	Birsa Munda Airport, (Approx. 100 km, NW)
23.	Nearest Hospitals	ESI Hospital (Approx. 1.70 km, ESE) TMH Hospital (Approx. 4.36 km, East) Govt, Hospital Gamharia (Approx. 2.89 km, WNW)
24.	Nearest Water Bodies	Sitarampur Reservoir: Approx. 3.73 km, WSW. Kharkai River: Approx. 0.92 km, East.

		Subarnarekha River: Approx. 3.57 km North
25.	EMP Budget	During Construction: Capital: 33 Lakhs Recurring: 20.5 Lakhs
		Operational Cost: Capital: 180 Lakhs Recurring: 26 Lakhs
24.	Construction Phase:	Power Back-up: 50 KVA each Water Requirement & Source: Fresh water – 9 KLD Treated wastewater-12 KLD Source: Tanker Water STP (Modular): 20 KLD
25.	Connectivity	Adityapur Railway Station: Approx.2.86 km SE. Birsa Munda Airport: Approx.100 km, West.

Area Summary

S. No.	Description	Area (Sqm.)
1.	Plot Area at Site	**19243.20**
2.	Green Cover Area (@28.9 % of the plot area)	5578.91
	Green belt area (@15% of Plot area)	2886.48
	Other Green area (@ 13% of Plot area Park, Lawn etc.)	2692.43
3.	Open Area and Paved Area	3162.8
4.	Proposed Ground Coverage (@ 41.87% of net plot area)	8056.49
5.	Proposed FAR (@ 2.24 of plot area)	43106.04
6.	**Built-Up Area**	**52184.06**
7.	Height	Approx. 18 m

Co-Ordinates:

1	Latitude		**22°48'6.97"N**
2	Longitude		**86° 8'17.18"E**

Land Details:

1	Village- Bhatia & Hathiadih Tehsil-Adityapur Thana No. 60 Dist.- Saraikela-Kharsawan State- Jharkhand		**Khata no.** 81	**Plot No.** 301 (P)

Statutory Clearances:

1	Land Allotment Letter	The land has been allotted by JIADA vide Allotment order no. **LA/AD/SW/00860/200** dated 10/03/2022.
2	DFO Certificate	Divisional Forest Officer (DFO), Seraikela Forest Division vide letter no. 32, dated 07.01.2023 certified that the distance of forest boundary from proposed project is less than 250 m as the applied area is notified forest land, which has been transferred to AIADA, Adityapur for non – forestry work vide notification no. वनभूमि-47/2006-1910 व०प०, dated 01.07.2009 of Department of Forest & Environment, Govt. of Jharkhand.
3	DFO wildlife	DFO, Dalma Elephant Project vide letter no. 83, dated 07.01.2023 certified that the proposed project site is outside Eco Sensitive Zone of Dalma Wildlife Sanctuary.
4	CO certificate	The CO, Gamharia Seraikela vide letter no. 1153 dated 30.12.2022 has certified that proposed project site belongs to forest land, for which Department of Forest & Environment, Govt. of Jharkhand has been transferred the said land to AIADA, Adityapur for non – forestry work vide notification no. वनभूमि-47/2006-1910 व०प०, dated 01.07.2009. CO has also informed that proposed project site has been transferred to M/s Nataji Subhas Hospital vide allotment order no. LA/AD/SW/00860/2022, dated 10.03.2022 for the period of 30 years.
5	Building Plan	Conceptual Plan submitted.

Water and waste water Requirement Details

Sl. No.	Hospital Block	Total Population	LPCD	Domestic	Flushing	Total Domestic water	Total Flushing water	Total Water requirement	Total waste water
1	Hospital Bed	350	450	300	150	105000	52500	157500	136500
2	Attendant with patient (24 hours)	350	100	66	34	23100	11900	35000	30380
3	OPD Visitors	1225	15	10	5	12250	6125	18375	15925

