

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/2022-23/2600/2022/

Ranchi, Date:

To: M/s Morias Infrastructure Pvt. Ltd., Shri Sumit Singh (Project In-Charge), 302, 3rd Floor, Pustak Bhawan Complex, Court Road Ranchi, Jharkhand – 834001.

Sub: Prescribing of ToR to "Residential Housing Complex Shri Vrinda Green Phase - III" of M/s Morias Infrastructure Pvt. Ltd., Village: Morabadi, Ward no.: 4, Thana: Bariatu, Thana no.: 192, Distt.: Ranchi, Jharkhand" (Proposal No: SIA/JH/MIS/76970/2022) - regarding.

Ref: Your application no.: Nil, Dated: 06.07.2022.

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 18.07.2022 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.

The proposed project involves the construction of Residential Housing Complex"Shri Vrinda Green Phase-III" at RS Plot No. 730, 731, 732, 736, 737, 738, 739, 740, 741, 742, 743; Khata No. 08, 61,97 & 39, Village Morabadi, ward No. 4, thana Bariatu, Thana No. 192, District Ranchi, Jharkhand promoted by Morias Infrastructure Pvt. Ltd. The total plot area of the project as per deed is 13884.96 sq. m., as per site is 13,882.47 sq. m and after POS is 13113.22 sq.m. &.Total Built-up area envisaged for the project is 46795.90sq.mand net built-up area is 37159.35 sq.m Thus, the project requires prior Environmental Clearance under Item 8 (a) {Building & Construction projects} of Schedule- EIA Notification 2006 and subsequent amendments thereafter from the State Level Environmental Impact Assessment Authority, Jharkhand.

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Construction has been started on 01.12.2017 before getting environmental clearance. 90% of construction has been completed at project site till now.

Salient Features of the Project:

Particulars	Detai	Details			
Project address	Village Morabadi, ward N	o. 4, thana Bariatu, Thana No. 192, District			
	Ranchi, Jharkhand.				
Type of project	Group Housing Project (Bu	Group Housing Project (Building & Construction)			
Screening category	Category 'B-2', item 8(a), (I	Category 'B-2', item 8(a), (Building and Construction)			
Total Plot area as per	13884.96 sq. m				
deed					
Total Plot area as per	13,882.47 sq.m.				
site					
Plot area after P.O.S	13113.22 sq.m.				
Total Built up Area	46795.90sq.m.				
Net Built-up area	37159.35 sq.m				
Ground Coverage	Permissible : 35% (4589.	63 sq. m.)			
	Proposed : 33.30 % (4	366.70 sq. m.)			
FAR	Permissible : 3.0 (39339.66 sq. m.)				
	Proposed : 2.83 (37159.35 sq. m.)				
Green Area	26.69% (3500 sq. m.)				
Parking facilities	Required Parking	: 368 ECS			
	Provided Parking	: 368ECS			
Power requirement	Connected load	: 4224.50 KW			
	Max. demand	: 2137.60 KW			
Power backup	DG sets of capacity of	: 500 kVA, Inos			
Water requirement	Total Water requirement	: 195 KLD			
&source	Fresh Water	: 135 KLD			
	Recycled Water	: 60 KLD			
	Source	: Ground water Supply			
Sewage treatment	Sewage treatment facility	: STP of 180 KLD Capacity			
	Waste water generated	:150KLD			







& disposal	
Municipal Solid waste	912 Kg/day
No. of RWH Pits	04
Project cost	Rs. 53.65 crores

Khata no. & Plot no. of the project:

Khata no.	Plot no.
39	730, 731,732
61	736, 737, 738
97	739, 740, 741
8	742, 743

Geographical coordinates:

	Point -1	Point -2
Latitude	: 23°23'56.46"N	Latitude : 23°23'57.76"N
Longitude	: 85°20'50.71"E	Longitude : 85°20'52.07"E
	Point -3	Point -4
Latitude	: 29°23'59.56"N	Latitude : 23°23'59.82"N
Longitude	: 85°20'52.18"E	Longitude : 85°20'52.64"E
	Point 5	Point 6
Latitude	: 23°23'59.13"N	Latitude :23°23'54.93"N
Longitude	: 85°20'55.71"E	Longitude : 85°20'54.26"E
	Point 7	Point 8
Latitude	: 23°23'54.82"N	Latitude : 23°23'55.79"N
Longitude	: 85°20'53.17"E	Longitude : 85°20'50.58"E

The proposed Project involves the construction of Group Housing Project with Dwelling units (320 nos.), and other facilities like Community Hall.etc.

