State Level Environment Impact Assessment Authority, Jharkhand
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Letter No.-**EC/SEIAA/2022-23/2674/2022** Ranchi, Date:

To: **M/s Lall Steels Private Limited,**
Sri Munna Kumar Sinha (C.E.O.),
Power House Road, Village – Barganda,
District – Giridih, Pin Code – 815301 (Jharkhand).

Sub: Prescribing of ToR to **"Enhancing the production of TMT Bars / Rods from 16,500 TPA to 64,680 TPA by modernization of existing Re-Rolling Mill from 5 TPH to 10 TPH capacity and by enhancing the production of M.S. Billets from 12,210 TPA to 79,200 TPA by installing additional 2x10 T induction furnace along with existing 1x4 T induction furnace and existing 1x2 Strand, 4/7 Radius CCM of M/s Lall Steels Pvt. Ltd., Village : Mahtodih, P.S. : Mahtodih, P.O. : Udnabad, Distt. : Giridih, Jharkhand" (Proposal No. : SIA/JH/IND/400932/2022) - regarding.**

Ref: Your application no.- Nil, dated – 22.11.2022.

Sir,

It is in reference to the project **"Enhancing the production of TMT Bars / Rods from 16,500 TPA to 64,680 TPA by modernization of existing Re-Rolling Mill from 5 TPH to 10 TPH capacity and by enhancing the production of M.S. Billets from 12,210 TPA to 79,200 TPA by installing additional 2x10 T induction furnace along with existing 1x4 T induction furnace and existing 1x2 Strand, 4/7 Radius CCM of M/s Lall Steels Pvt. Ltd., Village : Mahtodih, P.S. : Mahtodih, P.O. : Udnabad, Distt. : Giridih, Jharkhand"** submitted by you for seeking Terms of Reference (ToR).

This is a existing project which has been taken for appraisal on 09.12.2022.

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 3 (a) Metallurgical Industries (Ferrous & Non-Ferrous) as per EIA Notification, 2006.

M/s Lall Steels Pvt. Ltd. is an existing steel plant at Village – Mathodih, P.S – Mathodih, P.O – Mathodih, District – Giridih, State – Jharkhand in total area of 7.57Ha.

The plant was initially installed by M/s Naiyadih Hi-Tech Pvt. Ltd. after obtaining Consent to Establish (CTE) for production of 20 TPD M.S Ingot from Bihar State Pollution Control Board

(BSPCB) vide Ref no. T-4500 dt. 23.08.1996. Further the production capacity of the plant was increased to 37 TPD of MS Ingots and installed 50TPD Re-rolling Mill in the year 1999 after obtaining CTE from BSPCB.

The Plant was taken over by M/s Lall Steels Pvt. Ltd. in the year 2011 and continued with the same production of 37TPD MS Ingots and 50TPD MS Bars after obtaining CTO from Jharkhand State Pollution Control Board (JSPCB) vide Ref. No. 1911 dt. 11.06.2014. The latest CTO is issued vide Ref. No. JSPCB/HO/RNC/CTO-12047631/2022/220, dt: 27.02.2022, valid up to 31.12.2023.

Company now proposes for enhancing the production of TMT Bars/ Rods from 16,500TPA to 64,680TPA by modernizing of Existing Re-rolling Mill from 5TPH to 10TPH capacity and by enhancing the production of M.S. Billets form 12,210TPA to 79,200TPA by installing additional 2x10T Induction Furnace along with existing 1x4T Induction Furnace and existing 1x2 Strand, 4/7 Radius CCM at Village – Mahtodih, P.S – Mahtodih, P.O. Udnabad and District – Giridih, Jharkhand.

Proposed Expansion shall be done within the Existing Plant area of 7.57Ha (18.7208Acres). No additional land is required. No forest land is involved. Out of the total area 2.82Ha (37.26%) will be developed as greenbelt.