4	All Staffs (Doctors. Nurses. Paramedical & non Paramedical staff)	210	45	20	25	4200	5250	9450	8610
5	Kitchen & Pantry	297	35	25	10	7425	2970	10395	8910
6	Laundry	.....	.....	.....	.....	3500	.....	3500	2450
						155475	**78745**	**234220**	**202775**
	ETP & STP Requirement								
	Effluent generation @10% of total wastewater	20 KLD	Capacity of ETP (20% higher than total effluent generation)						25 KLD
	Sewage generation @ 90% of total wastewater	203 KLD	Capacity of STP (20% higher than total Sewage generation)						245 KLD
	Total treated water generation		**162 KLD (@ 80% of total waste water)**						
	DG Cooling	750 KVA	4500						
	Irrigation water 5578.91 Sqm @3 l/sqm.		16737						
	Total water requirement (One Time)		**255457**						

Category	**Total Quantity (KLD)**
Fresh water Req. for domestic purpose	155
Flushing water Req.	79
Sewage generation (@80% of the fresh water consumption + 100% flushing water)	203
Capacity of STP	245
Recovered water from STP (80% of Waste water) 1. Flushing 2. Landscaping 3. Discharge to Sewer	162 79 16 66

Solid Waste

S. No.	Category of Solid Waste	Waste Generation Rate	Formula	Total Population	Waste Generated	Bio-degradable	Non-biodegradable
1.	Attendant with patient (24 hours)	0.3 to 0.6 kg/cap/day	Total Population*0.45	350	157.5	63	94.5
2.	All Staffs (Doctors, Nurses, Paramedical & non Paramedical staff)	0.1 to 0.3 kg/cap/day	Total Population*0.15	210	31.5	12.6	18.9
3.	Clinical Requirement OT/Lab/Nurses Station/Doctors Consultation room etc.	0.1 to 0.3 kg/cap/day	Total Population*0.15	297	45	18	27
4.	OPD Patient @ 3.5 of total no. of Beds	0.1 to 0.3 kg/cap/day	Total Population*0.15	1225	183.75	73.5	110.25
Total					**418**	**167**	**251**
1.	Bio medical waste generation	1 kg/Bed	Total Bed *1 Kg/day	350	350 Kg/day		
2.	OPD BMW			--	35 Kg/day		
Total					**385 Kg/day**		

ENVIRONMENT MANAGEMENT

Green Belt Development

- Combination of local trees and shrubs are planned within the project site.
- Green belt will be provided in **5578.91** sqm. (@28.90% of 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.

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 segregated at source & collected.
- 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).
- Recyclable wastes will be disposed to govt. or SPCB approved third party vendors.
- Dewatered sludge can be buried underground in a sanitary landfill. It also may be spread on agricultural land in order to make use of its value as a soil conditioner and fertilizer.
- The Hazardous waste generated 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 Labourers.
- Generated waste water will be collected through tankers and dispose to septic tank for treatment.

During Operation Phase

- STP of capacity i.e. 245 KLD & ETP of capacity 25 KLD is proposed for treatment of wastewater.
- Treated waste water would be reused for Horticulture, DG cooling, flushing and in nearby construction site/sewer.
- Use of water efficient plumbing fixtures to conserve water.
- Approx. 155 KLD of fresh water is required during operational phase of the project.

Air Quality Management

- 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

- Solar Panels will be used in Street Lights, Common area, Pumping area.

Based on the information contained in the documents submitted and the presentation made before the State Level Expert Appraisal Committee (SEAC) during its 101st meeting held during 20, 21, 22, 23 & 24.02.2023, the Committee recommends issuing of TORs for consideration of SEIAA for undertaking detailed EIA / EMP study and alongwith following specific condition as recommended by SEAC. SEIAA, Jharkhand has approved the ToRs in its 102nd meeting held on 17th & 18th March, 2023.

The TORs prescribed for undertaking detailed EIA study are as follows:

