

**Ministry of Environment, Forest and Climate Change  
Impact Assessment Division  
(Industry-1 Sector)**

**Summary record of the thirtieth (30<sup>th</sup>) meeting of Re-Constituted Expert Appraisal Committee (REAC) held on 10<sup>th</sup>-11<sup>th</sup> February, 2021 for environment appraisal of Industry-1 sector projects constituted under the provisions of Environment Impact Assessment (EIA) notification, 2006.**

The thirtieth meeting of the Expert Appraisal Committee (EAC) for Industry-1 Sector constituted as per the provisions of the EIA Notification, 2006 for Environment Appraisal of Industry-1 Sector Projects was held on 10<sup>th</sup>-11<sup>th</sup> February, 2021 in the Ministry of Environment, Forest and Climate Change (MoEF&CC) through **video conferencing** in view of the Corona Virus Disease (Covid-19) pandemic. The list of EAC attendees is as follows.

S.No.	Name	Position	10/02/2021	11/02/2021
1.	Dr. Chhavi Nath Pandey	Chairman	Present	Present
2.	Dr. Kamaljeet Singh Panesar, Scientist 'F', CPPRI.	Member	Present	Present
3.	Dr. Siddharth Singh, Scientist 'E' IMD.	Member	Present	Present
4.	Dr. Jagdish Kishwan	Member	Present	Present
5.	Dr. G.V. Subramanyam	Member	Present	Present
6.	Dr. Tejaswini Ananth Kumar	Member	Present	Present
7.	Shri. Ashok Upadhyaya	Member	Present	Present
8.	Shri. Rajendra Prasad Sharma	Member	Present	Present
9.	<i>Dr. Sanjay Deshmukh</i>	<i>Member</i>	<i>Absent</i>	<i>Absent</i>
10.	<i>Prof. S.K. Singh</i>	<i>Member</i>	<i>Absent</i>	<i>Absent</i>
11.	<i>Dr. R. Gopichandran</i>	<i>Member</i>	<i>Absent</i>	<i>Absent</i>
12.	Shri Jagannadha Rao Avasarala	Member	Present	Present
13.	Shri. J.S.Kamyotra	Member	Present	Present
<b>Special Invitees from EAC – Violation</b>				
14.	Shri. K Gowrappan	Member	For appraisal of item no. 30.9 of M/s. ESL	
15.	Shri. Ashok Agrawal	Member		
<b>Officials from MoEF&amp;CC</b>				
16.	Shri. A.K. Agrawal	Director & Member Secretary	Absent	Absent
17.	Shri. Sundar Ramanathan	Scientist 'E' & Link Officer	Present	Present
18.	Dr.Ranjeet Singh	Scientist 'C'	Present	Present

After welcoming the Committee Members, discussion on each of the agenda items was taken up. The minutes of 29<sup>th</sup> meeting held during 27<sup>th</sup> January, 2021 were confirmed by the EAC as already uploaded on PARIVESH.

**10<sup>th</sup> February, 2021**

30.1 Proposed 3 MTPA crude steel plant and Captive power generation of 84.7 MW plant by **M/s. AP High Grade Steels Ltd** located at Sunnapurallapalli and Peddandluru villages, Jammalamadugumandal, **YSR district, Andhra Pradesh**. [Online Proposal No. IA/AP/IND/146236/2020; File No. J-11011/70/2020-IA. II(I)] – **Environment Clearance – regarding.**

30.1.1 M/s. AP high Grade Steels Limited (APHSL) submitted online application vide proposal no. IA/AP/IND/146236/2020 dated 29/01/2021 along with copy of EIA/EMP report and Form – 2 seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Schedule No. 3 (a) Metallurgical industries (ferrous & non-ferrous) under Category “A” of the schedule of the EIA Notification, 2006 and appraised at the Central level.

**Details submitted by Project proponent**

30.1.2 The details of the ToR are furnished as below:

<b>Date of Application</b>	<b>Consideration</b>	<b>Details</b>	<b>Date of Accord</b>
28/02/2020	19 <sup>th</sup> meeting of EAC (Industry-1) held on 20/05.2020	Terms of Reference	09/07/2020
10/10/2020	24 <sup>th</sup> meeting of EAC (Industry-1) held on 27/10/2020	Amendment in Terms of Reference	15/12/2020

30.1.3 The project of M/s. AP high Grade Steels Limited (APHSL) located in Sunnapurallapalle and Peddandluru villages, Jammalamadugu Mandal, YSR District (formerly known as Kadapa district), Andhra Pradesh is for setting up of a new integrated steel plant for production of 3.0 million MTPA and Captive power generation of 84.7 MW.

30.1.4 Environmental Site Settings

<b>S. No.</b>	<b>Particulars</b>	<b>Details</b>	<b>Remarks</b>
i.	Total land	1453.49 ha or 3591.65 Acres [Private: Nil; Govt: 1453.49 ha; Agriculture: Nil; and Grazing land: Nil]	Land use: Waste/Barren
ii.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	Advance possession for the land to an extent of 1274.25 ha by Revenue (Lands.VI) Department, Govt of Andhra Pradesh.	Balance land is under process of alienation.
iii.	Existence of habitation & involvement of R&R, if any.	Nil	

S. No.	Particulars	Details		Remarks
		Latitude, N	Longitude, E	
iv.	Latitude and Longitude of the project site	14°46'31.44"	78°25'00.84"	
		14°44'39.99"	78°24'01.68"	
		14°45'13.32"	78°24'35.50"	
		14°44'13.39"	78°23'52.23"	
		14°43'46.42"	78°25'57.51"	
		14°44'31.87"	78°26'21.07"	
		14°45'19.69"	78°26'49.08"	
		14°45'30.90"	78°26'37.83"	
		14°45'33.92"	78°26'18.65"	
		14°45'07.05"	78°26'01.61"	
		14°45'12.77"	78°25'45.77"	
		14°45'23.32"	78°25'54.72"	
		14°45'22.63"	78°26'02.33"	
		14°45'48.96"	78°26'10.36"	
		14°45'59.56"	78°25'43.79"	
14°46'02.93"	78°25'44.37"			
v.	Elevation of the project site	172-315 m, MSL		
vi.	Involvement of Forest land if any.	No forest land involved		Not Applicable
vii.	Water body exists within the project site as well as study area	<b><u>Project site:</u></b> Nil <b><u>Study area</u></b> Penneru (Penna) River is at a distance of 1.6 km in North direction from the project		Not Applicable
viii.	Existence of SZ/ ESA/ national park / wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area	Nil		

30.1.5 The proposed project is a Greenfield project. CTE and CTO will be obtained after the grant of Environment Clearance for the said project.

30.1.6 The unit configuration and capacity of proposed project is given as below:

Name of the unit	No of Units / capacity of each unit	Product	Production Capacity, TPA
Coke oven and by-product plant	2 x 67 ovens, 7 m tall	Coke	1754100
Sinter plant	1 x 496 m <sup>2</sup>	Sinter	5384600
Blast furnace	4700 m <sup>3</sup> (UV)	Hot Metal	3433500
<b>Steelmaking and continuous casting shop</b>			
Basic Oxygen Furnaces	2 x 175 t	Liquid steel	3099000
Ladle furnaces (LF)	2 x 175 t	Liquid steel	3092800
RH-Degasser	1 x 175 t	Liquid steel	
Billet casters	2 x 6 - strand	Billets	2273400
Slab caster	1 x 1 - strand	Slab	734100
<b>Rolling mills</b>			
Plate mill	668000 tons/yr	Plates	668000
Merchant mill	1200000 tons/yr	TMT rebar, Plain rounds, Equal Angles and Channels	1200000
Wire rod mill	1000000 tons/yr	Wire Rods (5.5 to 22 mm)	1000000
<b>Oxygen plant (BOO Basis)</b>	2 x 1350 TPD	Oxygen, Nitrogen and Argon	2 x 1350 TPD
<b>Calcination plant</b>			
Calcined lime plant	2 x 500 tons/day	Calcinated Lime	314100
Calcined dolo plant	1 x 500 tons/day	Calcinated Dolo	68000
Steam turbine generator (STG) at power blowing station	(3 x 15 MW) – 2 Working + 1 Standby	Electric Power	30 MW
Backpressure turbine generator (BPTG) at CDCP	1 x 12.7 MW	Electric Power	12.7 MW
Top recovery turbine generator (TRT) at Blast Furnace	1 x 27 MW	Electric Power	27 MW

Name of the unit	No of Units / capacity of each unit	Product	Production Capacity, TPA
Waste heat recovery boiler generator (WHRB) at the Sinter Plant	1 x 15 MW	Electric Power	15 MW

**Manufacturing Capacity**

Items	Capacity, (TPA)	Remarks, TPA
BF Coke	136100	BF Coke - 1754100, Saleable – 136100
Coke Breeze	27200	Saleable – 27200
Iron Shots	300200	Saleable – 300200
Wire Rods	1000000	Saleable -1000000
Merchant Product	1200000	Saleable -1200000
Plates	668000	Saleable -668000
Granulated Slag	978600	Saleable -978600
Oxygen Plant	891000 Nm <sup>3</sup> /hr	
<b>By-products</b>		
Coke oven gas	84360 Nm <sup>3</sup> /hr	
Crude Tar	92000	Saleable -92000
Elemental Sulphur	2500	Saleable -2500
Naphthalene	150	Saleable -150
<b>In house power generation</b>		
Steam turbine generator (STG) at power blowing station	(3 x 15 MW) – 2 Working + 1 Standby	
Backpressure turbine generator (BPTG) at CDCP	1 x 12.7 MW	
Top recovery turbine generator (TRT) at Blast Furnace	1 x 27 MW	
Waste heat recovery boiler generator (WHRB) at the Sinter Plant	1 x 15 MW	

30.1.7 The details of the raw material requirement for the proposed project along with its source and mode of transportation is given as below:

Raw material	Units	Quantity	Source & Transportation
Iron ore lump	TPA	1139900	Bailadila (Kirandul / Bachel) iron ore mines around 800km, NMDC transported by wagon train
Iron ore lump	TPA	37100	
Iron ore lump	TPA	1177100	
Iron ore fines	TPA	3795700	
Limestone (BF)	TPA	411900	The Source will be in the vicinity of 240 km, transport by goods wagon train
Dolomite	TPA	540100	

Raw material	Units	Quantity	Source & Transportation
Limestone	TPA	602400	Imported (middle east), through Krishnapatnam port at a distance of 190 km, transport by goods
Dolomite (SMS)	TPA	139800	
Blended coking	TPA	2308000	Australia and then through Krishnapatnam port at a distance of 190 km, transport by goods wagon
Non-coking	TPA	515000	
Quartzite	TPA	202600	Mines within 100 km from the site, transport by
Ferroalloys	TPA	61850	Local manufacturers within 100 km from the site, transport by trucks.
Purchased DRI	TPA	151000	
Propane	TPA	4160	Local Petro product storage at a distance of 100 km, transport by bullet trucks.

30.1.8 The water requirement for the project is estimated as 2285 m<sup>3</sup>/hr, out of which 1880 m<sup>3</sup>/hr of fresh water requirement will be obtained from the Gandikota Reservoir and the remaining requirement of 405 m<sup>3</sup>/hr will be met from the recycled water. The permission for drawl of surface water is obtained from Water Resources department, Govt of Andhra Pradesh. vide G.O.MS.No. 84, dated 20/12/2019.

30.1.9 The power requirement for the project is estimated as 250.94 MW, out of which 166.24 MW will be obtained from the A.P. Southern Power Distribution Company (APSPDCL) and 84.7 MW from Captive power plant generation.

30.1.10 Baseline Environmental Studies:

Period	March – June 2020
AAQ parameters at 8 locations	PM <sub>2.5</sub> = 14 to 21 µg/m <sup>3</sup> PM <sub>10</sub> = 41 to 59 µg/m <sup>3</sup> SO <sub>2</sub> = 6 to 20 µg/m <sup>3</sup> NO <sub>x</sub> = 7 to 24 µg/m <sup>3</sup> CO = 0.39 to 0.67 µg/m <sup>3</sup>
AAQ modelling	PM <sub>10</sub> = 6.61 µg/m <sup>3</sup> SO <sub>2</sub> = 6.11 µg/m <sup>3</sup> NO <sub>x</sub> = 10.3 µg/m <sup>3</sup>
Ground water quality at 8 locations	pH: 6.82 to 8.21, Total Hardness:125 to 520 mg/l, Chlorides: 42 to 317 mg/l, Fluoride: 0.22 to 0.56 mg/l. Heavy metals are within the limits.
Surface water quality at 8 locations	pH: 7.52 to 8.72 DO: 3.7 to 4.9 mg/l and BOD: 3.9 – 13 mg/l. COD from 16 to 22.8 mg/l
Noise levels	38 to 54 dBA for the day time and 31 to 38 dBA for the Night time.
Traffic assessment study findings	Proposed 4 lane road shall cater to the additional peak traffic of 584 PCU during shift change over. The additional traffic due to material transport shall be 1238 PCU/day (reflecting in approximately 354 truck trips/day) for material transport. It is proposed to storage dispatches to avoid congestion on connecting road.

Flora and fauna	The authenticated list of flora and fauna provided by the Divisional forest officer, Proddatur (WL) division, vide letter no. Rc.No.236/2020-P8, dt.30.09.2020 reporting presence of Schedule-I fauna in the study area. Conservation plan submitted to the Chief Wildlife Warden, Andhra Pradesh, awaiting for authentication.
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30.1.11 The details of solid and hazardous waste generation along with its mode of treatment/disposal is furnished as below:

Type of Solid Waste	Unit	Quantity generated	Mode of Treatment / Disposal (Recycle / reuse / sale as new products)
Granulated BF Slag	TPA	978600	Sold to the cement plant
LD slag	TPA	440000	Send to metal recovery plant for recovery of metallics and balance used as sub base in roads, ballast for railways, sinter plants, SMS, and cement making
Iron ore fines	TPA	126700	Reused in the sinter plant
Flue dust, dust from ESP, bag filter, dedusting system,	TPA	223000	Reused in the sinter plant
Solid waste from mill scales	TPA	72700	Reused in the sinter plant
Lime fines dust	TPA	20200	Reused in the sinter plant
Tar sludge from tar decanters and muck from naphthalene plant	TPA	1720	Transported to coal handling plant for mixing with coal and used in coke oven battery.
Sludge from the ETP	TPA	1100	Mixed with the coal charge being fed to the coke ovens
Sludge from the STP	TPA	500	Used as compost
Used Batteries	no/ year	500	Sent to Authorized recyclers
Waste Oil	KL/ year	500	Sent to Authorized recyclers
Transformer Oil	KL/year	20	Sold to APTRANSCO authorized contractors.
E-waste	TPA	5	Sent to Authorized recyclers
Municipal solid waste	TPA	720	Bio degradable waste sent to Vermicompost units and reused as manure, recyclables are sent to recyclers, inerts are used for filling low lying areas.
Packing material	TPA	100	Sold to rescuers or recyclers
Biomedical medical waste	TPA	15	Sent to BMW facilities

\* Reference data of similar plant does not show any toxic leachable metals for BF and BOF slag.

\*\*All the solid wastes are subjected to TCLP test to ascertain that it is non-hazardous, before disposal.

\*\* Slag Storage area shall be provided with a stable liner of bentonite and PCC bed, and garland drain connected to a settling tank.