Project background:

Latitude	24° 08' 53.64"N and 24° 08' 42.65"N	
Longitude	86° 20' 34.13"E and 86° 20' 22.69"E	
Points	**Latitude**	**Longitude**
A	24° 8'53.488"N	86°20'34.036"E
B	24° 8'51.672"N	86°20'32.573"E
C	24° 8'51.040"N	86°20'33.748"E
D	24° 8'48.387"N	86°20'32.053"E
E	24° 8'49.007"N	86°20'30.262"E
F	24° 8'51.010"N	86°20'31.442"E
G	24° 8'52.165"N	86°20'28.519"E
H	24° 8'50.310"N	86°20'27.719"E
I	24° 8'48.056"N	86°20'27.066"E
J	24° 8'46.831"N	86°20'26.564"E
K	24° 8'47.427"N	86°20'24.252"E
L	24° 8'42.618N	86°20'22.545"E
M	24° 8'40.624"N	86°20'30.584"E
N	24° 8'42.898"N	86°20'31.372"E

O	24° 8'42.878"N	86°20'34.616"E
P	24° 8'45.512"N	86°20'34.921"E
Q	24° 8'46.844"N	86°20'33.991"E
R	24° 8'50.882"N	86°20'34.040"E
S	24° 8'52.676"N	86°20'35.188"E

LAND DETAILS:

Khata No.	Plot No.	Khata No.	Plot No.
17	162, 189, 190, 192, 197	10	205, 179
19	164, 165	28	206
22	176, 195	30	208, 199, 209
20	177, 184	18	204, 188
12	158, 172, 174, 175, 185, 186, 187, 207, 203, 196	31	202
		11	193, 194
		35	183
33	157, 171	25	180, 182

Estimated cost for the proposed expansion is Rs. 12.44 Crs and the Total Project cost is estimated to be 21.7035 Crs. Including the cost of the existing plant at Rs. 9.2635 Crs. Employment Generation after the proposed project will be 90 direct employment and approximately 50-60 people will be employed during the construction phase and will be recruited from the local villages surrounding the project site.

Raw material for the plant would be procured from local and other state markets depending upon the quality. The transportation of raw material and the final products will be done through SH-13 that is adjacent to the project site. The capacity of different existing and proposed units is as follows:

Sl. No	Plant Facilities	Existing Configuration	Proposed New Configuration	Final Production Capacity (TPA)
1.	Induction Furnace	12.210TPA (1x4T)	66990TPA (2x10T- New Addition)	MS Billets 79.200TPA (1x4T+2x10T IF & 1x2 Strand, 4/7 Radius CCM)
	Continuous Casting Machine	1x2 Strand, 4/7 Radius CCM	--	
2	Rolling Mill (TMT Bars/Rods)	16.500TPA (1x5TPH) Will be modernized	64.680 TPA* (Modernization of existing 1x5TPH capacity Rolling	Roll Products (TMT Bars/ Rods) 64.680 TPA

Sl. No	Plant Facilities	Existing Configuration	Proposed New Configuration	Final Production Capacity (TPA)
			Mill To 1x10TPH capacity)	
3	Reheating Furnace (Coal Fired)	50TPD	--	50TPD (Will be operated only in the case of Emergency)

The rolling capacity will be increases by installing high speed rolls and increasing number of working hours.

Total requirement of power required after the proposed expansion will be 12.2 MVA. Power requirement will be sourced form Damodar Valley Corporation (DVC). DG Sets existing 1x500kVA and an additional of 2x180kVA DG set for meeting emergency requirement of the plant.

Total Raw material requirement after the proposed expansion of plant is given below :

Raw Materials	Existing Requirement (TPA)	Total Requirement After Expansion (TPA)	Source
MS Billets Production	***12210TPA***	***79200TPA***	
Sponge Iron	9768	63360 TPA	Local Plants in Giridih. Through Road
Pig Iron	3663	23760 TPA	
Scrap	1831	11880 TPA	In-house & nearby Plants. Through Road
Ferro Alloys (SiMn/FeSi)	24	158 TPA	Local Plants in Giridih. Through Road
Total Raw Materials	**15286**	**99158 TPA**	
Rolling Mill – TMT Bars/Rods	***16500TPA***	***64680 TPA***	
Hot Billets/M.S. Billets	16830	66,000 TPA	Billets 66.000TPA will be used for in-house rolling mill & Balance 13200TPA sell to other plants
Reheating Furnace	***50TPD***	--	
Coal	1050	--	Dhanbad & Giridih Through Road.

The total water requirement after the proposed expansion will be 113KLD. Water requirement will be met from Groundwater through borewells. Application vide Ref. No. 21-4/934/JH/IND/2022 has been submitted to the Central Ground Water Authority (CGWA) to obtain NOC for 113KLD of water withdrawal through bore well. Zero Liquid Discharge (ZLD) shall be maintained.

The proponent has mentioned that there is no court case or violation under EIA Notification to the project or related activity.