A. Standard Conditions :

1. Examine baseline environmental quality along with projected incremental load due to the project.
2. Environmental data to be considered in relation to the project development would be (a) land, (b) groundwater, (c) surface water, (d) air, (e) bio-diversity, (f) noise and vibrations, (g) socio economic and health.
3. Submit a copy of the contour plan with slopes, drainage pattern of the site and surrounding area. Any obstruction of the same by the project.
4. Submit the details of the trees to be felled for the project.
5. Submit the present land use and permission required for any conversion such as forest, agriculture etc.
6. Submit Roles and responsibility of the developer etc for compliance of environmental regulations under the provisions of E (P) Act.
7. Ground water classification as per the Central Ground Water Authority.
8. Examine the details of Source of water, water requirement, use of treated waste water and prepare a water balance chart.
9. Rain water harvesting proposals should be made with due safeguards for ground water quality Maximize recycling of water and utilization of rain water. Examine details.
10. Examine soil characteristics and depth of ground water table for rainwater harvesting.
11. Examine details of solid waste generation treatment and its disposal.
12. Examine and submit details of use of solar energy and alternative source of energy to reduce the fossil energy consumption. Energy conservation and energy efficiency.
13. DG sets are likely to be used during construction and operational phase of the project. Emissions from DG sets must be taken into consideration while estimating the impacts on air environment. Examine and submit details.
14. Examine road/rail connectivity to the project site and impact on the traffic due to the proposed project. Present and future traffic and transport facilities for the region should be analysed with measures for preventing traffic congestion and providing faster trouble free system to reach different destinations in the city.
15. A detailed traffic and transportation study should be made for existing and projected gatherings in different time & period.

16. Examine the details of transport of materials for construction which should include source and availability.
17. Examine separately the details for construction and operation phases both for Environmental Management Plan and Environmental Monitoring Plan with cost and parameters.
18. Submit details of a comprehensive Disaster Management Plan including emergency evacuation during natural and man-made disaster.
19. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
20. The cost of the Project (capital cost and recurring cost) the damage cost of already opened land as well as the cost towards implementation of EMP should be clearly spelt out.
21. Any further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative measure, project proponent can refer to the model ToR available on Ministry website http://moef.nic.in/Manual/Townships.
22. Any other rules / guidelines / orders issued by any competent authority shall be applicable to the project at the time of consideration of the projects for grant of EC.

B. Specific Conditions :

1. The State Govt. / SPCB to take action against the project proponent under the provisions of section 19 of the Environment (Protection) Act, 1986.
2. The project proponent shall be required to submit a bank guarantee equivalent to the amount of remediation plan and natural and community resource augmentation plan with the SPCB prior to the grant of EC. The quantum shall be recommended by the SEAC and finalized by the regulatory authority. The bank guarantee shall be released after successful implementation of the EMP, followed by recommendations of the SEAC and approval of the regulatory authority.
3. Assessment of ecological damage with respect to air, water, land and other environmental attributes. The collection and analysis of data shall be done by an environmental laboratory duly notified under the Environment (Protection) Act, 1986, or an environmental laboratory accredited by NABL, or a laboratory of a Council of Scientific and Industrial Research (CSIR) institution working in the field of environment.
4. Preparation of EMP comprising remediation plan and natural and community resource augmentation plan corresponding to the ecological damage assessed and economic benefits derived due to violation.
5. An assessment of the cumulative impact of all development and increased in habitation being carried out or proposed to be carried out by the project or other agencies in the core area, shall be made for traffic densities and parking capabilities in a 2 kms radius from the site. A detailed traffic management and a traffic decongestion plan drawn up throughan organization of repute and specializing in Transport Planning shall be summited withthe EIA and the plan to be implemented to the satisfaction of all the concerned state departments and implementing agencies".
6. Management of solid waste and the Construction & Demolition waste for the project vis-a-vis the Solid Waste Management Rules, 2016 and the Construction & Demolition Rules, 2016.

7. Details of all construction input should be furnished for assessment of Ecological damage/Environmental damage.
8. The remediation plan and the natural and community resource augmentation plan to be prepared as an independent chapter in the EIA report by the accredited consultants.
9. Funds allocation for Corporate Environment Responsibility (CER) shall be made as per Ministry's O.M. No. 22-65/ 2017-IA.III dated May, 2018 for various activities therein. The details of fund allocation and activities for CER shall be incorporated in EIA/EMP report.
10. 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.

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

Memo No.-**EC/SEIAA/2022-23/2763/2023/**468. Dated: 24.03.2023.

Copy to:

1. Additional Chief Secretary, Department of Forests, Environment & Climate Change, Govt. of Jharkhand for information and necessary action.
2. Member Secretary, Jharkhand State Pollution Control Board, Ranchi for information and necessary action.
3. Secretary, SEAC, Jharkhand, Ranchi for information and necessary action.

24/03/2023

Member Secretary
State Level Environment Impact
Assessment Authority, Jharkhand