30.1.12 Public Consultation:

Details of Advertisement given	09.10.2020
Date of Public Consultation	11.11.2020
Venue	Proposed Project site, Sunnapurallapalle and Peddandluru villages, Jammalamadugu Mandal, YSR District, AP
Presiding Officer	Joint Collector and Additional District Magistrate, YSR district
Major Issues Raised	<ul style="list-style-type: none"> <li>i. Employment to locals</li> <li>ii. Skill development and skill development center</li> <li>iii. Compensation for land acquisition</li> <li>iv. Schools in the surrounding villages</li> <li>v. Hospitals in surrounding villages</li> <li>vi. Implementation of Pollution control measures</li> <li>vii. Provision of drinking water</li> <li>viii. Treated wastewater for agriculture</li> <li>ix. More funds for Kanya theertham temple development</li> <li>x. Loss of grazing land and alternate means of lively hood</li> <li>xi. Improvement of road infrastructure</li> <li>xii. Avenue plantation in villages</li> <li>xiii. Reservations in employment</li> </ul>

**Action plan as per MoEF&CC O.M. dated 30/09/2020: Time frame five years**

Sector	Activity & Name of the village	Quantity	Year wise breakup (Physical in numbers & Financial in Lakh Rs.)
1. Educational Programmes	i) Construction of Skill Development Centre	1 (JMM)	60.00
	ii) Training programs on skill development.	Total 18 @4 Nos. / Year	135.00
	iii) Construction of Technical Training center at Project Office, APHSL	1 (SP)	150.00
	iv) Technical training programs	Total 07 @2 Nos. / Year	85.00
	v) Construction of School Buildings	3	75.00
	vi) Transportation facility for students	2 Routes (SP e to JMM & SP to Proddatur)	50.00

Sector	Activity & Name of the village	Quantity	Year wise breakup (Physical in numbers & Financial in Lakh Rs.)
	vii) Additional Infrastructure development in Govt. Schools	21 (*Existing schools spread across all 11 villages as listed in the foot note)	500.00
	<b>Subtotal-1</b>		<b>1055.00</b>
2. Health & Sanitation programs	i) Public Health Sub-centres	11**	275.00
	ii) Upgradation of Public Health Sub centres	2	200.00
	iii) Provision of Veterinary Hospital	2	100.00
	iv) Additional Infrastructure development in Veterinary Hospital	1 (CU)	60.00
	v) Provision of Ambulance & its operation	1 (SP)	80.00
	vi) Conducting medical camps	28 (7 Nos / Year)	28.00
	vii) Conducting Swachh Bharath	***12 Villages	125.00
	viii) Conducting awareness programs	***12 Villages	27.00
		<b>Subtotal-2</b>	
3. Environmental Awareness Programs	i) Plantation programs in villages, schools, hospitals & other government buildings.	***12 Villages (@1000 Nos / Village)	60.00
	ii) Maintenance of Plantation in villages, schools, hospitals & other government buildings.	***12 Villages (@1000 Nos / Village)	15.00
	iii) Roadside Plantation programs in village roads.	30 Km (VM to CH)	300.00
	iv) Maintenance of Roadside Plantation.	30 Km (VM to CH)	90.00
	v) Rainwater harvesting structures in Villages	***12 Villages (@25-50 Nos / Village)	270.00
	vi) Desilting operations of tanks and Deepening of ponds in villages	12	165.00
	vii) Provision of covered sewers in villages	***12 Villages	340.00
	viii) Tree cover improvement in buffer zone - Southern side of plant boundary.	100 Ha	500.00
	ix) Maintenance of bufferzone - Southern side of plant boundary.	100 Ha	125.00
	x) Development & maintenance of Biodiversity park - in Buffer zone	1 (in 10 Ha)	600.00
	xi) Conducting Environmental awareness programs (1programme / 2 villages)	***12 Villages / 6 Programs	30.00
		<b>Subtotal-3</b>	

Sector	Activity & Name of the village	Quantity	Year wise breakup (Physical in numbers & Financial in Lakh Rs.)
4. Infrastructure Development programs	i) Construction of New roads in villages	***30 Km	1200.00
	ii) Repairs/improvements to existing roads	***40 Km	400.00
	iii) Providing Lighting to the roads & its maintenance	14.5 Km (VM to SIR)	385.00
	iv) Construction of Anganwadi centres	***12 No.	240.00
	v) Solar street Light arrangements in villages	***12 No.	270.00
	vi) Boundary wall for graveyards	10 No.	135.00
	vii) Reading rooms	4 Nos.	60.00
	viii) Community centres	4 Nos.	375.00
	ix) Bus stops	5 Nos.	40.00
	<b>Subtotal-4</b>		
<b>Grand Total</b>			<b>7550.00</b>
* Dharmapuram, Danavulapadu, Sunnapurallapalle, Peddandlur, Devagudi, Sugamanchipalle, Sirigepalle, Ambavaram, Goriganuru, Kosinapalle and Chowduru.			
** Kothaguntepalle, Dharmapuram, Danavulapadu, Peddandlur, Devagudi, Sugamanchipalle, Sirigepalle, Ambavaram, Kosinapalle, Rangasayapuram and P.Gopalapuram.			
*** Kothaguntepalle, Dharmapuram, Danavulapadu, Sunnapurallapalle, Peddandlur, Devagudi, Sugamanchipalle, Sirigepalle, Ambavaram, Chowduru, Kosinapalle and P. Gopalapuram.			
JMM- Jammalamadugu, SP- Sunnapurallapalle, RSP – Rangasayapuram, VM- Vemaguntepalle, SIR- Sirigepalle, SUGM- Sugamanchipalle, DHM- Dharmapuram, KT- Kothaguntepalle, DVP- Danavulapadu, PD- Peddandlur, GVN-Guruwareddynagar, AB- Ambhavaram, DG- Devagudi, KP- Kosinapalle, PGP- P.Gopalapuram, SGM- Sugamanchipalle, AB- Ambavaram, GG- Goriganuru, KV- Kottala vantamidde, CU- Chowduru, BM- Bommepalle, TP- Tugutlapalle, CH- Chilamkur			

30.1.13 The capital cost of the project is Rs. 16986 Crores and the capital cost for environmental protection measures is proposed as Rs. 1812.61 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs.52.805 Crores. The employment generation from the proposed project is 4350 Nos. The details of cost for environmental protection measures are as follows:

Description	Capital cost in Rs. Lakhs		Recurring cost in Rs. Lakhs	
	Construction Phase	Operation Phase	Construction Phase	Operation Phase
Air Pollution Control	67477	1000	100	2525
Water Pollution Control	31346	900	8	320
Rainwater harvesting structures and tank	1000	20	1	20

Description	Capital cost in Rs. Lakhs		Recurring cost in Rs. Lakhs	
	Construction Phase	Operation Phase	Construction Phase	Operation Phase
Check dam repairs and Management	800	80	1	10
Noise Pollution Control	1827	182	30	50
Environmental Monitoring & Management	8846	400	9.6	255.5
Energy conversation costs	35165	20	50	200
Green belt & Open area development	8000	500	50	100
Solid Waste	17000	2000	624	1500
Others - Occupational health and safety	4000	100	60	300
CER Budget to address issues raised in public hearing	5800	-	1750	-
PH concern - Development of Kanya theertham area	50	-	-	-
<b>Total</b>	<b>181261</b>	<b>5202</b>	<b>2683.6</b>	<b>5280.5</b>

- 30.1.14 Greenbelt will be developed in 484.18 ha which is about 33.31% of the total project area. A 50 m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB/MoEF&CC, New Delhi guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 1210000 saplings will be planted and nurtured in 484.18 ha in 5 years.
- 30.1.15 The proponent has reported that there is no violation under EIA Notification, 2006/court case/show cause/direction related to the project under consideration.
- 30.1.16 Name of the EIA consultant: M/s Team Labs and Consultants, Hyderabad [S.No. 140, List of ACOs with their Certificate / Extension Letter no. Rev. 06, Jan. 15, 2021].
- 30.1.17 M/s. AP High Grade Steels Limited has earlier made online application vide proposal no. IA/AP/IND/146236/2020 dated 20/12/2020 along with copy of EIA/EMP report and Form – 2 seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposal was considered by the EAC in its 27<sup>th</sup> meeting held during 30-31<sup>st</sup> December, 2020. The observations and recommendations of EA are given as below:

**Observations of the Committee held during 30-31<sup>st</sup> December, 2020**

The Committee noted the following:

- i. Compliance to specific ToR points have not been addressed adequately.
- ii. Issues raised during the public consultation have not been addressed in the final EIA report.

- iii. Action plan to address the issues raised public consultation as per MoEF&CC O.M. dated 30/09/2020 has not been provided.
- iv. Action plan to control the fugitive emission has not been provided.
- v. Generic TOR point no. 9 pertaining to Corporate Environment Policy has not been addressed adequately.
- vi. BOD Plant details for treatment of effluent emanating from Coke Oven Plant has not been provided.
- vii. Storm water management details have not been provided.
- viii. Calibration of instruments as per CPCB guidelines has not been included.
- ix. Concrete Plan to compensate for loss of grazing land as pointed out during PH has not been proposed.
- x. No commitment is given to improve upon the plant approach road.
- xi. Air quality management for Temple area not described in the EIA report.

**Recommendations of the Committee held during 30-31<sup>st</sup> December, 2020**

In view of the foregoing and after deliberations, the committee recommended to return the proposal in present form.

30.1.18 M/s. AP high Grade Steels Limited (APHSL) submitted their revised application vide proposal no. IA/AP/IND/146236/2020 dated 29/01/2021 and the proposal placed before the EAC in its 30<sup>th</sup> meeting held on 10-11<sup>th</sup> February, 2021.

**Written submissions during the course of meeting**

30.1.19 PP has submitted written clarifications on the following points during the course of meeting:

S.No.	Written submissions on	Commitment made
i.	Timelines for completing Railway Connectivity	Railway line will be commissioned by December 31st, 2023 as envisaged.
ii.	List of CER activities with Village names	Detailed village wise action plan has been submitted with physical targets and financial outlay of Rs. 7550 lakhs over a period of five years.
iii.	Choice of Technology – Justification	Justification for selection of BF-BOF route for steel making has been submitted.
iv.	Specific Water Consumption	Specific fresh makeup water consumption will be 3.96 m <sup>3</sup> /ton of finished steel.
v.	Solid Waste Storage and Disposal	Period of solid storage will vary from 15-90 days.
vi.	Sensible Heat Recovery	Sensible heat recovery is observed to be 143.1 Gcal/hr
vii.	Reduction of SO <sub>2</sub> and NO <sub>x</sub>	Major SO <sub>2</sub> and NO <sub>x</sub> emissions are from Sinter plant. It is now proposed to install MEROS technology with waste gas recycling system. In this technology the waste gas will be treated

S.No.	Written submissions on	Commitment made
		with hydrated lime whereby SO <sub>2</sub> will be absorbed. 50% of treated waste gas will be recycled back into the system and 50% will go through gas cleaning system. The net reduction in SO <sub>2</sub> will be more than 75% (50 mg/Nm <sup>3</sup> ) whereas NO <sub>x</sub> level in the waste gas will come down to < 150 mg/Nm <sup>3</sup> .
viii.	Baseline data justification with respect to water quality	The high pH level observed in sample 9 located at Goriganuru Cheruvu may be attributed to usage of washing soda by washermen at the tank and other activities of locals. Turbidity was high in sample 8, located at Kothakuntalapalli Cheruvu may be attributed to stagnant water with animal washing.
ix.	Site Management plan for construction period	Action plan submitted.

### Observations of the Committee

30.1.20 The EAC noted the following:

- i. The EAC found that the EIA/EMP report is in order reflecting the present environmental concerns and the projected scenario for all the environmental components arising out of the proposed project with respective mitigation measures. The EAC also noted that the baseline data reported and incremental GLC due to the proposed project were within NAAQ standards.
- ii. The EAC also deliberated on the public hearing issues as well as action plan to address the issues raised during public hearing and found it satisfactory.
- iii. The EAC noted that the written submissions made by the project proponent during the course of meeting are addressing the concerns of the Committee and acceded to the same.

### Recommendations of the Committee

30.1.21 In view of the foregoing and after detailed deliberations, the committee recommended the instant proposal for grant of Environment Clearance under the provisions of EIA Notification, 2006 subject to the following specific conditions and general conditions as per the Ministry's Office Memorandum No. 22-34/2018-III dated 9/8/2018 pertaining to integrated steel plants based on project specific requirements:

#### A. Specific conditions

- i. Dust emission from Steel Plant stacks shall not exceed 30 mg/Nm<sup>3</sup> while from Power Plant stacks it shall not exceed 25 mg /Nm<sup>3</sup>.
- ii. Overall emissions of PM, SO<sub>2</sub> and NO<sub>x</sub> shall not exceed the following

- a. PM- 5.40 TPD
  - b. SO<sub>2</sub>- 6.24 TPD, and
  - c. NO<sub>x</sub> – 11.58 TPD.
- iii. Maximum 90 days of slag storage area shall be permitted inside the plant. PP shall recycle/reuse /sell 100 % solid waste generated in the plant. Dumping of waste for any longer period would not be permitted.
  - iv. Waste Recycling Plant shall be installed to recover metal and flux from the BOF Slag.
  - v. Water consumption shall not exceed 3.96 m<sup>3</sup>/t of steel produced.
  - vi. Intermediate storage area shall be provided with stable impervious lining with garland drains connected to a settling pond.
  - vii. Tar sludge from coke ovens shall be recycled to input coal to coke ovens.
  - viii. CDQ shall be installed in coke ovens.
  - ix. Coke Oven Gas shall be desulfurized.
  - x. Sinter cooler waste heat recovery shall be installed.
  - xi. Sinter Plant will be installed based on MEROS technology to reduce emission of SO<sub>2</sub> , NO<sub>x</sub> and heavy metals.
  - xii. BF shall be equipped with TRT, dry gas cleaning plant, stove waste heat recovery, cast house and stock house ventilation system and slag granulation facility.
  - xiii. Secondary fume extraction system with Dog House shall be installed on converters of SMS. BOF shall have dry gas cleaning facility.
  - xiv. 80-85% billets and slabs shall be hot charged.
  - xv. Performance test shall be conducted on all pollution control systems every year and report shall be submitted to Regional Office of the MoEF&CC.
  - xvi. Entire effluent generated from the plant shall be treated and recycled.
  - xvii. Green belt shall be developed in an area equal to 33% of the project area with a native tree species with tree density of 2500 trees per ha in accordance with CPCB guidelines. The greenbelt shall *inter alia* cover the entire periphery of the plant. 30 m wide dense plantation shall be provided towards the RF direction within the plant boundary.
  - xviii. Landscaping shall be done and a 50 m green belt buffer zone shall be provided towards Kanya Theertham Temple. A 10 m high dust curtain shall be provided towards the temple side and no polluting unit shall be installed towards the temple. 3 tier buffer plantations shall be developed and maintained around Kanyathirtham temple and Nallah.
  - xix. Natural drainage pattern of the project site shall be maintained.
  - xx. Rain water harvesting and extensive ground water recharge shall be carried out within the plant complex.
  - xxi. A dedicated 4-lane approach road shall be constructed from NH 67 up to the plant.
  - xxii. The railway siding shall be commissioned by December, 2023.
  - xxiii. A biodiversity Park shall be developed in 10 ha area. Compliance status in this regard shall be furnished to the Regional Office of MoEF&CC.
  - xxiv. The project proponent shall obtain approval of Chief Wildlife Warden for Site-Specific Conservation Plan & Wildlife Management Plan. The recommendations of the

approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report to the Regional Office.

**B. General conditions**

**I. Statutory compliance:**

- i. The Environment Clearance (EC) granted to the project/ activity is strictly under the provisions of the EIA Notification, 2006 and its amendments issued from time to time. It does not tantamount/ construe to approvals/ consent/ permissions etc., required to be obtained or standards/conditions to be followed under any other Acts/Rules/Subordinate legislations, etc., as may be applicable to the project.

