



**State Level Environment Impact Assessment Authority, Jharkhand**

Nursery Complex, Near Dhurwa Bus Stand, Dhurwa, Ranchi, Jharkhand-834004

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Letter No.- EC/SEIAA/2021-22/2512/2021/

Ranchi, Date:

To: **Shri Chandan Kumar**  
**M/s Moti Infrastructures,**  
**Shiv Mandir ke Pass, Argora, Ranchi,**  
**Jharkhand – 834001.**

Sub: Prescribing of ToR to “Affordable Housing Project “Pearl Orchid” for LIG and EWS of M/s Moti Infrastructures at Village : Argora, Tehsil : Ranchi, Dist : Ranchi, Jharkhand” (Proposal No : SIA/JH/MIS/71739/2022) - regarding.

Ref: Your application no.: Nil, Dated : 15.02.2022.

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.

This is a case of violation which has been taken for appraisal on 20.02.2022 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 sq m and development area is less than 50 ha.

**Salient Features of the Project :**

Parameters	Description
Plot Area	6849.50 m <sup>2</sup> (approx. 1.69 acre)
Project Cost	INR 32 Crores

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Built-up Area	39388.94 m <sup>2</sup>
Green Area	342.5sq m (@5% of plot area)
Population	1391
Water Requirement	181 KLD
Fresh Water Requirement	125 KLD
Wastewater Generation	168 KLD
STP Capacity	180 KLD
Total Municipal Waste	685 kg/day
Power Requirement	500 KVA (Jharkhand State Electricity board)
DG Sets	1 no. of DG set of Total 125 KVA
RWH Pits	02 no.
Parking	481 no.
Connecting road	The project site is well connected with road. 12.5 m wide road abuts project site in North direction.
National Highway	NH 75 (700 m, E) 12.5 m road (abuts site in N direction)
Nearest Railway Station	Ranchi junction Railway station, (4.58 km, E)
Airport	Birsa Munda Airport, (3.6 km, SE)
Nearest Hospitals	Ranchi City Hospital, (2.5 Km, SE) Raj Hospital (3.58 km, E)
Nearest Water Bodies	Ranchi Lake (3.29 km, NE) Dhurwa Dam (6.9 km, SSW) Kanke Dam (5.1 km, N)

**Area Summary :**

Sl. no.	Description	Area (SQ M)
1.	Plot Area	6849.50
2.	Surrendered for road widening	71.43

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3.	Net Plot Area	6778.07
4.	Common Plot	830.52
5.	Balance plot area (1-2)	5947.54
6.	Permissible Ground Coverage (@50% of net plot area)	3389.03
7.	Proposed Ground Coverage (@34.64% of net plot area)	2348.05
8.	Permissible FAR (@3.5 of plot area)	23973.25
9.	Proposed FAR (@3.49 of plot area)	23921.49
	Residential	23681.39
	Utility Building	240.01
10.	Non FAR Area (including Basement)	15,467.45
	Basement	3,891.67
	On floors	11,575.78
11.	Built-up Area	39388.94
12.	Green Area (@5% of balance plot area)	342.5
13.	Height	43.9
14.	No of Dwelling Units	260

**CO-ORDINATES :**

1	Latitude	From 23°21'0.8"N	To 23°21'3.1"N
2	Longitude	From 85°17' 22.8"E	To 85°17' 26.8"E

**LAND DETAILS :**

1	Village - Argora,	<b>Khata No.</b>	<b>Plot no.</b>
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	Tehsil- Ranchi	73	1066 & 1067
		79	1064 & 1065

#### STATUTORY CLEARANCES :

1	DFO Forest Distance	:	DFO, Ranchi Forest Division vide letter no. 5047, dated 26.12.2020 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
2	DFO Wild Life	:	DFO, Wildlife Ranchi Division vide memo no. 764, dated 27.10.2020 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
3	CO certificate	:	The CO, Argora, Ranchi vide letter no. 424, dated 14.10.2020 has mentioned the plot no. of the project is not recorded as “Jangle Jhari” in Khatiyani.
4	AAI NOC	:	Airports Authority of India issued NOC vide NOC ID : RANC/EAST/B/011619/364096, dated 01.02.2019.
5	Fire Department	:	A Certificate from Fire Department, Ranchi, Govt. of Jharkhand vide letter no. 175/Tech, dated 21.01.2019.
6	Building Plan	:	Ranchi Municipal Corporation has approved the Building Plan vide Memo No. RMC/AH/0028/W36/2019, dated 28.02.2019.

