State Level Environment Impact Assessment Authority, Jharkhand
Nursery Complex, Near Dhurwa Bus Stand, P.O+P.S-Dhurwa, Ranchi, Jharkhand-834 004
E-mail: mssciaa.jhk@gmail.com / chr-seiaajhr@gov.in
website: www.jseiaa.org

Letter No.-**EC/SEIAA/2023-24/2895/2023/** Ranchi, Date:

To: **M/s Tulshyan Metals Private Limited,**
Shri Ashish Kumar Agrawal,
Director,
Gajhandi Road, Gumo Jhmri Telaiya,
District – Koderma – 825409, Jharkhand.

Sub: Prescribing of ToR to **"Enhancement of MS Billet Production from 15,000 TPA to 1,48,500 TPA through 3x15 T Induction Furnaces (by Replacing existing 1x6 T furnace with 1x15 T & Installing additional 2x15 T Furnaces along with CCM – 2x2 Strand), Slag Crusher from 2400 TPA to 30,000 TPA capacity and TMT Bars & Rolled Products from 13,500 TPA to 1,44,210 TPA by Modernization of Existing Rolling Mill from 1x5 TPH to 1x25 TPH capacity along with Electroplating unit of 20 TPD by M/s Tulshyan Metals Private Limited, Village : Gajhandi Road, Gumo Jhumri Telaiya, P.S. : Koderma, Dist. : Koderma, Jharkhand" (Proposal No. : SIA/JH/IND1/439213/2023) - regarding.**

Ref: Your application no.- Nil, dated – 11.08.2023.

Sir,

It is in reference to the project **"Enhancement of MS Billet Production from 15,000 TPA to 1,48,500 TPA through 3x15 T Induction Furnaces (by Replacing existing 1x6 T furnace with 1x15 T & Installing additional 2x15 T Furnaces along with CCM – 2x2 Strand), Slag Crusher from 2400 TPA to 30,000 TPA capacity and TMT Bars & Rolled Products from 13,500 TPA to 1,44,210 TPA by Modernization of Existing Rolling Mill from 1x5 TPH to 1x25 TPH capacity along with Electroplating unit of 20 TPD by M/s Tulshyan Metals Private Limited, Village : Gajhandi Road, Gumo Jhumri Telaiya, P.S. : Koderma, Dist. : Koderma, Jharkhand"** submitted by you for seeking Terms of Reference (ToR).

This is an expansion project which has been taken for appraisal on 17.08.2023.

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 Tulshyan Metals Private Limited is an existing secondary unit at Gajhandi Road, Gumo, Jhumri Telaiya, District Koderma, and State Jharkhand. M/s Tulshyan Metals Private Limited is a Private incorporated on 08 August 2005. It is classified as Non-govt Company and is registered at Registrar of Companies, Patna. Mr. Ashish Kumar Agrawal, Mrs. Richa Agrawal is the directors of the company.

M/s Tulshyan Metals Private Limited is currently engaged in the production of 15000 TPA M.S. Ingot/Billet through 1x6T Induction Furnace & CCM (2x2 Strand, Rad. 4/7) along with Slag Crusher of capacity 2400 TPA & TMT Bars, Rolled products 13500 TPA by Rolling Mill of capacity 1X5 TPH after obtaining the Consent To Establish (CTE) from Jharkhand State Pollution Control Board (JSPCB) vide letter No. JSPCB/HO/RNC/CTE-10604394/2021/240, dated 27-09-2021.

Consent to Operate (CTO) for the same production capacity was obtained from JSPCB vide ref No. JSPCB/HO/RNC/CTO-11520314/2022/137, dated 04.02.2022 with a validity upto 30/09/2022.

M/s Tulshyan Metals Private Limited now proposes to obtain Environmental Clearance for the Enhancement of MS Billet Production From 15,000 TPA to 148,500 TPA through 3x15T Induction Furnaces (by Replacing existing 1x6 T furnace with 1x15T & Installing additional 2x15T Furnaces Along With CCM-2X2 Strand, Slag Crusher From 2400 TPA to 30,000 TPA capacity and TMT Bars & Rolled Products from 13,500 TPA To 144,210 TPA By Modernization Of Existing Rolling Mill From 1x5TPH To 1x25 TPH Capacity along with Electroplating Unit of 20 TPD. The expansion will be done within the existing plant of 2.70 Acres.

Cost of the existing facilities is Rs. 10.0 crore, the total estimated cost of the project after the proposed expansion will be Rs 43. Crore.