**II. Air quality monitoring and preservation**

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission as well as 04 Nos. Continuous Ambient Air Quality Station (CAAQS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- iii. Sampling facility at process stacks and at quenching towers shall be provided as per CPCB guidelines for manual monitoring of emissions.
- iv. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- v. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.
- vi. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
- vii. Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration.

- viii. The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.
- ix. Facilities for spillage collection shall be provided for coal and coke on wharf of coke oven batteries (Chain conveyors, land based industrial vacuum cleaning facility).
- x. Land-based APC system shall be installed to control coke pushing emissions.
- xi. Monitor CO, HC and O<sub>2</sub> in flue gases of the coke oven battery to detect combustion efficiency and cross leakages in the combustion chamber.
- xii. Vapor absorption system shall be provided in place of vapour compression system for cooling of coke oven gas in case of recovery type coke ovens.
- xiii. Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.
- xiv. Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.

### **III. Water quality monitoring and preservation**

- i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R 277 (E) dated 31<sup>st</sup> March 2012 (Integrated iron & Steel); G.S.R 414 (E) dated 30<sup>th</sup> May 2008 (Sponge Iron) as amended from time to time; S.O. 3305 (E) dated 7<sup>th</sup> December 2015 (Thermal Power Plants) as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre- and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.
- iii. The project proponent shall provide the ETP for coke oven and by-product to meet the standards prescribed in G.S.R 277 (E) dated 31<sup>st</sup> March 2012 (Integrated iron & Steel); G.S.R 414 (E) dated 30<sup>th</sup> May 2008 (Sponge Iron) as amended from time to time; S.O. 3305 (E) dated 7<sup>th</sup> December 2015 (Thermal Power Plants) as amended from time to time as amended from time to time;
- iv. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.

- v. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.
- vi. Tyre washing facilities shall be provided at the entrance of the plant gates.
- vii. Treated water from ETP of COBP shall not be used for coke quenching.
- viii. Water meters shall be provided at the inlet to all unit processes in the steel plants.

#### **IV. Noise monitoring and prevention**

- i. Noise pollution shall be monitored as per the prescribed Noise Pollution (Regulation and Control) Rules, 2000 and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.

#### **V. Energy Conservation measures**

- i. Use torpedo ladle for hot metal transfer as far as possible. If ladles not used, provide covers for open top ladles.
- ii. Restrict Gas flaring to < 1%.
- iii. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;
- iv. Provide LED lights in their offices and residential areas.
- v. Ensure installation of regenerative type burners on all reheating furnaces.

#### **VI. Waste management**

- i. An attrition grinding unit to improve the bulk density of BF granulated slag from 1.0 to 1.5 Kg/l shall be installed to use slag as river sand in construction industry.
- ii. Carbon recovery plant to recover the elemental carbon present in GCP slurries for use in Sinter plant shall be installed.
- iii. Used refractories shall be recycled as far as possible.
- iv. 100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office.
- v. Oil Collection pits shall be provided in oil cellars to collect and reuse/recycle spilled oil. Oil collection trays shall be provided under coils on saddles in cold rolled coil storage area.

- vi. Kitchen waste shall be composted or converted to biogas for further use.

**VII. Green Belt**

- i. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration by trees.

**VIII. Public hearing and Human health issues**

- i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii. The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
- iii. Occupational health surveillance of the workers shall be done on a regular basis and records maintained.

**IX. Corporate Environment Responsibility**

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 30/09/2020.
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will report directly to the head of the organization.

**X. Miscellaneous**

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.

- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely; PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub> (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- viii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- ix. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- x. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xi. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

- xiii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xiv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

30.2 Expansion of Cement Plant with clinker production from 1.485 to 3.65 MTPA and Cement production from 1.65 MTPA to 5.5 MTPA with New 50 MW Coal Based CPP by **M/s. The India Cements Limited** located at Village Chilamkur, Yerrakuntla Mandal, **District YSR Kadapa, Andhra Pradesh**. [Online Proposal No. IA/AP/IND/192889/2016; File No. J-11011/126/2011-IA.II (I)] – **Environment Clearance** – regarding.

30.2.1 M/s. The India Cements Limited (ICL) has made an online application vide proposal no. IA/AP/IND/192889/2016 dated 20/01/2021 along with copy of EIA/EMP report and Form – 2 seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at schedule no. 3(b) Cement plants under Category “A” of the schedule of the EIA Notification, 2006 and appraised at Central Level.

**Details submitted by Project proponent**

30.2.2 The details of the ToR are furnished as below:

<b>Date of Application</b>	<b>Consideration</b>	<b>Details</b>	<b>Date of Accord</b>
30/09/2016	12 <sup>th</sup> meeting of EAC held on 27-28 <sup>th</sup> October 2016	Terms of Reference	18/01/2017*
02/08/2018	35 <sup>th</sup> meeting of EAC held on 17-18 <sup>th</sup> September 2018	Amendment in Terms of Reference	01/02/2019
20/05/2019	7 <sup>th</sup> meeting of EAC held on 29-31 <sup>st</sup> May 2019 & 8 <sup>th</sup> meeting of EAC held on 26/06/2019	Amendment in Terms of Reference	-
09/10/2019	12 <sup>th</sup> meeting of EAC held on 21-23 <sup>rd</sup> October, 2019	Validity Extension of TOR	26/02/2020

\*- Proposal was originally submitted to the Ministry on 8/12/2020

30.2.3 The project of M/s. The India Cements Limited located in Chilamkur Village, Yerraguntla Mandal, YSR Kadapa District, Andhra Pradesh is for increase of clinker production from 1.485 MTPA to 3.65 MTPA by upgradation of Unit – I & Installation of a new Unit - II,

Increase of Cement production capacity from 1.65 to 5.50 MTPA and install a 50 MW Coal based Captive Power Plant.

30.2.4 Environmental Site Settings

S. No.	Particulars	Details		
i.	Total land	Owned by ICL (Land use: Industrial)		
		<b>Description</b>		<b>Area ha.</b>
		Cement Plant & Power Plant	Cement Plant	31.69
			Power Plant	1.78
			Railway siding	7.04
			Parking Area	1.38
			Future Utility	58.11
			Greenbelt Development	106.41
		Colony	Residential houses & amenities including School, Parking & various infrastructures	2.65
			Greenbelt	8.22
Future Utility	17.48			
<b>Total</b>		<b>234.76</b>		
ii.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	Owned by ICL		
iii.	Existence of habitation & involvement of R&R, if any.	None, No R&R is involved		
iv.	Latitude and Longitude of the project site	Latitude : 14°39'6.02" N – 14°40'20.00"N & Longitude 78°27'7.41" E – 78°28'8.21"E3		
v.	Elevation of the project site	196 m above MSL		
vi.	Involvement of Forest land if any.	No Forest Land Involved		
vii.	Water body exists within the project site as well as study area	No water Bodies exists in project area <b>Study area</b> Pedda Vanka- 0.8 km - SSE Penneru River –Third order Stream - 1.5 km – N Penneru River – 9.4 km – NNE		

S. No.	Particulars	Details
viii.	Existence of SZ/ ESA/ national park / wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area	No ESZ/ESA/ National park/wildlife sanctuary/biosphere reserve/tiger reserve/elephant in Study area

30.2.5 The existing project was accorded environmental clearance vide Ir.no. J-11011/126/2011-IA-II (I) dated 7/12/2012 for 1.485 MTPA Clinker production and 1.65 MTPA cement production. Consent to Operate (CTO) from Andhra Pradesh Pollution Control Board was obtained from time to time and current Consent to Operate (Auto Renewal) obtained from APPCB vide File No. APPCB/KNL/TPT/72/HO/CFO/2015-404, dt.16.04.2015 with validity up to 31.12.2022.

30.2.6 Implementation status of the existing EC:

Sl. No.	Facilities	Units	As per EC dated 07.12.2012	Implementation Status as on today	Production as per CTO
1	Clinker	MTPA	1.485	1.485	1.485
2	Cement	MTPA	1.65	1.65	1.65

30.2.7 The unit configuration and capacity of existing and proposed project is given as below:

Cement Plant	Present Consented Capacity as per MoEF&CC (EC Obtained)			Capacity after proposed enhancement (EC Requested)		
	Clinker	Cement	Captive Power Plant (MW)	Clinker	Cement	Coal based Captive Power Plant (MW)
	(MTPA)			(MTPA)		
Unit –I	1.485	1.65	-	1.65	2.00	50
Unit –II (new line)	-	-		2.0	3.50	
<b>Total</b>	<b>1.485</b>	<b>1.65</b>		3.65	5.50	

30.2.8 The details of the raw material requirement for the expansion cum proposed project along with its source and mode of transportation is given as below:

S. No	Raw Material	Quantity required per annum (MTPA)			Source	Distance from site (Kms)	Mode of Transportation
		Existing	Expansion	Total			
1	Limestone	2.0	3.5	5.5	Captive Mine	3.0	Road
2	Gypsum	0.08	0.19	0.27	By product from the chemical plant	200	Rail
3	Laterite/ Iron ore	0.04	0.07	0.11	Mines	300	Rail
4	Fly ash	0.50	1.08	1.58	Royalaseema Thermal Power Station	15	Road /CPP
5	Coal/ Pet coke	0.21	0.68	0.897	Indian/ Imported	350	Rail

30.2.9 The water requirement for the project is estimated as 3800 m<sup>3</sup>/day, Water requirement will be obtained from Penna River and Mine pit. ICL has obtained necessary permission from Govt. of A.P for water drawl of about 4546.10 m<sup>3</sup>/day from Penna River vide Lr. No G.O. Ms No. 24C dated 10 Jun 2002.

30.2.10 The power requirement for the project is estimated as 37.5 MW, the same will be sourced from proposed 50 MW Captive Power plant.

30.2.11 Baseline Environmental Studies:

Period	Summer season – 2019 (March – May, 2019)
AAQ parameters at 10 Locations	PM <sub>2.5</sub> = 17.4 to 31.4 µg/m <sup>3</sup> PM <sub>10</sub> = 44.6 to 64.2 µg/m <sup>3</sup> SO <sub>2</sub> = 7.9 to 15.9 µg/m <sup>3</sup> NO <sub>x</sub> = 9.3 to 17.5 µg/m <sup>3</sup> CO: less than 1 ppm
AAQ modelling (Baseline plus predicted GLC)	PM <sub>10</sub> = 75.04 µg/m <sup>3</sup> SO <sub>2</sub> = 18.48 µg/m <sup>3</sup> NO <sub>x</sub> = 32.27 µg/m <sup>3</sup> CO = 1315 µg/m <sup>3</sup>
Ground water quality at 08 locations	pH: 7.62 to 7.90 Total Hardness: 284 to 593 mg/l, Chlorides: 45 to 516 mg/l, Fluoride: 0.78 to 1.37 mg/l. Heavy metals are within the limits.
Surface water quality at 03 Locations	pH: 7.88 to 8.29 BOD: 04 to 05 mg/l. COD from 18 to 24 mg/l
Noise levels	51.8 to 71.2 dB (A) for the day time and 42.6 to 65.3 dB (A) for the Night time.

Traffic assessment study Findings					
<ul style="list-style-type: none"> <li>• Traffic study has been carried out on road connecting Chilamkur – Kalamalla (Railway cross) near project site</li> <li>• 50% finished product is transported by road.</li> <li>• Additional material - 3.27 MTPA due to expansion - 21 trucks/hr (25 T Capacity)</li> </ul>					
TRAFFIC SCENARIO AND LEVEL OF SERVICE (LOS)					
	Existing				Performance (IRC Classification)
	Peak Volume V	*Capacity PCU/HR C	V/C	LEVEL OF SERVICE	
PRESENT	164	1500	0.10	A	Excellent
AFTER EXPANSION	211	1500	0.14	A	Excellent (No Change)
* Note: Capacity as per IRC-106:1990. Guide line for capacity for urban roads Page 11, Table-2 V= Volume in PCU's/hr & C= Capacity in PCU's/ hr LOS= Level of Service					
Flora and fauna			<p>Schedule – I species reported (5 species):</p> <ol style="list-style-type: none"> <li>Antilope cervicapra - Blackbuck</li> <li>Gazellabennettii - Chinkara</li> <li>Melursus ursinus- Sloth bear</li> <li>Pavocristatus- Peafowl</li> <li>Mains crassicaudata – Indian pangolin</li> </ol> <p>Wild Life Conservation Plan: Common for Cement Plant &amp; Captive Limestone Mine Approved by PCCF, Forest Department, Govt of A.P. Letter Rc.no. 5295/2020/WL-2, Dated 13/10/2020 Budget: Rs 2130 Lakhs</p>		

30.2.12 The details of solid and hazardous waste generation along with its mode of treatment/disposal is furnished as below:

S. No.	Type of Waste	Source	Quantity Generated (TPA)	Mode of Treatment /Disposal
1	Waste Lube Oil	Cement plant	15.50	Used in Cement Plant
2	Lead Acid batteries	Cement plant	2.0	Authorized Recyclers
3	Fly ash	Captive power plant	105000	Pneumatic Conveying System - Reused in Cement Plant

30.2.13 Public Consultation:

Details of Advertisement given	23 Sep 2020 in “The New Indian Express” (English News Paper) and Sakshi (Telugu News Paper)
Date of Public Consultation	28 Oct 2020
Venue	Sri Venkateswara Swamy Temple, Chilamkur which is 0.5 km from the Cement plant
Presiding Officer	Sri. A. Malola District Revenue Officer (DRO) & Addl. Dist. Magistrate Y S R Kadapa
Major Issues Raised	<ul style="list-style-type: none"> <li>• Employment for Locals,</li> <li>• Development of Village</li> </ul>

**Action plan as per MoEF&CC O.M. dated 30/09/2020**

S. No	Activity		1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	4 <sup>th</sup> year	Total
<b>SWATCH BHARAT</b>							
1	Construction of 25 numbers of toilets in each village for 4 villages @ 0.40 lakhs each	Physical Nos	25	25	25	25	<b>100</b>
		@Village	Chilamkur	Niduzivvi	Sunnapurallapalli	Kalamalla	
		Budget Rs Lakhs	10.0	10.0	10.0	10.0	<b>40</b>
2	Provision of 50 dustbins & trollies each for 6 villages @ Rs. 2000 each.	Physical Nos	50	50	50	50	<b>100</b>
		@Village	Malepadu (25 nos) & Timmapuram (25 nos)	Rangasaypuram (25 nos) & Chirajupalli (25 nos)	Penikalapadu, (25 nos) & Sunnapurallapalli (25 nos)	Kadasanikothapalle (25 nos) and Kosinepalle (25 nos)	-
		Budget Rs Lakhs	1.0	1.0	1.0	1.0	<b>4</b>
3	Contribution towards various Government sponsored programs in the villages falling in the impact zone.	Nos	AP Government sponsored programs – YSR kanti velugu ,YSR Housing schemes for poor	AP Government sponsored programs – YSR kanti velugu ,YSR Housing schemes for poor	AP Government sponsored programs – YSR kanti velugu ,YSR Housing schemes for poor	AP Government sponsored programs – YSR kanti velugu ,YSR Housing schemes for poor	<b>8</b>
		@Village	Niduzivvi	Malepadu	Chilamkur	Kalamalla	
		Budget	8	8	10	10	<b>36</b>