Project facilities are as under:-

S. No	Particulars	Details
1.	No of Blocks	4 Nos. (Block A, B, C, D)

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2.	Block wise	As under:	:-			
	No. of Floors	Blocks	Number of	Height (in m)		
		floors	Upto Terrace Level	Upto Mumty Level		
			Block A	B + G + 8 floors	26.65	30.55
			Block B	B+G+10	32.25	36.25
			Block C	B+G+10	32.25	36.25
			Block D	B+G+12	38.05	42.5
3.	Block wise	320 nos.	(8 dwelling	g unit/ floor) (3 BHI	(each)	
	Dwelling units	A Block	: 64			
		B Block	: 80			
		C Block	: 80			
		D Block	: 96			

Limit use threshage

S. No	Particulars	Permissible	Proposed	
1.	Total Plot area as per deed	13,884.96 sq. m.		
2.	Total Plot area as per site	13,113.22 sq. m.		
3.	Gross Built up area	46,795.90 sq. m		
5.	Ground Coverage	35% (4589.63 sq. m.) 33.30 % (4366.70 sq. m.		
6.	Green Area	26.69% (3500.00 sq. m.)		
7.	Paved area	40.01% (5246.52 sq. m.)		

Built Up Area Details:

Floor Name	Block-A+B+C+D+ Community Hall Block Built-up area details (sq.m.)			
	Total Built up area	Total deductions	Net Built up area	
Basement	4043.40	3762.34	281.06	

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4367.4	3858.11	509.29
4030.11	100.35	3929.76
3706.11	100.35	3605.76
3706.11	100.35	3605.76
3706.11	100.35	3605.76
3706.11	100.35	3605.76
3706.11	100.35	3605.76
3706.11	100.35	3605.76
3706.11	100.35	3605.76
2770.22	79.20	2691.02
2770.22	79.20	870.99
935.89	27.45	908.44
935.89	27.45	908.44
46795.90	8636.55	37159.35
	4030.11 3706.11 3706.11 3706.11 3706.11 3706.11 2770.22 2770.22 2770.22 935.89 935.89	4030.11 100.35 3706.11 100.35 3706.11 100.35 3706.11 100.35 3706.11 100.35 3706.11 100.35 3706.11 100.35 2770.22 79.20 2770.22 79.20 935.89 27.45 935.89 27.45

Parking Details:

Particulars	Flats/ dwelling	Basis	Required
	units		
Residential	320	@1 ECU/ flat	320 ECU
Visitors	-	@ 15% of total parking	48 ECU
			368 ECU

Required Parking : 368 ECU

Provided Parking : 368 ECU

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Population Projection:

S. No	Particulars	No of	Basis	Population
		flats/Area		
1.	Residential	320	@ 5 person/Flat*	1600
2.	Visitors	-	@15 % of residential Population	240
3.	Community hall (648 sqm.)	6972.48 sq. ft.	40 sq.ft./ person	174
4.	Staff			50
	Total			2064

Water demand calculation

S. No.	Particulars	Population	Fresh water	Treated water	Total water
1.	Residential	1600	@ 80 LPCD: 128	@21 LPCD: 33.6	162 KLD
			KLD	say 34 KLD	
2.	Visitors	240	@5 LPCD: 1	@10 LPCD: 3 KLD	4 KLD
			KLD		
3.	Community	174	@20LPCD: 4	@20 LPCD: 4 KLD	8 KLD
	Hall	1/4	KLD	W_LO ET CD. 4 KED	0 1(1.1)
4.	Staff	50	(<i>à</i>)25 LPCD: 2	@20 LPCD: 1 KLD	3 KLD
			KLD		
5.	Landscaping	<u>(a)</u> 5 lt/sq.m.	-	18 KLD	18 KLD
	Total		135 KLD	60 KLD	195 KLD