Project Details:

Sl. No	Parameters	Description
1.	Project Name	Environmental Clearance for the Enhancement of MS Billet Production From 15,000 TPA to 148,500 TPA through 3x15T Induction Furnaces (by Replacing existing 1x6 T furnace with 1x15T & Installing additional 2x15T Furnaces Along With CCM-2X2 Strand), Slag Crusher From 2400 TPA to 30,000 TPA capacity and TMT Bars & Rolled Products from 13,500 TPA To 144,210 TPA By Modernization Of Existing Rolling Mill From 1x5TPH To 1x25 TPH Capacity along with Electroplating Unit of 20 TPD by M/s Tulshyan Metals Private Limited

2.	Existing Capacity	MS Billet - 15000 TPA. Slag Crusher - 2400 TPA. TMT Bars Rolled products - 13500 TPA.
3.	Capacity after proposed Expansion	MS Billet - 148.500 TPA. Slag Crusher - 30.000 TPA. TMT Bars Rolled products - 144.210 TPA.
4.	Total Plot Area	Total Plot Area 2.70 Acre
5.	Location	Gajhandi Road, Gumo, Jhumri Telaiya, District Koderma, and State Jharkhand
6.	Water requirement	Water requirement is fulfilled through bore well made at the plant area and from the rain water harvesting pond. Overall water requirement for the proposed expansion project will be approx. 300 KLD out of which 270 KLD will be recirculate in the process and 30 KLD will be makeup water.
7.	Source of water	Borewell
8.	Wastewater	The domestic water consumption will result in generation of ~4.0 m3/day of domestic wastewater. The wastewaters will be treated and entirely reused.
9.	Man Power	Existing: 40 Total after expansion: 100
10.	Electricity/Power requirement	The electrical power requirement will increase to ~22000 kVA. One DG set of 250 kVA already installed (as power back-up).
11.	Alternative site	The proposed addition will be established in the existing plant premises only.

Land Details:

Khata No.	Plot No.
97	104
34	105
100	103

Latitude & Longitude of the project :

Sl No.	Latitude	Longitude
1	24°25'57.894"N	85°29'23.137"E
2	24°25'57.668"N	85°29'24.942"E
3	24°25'58.683"N	85°29'25.122"E
4	24°25'58.300"N	85°29'27.378"E
5	24°25'57.510"N	85°29'27.333"E
6	24°25'56.653"N	85°29'30.515"E
7	24°25'55.953"N	85°29'33.109"E
8	24°25'54.284"N	85°29'32.207"E
9	24°25'55.592"N	85°29'27.897"E
10	24°25'56.472"N	85°29'23.295"E

Configuration and Production Capacities of the existing & Proposed Units :

Sl. No	Plant Facilities	Existing Installed Units and Capacity		Proposed Units andCapacity		Total after Expansion	
		Unit	Capacity	Unit	Capacity	Unit	Capacity
1.	Induction Furnace	1x6T	15,000 TPA MS Billets	Replacement of existing 1x6T by 1x15T and additional 2x15T	1,48,500 TPA MS Billets	3x15T	**Hot MS Billets 148,500 TPA**
2.	Continuous Casting Machine	1x2 strand, Rad. - 4/7		1x2 strand, Rad. - 4/7		2x2 strand, Rad. - 4/7	
3.	Rolling Mill	1X5 TPH	13500 TPA	Mordenising the existing Rolling mill from 1X5 TPH to 1x25TPH	144.210TPA TMT Bars & Rolled Products/Rod setc.	1x25TPH	**144,210 TPA TMT Bars & Rolled Products/ Rods etc.**

4.	Slag Crusher	--	2400 TPA	Replacement of existing facility By 1x10 TPH	30,000 TPA	--	**30,000 TPA**
5.	Electoplating Unit	--	--	1*20 TPD	20 TPD	1*20 TPD	20 TPD

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

Salient Features of the Project existing & proposed

Sl no	Particulars	Existing	Proposed	After expansion final
1.	**Unit processes/ machinery**			
a	**Induction Furnace/ Continuous Casting Machine**	1x6T CCM 1x2 strand, Rad. - 4/7 15000 TPA M.S Billet	Replacement of existing 1x6T by 1x15T and additional 2x15T 1x2 strand, Rad. - 4/7	1,48,500 TPA MS Billets
b	**Rolling Mill**	13500 TPA 1x5TPH	Modernizing the existing Rolling mill from 1X5 TPH to 1x25TPH	144,210TPA TMT Bars& Rolled Products/ Rods etc.
d	**Slag Crusher**	2400 TPA	Replacement of existing facility	30,000 TPA
			By 1x10 TPH	
e	**Electroplating Unit**	--	1*20 TPD	1*20 TPD
2	**Fixed capital investment (Rs)**	~10Cr	~33Cr	~43Cr
3	**Electrical power requirement**	~4500 KVA	~17500 KVA	~22000 KVA

4	**Sponge iron**	44 TPD	452 TPD	452 TPD
5	**Ferro-alloys**	1.0 TPD	11 TPD	11 TPD
6	**MS Scrap/Pig iron**	10 TPD	95TPD	95TPD
7	**Ingots/billets (Only for rolling)**	41 TPD	450 TPD	450 TPD
8	**Manpower requirement**	~40	~60	~100
9	**Makeup Water requirement**	10 m3 /day	~ 20 m3 /day	~ 30 m3 /day
10	**Domestic water requirement**	~2.0 m3/day	~ 3.0 m3/day	~5.0 m3/day
11	**Domestic wastewater generation**	~1.6 m3/day	~2.4 m3/day	~4.0 m3/day
12	**Solid Waste Slag Mill Scale**	Slag: 8.0 TPD Mill Scale: 0.4 TPD	Slag: 90 TPD Mill Scale: 4.0 TPD	Slag: 90 TPD Mill Scale: 4.0TPD
13	**Bag Filter Dust from the process**	30 TPA	~297TPA	~297 TPA
14	**APCD- Bag-House Filter**	01	01	01
15	**Fuel**	HSD- DG sets		
16	**ETP**	10 KLD		