S. No	Activity		1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	4 <sup>th</sup> year	Total
		Rs Lakhs					
<b>EDUCATION AND SPORTS</b>							
1	Providing infrastructure to schools in the villages falling in the impact zone. (4 villages)  Digital Class Rooms - with Digital Boards connected Computer	Physical Nos	4 Digital Class Rooms with accessories	4 Digital Class Rooms with accessories	5 Digital Class Rooms with accessories	5 Digital Class Rooms with accessories	<b>18</b>
		@Village	Kadasani kothapalle	Kalamalla	Chilamkur	Niduzuvvi	
		Budget Rs Lakhs	12	12	15	15	<b>54</b>
2	Providing computers for Government schools in the impact zone. (4 villages)	Physical Nos	4	4	6	6	<b>20</b>
		@Village	Sunnapur allapalli	Penikalapadu	Chilamkur	Yerraguntla	
		Budget Rs Lakhs	2	2	3	3	<b>10</b>
3	Improvements to the school grounds in ZP schools. (4 villages)  Levelling and compacting the ground and fencing.	Physical Nos	1	1	1	1	<b>4</b>
		Village	Kallamala	Yerraguntla	Chilamkur	Muddanur	
		Budget Rs Lakhs	2	2	3	3	<b>10</b>
4	Purchase of sports equipment for ZP schools.  Outdoor sports equipment – Nets, Goal Boards, Poles	Physical Nos	Cricket Kits 2 set Basket Ball Goal post and accessories 2 sets and Volley ball court posts, net and accessories 2 sets.	Cricket Kits 2 set Basket Ball Goal post and accessories 2 sets and Volley ball court posts, net and accessories 2 sets.			<b>12</b>
		Village	Chilamkur	Muddanur			
		Budget Rs Lakhs	2	2	0	0	<b>4</b>
<b>WOMEN WELFARE</b>							
1	Construction of building for self-welfare schemes / assistance to self-	Physical Nos	-	1			<b>1</b>
		Village	-	Yerraguntla	-	-	
		Budget		10	-	-	<b>10</b>

S. No	Activity		1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	4 <sup>th</sup> year	Total
	welfare schemes at Mandal head quarter.  A Room of 1000 sqft with partitions	Rs Lakhs					
<b>ROADS DEVELOPMENT</b>							
1	Renovation of village internal roads and drainage system in 4 villages –@ 10 lakhs each	Physical Nos	1 km road with drainage	3 km road with drainage	3 km road with drainage		7 km road with drainage
		<b>Village</b>	Chilamkur	Niduzuvvi & Chilamkur	Sunnapurallapalle and Kalamalla.		
		Budget Rs Lakhs	5	20	20	-	<b>45</b>
2	Renovation of village internal roads and drainage system in the villages falling in the 3.0 to 5.0 km impact zone	Physical Nos	2 km Repair of Roads and drainage system	3 km in each village Repair of Roads and drainage system	4 km in each village Repair of Roads and drainage system		<b>16 km</b> Repair of roads and drainage system
		<b>Village</b>	Malepadu	Penikalapadu & Kadasanikot hapalle	Rangasayapuram & Kosinepalle		
		Budget Rs Lakhs	7	10	13	-	<b>30</b>
3	Renovation of village internal roads and drainage system in the villages falling in the 5.0 to 10.0 km impact zone of village internal roads and drainage in the villages falling in the impact zone of 5-10 km radius.	Physical Nos	2 km Repair of Roads and drainage system	4 km in each village Repair of Roads and drainage system	3 km in each village Repair of Roads and drainage system		<b>16 km</b> Repair of roads and drainage system
		<b>Village</b>	Chirajupalli	Yerraguntla & Timmapuram	Sirigepalle & Gopalapuram		
		Budget Rs Lakhs	5	15	15	-	<b>35</b>
<b>DRINKING WATER</b>							
1	Construction of elevated water tank and water pumping	Physical Nos	-	1	-	-	<b>1</b>
		<b>Village</b>	-	Niduzuvvi	-	-	<b>-</b>
		Budget	-	25	-	-	<b>25</b>

S. No	Activity		1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	4 <sup>th</sup> year	Total
	system at Niduzuvvi village.  Elevated Water tank of 5000 kl with water pumping system	Rs Lakhs					
2	Construction of elevated water tank and water pumping system	Physical Nos	-	-	1	-	1
		<b>Village</b>	-	-	Sunnapurallapalle	-	-
		Budget Rs Lakhs	-	-	25	-	25
3	Desilting and strengthening of bunds for existing water tanks in the impact villages. Plant (in 3 villages @ Rs. 05 lakh each.)	Physical Nos	1	1	1		3
		<b>Village</b>	Chilamkur	Kalamalla	Malepadu		-
		Budget Rs Lakhs	5	5	5	-	15
4	Mineral Water Plant (in 3 villages @ Rs. 10 lakh each.)	Physical Nos	1	1	1	-	3
		<b>Village</b>	Penikalapadu	Karchuguntapalli	Chilamkur		
		Budget Rs Lakhs	10	10	10	-	30
<b>SKILL DEVELOPMENT</b>							
1	Providing skill development training to ITI & diploma passed local youth (for 10 members) per year in plants of ICL for a span of one year.  Three batches of 10 each for 3 years. Monthly stipend @ Rs.16500 / pm for 1 year to each of the trainee.	Physical Nos	10 students/year	10 students/year	10 students/year		30
		<b>Village</b>	Local Youth from 10 km radius				
		Budget Rs Lakhs	20	20	20	-	60
2	Training to farmers in various activities like improved agricultural practices, organic farming, improved fodder crops, improved animal husbandry practices etc. (in 3 villages @ Rs. 05 lakh each.)	Physical Nos	100 farmers in each session in 5 Sessions	100 farmers in each session in 5 Sessions	100 farmers in each session in 5 Sessions		300 farmers
		<b>Village</b>	Chilamkur	Niduzuvvi	Karchuguntapalli		
		Budget Rs Lakhs	5	5	5	-	15

S. No	Activity		1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	4 <sup>th</sup> year	Total
<b>HEALTH CARE</b>							
1	Purchase of hospital equipment and Renovation of primary health centers (PHC) in the impact zone villages.	Physical Nos	1	1	1		3
		Village	Chilamkur	Muddanur	Yerraguntla		
		Budget Rs Lakhs	4	4	4	-	12
2	Conduct of medical camps twice in a year in three different locations in the impact zone. (in 3 villages @ Rs. 06 lakh each.)  Medical camps with distribution of medicines	Physical Nos	2	2	2		6
		Village	Chilamkur	Rangasaypuram	Karchuguntapalli		
		Budget Rs Lakhs	6	6	6	-	18
<b>VETERINARY</b>							
1	Purchase of hospital equipment and Renovation of veterinary hospital	Physical Nos	-	1	-		1
		Village		Chilamkur			
		Budget Rs Lakhs	-	4.00	-	-	4.00
<b>OTHERS</b>							
1	Rain water harvesting pits @ 10 numbers in two villages @ the cost of Rs. 1 lakh each.	Physical Nos	-	10	10		20
		Village		Chilamkur	Kadasanikothapalle		
		Budget Rs Lakhs	0	10	10	-	20
2	Encouraging farm forestry activities in the villages falling in the impact zone. (in 3 villages @ Rs. 05 lakh each.)	Physical Nos	1 Ha in Panchayat Lands	1 Ha in Panchayat Lands	1 Ha in Panchayat Lands		3
		Village	Chilamkur	Niduzuvvi	Kalamalla		
		Budget Rs Lakhs	5	5	5	-	15
3	Development / construction of public buildings like panchayat / community center / libraries in 3 villages	Physical Nos	1 building	1 building	1 building		3
		Village	Penikalapadu	Niduzuvvi	Chilamkur		
		Budget Rs Lakhs	5	7	8	-	20
4	Avenue Plantation along the pucca roads in 3 villages @ Rs. 10 lakh each.	Physical Nos	10000 saplings	10000 saplings	10000 saplings		30000 saplings
		Village	Chilamkur	Penikalapad	Kalamalla		

S. No	Activity	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	4 <sup>th</sup> year	Total
		ur	u			
	Budget Rs Lakhs	10	10	10	-	30
<b>TOTAL BUDGET (In lakhs of rupees) – Implementation period - 4 years</b>						<b>567</b>

30.2.14 The capital cost of the project is Rs.900 Crores and the capital cost for environmental protection measures is proposed as Rs.83.91 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs.6.60 Crores. The employment generation from the proposed project / expansion is 500. The details of cost for environmental protection measures is as follows:

Description		Capital Cost (Rs. Lakhs)	Recurring Cost per annum (Rs.Lakhs)
Upgradation of Air Pollution equipment – Unit-I		0	200
Air pollution control equipment - Unit-II		5000	300
Air pollution control equipment - CPPs		2000	100
Effluent Treatment Plant - CPP		35	5
Rainwater harvesting – 4 pits		0	2
Greenbelt for Gap filling and increasing the density to 2500 Tree/Ha		158	15
Sewage Treatment Plant		0	8
Environmental Monitoring		293	30
Conservation Plan (Approved)	(i) cost of tractor and trailer mounted with a water tank- Rs.15 lakhs, (ii) procurement of vehicle for the project controlling officer- Rs.10 lakhs and (iii) cost of vehicle for patrolling and protection unit- Rs.8 lakhs;	33	0
	Conservation plan for Schedule – I animals: Conservation plan for Blackbuck and peafowl in Niduzuvvi reserve forest, Kosinepalli and Kosinepalli Ext. Forest blocks and the corridor connecting the mining area with Gandikota Forest block.+ SMC works in Niduzuvvi RF, Kosinepalli RF and Kosinepalli ext. RF and in the area connecting the mining area and Gandikota forest block.	245	
	Public hearing action plan	567	
	Greenbelt development in surrounding Village	60	

Description		Capital Cost (Rs. Lakhs)	Recurring Cost per annum (Rs.Lakhs)
	Greenbelt and soil conservation measures for mining lease area	(-)*1225	
<b>Total</b>		<b>8391</b>	<b>660</b>

*\*Considered under Captive Limestone Mine EMP*

30.2.15 Greenbelt will be developed in 106.41 ha which is about 45% of the total project area. A 20-100 m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB/MoEF&CC, New Delhi guidelines. Over the period from 1980 to 2020, 123550 saplings have been planted. Present density is 1200 Tree/Ha. A wide green belt has been developed all along the periphery of the plant with local plant species. All the open spaces have been utilized for plantation purposes. ICL will take up gap filling and vacant spaces by planting 158000 saplings to achieve density of 2500 tree/Ha and the same will be completed by 2025 by incurring an amount of Rs 158 Lakhs. ICL has carried out plantation/greenbelt in total area of 262.92 acres in cement plant.

Details of plantation carried out along with number of plants is given below:

Area of the Plantation	Total	
	Plants (No's)	Area (Ha.)
<b>Plant &amp; Plant Out side</b>	123550	106.41

30.2.16 The proponent has reported that there is no violation under EIA Notification, 2006/court case/show cause/direction related to the project under consideration.

30.2.17 Name of the EIA consultant: M/s. B.S. Envi Tech Pvt.Ltd [S.No. 137, List of ACOs with their Certificate / Extension Letter no. Rev. 06, Jan. 15, 2021].

30.2.18 **Certified compliance report from Regional Office:**

The Status of compliance of earlier EC dated 11/09/2019 and amendment dated 13/04/2020 was obtained from Regional Office, Chennai vide letter no. E.P./12.1/612/AP/415 Dated 08.05.2020. Date of site visit was 05.03.2020 & 06.03.2020. As per the compliance report, all the conditions are complied by project proponent.

30.2.19 The project proponent had earlier applied for EC vide proposal no. IA/AP/IND/184133/2012 dated 08/12/2020. The project was considered during 26<sup>th</sup> meeting of the Re-constituted EAC (Industry-I) held during 16-17<sup>th</sup> December, 2020 wherein the Committee, after deliberations, recommended to return the proposal in present form. The observations of the committee during the 26<sup>th</sup> meeting are as follows:

**Observations of the Committee (During EAC meeting on 16-17<sup>th</sup> December, 2020)**

The Committee noted the following:

- i. Dioxin and Furans Monitoring Schedule has not been furnished in the EIA Report.
- ii. EMPs for social and infrastructure development (CER) not presented in EIA report. These need to be drawn from PH proceeds and SIA study.

- iii. Public hearing was conducted in Oct 2020. Summary details of PH are not available in EIA report. MOM is attached as Annexure 7A. Many of the written representations are not legible and also not translated in English as per the generic ToR no. ix.
- iv. Summary of Wildlife Conservation Plan is not available in EIA Report.
- v. EMP Chapter 10 is generic and does not provide details of EMPs, their Specifications for implementation in post project monitoring scenario.
- vi. Executive summary does not have any reference to Public hearing held on 28/10/2020.
- vii. TOR Point #9 not addressed adequately.
- viii. Plantation density for green belt is only 1200 trees per ha in place of 2500 trees per ha.

30.2.20 The project proponent has submitted the revised application vide proposal no. IA/AP/IND/192889/2016 dated 20/01/2021 along with copy of EIA/EMP report and Form – 2 seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned and the proposal placed before the EAC in its 30<sup>th</sup> meeting held on 10-11<sup>th</sup> February, 2021.

**Written submissions during the course of meeting**

30.2.21 PP has submitted written clarifications on the following points during the course of meeting:

<b>S.No.</b>	<b>Written submissions on</b>	<b>Commitment made</b>
i.	PH action plan as per MoEF&CC O.M. dated 30/09/2020	Detailed village wise action plan has been submitted with physical targets and financial outlay of Rs. 567 lakhs over a period of four years.
ii.	Environment Management Cell	Composition of the revised Environment Management Cell has been submitted.

**Observations of the Committee**

30.2.22 The EAC noted the following:

- i. The EAC found that the EIA/EMP report is in order reflecting the present environmental concerns and the projected scenario for all the environmental components arising out of the proposed project with respective mitigation measures. The EAC also noted that the baseline data reported and incremental GLC due to the proposed project were within NAAQ standards.
- ii. The Committee also deliberated upon the certified compliance report of RO and found that the compliance to the existing EC conditions are satisfactory.
- iii. The EAC also deliberated on the public hearing issues as well as action plan to address the issues raised during public hearing and found it satisfactory.
- iv. The EAC noted that the written submissions made by the project proponent during the course of meeting are addressing the concerns of the Committee and acceded to the same.

## **Recommendations of the Committee**

30.2.23 In view of the foregoing and after detailed deliberations, the committee recommended the instant proposal for grant of Environment Clearance under the provisions of EIA Notification, 2006 subject to the following specific conditions and general conditions as per the Ministry's Office Memorandum No. 22-34/2018-III dated 9/8/2018 pertaining to integrated cement plants based on project specific requirements:

### **A. Specific conditions**

- i. In case of co-processing, dioxin and furans shall be monitored on yearly basis and report shall be submitted to the Regional Office of MoEFCC.
- ii. Air cooled condensers shall be used in the power Plant.
- iii. Duly approved Wildlife Conservation Plan shall be implemented. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report to the Regional Office.
- iv. Plantation density for green belt shall be 2500 trees per ha. Minimum 33 % of the plant area shall be brought under green belt.
- v. PM emission from stacks shall not exceed 30 mg/Nm<sup>3</sup>.
- vi. Plant shall treat and recycle the waste water completely.
- vii. Plant roads shall be paved and an industrial vacuum cleaner shall be provided to clean the roads regularly.
- viii. The project proponent shall achieve power consumption less than 65 units/tonne for Portland Pozzolona Cement (PPC) and 85 units/tonne for Ordinary Portland Cement (OPC) production and thermal energy consumption of 670 Kcal/Kg of clinker.

### **B. General conditions**

#### **I. Statutory compliance:**

- i. The Environment Clearance (EC) granted to the project/ activity is strictly under the provisions of the EIA Notification, 2006 and its amendments issued from time to time. It does not tantamount/ construe to approvals/ consent/ permissions etc., required to be obtained or standards/conditions to be followed under any other Acts/Rules/Subordinate legislations, etc., as may be applicable to the project.

#### **II. Air quality monitoring and preservation**

- i. The project proponent shall install 24x7 Continuous Emission Monitoring System (CEMS) at process stacks to monitor stack emission as well as Continuous Ambient Air Quality Station (CAAQS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.

- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognized under Environment (Protection) Act, 1986.
- iii. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.
- iv. The project proponent shall ensure covered transportation and conveying of ore, coal and other raw material to prevent spillage and dust generation; Use closed bulkers for carrying fly ash;
- v. The project proponent shall provide wind shelter fence and chemical spraying on the raw material stock piles; and
- vi. Efforts shall be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land by the use of covered conveyor belts/railways as a mode of transport
- vii. Ventilation system shall be designed for adequate air changes as per the prevailing norms for all tunnels, motor houses, cement bagging plants.

### **III. Water quality monitoring and preservation**

- i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R. No. 612 (E) dated 25<sup>th</sup> August, 2014 (Cement) and subsequent amendment dated 9<sup>th</sup> May, 2016 (Cement) and 10<sup>th</sup> May, 2016 (in case of Co-processing Cement) as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall regularly monitor ground water quality at least twice a year (pre- and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.
- iii. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
- iv. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off
- v. Water meters shall be provided at the inlet to all unit processes in the cement plant.
- vi. The project proponent shall make efforts to minimise water consumption in the cement plant complex by segregation of used water, practicing cascade use and by recycling treated water.

### **IV. Noise monitoring and prevention**

- i. Noise quality shall be monitored as per the prescribed Noise Pollution (Regulation And Control) Rules, 2000 and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.

**V. Energy Conservation measures**

- i. Waste heat recovery system shall be provided for kiln and cooler.
- ii. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly.
- iii. Provide the project proponent for LED lights in their offices and residential areas.
- iv. Maximize utilization of fly ash, slag and sweetener in cement blend as per BIS standards.
- v. Maximize utilization of alternate fuels and Co-processing to achieve best practice norms.

**VI. Waste management**

- i. Used refractories shall be recycled as far as possible.
- ii. Kitchen waste shall be composted or converted to biogas for further use.

**VII. Green Belt**

- i. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration by trees in the plant premises.

**VIII. Public hearing and Human health issues**

- i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii. The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
- iii. Occupational health surveillance of the workers shall be done on a regular basis and records maintained.

**IX. Corporate Environment Responsibility**

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 30/09/2020.
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.

**X. Miscellaneous**

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely; PM10, SO<sub>2</sub>, NO<sub>x</sub> (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- viii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- ix. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- x. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xi. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

- xiii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xiv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

30.3 Enhancement of production 1.0 to 2.0 MTPA in Portland Pozzolana Cement grinding unit by **M/s Nu Vista Limited [Formerly M/s. Emami Cement Ltd.]** located at Kulhariya village, Durgawati Tehsil, **Bhabua Kaimur District, Bihar**. [Online Proposal No. IA/BR/IND/184487/2011; File No. J- 11011/287/2010-IA.II(I)] – **Environment Clearance** – regarding.

30.3.1 M/s Nu Vista Limited [Formerly Emami Cement Ltd.] has made an online application vide proposal no. IA/BR/INDI 184487/2011 dated 21/01/2021 along with copy of EIA/EMP report and Form 2 seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed expansion project activity is listed at schedule no. 3(b) Cement plants under Category "B" of the schedule of the EIA Notification, 2006. Due to proximity of inter- state [UP-Bihar] boundary [within 5 km of the project site], the project attracts general condition and appraised at Central Level.

**Details submitted by the project proponent**

30.3.2 The details of the ToR are furnished as below:

<b>Date of Application</b>	<b>Consideration</b>	<b>Details</b>	<b>Date of Accord</b>
29/01/2020	18 <sup>th</sup> meeting of EAC held on 29/04/2020	Terms of Reference	19/06/2020

30.3.3 The project of M/s Nu Vista Ltd. [Formerly Emami Cement Ltd.] is located in Kulhariya Village, Durgawati Tehsil, Bhabua (Kaimur) District, Bihar State is for enhancement of Portland Pozzalana Cement production from 1 MTPA to 2 MTPA in existing grinding unit.

30.3.4 Environmental Site Settings

<b>S. No.</b>	<b>Particulars</b>	<b>Details</b>
i.	Total land	7.87 ha / 19.45 Acres
ii.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	Proposed enhancement project is coming within the existing plant premises. Hence no land acquisition is required.
iii.	Existence of habitation & involvement of R&R, if any.	No R&R is involved.

S. No.	Particulars	Details		
		Corner	Latitude	Longitude
iv.	Latitude and Longitude of the project site	SE	25°13'20.21"	83°27'46.11"
		SN	25°13'21.19"	83°27'37.03"
		NW	25°13'31.15"	83°27'38.19"
		NE	25°13'30.11"	83°27'48.34"
v.	Elevation of the project site	76m above MSL		
vi.	Involvement of Forest land if any.	No Forest involved.		
vii.	Water body exists within the project site as well as study area	No water Body within the Project Site  Study area: Name with distance Kohira main Canal- 2.2 km (N) Karmnasa River - 2.7 km(N) Durgawati River- 5.4 km (E)		
viii.	Existence of SZ/ ESA/ national park / wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area	Nil.		

30.3.5 The existing project was accorded Environmental Clearance vide letter no. J-11011/287/2010-IA-II(I) dated 31/10/2011. Consent to Operate for the existing unit was accorded by Bihar State Pollution Control Board vide letter no. 70/20/4236 dated 07/10/2020. The validity of CTO is up to 31/03/2022.

30.3.6 Implementation status of the existing EC:

Sl. No.	Facilities	Units	As per EC dated 31/10/2011	Production as per CTO
1	Cement Grinding Unit	MTPA	1	1

30.3.7 The unit configuration and capacity of existing and proposed project is given as below:

Sl. No.	Name	Existing Units	Proposed Units	Total (Existing + Proposed)
		MTPA	MTPA	MTPA
1.	Cement Grinding Unit	1	1	2

30.3.8 The details of the raw material requirement for the expansion cum proposed project along with its source and mode of transportation is given as below:

S. No	Raw Material	Quantity required per annum (MTPA)			Source	Distance from site (Kms)	Mode of Transportation
		Existing	Expansion	Total			
1	Clinker	0.575	0.575	1.15	From Rishda Plant owned by the PP in Chhattisgarh	630	Road
2	Fly Ash	0.35	0.35	0.7	From nearby thermal power plants,	84	Road
3	Gypsum	0.075	0.075	0.15	Obtained from traders [From West Bengal Odisha Port to Mughal Sarai Railway Yard and from there to Plant by road.	800	By Rail and Road

30.3.9 The water requirement for the project [Post expansion] is estimated as 14.5 m<sup>3</sup>/day, out of which fresh water requirement of 6.9 m<sup>3</sup>/day will be obtained from the onsite Tube-well and the remaining requirement of 7.6 m<sup>3</sup>/day will be met from the onsite RWH Pond. The permission for drawl of groundwater is obtained from the Central Ground Water Board vide letter no. CGWA/NOC/IND/ ORIG/2018/3756 dated 06 July 2018. Application for renewal is under process.

30.3.10 The power requirement for the project is estimated as 11 MW, which will be obtained from the Bihar State Electricity Board.

30.3.11 Baseline Environmental Studies:

Period	December 2019 to February 2020
AAQ parameters at 9. locations	<b>PM<sub>2.5</sub> = 62.00 to 95.00 µg/m<sup>3</sup></b> <b>PM<sub>10</sub> = 124.00 to 168.00 µg/m<sup>3</sup></b> SO <sub>2</sub> = 6.50 to 10.40 µg/m <sup>3</sup> NO <sub>x</sub> = 14.10 to 22.50 µg/m <sup>3</sup>
AAQ modelling	Incremental Value at Project Site- PM <sub>10</sub> = 8.5 µg/m <sup>3</sup> PM <sub>2.5</sub> = 0.5 µg/m <sup>3</sup> NO <sub>x</sub> = 1.0 µg/m <sup>3</sup>
Ground water quality at 9 locations	pH: 7.35 to 7.58, Total Hardness:256 - 300 mg/l, Chlorides: 196 – 260 mg/l, Fluoride: 0.12 - 0.19 mg/l, Heavy metals are within the limits.
Surface water quality at 4 locations	pH: 6.46 to 7.62, DO: 5.9 to 6.2 mg/l and BOD: 4.0 – 8.6.mg/l, COD from14.0 – 56.0 mg/l
Noise levels	49.36 to 54.51 for the day time and 40.06 to 42.12 for the

		Night time.					
Traffic assessment study findings		Existing		Expansion		Total (MTPA)	
	Materials	(MTPA)	Trucks per day	(MTPA)	Trucks per day		
	Clinker	0.575	53	0.575	106		1.15
	Fly ash	0.35	36	0.35	72		0.7
	Gypsum	0.075	1.5 rake per month	0.075	3 rake per month		0.15
Flora and fauna	No endangered species and schedule I fauna exist in the study area.						

30.3.12 The details of solid and hazardous waste generation along with its mode of treatment/disposal is furnished as below:

S. No.	Type of Waste	Source	Quantity generated (TPA)	Mode of Treatment / Disposal
1	Used Oil	Plant & Machinery	840 lit/Annum	Collected in the leak proof drums, stored in designated area and disposed to BPSCB authorized Re- processor/ Incinerator.

30.3.13 Public Consultation:

Details of Advertisement given	26 Aug 2020
Date of Public Consultation	30 September 2020
Venue	BSPCB RO office
Presiding Officer	Deputy Development Commissioner
Major Issues Raised	i. Employment of local people ii. Details asked about mitigation measures to control dust emission iii. Asked about the green area plantation/development iv. Suggestion for water sprinkling/concrete road to control dust emission v. Request for development of park, playground, drinking water facility

Action plan as per MoEF&CC O.M. dated 30/09/2020

S. NO	Concerns raised during the Public Hearing	Physical activity and action plan	Tentative Budget, Rs Lacs	Target date for implementation of action plan
1	Mitigation to control	Bag House, Water Sprinkling	1.45 Crore	Before start of

S. NO	Concerns raised during the Public Hearing	Physical activity and action plan	Tentative Budget, Rs Lacs	Target date for implementation of action plan
	dust emission			expansion project
2	playground	Construction of playground facilities in schools	2 lakhs	Year 2
3	Drinking water facility	Drinking water Facilities and Irrigation facility	20 lakhs	Year 1, 2 & 3
4	Road construction	Construction of village roads	7 lakhs	Year 1, 2 & 3
5	Green area development	Development of nursery for plantation of in villages and distribution beyond the immediate villages	8 lakhs	Year 1,2 & 3
6	Employment	Skill Development Workshops	6 lakhs	Year 1 & 2

30.3.14 The capital cost of the project is n is Rs. 343 Cr [Current Cost 245 Cr. + Expansion Cost 98 Cr.] and the capital cost for environmental protection measures is proposed as Rs. 392.5 Lakhs. The annual recurring cost towards the environmental protection measures is proposed as Rs 5.6 lakhs. The employment generation from the proposed project/ expansion is 131 (contractual). The details of cost for environmental protection measures is as follows:

S. No.	Description of Item	Existing (Rs. in Crores/lakhs)	
		Capital Cost	Recurring Cost
i.	Air Pollution Control/ Noise	135 lakhs	0.8 lakhs
ii.	Water Pollution Control	10 Lakhs	0.55 lakhs
iii.	Environmental Monitoring and Management (Online stack Monitoring system)	240 lakhs	0.64 lakhs
iv.	Green Belt Development	7.5 lakh	1.99 lakhs
<b>Total</b>		<b>392.5 lakhs</b>	<b>5.6 lakhs</b>

30.3.15 Greenbelt will be developed in 2.83 ha which is about 35.99% of the total project area. A 10.0m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB/MoEF&CC, New Delhi guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 2200 saplings/Ha will be planted and nurtured in 2.83 hectares within 3 years.

30.3.16 The proponent has reported that there is no violation under EIA Notification, 2006/court case/show cause/direction related to the project under consideration.

30.3.17 Name of the EIA consultant: M/s Ardra Consulting Services Pvt. Ltd, Bhubaneswar [S.No. 86, List of ACOs with their Certificate / Extension Letter no. Rev. 06, Jan. 15, 2021].

**30.3.18 Certified compliance report from Regional Office:**

The Status of compliance of earlier EC was obtained from Regional Office, Ranchi vide letter no. 105-94/4081 dated 21/07/2020 in the name of M/s. Emami Cement Limited. The Action taken report regarding the partially/non-complied condition was submitted to Regional officer MoEF&CC, Ranchi vide letter no. Nil dated 12/11/2020. The details of the observations made

by RO in the report dated 105-94/4363 dated 24/11/2020 along with its re-assessment / present status are furnished below:

Sl. No.	Non compliances / Partial Compliances Environmental Clearance conditions monitored by Regional office, Ranchi, MoEF & CC as on 10.07.2020	Remarks of Regional Office, Ranchi, vide letter no. No. 105-94/ Dated: 21.07.2020	Latest Remarks of Regional Office, Ranchi on the basis of project site visited on dated 17.11.2020 and submitted documents by project proponent.
1	<b>Specific Condition no. (i):</b> Particulate emissions shall be controlled within 50 mg/Nm <sup>3</sup> by installing adequate air pollution control system viz. Bag filters and stacks of adequate height etc. Data on ambient air, fugitive and stack emissions shall be submitted to the Ministry's Regional Office at Ranchi, SPCB and CPCB regularly.	<b>Partial Complied:</b> The stack height of the cement mill is below the building top horizon and therefore does not meet the prescribed norms where profuse dust was observed inside the industry premises. Online stack emission data are not yet linked to SPCP and CPCP server.	<b>Partial Complied:</b> There are three stacks were observed in the project site, where attached with cement mill, baghouse of clinker unloading section and bag house of gypsum feeding area. The stack attached with cement mill was observed that piece to increase the height is being fabricated and presently skilled labors are working. Project proponent informed that it will be completed on December 2020. The other two stacks height is also below the building top horizon. Renewal of cement mill online stack emission data has been link with SPCB and CPCB portal id: is <a href="http://cpcbtdms.nic.in">http://cpcbtdms.nic.in</a> and also these two stacks are not connected with online monitoring system. <b>Hence all stack height of the industry is below the building top horizon and therefore does not meet the prescribed norms.</b>
2	<b>Specific Condition no. (iii):</b> Gaseous emission levels including secondary fugitive emissions from all the sources shall be controlled within the latest permissible limits issued by the Ministry and regularly monitored. Guidelines/Code of Practice issued by the CPCB should be followed.	<b>Partial Complied:</b> The industry does not have effective mechanism to prevent and arrest fugitive dust generated due to movement of traffic and materials. All machinery & equipment and shop floors were found to be fully covered with dust / mud. Project proponent has not installed adequate dust extractors system in the crushing and all the material transfer points.	<b>Partial Complied:</b> Project proponent informed that water sprinkler is installed in the side of road to suppress the fugitive dust generated by traffic movement. For the dust collector increase the collection efficiency by replacing the filter bags. <b>All machinery &amp; equipment and shop floors were found to be fully covered with dust. Project proponent has not installed adequate dust extractors system all the material transfer points as yet.</b>