STATUTORY CLEARANCES:

1	DFO Forest Distance		DFO, Giridih East Forest division vide letter no. 2206, dated 11.11.2020 & letter no. 1320, dated 09.06.2022 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
2	DFO wildlife	:	DFO, Wildlife Hazarinag vide letter no. 1159, dated 16.07.2021 certified that the said project is outside of Eco Sensitive Zone of Parasnath and Topchanchi Wildlife Sanctuary.
3	CO certificate	:	The CO, Giridih Sadar vide letter no. 284, dated 10.03.2022 & letter no. 445, dated 13.04.2022 have mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S. Khatiyan & Register II.
4	Consent to Establish (CTE) & Consent to Operate (CTO)	:	i. **CTE** issued by JSPCB vide Ref. no. JSPCB/HO/RNC/CTE-5535934/2019/545, dated 24.09.2019. ii. **CTO** issued by JSPCB vide Ref. no. B-1911, dated 11.06.2014. iii. **CTO** issued by JSPCB vide Ref. no. JSPCB/HO/RNC/CTO-6943167/2020/437, dated 19.02.2020 iv. **CTO** issued by JSPCB vide Ref. no. JSPCB/HO/RNC/CTO-12047631/2022/220, dated 27.02.2022.

Based on the information contained in the documents submitted and the presentation made before the State Level Expert Appraisal Committee (SEAC) during its meetings held during **07, 08, 09, 10 & 11.12.2022**, the Committee recommends for issuing of TOR for consideration of SEIAA for undertaking detailed EIA / EMP study and alongwith the following specific conditions as recommended by SEAC:

SEAC, Jharkhand has suggested the ToRs in its 99th meeting dated 07th, 08th, 09th, 10th and 11th December, 2022 and SEIAA, Jharkhand has approved the ToRs in its 100th meeting held on 21st, 22nd & December, 2022.

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

A. Standard Terms of Reference

1. Executive Summary

2. Introduction

i. Details of the EIA Consultant including NABET accreditation.
ii. Information about the project proponent.
iii. Importance and benefits of the project.

3. Project Description

i. Cost of project and time of completion.
ii. Products with capacities for the proposed project.
iii. If expansion project, details of existing products with capacities and whether adequate land is available for expansion, reference of earlier EC if any.
iv. List of raw materials required and their source along with mode of transportation.
v. Other chemicals and materials required with quantities and storage capacities
vi. Details of Emission, effluents, hazardous waste generation and their management.
vii. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract)
viii. Process description along with major equipments and machineries, process flow sheet (quantative) from raw material to products to be provided.
ix. Hazard identification and details of proposed safety systems.
x. Expansion/modernization proposals:
    a. Copy of all the Environmental Clearance(s) including Amendments thereto obtained for the project from MOEF/SEIAA shall be attached as an Annexure. A certified copy of the latest Monitoring Report of the Regional Office of the Ministry of Environment and Forests as per circular dated 30th May, 2012 on the status of compliance of conditions stipulated in all the existing environmental clearances including Amendments shall be provided. In addition, status of compliance of Consent to Operate for the ongoing / existing operation of the project from SPCB shall be attached with the EIA-EMP report.
    b. In case the existing project has not obtained environmental clearance, reasons for not taking EC under the provisions of the EIA Notification 1994 and/or EIA Notification, 2006 shall be provided. Copies of Consent to Establish/No Objection Certificate and Consent to Operate (in case of units operating prior to EIA Notification 2006, CTE and CTO of FY 2005-2006) obtained from the SPCB shall be submitted. Further, compliance report to the conditions of consents from the SPCB shall be submitted.

4. Site Details

i. Location of the project site covering village, Taluka/Tehsil, District and State. Justification for selecting the site, whether other sites were considered.

ii. A toposheet of the study area of radius of 10km and site location on 1:50,000/1:25,000 scale on an A3/A2 sheet. (including all eco-sensitive areas and environmentally sensitive places).

iii. Details w.r.t. option analysis for selection of site

iv. Co-ordinates (lat-long) of all four corners of the site. .

v. Google map-Earth downloaded of the project site.

vi. Layout maps indicating existing unit as well as proposed unit indicating storage area, plant area, greenbelt area, utilities etc. If located within an Industrial area/Estate/Complex, layout of Industrial Area indicating location of unit within the Industrial area/Estate.

vii. Photographs of the proposed and existing (if applicable) plant site. If existing, show photographs of plantation/greenbelt, in particular.

viii. Landuse break-up of total land of the project site (identified and acquired), government/ private - agricultural, forest, wasteland, water bodies, settlements, etc shall be included. (not required for industrial area)

ix. A list of major industries with name and type within study area (10km radius) shall be incorporated. Land use details of the study area

x. Geological features and Geo-hydrological status of the study area shall be included.

xi. Details of Drainage of the project upto 5km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based on peak rainfall data of the past 30 years. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided. (mega green field projects)

xii. Status of acquisition of land. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.

xiii. R&R details in respect of land in line with state Government policy.