Proposed Raw Materials Details

Sl no.	Raw Materials	Existing Requirement	Total Requirement after Expansion
1	Sponge iron	44 TPD	452 TPD
2	Ferro-alloys	1 TPD	11 TPD
3	MS Scrap +Pig iron	10 TPD	95TPD

Existing & Proposed Configuration and Production - Rolling Mill

Sl. No	Plant Facilities	Existing Installed Units and Capacity		Proposed Units and Capacity		Total after Expansion	
		Unit	Capacity	Unit	Capacity	Unit	Capacity
	Rolling Mill	1X5 TPH	13500 TPA	Modernizing the existing Rolling mill from 1X5 TPH to 1x25TPH	144,210 TPA TMT Bars & Rolled Products/Rods etc.	1x25TPH	**144,210 TPA TMT Bars & Rolled Products/ Rods etc.**

Raw Materials Details- Rolling Mill

Raw Materials	Existing	Total After Expansion
M.S Billet	41TPD	450 TPD

Raw Materials Requirement After Expansion

Raw Materials	Total Requirement After Expansion (TPD)	Source
MS Billets Production		
Sponge Iron	~452 TPD	Local Plants in Koderma. Through Road
Ferro-alloys	~11 TPD	Plants in Asansol. Through Road
MS Scrap/Pig Iron	~95TPD	Scrap- In-house & nearby Plants. Through Road Pig iron- Local Plants in Koderma Through Road
Rolling Mill – Angle, Flat Etc.		
Hot Billets/M.S. Billets	**450 TPD**	**Billets will be used for in-house rolling mill**
Electroplating Machine		
Zinc	20kg/day	Open Market
HCL	20lpd	Open Market
Salt	1 liter per tone	Open Market

Green Belt :

The total greenbelt area is 40%. A greenbelt development plan will be prepared and implemented for the expansion project. Due to non availability of sufficient land within the industial premises, the PAs have proposed to developed green belt in the land adjacent the project premises.

Water Management (Source and Supply of Water) :

The water will be stored in respective recirculation tanks for continuous recycle. The water losses, due to spillages and evaporation, will be constantly made-up by adding fresh water. Total cooling water make-up requirement will be about 60 m3/day. Out of this, the RO treated water requirement will be about of 36 m3/day (resulting in reject generation @ 5 m3/day). Industry will need a maximum of 5.0 m3/day of fresh water for domestic use. A part of the sanitation water requirement will be met from reuse of RO plant reject water.

Sewerage System:

The domestic water consumption will result in generation of ~4.0 m3/day of domestic wastewater. The wastewaters will be treated and entirely reused. The effluent generated will be treated in the ETP of capacity 10 KLD.

Power Requirement & Supply / source :

The total power requirement for the unit is 22.0 MVA. The total power demand of the plant will be met through DVC. The plant has existing DG Sets of 1x250 kVA.

STATUTORY CLEARANCES:

1	Lease docs	:	Private land, owned by M/s Tulshyan Metals Private Limited.
2	DFO Forest Distance	:	DFO, Koderma Division vide letter no. 2498, dated 10.06.2023 certified that the distance of reserved/protected forest is 270 m from project site.
3	DFO Wildlife	:	DFO, Wildlife Hazaribagh vide letter no. 1670, dated 03.08.2023 certified that proposed project site is outside Eco Sensitive Zone of Koderma Wildlife Sanctuary.
4	CO certificate	:	The CO, Koderma vide letter no. 851, dated 13.05.2023 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S. Khatiyan.
6	Consent to Operate (CTO)	:	CTO issued by JSPCB vide Ref. no. : JSPCB/HO/RNC/CTO-11520314/2022/137, dated 04.02.2022.

Baseline data has been generated from 1st March, 2023 to 31st May, 2023.

SEAC, Jharkhand has recommended the ToRs in its **107th** meeting held on **16th, 17th, 18th, 19th, and 20th August, 2023** for undertaking detailed EIA / EMP study and SEIAA, Jharkhand has granted the ToRs in its **108th** meeting held on **27th & 28th August, 2023**. The SEAC has recommended following conditions:

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. Specific Condition

i. Ground water permission must be obtained at the time of final EIA.

4. 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, Forest and Climate Change as per OM no. F.no. IA3-22/10/2022-IA.III [E 177258], dated 08th June, 2022 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.

5. 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.

6. 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.

7. 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.

8. 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 2500 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.

9. Occupational health:

i. Plan and fund allocation to ensure the occupational health & safety of all contract and 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 health status of workers with special reference to Occupational Health and Safety.

10. 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

11. 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.

12. 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.

13. 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.

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

A. 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.

B. 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 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/2023-24/2895/2023/**252 Dated: 01/09/2023

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.

01/09/2023
Member Secretary
State Level Environment Impact
Assessment Authority, Jharkhand.