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File No: EC/SEIAA/2024-25/3128/2024

Government of India

Ministry of Environment, Forest and Climate Change

(Issued by the State Environment Impact Assessment Authority(SEIAA), JHARKHAND)

***

Dated **19/06/2024**

To,

SAURABH KUMAR
VENKATESHWARA SPONGE AND IRON COMPANY PRIVATE LIMITED
VILLAGE: MAHUATAND, TUNDI ROAD, P.O.: GADI SRIRAMPUR, DISTRICT: GIRIDIH, JHARKHAND. 815301, Village Mahuatand, GIRIDIH, JHARKHAND, 815301
venkateshwara4saurabh@gmail.com

Subject: Grant of Terms of Reference under the provision of the EIA Notification 2006-regarding.

Sir/Madam,

This is in reference to your application for Grant of Terms of Reference under the provision of the EIA Notification 2006-regarding in respect of project Environmental Clearance for Expansion of Sponge Iron Plant from 33,000 TPA to 62,700 TPA by addition of 90 TPD Kiln & existing 100 TPD Kiln along with proposed Captive Power Plant 8MW(2X2MW WHRB & 1X4MW AFBC), M.S. Billets production 1,40,000 TPA by installing 2x20Ton Induction Furnace with CCM (3X6/11), Re Rolling Mill for production of 1,40,000 TPA rolled products and Slag Crusher Unit (10 TPH) by M/s. Venkateswara Sponge & Iron Company Private Limited at Village- Mahuatand, District- Giridih submitted to Ministry vide proposal number SIA/JH/IND1/472670/2024 dated 27/05/2024.

2. The particulars of the proposal are as below :

(i) TOR Identification No.	TO24B1003JH5772648N
(ii) File No.	EC/SEIAA/2024-25/3128/2024
(iii) Clearance Type	TOR
(iv) Category	B1
(v) Project/Activity Included Schedule No.	3(a) Metallurgical Industries (ferrous and non ferrous),3(a) Metallurgical Industries (ferrous and non ferrous),3(a) Metallurgical Industries (ferrous and non ferrous),3(a) Metallurgical Industries (ferrous and non ferrous)
(vii) Name of Project	Environmental Clearance for Expansion of Sponge Iron Plant from 33,000 TPA to 62,700 TPA by addition of 90 TPD Kiln & existing 100 TPD Kiln along with proposed Captive Power Plant 8MW(2X2MW WHRB & 1X4MW AFBC), M.S.

	Billets production 1,40,000 TPA by installing 2x20Ton Induction Furnace with CCM (3X6/11), Re Rolling Mill for production of 1,40,000 TPA rolled products and Slag Crusher Unit (10 TPH) by M/s. Venkateswara Sponge & Iron Company Private Limited at Village- Mahuatand, District-Giridih
(viii) Name of Company/Organization	VENKATESHWARA SPONGE AND IRON COMPANY PRIVATE LIMITED
(ix) Location of Project (District, State)	GIRIDIH, JHARKHAND
(x) Issuing Authority	SEIAA
(xii) Applicability of General Conditions	no
(xiii) Applicability of Specific Conditions	no

3. In view of the particulars given in the Para 1 above, the project proposal interalia including Form-1(Part A and B) were submitted to the Ministry for an appraisal by the State Environment Impact AssessmentAuthority(SEIAA) Appraisal Committee (SEIAA) in the Ministry under the provision of EIA notification 2006 and its subsequent amendments.

4. The above-mentioned proposal has been considered by State Environment Impact AssessmentAuthority(SEIAA) Appraisal Committee of SEIAA in the meeting held on 07/06/2024. The minutes of the meeting and all the Application and documents submitted [(viz. Form-1 Part A, Part B, Part C EIA, EMP)] are available on PARIVESH portal which can be accessed by scanning the QR Code above.

5. The brief about configuration of plant/equipment, products and byproducts and salient features of the project along with environment settings, as submitted by the Project proponent in Form-1 (Part A, B and C)/EIA & EMP Reports/presented during SEIAA are annexed to this EC as Annexure (1).

6. The SEIAA, in its meeting held on 07/06/2024, based on information & clarifications provided by the project proponent and after detailed deliberations recommended the proposal for grant of Terms of Reference under the provision of EIA Notification, 2006 and as amended thereof subject to stipulation of specific and general conditions as detailed in Annexure (2).