#### Water and waste water Requirement Details :

Category	Population/Area (sq m)/Capacity	Standard (LPCD)	Water Requirement	Fresh Water Requirement	Recycled Water requirement
<b>Domestic</b>					
Residents	1300	135	176	123	53
Staff	26	45	2	1	1
Visitors	65	15	2	1	1
<b>Total Domestic Water Demand</b>			180	125	55
Landscape	342.5	1 l/day	1	0	1
<b>Total</b>		-	181	125	56

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Category	Total Quantity (KLD)
Fresh water Req.	125
Flushing water Req.	55
Sewage generation (@90% of the water consumption)	168
Capacity of STP	180
Recovered water from STP (80% of Waste water)	134
1. Flushing	55
2. Landscaping	1
3. Construction in nearby areas/road washing/sewer	78

### Solid Waste Requirement

S. No	Description	Occupancy/Area	kg/capita/day	Total Solid Waste Generation (kg/day)	Recyclable (kg/day)	Non Recyclable (kg/day)
1.	Residents	1300	0.5	650	195	455
2.	Staff	26	0.25	7	2	5
3.	Visitors	65	0.15	10	3	7
4.	Landscape waste	0.08 acres	0.2 kg/acres	1	0	1
5.	STP sludge	168 KLD	--	17	0	17
<b>Total Waste Generated</b>				685	200	485

## ENVIRONMENT MANAGEMENT

### Green Belt Development

- Combination of local trees and shrubs are planned within the project site.
- Green area will be provided in 342.5sq m (@5% 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. 180.0 KLD is proposed for treatment of wastewater.
- Treated waste water would be reused for Horticulture, DG cooling, flushing, fire fighting and in nearby construction site/sewer.
- Use of water efficient plumbing fixtures to conserve water.
- Approx. 125.0 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 (approx. 6 Nos of solar panels will be used to save around 10 % of the total power requirement).

### **During the presentation the following documents were sought :**

- i. Detail calculation of green cover area.
- ii. Revised water requirement calculation & its usage.
- iii. Revised solid waste calculation.
- iv. Submission of contour plan and evacuation plan.

### **The PAs have submitted the above required documents.**

Based on the information contained in the documents submitted and the presentation made before the State Level Expert Appraisal Committee (SEAC) during its meeting held during 18<sup>th</sup> – 27<sup>th</sup> February, 2022 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:

- i. **One month additional monitoring will be done during the month of March, 2022.**
- ii. **Excess water from the STP shall not be discharged out side of premises and appropriate utilization should be ensured.**

SEAC, Jharkhand has suggested the ToRs in its 93<sup>rd</sup> meeting dated 18<sup>th</sup>, 19<sup>th</sup>, 20<sup>th</sup>, 21<sup>st</sup>, 22<sup>nd</sup>, 23<sup>rd</sup>, 24<sup>th</sup>, 25<sup>th</sup>, 26<sup>th</sup> and 27<sup>th</sup> February, 2022 and SEIAA, Jharkhand has approved the ToRs in its 94<sup>th</sup> meeting held on 13<sup>th</sup>, 14<sup>th</sup> & 15<sup>th</sup> April, 2022.

### **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>.



## B. Specific Conditions :

1. As per para 12(3) of SO – 804(E) dated 14.03.2017 of Ministry of Environment, Forest and Climate Change, Govt. of India, 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 through an organization of repute and specializing in Transport Planning shall be submitted with the 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 would be valid for a period of three years for submission of the EIA / EMP reports, as per the O.M. No. J-11015/109/2013-IA.II(M), dated 12.01.2017.

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

Memo No.-EC/SEIAA/2021-22/2512/2021/ 103

Dated: 16/04/2022

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. Member Secretary, SEAC, Jharkhand, Ranchi for information and necessary action.

Member Secretary  
State Level Environment Impact  
Assessment Authority, Jharkhand

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16/04/2022