WATER & WASTE WATER MANAGEMENT

- Domestic waste water to the tune of 101 KLD will be treated in sewage treatment plant based on MBBR technology with capacity of 125 KLD.
- Treated water from STP will be reused/ recycled for flushing (27 KLD), landscaping & general washing (14KLD) which will help in reducing the water demand & Excessive treated water will be used in road side plantation (50KLD).
- Efforts will be done for water conservation by the use of efficient and low flow fixtures.
- Water meter will be installed to monitor the water usage at the following points.
 - Fresh water intake
 - Inlet of flushing tanks
 - **❖** STP inlet
 - **❖** STP outlet
 - Landscaping

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Characteristics of inlet and outlet of STP

Influent	Treated effluent
7.5 - 8.5	7 - 8
100- 150 mg/l	<5 mg/l
200 - 250 mg/l	<5 mg/l
450 - 600 mg/l	<60 mg/l
20-25 mg/l	<1 mg/l
	7.5 - 8.5 100- 150 mg/l 200 - 250 mg/l 450 - 600 mg/l

SOLID WASTE CALCULATION

Particulars	Population	Basis	Quantity of waste generated (in kg/day)
Residential	1600	0.5 kg/day	800
Visitor	414	@0.25 kg/day	103.5
Staff	50	@0.15 kg/day	7.5
Landscaping	0.8648	@0.133 kg/acre/day	0.115
Total		I .	911.115 say 912

SOILD WASTE MANAGEMENT:

Bins	Particulars	Treatment	Disposal	
Green	Compostable waste	Collected in green colored bins and disposed through organic waste convertor & compost pit	Organic waste convertor	
White	Dry/ recyclable waste:	No in-situ treatment. Collected in white colored bins and sent to solid waste collection point.	Segregated waste will be handed over to authorized	
Black	Other waste/ Domestic hazardous waste	No in-situ treatment. Collected in Black colored bins and sent to solid waste collection point	waste pickers or waste collectors.	

STATUTORY CLEARANCE

Airport Authority of India issued a height clearance NOC vide its NOC ID – RANC/EAST/B/020216/120503, dated 18.02.2016.

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- ► Fire fighting Department, Jharkhand has issued a Advisory vide its Letter No. 305, dated 29.06.2015.
- The DFO, Wildlife Ranchi Vide Letter No. 398 Dated 07.05.2022 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
- The DFO, Ranchi Forest Division vide Letter No. 2174 Dated 11.05.2022 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
- The CO, Baragai, Ranchi vide Letter No. 845 Dated 19.11.2020 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S Khatiyan.
- CGWA NOC for Ground Water abstraction has been obtained vide NOC No. CGWA/NOC/INF/ORIG/2021/13868 dated 30.11.2021, which was valid upto 29.11.2026.

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 $15^{th} - 22^{nd}$ July, 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:

SEAC, Jharkhand has suggested the ToRs in its 95th meeting held on 15th, 16th, 17th, 18th, 19th, 20th, 21st and 22nd July, 2022 and SEIAA, Jharkhand has approved the ToRs in its 96th meeting held on 26th, 27th & 28th July, 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.

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- 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. 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.
- 2. All raw material to be stored only under covered shed.

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- 3. PAs to offset (upto20%) consumption of conventional energy sources by promoting use of solar energy, passive energy utilization, optimum fenestration, shading effect and heat islands.
- 4. Developers to promote energy conservation measures such that it offsets not less than 02 % of connected load. It is to be achieved by solar panels etc meeting ECBC norms.
- 5. Trees should be developed & maintained not less than 15% of project area.
- 6. Organic Waste Converter (OWC) to be installed of sufficient capacity such that all organic waste (bio degradable) generated is composted at source only.
- 7. Developers/Company to install STP of sufficient capacity such that all the sewer produced is treated and reused.
- 8. 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.
- 9. Developers/Company to conduct and submit carbon footprint and carbon sequestration study report including mitigation measures as a part of EC compliance.
- 10. 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
- 11. 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.
- 12. 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.
- 13. 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.
- 14. 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.
- 15. 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 summitted withthe EIA and the plan to be implemented to the satisfaction of all the concerned state departments and implementing agencies".

- 16. Management of solid waste and the Construction & Demolition waste for the project visa-vis the Solid Waste Management Rules. 2016 and the Construction & Demolition Rules. 2016.
- 17. Details of all construction input should be furnished for assessment of Ecological damage/Environmental damage.
- 18. 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.
- 19. 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.
- 20. 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/2022-23/2600/2022/218

Dated: 06/8/2022

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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