7. The SEIAA has examined the proposal in accordance with the Environment Impact Assessment (EIA) Notification, 2006 & further amendments thereto and after accepting the recommendations of the State Environment Impact AssessmentAuthority(SEIAA) Appraisal Committee hereby decided to grant Terms of Reference for instant proposal of M/s. SAURABH KUMAR under the provisions of EIA Notification, 2006 and as amended thereof.

8. The Ministry reserves the right to stipulate additional conditions, if found necessary.

9. The Terms of Reference to the aforementioned project is under provisions of EIA Notification, 2006. It does not tantamount to approvals/consent/permissions etc. required to be obtained under any other Act/Rule/regulation. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes, as applicable, to the project.

10. This issues with the approval of the Competent Authority.

Copy To

N/A

Annexure 1

Standard Terms of Reference for Industrial Projects - 1

1. Preliminary Requirements

S. No	Terms of Reference
1.1	EIA/EMP report cover page shall consists of project title with location, applicable schedule of the EIA Notification, 2006, ToR letter No. with date, study period along with EIA consultant & laboratory details with QCI/NABET/NABL accreditation certificate detail.
1.2	Besides, following points shall be compiled as per QCI/NABET norms: a. Disclaimer by the EIA consultant. b. Declaration by the Functional Area Experts contributed to the EIA study and declaration by the head of the accredited consultant organization/authorized person. c. Undertaking by the project proponent owning the contents (information and data) of the EIA/EMP report. d. Undertaking by the EIA consultant regarding compliance of ToR issued by MoEF&CC. e. Consultant shall submit the Plagiarism Certificate for the EIA/EMP Report.

2. Executive Summary

S. No	Terms of Reference
2.1	Table of Contents of the EIA report including list of tables/figures/annexures/abbreviations/symbols/notations.
2.2	Point wise compliance to the ToR issued by MoEF&CC.

2.1 Introduction

S. No	Terms of Reference
2.1.1	Name of the project along with applicable schedule and category as per EIA, 2006.
2.1.2	Location and accessibility

2.2 Project Description

S. No	Terms of Reference
2.2.1	Resource requirements (Land; water; fuel; manpower)
2.2.2	Operational activity
2.2.3	Key pollution concerns

2.3 Baseline Environment Studies

S. No	Terms of Reference
2.3.1	Ambient air quality

Additional Terms of Reference

N/A

Annexure 2

Details of Products & By-products

Name of the product /By-product	Product / By-product	Existing	Proposed	Total	Unit	Mode of Transport / Transmission
M.S. Billets	M.S. Billets	0	140000	140000	Tons per Annum (TPA)	CCM
Rolled products	Rolled products	0	140000	140000	Tons per Annum (TPA)	CCM
Dolochar	Dolochar	8250	7425	15675	Tons per Annum (TPA)	Road
Slag	Slag	0	23800	23800	Tons per Annum (TPA)	Road
Mill Scale	Mill Scale	0	1400	1400	Tons per Annum (TPA)	Road
Sponge Iron	Sponge Iron	30000	27000	57000	Tons per Annum (TPA)	Road

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

Letter No.-**EC/SEIAA/2024-25/3128/2024/** Ranchi, Date:

To: **M/s Venkateshwara Sponge & Iron Co. Pvt. Ltd.,**
Directors : Shri Saurav Kumar & Shri Kumar Vikram Singh,
'SHUBHAM", Nandlal school Road,
P.O. : Chirkunda, District : Dhanbad,
Jharkhand : 828202.

Sub: Prescribing of ToR to **"Expansion of Sponge Iron Plant from 30,000 TPA to 57,000 TPA by addition of 90 TPD Kiln & existing 100 TPD Kiln along with proposed Captive Power Plant 8 MW (2x2 MW WHRB & 1x4 MW AFBC), MS Billets Production 1,40,000 TPA by installing 2x20 Ton Induction furnaces with CCM (3x6/11), Re-Rolling Mill for production of 1,40,000 TPA rolled products and Slag crusher unit (10 TPH) by M/s Venkateshwara Sponge & Iron Co. Pvt. Ltd. at Village : Mahuatand, Tehsil : Giridih, Distt. : Giridih, Jharkhand" (Proposal No. : SIA/JH/IND1/472670/2024) - regarding.**

Ref: Your application no.- Nil, dated – 27.05.2024.