5. Forest and Wildlife related issues (if applicable):

i. Permission and approval for the use of forest land (forestry clearance), if any, and recommendations of the State Forest Department. (if applicable).

ii. Landuse map based on High resolution satellite imagery (GPS) of the proposed site delineating the forestland (in case of projects involving forest land more than 40 ha)

iii. Status of Application submitted for obtaining the stage I forestry clearance along with latest status shall be submitted.

iv. The projects to be located within 10 km of the National Parks, Sanctuaries, Biosphere Reserves, Migratory Corridors of Wild Animals, the project proponent shall submit the map duly authenticated by Chief Wildlife Warden showing these features vis-à-vis the project location and the recommendations or comments of the Chief Wildlife Warden-thereon

v. Wildlife Conservation Plan duly authenticated by the Chief Wildlife Warden of the State Government for conservation of Schedule I fauna, if any exists in the study area

vi. Copy of application submitted for clearance under the Wildlife (Protection) Act, 1972, to the Standing Committee of the National Board for Wildlife.

6. Environmental Status:

i. Determination of atmospheric inversion level at the project site and site-specific micro- meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall.

ii. AAQ data (except monsoon) at 8 locations for PM10, PM2.5, SO2, NOX, CO and other parameters relevant to the project shall be collected. The monitoring stations shall be based CPCB guidelines and take into account the pre-dominant wind direction, population zone and sensitive receptors including reserved forests.

iii. Raw data of all AAQ measurement for 12 weeks of all stations as per frequency given in the NAQQM Notification of Nov. 2009 along with - min., max., average and 98% values for each of the AAQ parameters from data of all AAQ stations should be provided as an annexure to the EIA Report.

iv. Surface water quality of nearby River (100m upstream and downstream of discharge point) and other surface drains at eight locations as per CPCB/MoEF & CC guidelines.

v. Whether the site falls near to polluted stretch of river identified by the CPCB/MoEF & CC, if yes give details.

vi. Ground water monitoring at minimum at 8 locations shall be included.

vii. Noise levels monitoring at 8 locations within the study area.

viii. Soil Characteristic as per CPCB guidelines.

ix. Traffic study of the area, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to proposed project, parking arrangement etc.

x. Detailed description of flora and fauna (terrestrial and aquatic) existing in the study area shall be given with special reference to rare, endemic and endangered species. If Schedule- I fauna are found within the study area, a Wildlife Conservation Plan shall be prepared and furnished.

xi. Socio-economic status of the study area.

7. Impact and Environment Management Plan:

i. Assessment of ground level concentration of pollutants from the stack emission based on site-specific meteorological features. In case the project is located on a hilly terrain, the AQIP Modelling shall be done using inputs of the specific terrain characteristics for determining the potential impacts of the project on the AAQ. Cumulative impact of all sources of emissions (including transportation) on the AAQ of the area shall be assessed. Details of the model used and the input data used for modelling shall also be provided. The air quality contours shall be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any.

ii. Water Quality modelling - in case of discharge in water body

iii. Impact of the transport of the raw materials and end products on the surrounding environment shall be assessed and provided. In this regard, options for transport of

raw materials and finished products and wastes (large quantities) by rail or rail-cum road transport or conveyor- cum-rail transport shall be examined.

iv. A note on treatment of wastewater from different plant operations, extent recycled and reused for different purposes shall be included. Complete scheme of effluent treatment. Characteristics of untreated and treated effluent to meet the prescribed standards of discharge under E(P) Rules.

v. Details of stack emission and action plan for control of emissions to meet standards.

vi. Measures for fugitive emission control.

vii. Details of hazardous waste generation and their storage, utilization and management. Copies of MOU regarding utilization of solid and hazardous waste in cement plant shall also be included. EMP shall include the concept of waste-minimization, recycle / reuse / recover techniques, Energy conservation, and natural resource conservation.

viii. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 2009. A detailed plan of action shall be provided.