Sl. No.	Non compliances / Partial Compliances Environmental Clearance conditions monitored by Regional office, Ranchi, MoEF & CC as on 10.07.2020	Remarks of Regional Office, Ranchi, vide letter no. No. 105-94/ Dated: 21.07.2020	Latest Remarks of Regional Office, Ranchi on the basis of project site visited on dated 17.11.2020 and submitted documents by project proponent.
3	<b>Specific Condition no. (iv):</b> The company shall install adequate dust collection and extraction system to control fugitive dust emissions at various transfer points, raw meal handling (unloading, conveying, transporting, stacking), vehicular movement, bagging and packing areas etc. All the raw material stock piles should be covered. A closed clinker stockpile system shall be provided. All conveyers should be covered with GI sheets. Covered sheds for storage of raw materials and fully covered conveyers for transportation of materials shall be provided besides cement, fly ash and clinker shall be stored in silos. Pneumatic system shall be used for fly ash handling	<b>Partial Complied:</b> It was observed that gypsum and limestone materials were being haphazardly dumped and not provided with covering to prevent dust pollution in the project site. The existing dust extractors system nearby the cement collection points, flyash collection points, gypsum and clinker unloading area were grossly inadequate. Conveyor systems were not completely closed to prevent fugitive dust. The house keeping is very poor.	<b>Partial Complied:</b> On the date of site visit it was observed that gypsum and limestone materials were being provided with covering to prevent dust pollution in the project site. Some part of the <b>Conveyor belt yet to be fully covered to prevent fugitive dust. The existing dust extractors system nearby the, gypsum and clinker unloading area were grossly inadequate. The house keeping is very poor.</b>
4	<b>Specific Condition no. (v):</b> Asphaltting / concreting of roads and water spray all around the stockyard and loading/unloading areas in the cement plant shall be carried out to control fugitive emissions. Regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of PM such as haul road, loading and unloading points, transfer points and other vulnerable areas. It shall be ensured that the ambient air quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.	<b>Partial Complied:</b> Inside the industrial premises most of the pathways are neither black topped nor properly paved / concreted creating muddy condition in wet season and dusty in dry season. This location also needs fixed water sprinklers, dust extractors system and sweep vacuums. Vehicular movement through this area is additional cause for spread of dust pollution.	<b>Partial Complied:</b> Project proponent has deployed water sprinklers trolley to suppressed fugitive dust generated by vehicle movement. <b>Some fixed type of water sprinklers arrangement was installed in the project premises which were inadequate as per the requisite. Inside the industrial premises most of the pathways are neither black topped nor properly paved / concreted creating dusty in the area. This location also needs fixed water sprinklers, dust extractors system and sweep vacuums. Vehicular movement through this area is additional cause for spread of dust pollution.</b>

Sl. No.	Non compliances / Partial Compliances Environmental Clearance conditions monitored by Regional office, Ranchi, MoEF & CC as on 10.07.2020	Remarks of Regional Office, Ranchi, vide letter no. No. 105-94/ Dated: 21.07.2020	Latest Remarks of Regional Office, Ranchi on the basis of project site visited on dated 17.11.2020 and submitted documents by project proponent.
5	<b>Specific Condition no. (vi):</b> Efforts shall be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land. All the raw materials including fly ash should be transported in the closed containers only and should not be overloaded. Vehicular emissions should be regularly monitored.	<b>Partial Complied:</b> Nearby project area transportation road has not been properly maintained and shop floors were found to be fully covered with mud /dust. Near all raw material unloading areas and end product collection points are soiled with too much of mud/dust which contains limestone, gypsum and clinkers by loaded vehicles wheel which are carried with rain water to the nearby agricultural fields. Project proponent should have provided proper wheel washing arrangements to effectively prevent such pollution.	<b>Partial Complied:</b> Project proponent is being started to concrete the parking area. (photo-). <b>However, nearby project area transportation road has not been properly maintained and shop floors were found to be fully covered with dust. Near all raw material unloading areas and end product collection points are soiled with too much of dust which contains limestone, gypsum and clinkers by loaded vehicles wheel which are carried with rain water to the nearby agricultural fields. Project proponent has not yet provided proper wheel washing arrangements to effectively prevent such pollution.</b>
6	<b>Specific Condition no. (vii):</b> Total ground water requirement for the cement plant shall not exceed 200 m <sup>3</sup> /day and necessary permission for the drawl of water shall be obtained from the Competent Authority. All the treated wastewater should be recycled and reused in the process and/or for dust suppression and green belt development and other plant related activities etc. No process wastewater shall be discharged outside the factory premises and 'zero' discharge should be adopted.	<b>Partial Complied:</b> Project proponent has obtained no objection certificate (NOC) from CGWA for abstracting ground water with letter no.- CGWA / NOC / IND / ORIG / 2018 / 3756; Dated: 19.06.2018, which expired on 18.06.2020. Project proponent should have submitted the valid ground water withdrawal permission letter to RO, Ranchi. Daily water consumption of ground water has not been monitored. It was observed that surface drainage system was not yet constructed. Although all runoff water in the industry area is being collected in a separate rain water harvesting pond but recycling system of drainage are not yet constructed and connected to rain water harvesting pond in the project site.	<b>Partial Complied:</b> At the project site it was observed that temporary drainage system has been constructed and functioning. It was informed that proper drainage system is planned and a copy of drawing has also been submitted to this IRO, Ranchi. Daily water consumption of ground water is being monitored. <b>It was observed that surface drainage system was not yet permanently constructed and interconnected. Although all runoff water in the industry area is being collected in separate rain water harvesting pond but recycling / reuse system of drainage are not yet constructed and connected to rain water harvesting pond in the project site.</b>
7	<b>Specific Condition no. (x):</b> Green belt shall be developed	<b>Partial Complied:</b> At the project site it was observed that	<b>Partial Complied:</b> As per the submitted documents by project

Sl. No.	Non compliances / Partial Compliances Environmental Clearance conditions monitored by Regional office, Ranchi, MoEF & CC as on 10.07.2020	Remarks of Regional Office, Ranchi, vide letter no. No. 105-94/ Dated: 21.07.2020	Latest Remarks of Regional Office, Ranchi on the basis of project site visited on dated 17.11.2020 and submitted documents by project proponent.
	in at least 33 % area in and around the cement plant as per the CPCB guidelines to mitigate the effects of air emissions in consultation with local DFO. Green belt development shall be started within 3 months after obtaining EC and completed within 3 years or before commissioning of the plant whichever is earlier.	as requisite, the Green Belt plantation has not yet been completely developed along the periphery of the campus. Some tree plantation has been done in the north direction of the project site, which is inadequate as per the stipulation. There is scope for development of green belt in most of the areas of the project which should be undertaken at the earliest. Project proponent should have submitted the covered plantation area as on date. To reduce air pollution in the project areas, some high value index air pollution tolerant species ( <i>i.e., Ficus bengalensis, Cassia siamea, Mangifera indica, Alstonia scholaris, Toona ciliate etc.</i> ) should also be planted in the periphery of the campus and other available areas in project to prevent and reduce the dust pollution.	proponent stated that plantation has been developed in the periphery of the campus with covering 4 acre of land out of 18.43 acre. which is 22% of total plantation area with species like <i>Cassia siamea, Mangifera indica, Alstonia scholaris, Toona Ciliate.</i> <b>There is scope for development of green belt in most of the areas of the project which should be undertaken at the earliest. To reduce the dust pollution in the direction of the public road side project proponent should have developed thick layer of greenbelt.</b>
8	<b>Specific Condition no. (xi):</b> At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment based on locals need and item-wise details along with time bound action plan should be prepared and submitted to the Ministry's Regional Office at Ranchi, Implementation of such program should be ensured accordingly in a time bound manner.	<b>Partial Complied:</b> Project proponent has not shown the activities carried out on Enterprise Social Commitment programme during the time of site visit.	<b>Partial Complied:</b> Project proponent has shown a Intermediate Hgh School, Dohnesa, where a interaction has been made with Mr. Bhushar Prasad Singh (Head Teacher) and Mr. Birendra Lal (Asst. Teacher). They stated that project authorities have supplied 5 nos. of Manual Sewing Machine and 5 nos. of Street light for the School. <b>Project proponent has not submitted year wise and tem wise expenditure incurred for Enterprise Social Commitment programme as on date.</b>

Sl. No.	Non compliances / Partial Compliances Environmental Clearance conditions monitored by Regional office, Ranchi, MoEF & CC as on 10.07.2020	Remarks of Regional Office, Ranchi, vide letter no. No. 105-94/ Dated: 21.07.2020	Latest Remarks of Regional Office, Ranchi on the basis of project site visited on dated 17.11.2020 and submitted documents by project proponent.
9	<b>General Condition no. (vi):</b> The overall noise levels in and around the plant area shall be kept well within the standards (85 dB) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under EPA Rules, 1989 viz. 75 dB (daytime) and 70 dB (night time).	<b>Partial Complied:</b> At the project site it was observed that the stack height of the DG set is below the building top horizon and therefore does not meet the prescribed norms and also the DG stack is not attached with stack of cement mill.	<b>Partial Complied:</b> At the project site it was observed that the stack height of the DG set is below the building top horizon and therefore does not meet the prescribed norms.
10	<b>General Condition no. (vii):</b> Occupational health surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.	<b>Partial Complied:</b> There was not maintaining patient record register in the project site. Project proponent should have submitted the workers' health check-up report which was certified by registered medical officer.	<b>Complied:</b> Patient record register has been Implemented and also doing the periodic health check-up. A copy of patient record register has been submitted.
11	<b>General Condition no. (ix):</b> The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report. Further, the company must undertake socio-economic development activities in the surrounding villages like community development programmes, educational programmes, drinking water supply and health care etc.	<b>Partial Complied:</b> It was observed that for the environmental protection project proponent has not taken adequate measures and there are gross deficits in the following; (i) fully covered conveyor belt (ii) development of green belt (iii) control of fugitive emission (iv) recycling of surface drainage system (v) prescribed height of the cement mill stack, and DG stack etc.	<b>Partial Complied:</b> It was observed that for the environmental protection project proponent has not taken adequate measures and there are gross deficits in the following; (i) some part of the conveyor belt yet to be fully covered (ii) thick green belt/wind barrier in the direction of public road side should be developed (iii) control of fugitive emission (iv) recycling/reusing of surface drainage system (v) prescribed height of the cement mill stack, and DG stack etc.
12	<b>General Condition no. (x):</b> As proposed, Rs. 5.6 Crore and Rs 0.85 Crore shall be earmarked towards capital cost and recurring cost/annum for environment pollution control measures to implement the conditions stipulated by the Ministry of	<b>Partial Complied:</b> No separate account has been maintained by project proponent on environmental protection measures. The year wise and activity wise expenditure incurred for environmental protection measures have not been recorded and furnished to	<b>Partially complied:</b> As per submitted documents by project proponent sated that the expenditure made for installation of bag filter – Rs. 65 lacs, levelling of field and rainwater harvesting pond- Rs. 5lacs, regular maintenance of equipment yearly – Rs. 10 lacs,

Sl. No.	Non compliances / Partial Compliances Environmental Clearance conditions monitored by Regional office, Ranchi, MoEF & CC as on 10.07.2020	Remarks of Regional Office, Ranchi, vide letter no. No. 105-94/ Dated: 21.07.2020	Latest Remarks of Regional Office, Ranchi on the basis of project site visited on dated 17.11.2020 and submitted documents by project proponent.
	Environment and Forests as well as the State Government. An implementation schedule for implementing all the conditions stipulated herein shall be submitted to the Regional Office of the Ministry at Ranchi. The funds so provided shall not be diverted for any other purpose.	RO, Ranchi.	and green belt development cost – yearly – Rs 6 lac. It was also stated that recurring cost for environmental pollution control measure has been made during the year (2018-19) is Rs. 26,88,052.00, and (2019-20) is Rs. 17,73,325.30/- <b>However, no separate account has been maintained by project proponent on environmental protection measures as on date.</b>
13	<b>General Condition no. (xi):</b> A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad / Municipal Corporation, Urban Local Body and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the web site of the company by the proponent.	<b>Partial Complied:</b> A copy of receipt of EC letter by Panchayat / local NGO should be submitted to RO, Ranchi	<b>Complied:</b> A copy of receipt of EC letter by Panchayat / local NGO has been submitted to IRO, Ranchi
14	<b>General Condition no. (xii):</b> The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MOEF at Ranchi. The respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>x</sub> (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects	<b>Partial Complied:</b> The pollutant levels AAQ (ambient air quality) data has not been shown in the digital display board or other manual board at a convenient location near the main gate of the industry in the public domain in the project site.	<b>Partial Complied:</b> The pollutants levels AAQ (ambient air quality) data has been shown in the manual board at a convenient location near the main gate in the public domain in the project site and also upload in the company website.  <b>The pollutant levels AAQ (ambient air quality) data has not been shown in the digital display board in front of the main gate of the project as on date. It was informed that digital display board will be completed by Nov 2020.</b>

Sl. No.	Non compliances / Partial Compliances Environmental Clearance conditions monitored by Regional office, Ranchi, MoEF & CC as on 10.07.2020	Remarks of Regional Office, Ranchi, vide letter no. No. 105-94/ Dated: 21.07.2020	Latest Remarks of Regional Office, Ranchi on the basis of project site visited on dated 17.11.2020 and submitted documents by project proponent.
	shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.		
15	<b>General Condition no. (xvi):</b> Project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.	<b>Partial Complied:</b> The date of financial closure, final approval of the project and land development work is yet to be submitted to Regional Office.	<b>Being Complied:</b> The date of start of the construction activity reported to be 05/07/2012. Date of Financial closure and final approval of the project by the concerned authorities is 01/11/211.

30.3.19 The proposal was considered by the EAC (Industry 1) in its 30<sup>th</sup> meeting of the Re-constituted EAC (Industry-I) held on 10<sup>th</sup> - 11<sup>th</sup> February, 2021.

#### Observations of the Committee

30.3.20 The Committee noted the following:

- i. RO report of 24/11/2020 indicates several non-compliances to the existing EC conditions inter-alia including that Pollution Control Devices (PCD)s provided are grossly undersized and inadequate to control emissions including the height of chimneys; Pathways are not paved; housekeeping was very poor; shop floors were covered with dust and there is no proper drainage. Display boards to show pollution levels at the plant gate have not been provided. Further, compliance regarding 33% green belt development in total project area has not been fulfilled.
- ii. Deficiencies in EIA report are highlighted as under;
  - a. All signatures of team members are scanned.
  - b. TOR point # 9 pertaining to Corporate Environment Policy has not been addressed.
  - c. Project description chapter does not include site photographs, site history, and process flow sheet. Only block diagrams are given.
  - d. Management hierarchy shown in section 2.14 of EIA report does not have any position for Environment Management Cell.
  - e. Chapter 2 has sections that are not relevant and not as per EIA notification eg section 2.18 – Environment operating conditions and Section 2.19- EIA requirement of Project are not relevant

- f. 98 percentile values of PM<sub>10</sub> and PM<sub>2.5</sub> are much higher than National Ambient Air Quality Standards and no explanation is available for the same.
- g. Noise levels have been monitored at 8.21 and 7.19 Km away from the plant.
- h. Total hardness of river water is reported as 4 mg/l while Ca and Mg concentrations are 15.6 and 11.7 mg/l.
- i. Socio-economic study in section 3.15 is incomplete.
- j. Traffic study has not been done while entire inbound and out bound traffic shall be handled by road only.
- k. Impacts in Chapter 4 are all generic and no quantification of impact has been done.
- l. Action plan to address the issues raised during public hearing as per Ministry's O.M. dated 30/09/2020 inter-alia including physical targets have not been furnished.
- m. Chapter 11 – Summary and conclusion is not presented as per the requirement of Appendix III of EIA Notification.

### Recommendations of the Committee

- 30.3.21 In view of the foregoing observations at paragraph 30.3.20 and after detailed deliberations, the committee recommended to return the proposal in present form.
- 30.4 Setting up of 3.2 MTPA Pellet and 3.6 MTPA Pellet feed cum Beneficiation plant by **M/s. Resources Concentrates Private Limited (RCPL)** located at Somalapur Village, Sandur Taluk, **Bellary District, Karnataka**. [Online Proposal No. IA/KA/IND/195445/2021; File No. J-11011/39/2021-IA.II(I)] – **Prescribing of Terms of Reference** – regarding.
- 30.4.1 M/s. Resources Concentrates Private Limited (RCPL) has submitted an application online vide proposal no. IA/KA/IND/195445/2021 dated 29/01/2021 along with the application in prescribed format (Form-I), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(a) Metallurgical industries (Ferrous and Nonferrous) and 2(b) Mineral beneficiations under Category “A” of the schedule of the EIA Notification, 2006 and appraised at Central Level.