Sir,

It is in reference to the project **"Expansion of Sponge Iron Plant from 30,000 TPA to 57,000 TPA by addition of 90 TPD Kiln & existing 100 TPD Kiln along with proposed Captive Power Plant 8 MW (2x2 MW WHRB & 1x4 MW AFBC), MS Billets Production 1,40,000 TPA by installing 2x20 Ton Induction furnaces with CCM (3x6/11), Re-Rolling Mill for production of 1,40,000 TPA rolled products and Slag crusher unit (10 TPH) by M/s Venkateshwara Sponge & Iron Co. Pvt. Ltd. at Village : Mahuatand, Tehsil : Giridih, Distt. : Giridih, Jharkhand"** submitted by you for seeking Terms of Reference (ToR).

This is an expansion project which has been taken for appraisal on 30.05.2024.

Project Category : B-1 - 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 (secondary metallurgical processing)** as per EIA Notification, 2006.

S. No	Parameters	Description
1	Identification of project	Project falls under Metallurgical Industries (secondary metallurgical processing) Item 3(a) of the schedule of EIA notification of Sept 14, 2006 issued by MOEF & CC.
2	Project Proponent	M/s. Venkateswara Sponge & Iron Company Private Limited
3	Brief description of nature of the project	Expansion of Sponge iron plant production from 30,000 TPA to 57,000 TPA by enhancement of Kiln 100 TPD to 190 TPD
4	**Salient Features of the Project**	
4.1	Proposed production capacity	Expansion of Sponge iron plant production from 30,000 TPA to 57,000 TPA by enhancement of Kiln 100 TPD to 190 TPD.
4.2	Existing Capacity	Sponge Iron~100 TPD or 30,000 TPA
4.3	Capacity after proposed expansion	Sponge iron~ 190 TPD or 57,000 TPA
4.4	Total Plot Area	27.53 Acre

	Khata no.	2	4	5	6	7	9
	Plot No.	4, 14	10	12,	7, 16	3, 5, 9, 11, 15	8

4.5	Location	Village: Mahuatand, Tundi Road, P.O: Gadi Srirampur, Dist: Giridih – 815301, Jharkhand
4.6	Geo-Coordinate	**Latitude-** 24°6'56.157"N to 24°7'7.150"N **Longitude-** 86°20'54.242"E to 86°21'16.823"E
4.7	Water requirement	Overall water requirement for the proposed expansion project will be approx. 457 KLD out of which 108 KLD will be used as makeup water including domestic purpose. Total water requirement for the existing project was 82 KLD.
4.8	Source of water	Borewell
4.9	Wastewater	The domestic water consumption will result in generation of ~7.2 KLD of domestic wastewater. The wastewaters will be managed through septic tank & soak pits.
4.10	Man Power	Construction phase: Around 150 persons Operation phase: Around 195 persons

S. No	Parameters	Description
4.11	Electricity/Power requirement	Existing Power requirement was 1.0 MW. Proposed requirement will be 7.0 MW. Total power requirement after expansion will be 8.0 MW. For emergency power requirement 1x600 KVA DG Set has been installed. Additionally, 1x600 KVA. DG set shall be installed under the proposed expansion.
4.12	Alternative site	The proposed addition will be established in the existing plant premises only.
4.13	Land form, Land use and land ownership	Private land, owned by M/s. Venkateswara Sponge & Iron Company Private Limited
4.14	Project Cost	31.57 Crore

Plant obtained CTE from Jharkhand State Pollution Control Board (JSPCB) videApplication.No. 4247 dated 18-08-2005 for production capacity of Sponge Iron-100 MT/day. The unit has obtained CTO for the same production though vides Ref No. JSPCB/HO/RNC/CTO-9029328/2021/227 Dated: 09/02/2021.

S.No.	Particulars	Existing	Proposed	Total Production (After expansion final)
		Unit processes/ machinery		
1.	Sponge Iron Plant	1x100 TPD Sponge Iron (30,000 TPA)	Installed additional 1x 90 TPD 27,000 TPA	(1X100 TPD+1X90 TPD) 57,000 TPA considering 300 working days
	Induction Furnace	--	2X 20 Ton with 1,40,000 TPA Production	1,40,000 TPA Production
	Rolling Mill	--	20 TPH with 1,40,000 TPA Production	1,40,000 TPA (considering 350 working days)
	CPP	--	(2x2 MW WHRB + 1x4MW AFBC)	8 MW
	Slag Crusher Unit	--	10 TPH	10 TPH
2.	Fixed capital investment (Rs)	~ 15.73 Crore	~15.84 Crore	~31.57 Crore
3.	Electrical	~1.0 MW	~7.0 MW	~8.0 MW

	power requirement			
4.	Manpower requirement	~45	~150	~195
5.	Makeup water requirement	35 KLD	71 KLD	108 KLD
6.	Domestic water requirement	2.0 KLD	7.0 KLD	9.0 KLD
7.	Domestic wastewater generation	1.6 KLD	5.6 KLD	7.2 KLD
8.	Fuel	HSD- DG sets		