ix. Action plan for the green belt development plan in 33 % area i.e. land with not less than 1,500 trees per ha. Giving details of species, width of plantation, planning schedule etc. shall be included. The green belt shall be around the project boundary and a scheme for greening of the roads used for the project shall also be incorporated.

x. Action plan for rainwater harvesting measures at plant site shall be submitted to harvest rainwater from the roof tops and storm water drains to recharge the ground water and also to use for the various activities at the project site to conserve fresh water and reduce the water requirement from other sources.

xi. Total capital cost and recurring cost/annum for environmental pollution control measures shall be included.

xii. Action plan for post-project environmental monitoring shall be submitted.

xiii. Onsite and Offsite Disaster (natural and Man-made) Preparedness and Emergency Management Plan including Risk Assessment and damage control. Disaster management plan should be linked with District Disaster Management Plan.

8. Occupational health:

i. Plan and fund allocation to ensure the occupational health & safety of all contract and casual workers.

ii. Details of exposure specific health status evaluation of worker. If the workers' health is being evaluated by pre designed format, chest x rays, Audiometry, Spirometry, Vision testing (Far & Near vision, colour vision and any other ocular defect) ECG, during pre placement and periodical examinations give the details of the same. Details regarding last month analyzed data of above mentioned parameters as per age, sex, duration of exposure and department wise.

iii. Details of existing Occupational & Safety Hazards. What are the exposure levels of hazards and whether they are within Permissible Exposure level (PEL). If these are not within PEL, what measures the company has adopted to keep them within PEL so that health of the workers can be preserved.

iv. Annual report of heath status of workers with special reference to Occupational Health and Safety.

9. **Corporate Environment Policy:**

   i. Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.

   ii. Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA.

   iii. What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions? Details of this system may be given.

   iv. Does the company have system of reporting of non compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism shall be detailed in the EIA report.

10. Details regarding infrastructure facilities such as sanitation, fuel, restroom etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase.

11. **Enterprise Social Commitment (ESC)**

   i. Adequate funds (at least 2.5 % of the project cost) shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan shall be included. Socio-economic development activities need to be elaborated upon.

12. Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, details thereof and compliance/ATR to the notice(s) and present status of the case.

13. A tabular chart with index for point wise compliance of above TOR.

B. SPECIFIC TERMS OF REFERENCE FOR EIA STUDIES FOR METALLURGICAL INDUSTRIES (FERROUS & NON FERROUS)

1. Complete process flow diagram describing each unit, its processes and operations, along with material and energy inputs & outputs (material and energy balance).
2. Details on blast furnace/ open hearth furnace/ basic oxygen furnace/ladle refining, casting and rolling plants etc.
3. Details on installation/activation of opacity meters with recording with proper calibration system
4. Details on toxic metals including mercury, arsenic and fluoride emissions
5. Details on stack height requirement for integrated steel
6. Details on ash disposal and management -Non-ferrous metal
7. Complete process flow diagram describing production of lead/zinc/copper/ aluminium, etc.
8. Raw materials substitution or elimination

9. Details on smelting, thermal refining, melting, slag fuming, and Waelz kiln operation
10. Details on Holding and de-gassing of molten metal from primary and secondary aluminum, materials pre-treatment, and from melting and smelting of secondary aluminium
11. Details on solvent recycling
12. Details on precious metals recovery
13. Details on composition, generation and utilization of waste/fuel gases from coke oven plant and their utilization.
14. Details on toxic metal content in the waste material and its composition and end use (particularly of slag).
15. Trace metals Mercury, arsenic and fluoride emissions in the raw material.
16. Trace metals in waste material especially slag.
17. Plan for trace metal recovery
18. Trace metals in water

C. Other

1. Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the F.R for securing the TOR) should be brought to the attention of SEIAA, Jharkhand with reasons for such changes and permission should be sought, as the TOR may also have to be altered.
2. After preparing the draft EIA (as per the generic structure prescribed in Appendix- III of the EIA Notification, 2006) covering the above mentioned issues, the proponent will get the public hearing conducted and take further necessary action for obtaining environmental clearance in accordance with the procedure prescribed under the EIA Notification, 2006.
3. 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/2022-23/2674/2022/** 345 Dated: 29·12·2022

Copy to:

1. Member Secretary, Jharkhand State Pollution Control Board, Ranchi for information and necessary action.
2. Secretary, SEAC, Jharkhand, Ranchi for information and necessary action.

Member Secretary
State Level Environment Impact
Assessment Authority, Jharkhand