### Details submitted by Project proponent

- 30.4.2 The proposed of M/s. RCPL located in Somalapura village, Sandur Tehsil, Bellary District, Karnataka State is for setting up of a new 3.2 MTPA Pellet plant with 3.6 MTPA Pellet feed cum Beneficiation plant based on Travelling Grate Technology.
- 30.4.3 Environmental site settings

Sl. No.	Particulars	Details
1	Total land	Total land is about 178.46 ha. Out of which about 68.26 ha of land is allotted by KIADB. About 60.23 ha are already under the possession of RCPL. About 54.25 ha of fallow land is under the process of acquisition.

Sl. No.	Particulars	Details																		
		Land use is barren and fallow land.																		
2	Existence of habitation & involvement of R&R, if any.	No R&R is envisaged.																		
3	Latitude and longitude of the project site	The plant boundary coordinates are given below: <table border="1"> <thead> <tr> <th>Sl. No.</th> <th>Co-ordinates</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Lat: 15°02'23.26" N Long: 76°30'13.41"E</td> </tr> <tr> <td>2</td> <td>Lat: 15°02'00.16" N Long: 76°30'36.91"E</td> </tr> <tr> <td>3</td> <td>Lat: 15°01'42.91" N Long: 76°30'34.82"E</td> </tr> <tr> <td>4</td> <td>Lat: 15°01'32.98" N Long: 76°30'50.02"E</td> </tr> <tr> <td>5</td> <td>Lat: 15°01'17.37" N Long: 76°30'55.62"E</td> </tr> <tr> <td>6</td> <td>Lat: 15°01'09.54" N Long: 76°30'25.04"E</td> </tr> <tr> <td>7</td> <td>Lat: 15°01'26.96" N Long: 76°30'23.79"E</td> </tr> <tr> <td>8</td> <td>Lat: 15°01'35.02" N Long: 76°30'12.56"E</td> </tr> </tbody> </table>	Sl. No.	Co-ordinates	1	Lat: 15°02'23.26" N Long: 76°30'13.41"E	2	Lat: 15°02'00.16" N Long: 76°30'36.91"E	3	Lat: 15°01'42.91" N Long: 76°30'34.82"E	4	Lat: 15°01'32.98" N Long: 76°30'50.02"E	5	Lat: 15°01'17.37" N Long: 76°30'55.62"E	6	Lat: 15°01'09.54" N Long: 76°30'25.04"E	7	Lat: 15°01'26.96" N Long: 76°30'23.79"E	8	Lat: 15°01'35.02" N Long: 76°30'12.56"E
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7	Lat: 15°01'26.96" N Long: 76°30'23.79"E																			
8	Lat: 15°01'35.02" N Long: 76°30'12.56"E																			
4	Elevation of the project site	The site is ranges from 625 to 645m above MSL. It is planned to maintain the buildings level at 630m.																		
5	Involvement of forest land if any	Nil.																		
6	Water body exists with the project site as well as study area.	Project site: Nil Study area: Monsoonal ponds are observed.																		
7	Existence of ESZ/ESA/national park/wildlife sanctuary/biosphere reserve/tiger reserve/elephant reserve etc. if any within the study area.	Nil.																		

30.4.4 The unit configuration and capacity of proposed project is given as below:

Sl. No.	Name	Proposed units		Total
		Configuration	Production TPA	
1	Pellet plant	3.2 MTPA	3200000	3.2 MTPA

Sl. No.	Name	Proposed units		Total
		Configuration	Production TPA	
2	Beneficiation plant	3.6 MTPA	3600000	3.6 MTPA

30.4.5 The details of the raw material requirement for the project along with its source and mode of transportation is given as below:

Sl. NO.	Raw material	Quantity (T/Year)	Source	Mode of transport
1	Iron ore fines	45,00,000 to 50,00,000	Indigenous (Mines belongs to group companies and other mines)	Rail/road
2	Bentonite	27,000	Indigenous (Gujarat/nearby sources)	Rail
3	Coke breeze	70,000	Indigenous (open market)	Rail
4	Limestone/dolomite	70,000	Indigenous (Gujarat/nearby sources)	Rail

30.4.6 The water requirement for the project is estimated as 6600 m<sup>3</sup>/day. Source of water is from TB dam by laying 700mm dia. pipeline at a distance of 35km. The permission of drawl of surface water is obtained from Tungabhadra Board (TB board clearance proceedings) Karnataka vide dated 17.12.2020

30.4.7 The estimated power requirement of the proposed project is 32.6 MVA. A new transmission line is proposed for drawing power from Badeladuku, Kudligi sub-station of KPTCL, through double circuit 220 kV overhead transmission line.

30.4.8 Fuel requirement for project is Furnace oil - 54,400 m<sup>3</sup>/yr (from nearest oil storage company), LDO and LNG. Fuel consumption mainly is FO for pelletisation process and LDO is planned for initial startup of the project. LNG is planned for future.

30.4.9 No solid and liquid effluent will be generated from the pellet plant. Recirculation of waste water generated from filter plant is planned. Tailings from beneficiation plant will be transported to a dump area in a semi-Solid form and stored which is approximately a km away from beneficiation plant. Process water for the plant will be continuously recycled.

30.4.10 The capital cost of the project is Rs. 2000 Crores and the capital cost for environmental protection measures is proposed as Rs. 200 Crores. The employment generation from the proposed project is 554 nos.

30.4.11 The project proponent has reported that there is no violation under EIA Notification, 2006/court case/show cause/direction related to the project under consideration.

30.4.12 Name of the EIA consultant: M/s. MECON Limited, Govt. of India Enterprise, Bangalore [S.No. 47, List of ACOs with their Certificate / Extension Letter no. Rev. 06, Jan. 15, 2021]

30.4.13 Proposed Terms of Reference (Baseline data collection period: One season except monsoon)

Attributes	Sampling		Remarks
	No. of locations	Frequency	
<b>A. Air</b>			
a. Meteorological parameters	One	Hourly, continuous for three months	<ul style="list-style-type: none"> <li>• Temp. (Dry &amp; Wet),</li> <li>• RH,</li> <li>• Wind speed &amp; direction,</li> <li>• Rainfall etc.</li> </ul>
b. AAQ parameters	8	Twice a week, 24 hours sampling	PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NO <sub>x</sub> , & CO
<b>B. Noise</b>	8	Once in season – continuously for 24 hours	dB(A), Max, Min.
<b>C. Surface water/Ground water quality parameters</b>	16	Once in season	All the parameters specified under the CPCB/IS:10500.
<b>D. Land</b>			
a. Soil quality	8	Once in season	As per MoEF guidelines
b. Land use	Covering 10 km radius		
<b>E. Biological</b>	Covering 10 km radius	Once in season	As per MoEF guidelines
a. Aquatic			
b. Terrestrial			
<b>F. Socio-economic parameters</b>	Covering 10 km radius	Once in season	As per MoEF guidelines

30.4.14 The proposal was considered by the EAC (Industry 1) in its 30<sup>th</sup> meeting of the Re-constituted EAC (Industry-I) held on 10<sup>th</sup> - 11<sup>th</sup> February, 2021. The observations and recommendations of EAC is given as below:

**Observations of the Committee**

30.4.15 The Committee noted the following:

- i. TOR is being sought for setting up of a 3.2 MTPA Pellet Plant and 3.6 MTPA Iron ore Beneficiation Plant at Somalapura.
- ii. Cost of the project is Rs. 2000 Cr and the plant shall be commissioned in 54 months.
- iii. 440 Acres of land is in possession of PP (117 Acres for plant and balance for tailing pond). very large area is being proposed for tailing pond. Tailing pond is approximately 1 km away from the plant. PP has committed that tailings shall be dewatered and dry tailings shall be disposed of in the tailing pond.
- iv. Site is surrounded by Somalapur and Kumaja RF.
- v. No alternate site has been studied due to vicinity to iron ore mine and railway siding. 145 Acre land is proposed under green belt.

### Recommendations of the Committee

- 30.4.16 After deliberations, the Committee recommended the project proposal for prescribing following specific ToRs for undertaking detailed EIA and EMP study in addition to the generic ToR enclosed at Annexure-1 read with additional ToRs at Annexure-2:
- i. PM emissions from stacks shall be less than 30 mg/Nm<sup>3</sup>.
  - ii. No ground water shall be abstracted 6600 KLD water shall be drawn from Tunga Bhadra Dam.
  - iii. 145 Acre land shall be developed under green belt.
  - iv. STP for domestic sewage shall be provided.
  - v. Action plan for rain water harvesting shall be worked out and submitted.
  - vi. Plant roads shall be paved and an industrial vacuum cleaner shall be provided to clean the roads regularly.
  - vii. PP shall submit the plan to reduce storage up to 90 days of tailings generated.
- 30.5 Expansion of Integrated Steel Plant from 9.6 MTPA to 14 MTPA Liquid steel by **M/s. Arcelor Mittal Nippon Steel India Limited** located at Village Hazira, **Surat District, Gujarat** [Online Proposal No. IA/GJ/IND/195125/2021; File No. J-11011/44/2004- IA. II(I)] – **Prescribing of Terms of Reference** – regarding.
- 30.5.1 M/s. Arcelor Mittal Nippon Steel India Limited has made an application online vide proposal no. IA/GJ/IND/195125/2021 dated 28/01/2021 along with the application in prescribed format (Form-I), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(a) Metallurgical industries (Ferrous and Nonferrous) under Category “A” of the schedule of the EIA Notification, 2006 and appraised at Central Level.
- 30.5.2 The proposal was placed before the EAC (Industry 1) in its 30<sup>th</sup> meeting of the Re-constituted EAC (Industry-I) held on 10<sup>th</sup> - 11<sup>th</sup> February, 2021.
- 30.5.3 During the course of meeting, the project proponent requested the EAC and Ministry to withdraw their proposal as they would like to modify their proposal. In this regard, project proponent also sent an email to the Ministry as well as EAC members on 10/02/2021.
- 30.5.4 In view of the above, the Committee recommended for accepting the withdrawal of the instant proposal.
- 30.6 Expansion of Clinker production capacity (5.35 MTPA to 8.0 MTPA) and WHRB (15 MW to 50 MW) by **M/s. JK Lakshmi Cement Ltd.**, located at Village Jaykaypuram, Tehsil Pindwara, **District Sirohi, Rajasthan**. [Online Proposal No. IA/RJ/IND/193010/2021; File No. J-11011/306/2013-IA.II(I)] – **Amendment / Clarification in Environmental Clearance** – regarding.
- 30.6.1 M/s JK Lakshmi Cement Ltd. has made an online application vide proposal no. IA/RJ/IND/193010/2021 dated 29/01/2021 along with Form 4 and sought for Amendment /

Clarification in Environmental Clearance accorded by the Ministry vide letter no. J – 11011/306/2013/IA.II(I) dated 28/10/2016.

**Details submitted by the project proponent**

30.6.2 MoEFCC issued Environmental Clearance to M/s JK Lakshmi Cement Ltd. vide letter no. J – 11011/306/2013/IA.II(I) dt. 28/10/2016 for “Expansion of Clinker Production capacity (5.35 MTPA to 8.0 MTPA) and WHRB (15 MW to 50 MW) located at village: Jaykaypuram, Tehsil: Pindwara, District: Sirohi (Rajasthan).

30.6.3 Following is the Configuration & capacity change granted in EC vis-a-vis with the proposed changes in configuration & capacity of units:

Units	Existing Capacity (Line- I, II & III)	Capacity as per EC letter dt. 28/10/2016	Amendment/Clarification required as per Online Proposal No. IA/RJ/IND/193010/2021
Clinker (MTPA)	5.35	8.0	-
Cement (MTPA)	8.70	8.70	-
Captive Power Plant (MW)	58 (2 x 20 + 1 x 18)	58 (2 x 20 + 1 x 18)	Inclusion of FGD and SNCR (APCDs) in Existing CTPPs
WHRB (MW)	15	50	-
D.G Sets (MW)	19	19	-

30.6.4 The project proponent has also proposed for additional water requirement i.e. 600 KLD for operation of proposed APCDs viz. FGD and SNCR.

30.6.5 The project proponent has submitted that in order to comply with emission norms notified by MoEF&CC vide notification S.O. 3305(E) dt. 07/12/2015 & CPCB vide letter no. B33014/07/2018/IPC-11/TPP/926 dated 16.04.2018 and subsequent letter dt. 16/10/2020 it is proposed to install FGD & SNCR as per CPCB extended timeline to meet out the emission norms by 30<sup>th</sup> June 2021 for existing CTPPs located at JK Lakshmi Cement Ltd. Dist. Sirohi (Raj.). Inline to this PP has applied for consent to establish application to Rajasthan State Pollution Control Board vide online application no : 253672 dated 10/01/2020 for installation of Flue Gas Desulphurization (FGD) Unit & SNCR for 2x20 MW (40 MW) & 1x18 MW Captive Thermal Power Plants (CTPPs). RSPCB vide CTE letter no. F(CPM)/Sirohi(Pindwara)/3(1)/2013-2014/553-555 dated 20/05/2020 imposed specific condition no :13 ***“That the industry shall obtained amendment in EC/clarification from MoEE& CC”***.

30.6.6 It has been reported that there is no violation under EIA Notification, 2006/court case/show cause/direction related to the project under consideration.

30.6.7 The proposal was considered by the EAC (Industry 1) in its 30<sup>th</sup> meeting of the Re-constituted EAC (Industry-I) held on 10<sup>th</sup> - 11<sup>th</sup> February, 2021. The observations and recommendations of EAC is given as below:

### Observations of the Committee

30.6.8 The Committee noted the following:

- i. Request is to amend EC of 28.10.2016 to include pollution control devices (FGD and SNCR) in existing boilers.
- ii. No additional land is required.
- iii. 81 KLD additional water would be required.

### Recommendations of the Committee

30.6.9 In view of the foregoing and after deliberations, the committee recommended for amendment in the EC dated 28/10/2016 for inclusion of Flue Gas De-sulphurization (FGD) and Selective Non-catalytic Reduction (SNCR) in existing Captive Thermal Power Plant subject to stipulation of additional specific conditions:

- i. The project proponent shall adhere to the stack height as well as emission norms of thermal power plant as per S.O. 3305 (E) dated 7<sup>th</sup> December 2015 and G.S.R. 593 € dated 28/06/2018 (Thermal Power Plants) as amended from time to time.
- ii. Gypsum storage shall be established as per the CPCB guidelines.
- iii. NH<sub>3</sub> release shall be included in DMP and Mock drills and monitoring shall be included in Continuous Emission Monitoring system.

30.7 Installation of 2 X 7 MTPA Greenfield Iron Ore Pellet Plant by **M/s. Essar Minmet Limited** located at Paradip, **Jagatsinghpur District, Odisha** [Online Proposal No. IA/OR/IND/194461/2021; File No. J-11011/38/2021-IA.II(I)] – **Prescribing of Terms of Reference** – regarding.

30.7.1 M/s. Essar Minmet Limited has made an application online vide proposal no. IA/OR/IND/194461/2021 dated 23/01/2021 along with the application in prescribed format (Form-I), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(a) Metallurgical industries (Ferrous and Nonferrous) under Category “A” of the schedule of the EIA Notification, 2006 and appraised at Central Level.