Mass balance of Sponge iron production

Sl.No	INPUT	Quantity TPD	Per annum	OUTPUT	Quantity TPD	Per annum
1	Iron Ore	307.8	92,340.0	Sponge Iron	190.0	57000
2	Coal	247.0	74,100.0	Wet scrapper sludge	5.5	1664.4
3	Dolomite	7.6	2,280.0	Dolochar	61.8	18525
4		0.0	0.0	ESP, Bag Filter Dust	16.6	4993.2
5		0.0	0.0	Accretion	13.9	4161
6				Volatile losses	274.6	82376.4
	Total	**562**	**1,68,720**		**562**	**168720**

Raw Materials Requirements

Unit	Annual Production	Mode of Transportation	Distance covered	Source (e.g.)	Address
Iron Ore	92,340.0	Truck	Approx. 250 km	Rungta Mines Ltd	Chaliyama, Saraikela Kharsawan
				Amalgam Steel	Kandra, Saraikela Kharsawan
				Rashmi Metaliks Ltd	Nandarchak, Kharagpur, West Bengal

Non-Coking Coal	74,100.0	Truck	300 km	Adani Enterprises	Salt Lake, Kolkata
Dolomite/Lime stone	2,280.0	Truck	100 km	Ganapati Enterprises	Kharkabad, Govindpur, Dhanbad

This is an indicative source of material while materials can be sourced from open market as per availability

Total Water Requirement for the Existing DRI Plant (KL)

Unit	Purpose	Recirculating water (KLD)	Makeup water (KLD)	Total water requirement (KL)	Waste water generation (KLD)
DRI Plant	Cooling	45	35	80	0
Drinking & Sanitation	Domestic	0	2	2.0	1.6
Total		**45**	**37**	**82**	**1.6**

Total Water Requirement for the Proposed expansion Plant (KLD)

Unit	Purpose	Recirculating water (KLD)	Makeup water (KLD)	Total water requirement (KL)	Waste water generation (KLD)
DRI Plant (100+90 TPD)	Cooling	90	70	160	0
Power Plant		115	13	128	0
SMS		108	12	120	0
Rolling Mill		36	4	40	
Drinking & Sanitation	Domestic	0	9	9	5.6
Total		**349**	**108**	**457**	**5.6**

Make-up Water (Fresh) Requirement for the Existing & Proposed Plant (KLD)

Unit	Makeup water Existing (KLD)	Makeup water for Proposed Units	Makeup water Total after expansion
DRI Plant	35	35	70
Power Plant (8 MW)	0	13	13
SMS (IF & CCM)	0	12	12

Rolling Mill	0	4	4
Drinking & Sanitation	2	7	9
Total	**37**	**71**	**108**

The capacity of the is around 50 sqm with an average depth 4 m, water holding capacity is 200 Cum. Source of water ground water and rainwater harvesting. The water from RWH tank can approximately meet 10 days of industrial demand.

Power requirement for Existing & Proposed Plant

Unit	Power requirement for Existing Units(MW)	Power requirement for Proposed Units (MW)	Total after Expansion (MW)
DRI Sponge	1.00	1.00	2.00
Steel Melting Shop	0	4.00	4.0
Rolling Mill	0	1.00	1.00
CPP Auxiliary	0	1	0.8
TOTAL	**1.00**	**7**	**8**
Total Power required		**7**	**8**

Details of Solid waste and Mode of disposal

Description of the Plant	Plant Capacity	By-product/Waste Product	Mode of Disposal	
Sponge Iron Plant	190 TPDX300 Days	61.8 TPD char generated during the production of sponge iron and will be totally utilized in AFBC Boiler. Wet scrapper sludge 5.5 TPD Accretion 13.9 TPD	Will be used in AFBC Boiler inhouse	In existing plant char generated from 100 TPD DRI Plant was sold to Shree ShyamUdyog, Goaladih, West Bengal
	ESP Bag Filter units-7 Nos.	Approximately 11T of ESP dust + 1.50/day from bag filter unit generated during the plant operation and it can sell	Brick making plants.	In existing plant ESP & Bag Filter dust sold to authorized recycler (Prakash Jalan). For proposed expansion the generated dust will be sold to

				Mongia Bricks, Manjhladih, Giridih
Power	2x2 MW (WHRBs)=4 MW+ 1X4 MW (AFBC)	There will be water waste from DM Plant and it will be utilized after neutralizing for dust suppression at raw material yards and for green belt.	The ash generated will be sold for Brick making Units	Mongia Bricks, Tundi Road, Manjhladih, Giridih
SMS	400 TPD X 350 Days= 1,40,000 TPA	Slag- 97 TPD Broken Refractory- 77 TPA	Land filling and brick manufacturing	Mongia Bricks, Tundi Road, Manjhladih, Giridih
Rolling	(20TPH) 1,40,000 TPA	Mill Scale-4.0 TPD Trimming reject-8.0 TPD	The waste has commercial worth and will be sold	Used in Lowling areas
Slag Crusher	10 TPH	Recovered Scrap-10 TPD Dust- 87 TPD	In-house Low line filling	
Domestic	195 Persons	10237kg/annum	Send to local municipal corporation	
Sludge/Salt from cooling towers	--	192kg/annum	Used as earthing	

STATUTORY CLEARANCES:

1	LOI/Lease docs	:	Private land, owned by M/s. Venkateswara Sponge & Iron Company Private Limited
2	CO	:	The CO, Giridih Sadar vide letter no. 589, dated 17.05.2024 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyan.
3	DFO Wild Life	:	DFO, Wildlife Hazaribagh vide letter no. 234, dated 10.02.2024 certified that the proposed project site is outside Eco Sensitive Zone of Parasnath & Topchanchi Wildlife Sanctuary.
4	DFO Forest Distance	:	DFO, Giridih East Forest Division vide letter no. 1351, dated 20.04.2024 certified that the distance of notified forest is **11**

			meters from project site. This being an expansion in a existing project and no addition of new land, siting criteria is not applicable.
5	Consent to Establish (CTE)	:	**CTE** issued by JSPCB vide Ref. no. N-69, dated 29.03.2006.
6	Consent to Operate (CTO)	:	**CTO** granted by JSPCB vide Ref. no. JSPCB/HO/RNC/CTO-9029328/2021/227, dated 09.02.2021.
7	CGWA	:	No Objection Certificate (NOC) for Ground Water Abstraction vide NOC No. CGWA/NOC/IND/ORIG/2022/17216, dated 28.10.2022 valid up to 27.10.2025.

Baseline data has been generated from 1st March, 2024 to 31st May, 2024.

SEAC, Jharkhand has recommended the ToRs in its **113th** meeting held on **30th, 31st May, 2024 & 01st, 02nd and 03rd June, 2024** for undertaking detailed EIA / EMP study and SEIAA, Jharkhand has granted the ToRs in its **113th** meeting held on **07th & 08th June, 2024**. 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 Conditions:

i. Complete material balance to be provided for all the input & output.
ii. **Detailed water balance to be provided.**
iii. **Details of all the waste generation in the project along with handling and management of the same.**
iv. **Primary study to be carried out for Socio Economy, Ecology & Bio-Diversity.**
v. Details of all the pollution control measures including ETP & STP, if any.
vi. Details of fire control management plan.
vii. All details of the existing plant is to be provided in EIA / EMP.
viii. An Affidavit with regard to original cost of the existing project is to be included in final EIA / EMP.

ix. **A certificate from the project consultant / supplier regarding the proposed new DRI kiln certifying that the maximum production capacity possible is 90 TPD only.**

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. Public Hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project.

13. 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.

14. 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.

15. 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. 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/2024-25/3128/2024/**118 Dated: 14/06/2024

Copy to:

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

2. Regional Office, Ministry of Environment, Forest and Climate Change, Govt. of India, 2nd Floor, Jharkhand State Housing Board (HQ), Harmu Chowk, Ranchi, Jharkhand – 834002.
3. Member Secretary, SEAC, Jharkhand, Ranchi for information and necessary action.

14/06/2024

Member Secretary
State Level Environment Impact
Assessment Authority, Jharkhand.

Signature Not Verified

Digitally Signed by : Shri Ashok Kumar
Member Secretary, SEIAA

Date: 19/06/2024