### Details submitted by Project proponent

30.7.2 The project of M/s. Essar Minmet Limited located in Paradip, Kujanga Tehsil, Jagatsinghpur District, Odisha State is for setting up of a new iron ore Pellet Plant for production of 14 Million Tons Per Annum (MTPA).

30.7.3 Environmental site settings

S.No.	Particulars	Details
i)	Total land	40.49 ha – Industrial land of Paradip Port Trust [Private : 0 Ha Govt. : 40.49 Ha Agriculture : 0 Ha Grazing land : 0 Ha]

S.No.	Particulars	Details
		Land use – Industrial land reserved for Port based industry
ii)	Existence of habitation & involvement of R&R, if any	No R&R is involved.
iii)	Latitude and Longitude of the project site	Lat : 20°17'01" N to 20°17'25" N Long: 86°37'54"E to 86°38'45"E
iv)	Elevation of the project site	1 to 2 m above MSL
v)	Involvement of Forest land if any	Nil
vi)	Water body exists within the project site as well as study area	Project site: No water body within the project site. Study area : Mahanadi river – 4.7 km in N Bay of Bengal – 5.0 km in S
vii)	Existence of ESZ/ESA/ national park/wildlife sanctuary/biosphere reserve/tiger reserve/ elephant reserve etc. if any within the study area	Nil

30.7.4 The unit configuration and capacity proposed project is given as below:

Sl. No.	Name	Proposed Units	
		Configuration	Production, MTPA
1	Pellet Plant (Module-I and Module-II)	2 x 7 MTPA	14
2	Proportioning and mixing, green balling, induration drying, pre-heating, firing, after firing and cooling and product screening	-	Matching Capacity
3	Terminal facilities (slurry receiving, thickening and filtration) for iron ore slurry	-	Matching Capacity
4	Iron ore fines wet grinding	-	5

30.7.5 The details of the raw material requirement for the project along with its source and mode of transportation is given as below:

S.No.	Raw Material	Quantity required per annum	Source	Distance from site (kms)	Mode of Transportation
1	Iron ore concentrate	14,294,000	Proposed captive beneficiation plant at Keonjhar district, Odisha, through slurry pipe line.	350	Slurry Pipeline
2	Bentonite	80,000	Procured from Gujarat	2000	Sea
3	Limestone	320,000	Imported from Middle East Countries (UAE, Oman)	3500	Sea
4	Dolomite	156,000			
5	Anthracite coal	202,000	Imported (Russia /Vietnam/ Indonesia/ Australia)	9000	Sea

30.7.6 The water requirement for the project is estimated as 385 m<sup>3</sup>/hr which will be met by the recovered water after dewatering/filtration of iron ore concentrate slurry at pellet plant area, when beneficiation plant will be operational. 214 m<sup>3</sup>/hr of fresh water requirement will be sourced from Taldanda Canal/Mahanadi River in the initial stage during standalone operation of single module of pellet plant for 7 MTPA capacity. The permission for drawl of surface water is obtained from Industrial Department, Govt. of Odisha vide Lr. No.162 dated 21/01/2021.

30.7.7 The power requirement for the project is estimated as 69 MW (avg) and 87 MW (max) which will be obtained from the State grid/ private power producer.

30.7.8 The capital cost of the project is Rs. 3583 crores (inclusive of 236 crores of GST) and the capital cost for environmental protection measures is proposed as Rs. 105 crores. The employment generation from the proposed project is 1,349 Nos.

30.7.9 The project proponent has reported that there is no violation under EIA Notification, 2006/court case/show cause/direction related to the project under consideration.

30.7.10 Name of the EIA consultant: M/s M. N. Dastur & Co (P) Limited [S.No. 168, List of ACOs with their Certificate / Extension Letter no. Rev. 06, Jan. 15, 2021]

30.7.11 Proposed Terms of Reference (Baseline data collection period: March to May 2021)

Attributes	Parameters	Sampling		Remarks
		No. of stations	Frequency	
A. Air				
a. Meteorological parameters	temperature, relative humidity, cloud cover, rainfall, wind speed, wind	1	Continuous hourly recording for 90 days	-

Attributes	Parameters	Sampling		Remarks
		No. of stations	Frequency	
	direction			
b. AAQ parameters	PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NO <sub>x</sub> , CO, O <sub>3</sub> , NH <sub>3</sub> , C <sub>6</sub> H <sub>6</sub> , BaP, Pb, As, and Ni	8	twice a week on 24 hrs basis for a total duration of 12 weeks	-
B. Noise	Leq for day time and night time	8	Once in a season	-
<b>C. Water</b>				
Surface water	Physico-chemical and biological covering 28/30 parameters	8	Once in a season	-
Ground water quality parameters	parameters as per IS: 10500	8	Once in a season	-
<b>D. Land</b>				
a. Soil quality	physicochemical, nutrients level and micro-biological characteristics	3	Once in a season	-
b. Land use	Based on recent times satellite imageries, Survey of India's OSM and ground validation	Study area of 10 km aerial coverage	Once in a season	-
<b>E. Biological</b>				
a. Aquatic	-	Study area of 10 km aerial coverage	Once in a season	-
b. Terrestrial	-			-
F. Socio-economic parameters	-	Study area of 10 km aerial coverage	Once in a season	-

30.7.12 The proposal was considered by the EAC (Industry 1) in its 30<sup>th</sup> meeting of the Re-constituted EAC (Industry-I) held on 10<sup>th</sup> - 11<sup>th</sup> February, 2021. The observations and recommendations of EAC is given as below:

**Observations of the Committee**

30.7.13 The Committee noted the following:

- i. Project proponent was unable to explain the site settings of the project site inter-alia including Environment Clearance if any obtained for the Paradeep Industrial Area and the type of industries envisaged in the said area.
- ii. Iron Ore slurry shall be sourced through pipe line from Keonjhar area. However, no details made available regarding the beneficiation plant.
- iii. Beneficiation plant at Keonjhar and pipeline to Paradeep are not enumerated in the pre-feasibility report.
- iv. Village habitation is only 50 m away from plant boundary. No environmental safeguards are proposed for protecting the village habitation.

**Recommendations of the Committee**

30.7.14 In view of the foregoing observations at paragraph no. 30.7.13 and after deliberations, the committee recommended to return the proposal in present form.

30.8 Expansion of existing Mini Steel Plant (0.5 MTPA) into Integrated Steel Plant (0.264 MTPA) along with 20 MW Captive Power Plant (8 MW WHRB and 12 MW CFBC) by **M/s MSP Sponge Iron Limited** located at Village Haldiaguna, **District Keonjhar, Odisha**. [Online Proposal No. IA/OR/IND/181251/2020; File No. J-11011/116/2011 IA.II(I)] – **Extension of validity of Environmental Clearance** – regarding.

30.8.1 M/s MSP Sponge Iron Limited has made online application vide proposal no. IA/OR/IND/181251/2020 dated 22/01/2021 along with Form 6 and sought extension of validity of Environment Clearance accorded by the Ministry vide letter no. J-11011/116/2011 IA.II(I) dated 10/10/2012.

**Details submitted by the project proponent**

30.8.2 M/s MSP Sponge Iron Limited was granted Environment Clearance by the Ministry vide letter No. J-11011/116/2011 IA. II(I) dated 10/10/2012 for a project titled “Expansion of existing Mini Steel Plant (0.5 MTPA) into Integrated Steel Plant (0.264 MTPA) along with 20 MW Captive Power Plant (8 MW WHRB and 12 MW CFBC) at Village Haldiaguna, District Keonjhar in Odisha by M/s MSP Sponge Iron Limited.”

30.8.3 The project proponent submitted the following details w.r.t. extension of validity of EC dated 10/10/2021:

<b>UNIT/ FACILITIES</b>	<b>PRE- EXISTING PROJECT BEFORE EC DT. 10.10.2012</b>	<b>EXPANSION PROJECTS APPROVED IN EC DT.10.10.2012</b>	<b>ULTIMATE ANNUAL CAPACITY AFTER EC</b>	<b>EXISTING CAPACITY AS PER CTO</b>	<b>PROJECTS FOR WHICH EC VALIDITY EXTENSION SOUGHT FOR</b>
DRI	54,000 TPA (2x50 TPD &	1,05,000 TPA (1x350 TPD)	1,59,000 TPA	54,000 TPA (2x50 TPD &	1,05,000 TPA (1x350 TPD)

UNIT/ FACILITIES	PRE- EXISTING PROJECT BEFORE EC DT. 10.10.2012	EXPANSION PROJECTS APPROVED IN EC DT.10.10.2012	ULTIMATE ANNUAL CAPACITY AFTER EC	EXISTING CAPACITY AS PER CTO	PROJECTS FOR WHICH EC VALIDITY EXTENSION SOUGHT FOR
	2x40 TPD)			2x40 TPD)	
SMS & Continuous Casting	50,400 TPA (3 x 5 T/ Heat)	2,13,000 TPA (4 x 15 T/Heat)	2,64,000 TPA	50,400 TPA (3 x 5 T/ Heat)	2,13,000 TPA (4 x 15 T/Heat)
Rolling Mill	42,000 TPA	----	42,000 TPA	42,000 TPA	-----
Coal Gasification	1x864 M <sup>3</sup> /hr.	23,664 M <sup>3</sup> /hr (4x2850 M <sup>3</sup> /hr 4x2850 M <sup>3</sup> /hr)	17,100 M <sup>3</sup> /hr	17,100 M <sup>3</sup> /hr (6 x 2850 M <sup>3</sup> /hr)	17,100 M <sup>3</sup> /hr (6 x 2850 M <sup>3</sup> /hr)
Iron Ore Pellet	-----	12,00,000 TPA (2 x 6,00,000 TPA)	12,00,000 TPA	1 x 6,00,000 TPA	1 x 6,00,000 TPA
Iron Ore Beneficiation	-----	----	10,00,000	10,00,000	-----
Captive Power Plant	-----	20 MW (CFBC-12 MW + (WHRB-8 MW)	20 MW	-----	20 MW (CFBC 12 MW + WHRB 8 MW)
Coal Beneficiation	-----	6,00,000 TPA	6,00,000 TPA	-----	To be Dropped
Sinter Plant	-----	4,16,000 TPA	4,16,000 TPA	----	To be Dropped
Mini Blast Furnace	-----	2,00,000 TPA	2,00,000 TPA	-----	To be Dropped

30.8.4 The project proponent has submitted the following reasons for seeking validity extension of EC:

**i. Regulatory hurdles under Mines and Mineral Law:**

Entire expansion project as per EC could not be set up due to nationwide issues / irregularities relating to Coal and Iron Ore mines & minerals giving rise to multiple prohibitory / restrictive regulations since 2012. Acute scarcity of minerals resulted in high input cost for steel industries.

**ii. Financial Hardship / Losses and gradual recovery:**

Consequently, Company started incurring huge losses. From 2017, slowly it could recover from losses and now, under extension of EC Validity, specific approved projects on existing land are proposed so as to make the project economically viable.

**iii. Unreasonable monetary and non-monetary demands of private land owners:**

Land of 86.16 Acres required under second phase out of total approved area of 160.93 acres could not be procured due to demand of extremely high price and unreasonable non-monetary terms by the private land owners. PP is compelled to give up the plan for acquiring balance land. Therefore, three projects namely, Coal Washery, Sinter and MBF could not come up.

30.8.5 The implementation status of the EC dated 10/10/2012 is as follows:

S.N	Facilities	Units	As per EC dt. 10.10.2012	Implementation status as on 03.02.2021	Consent (CTE / CTO)
1.	10,00,000 TPA	Iron Ore Beneficiation	Iron Ore Beneficiation	Fully installed & commissioned.	10,00,000 TPA
2.	12,00,000 TPA (2x 6,00,000 TPA)	Iron Ore Pellet (Pellet)	Iron Ore Pellet	<ul style="list-style-type: none"> <li>• 6,00,000 TPA installed &amp; commissioned.</li> <li>• 2<sup>nd</sup> Module of 6,00,000 TPA to be installed upon extension of EC validity.</li> </ul>	6,00,000 TPA
3.	1,59,000 TPA (1 x 50 TPD 2 x 40 TPD & 1 x 350 TPD)	DRI Kilns (Sponge Iron)	DRI Kilns (Sponge Iron)	<ul style="list-style-type: none"> <li>• 2x50 TPD &amp; 2x40 TPD kilns (54,000TPA) are operating since 2000 prior to EC.</li> <li>• 1 x 350 TPD to be installed upon extension of EC validity.</li> </ul>	54,00,000 TPA (1x 50 TPD & 1 x 40 TPD)
4.	2,64,000 TPA (3 x 5T & 4 x 15T)	IF with CCM (MS Billet)	IF with CCM (MS Billet)	<ul style="list-style-type: none"> <li>• 3 x 5 MT / IF (50400 TPA) are operating since 2000 prior to EC.</li> <li>• 4 x 15 MT/IF (2,13,600 TPA) is to be set up upon grant of extension of EC validity.</li> </ul>	50,400 TPA (3 x 5 T)

S.N	Facilities	Units	As per EC dt. 10.10.2012	Implementation status as on 03.02.2021	Consent (CTE / CTO)
5.	42,000 TPA	Rolling Mill (Hot Rolled Products)	Rolling Mill (Hot Rolled Products)	Operating since 2000 prior to EC.	42,000 TPA
6.	23,664 M <sup>3</sup> /hr (1 x 864 M <sup>3</sup> /hr 8 x 2850 M <sup>3</sup> /hr)	Coal Gasification	Coal Gasification	6 x 2850 m <sup>3</sup> / hr Installed & in operation.	1 x 864 m <sup>3</sup> /hr 6 x 2850 m <sup>3</sup> /hr.
7.	20 MW (CFBC-12 MW WHRB - 8 MW)	C P P (Power)	C P P (Power)	20 MW CPP to be installed upon grant of Extension of Validity of EC.	N I L

30.8.6 It has been reported that there is no violation under EIA Notification, 2006/court case/show cause/direction related to the project under consideration.

30.8.7 The proposal was considered by the EAC (Industry 1) in its 30th meeting of the Re-constituted EAC (Industry-I) held on 10-11<sup>th</sup> February, 2021. The observations and recommendations of EAC is given as below:

**Observations of the Committee**

30.8.8 The Committee noted the following;

i. EC was accorded on 10/10/2012. Request for validity extension has been submitted on 22/01/2021 after the expiry of the validity period of the EC i.e., 09/10/2019, even after the condonation period of 90 days as per the extant provisions prescribed in the EIA Notification, 2006. Further, as per the provisions of the said notification, no condonation for delay shall be considered for any application for extension filed beyond ninety days after the validity period of Environment Clearance.

ii. The project proponent has not applied for EC validity extension on time.

**Recommendations of the Committee**

30.8.9 In view of the foregoing and after deliberations, the Committee recommended to reject the validity extension application of M/s. MSP Sponge Iron Limited submitted vide proposal no. IA/OR/IND/181251/2020.

**11<sup>th</sup> February, 2021**

30.9 Integrated Steel Plant for achieving 3.0 MTPA Crude Steel production [Coke Oven (HRT): 2× 0.5 MTPA, Sinter Plant: 2×105 m<sup>2</sup> (2.744 MTPA), Pellet Plant: 2.2 MTPA, Blast Furnace: 3 nos (1×1050 m<sup>3</sup>, 1×350 m<sup>3</sup>, 1×1700 m<sup>3</sup>); (3.0 MTPA), SMS: 4×60 T BOF, 4×T LRF, (2×5)+(2×4) Strand, Billet caster: (Pig Casting: 0.35 MTPA, Rebar Mill: 1.9 MTPA & Wire Rod Mill:0.5 MTPA), DI Pipe: 0.4 MTPA, Oxygen Plant(2nos): 1990 MTPA, Power Plant: 2× 60 MW, 1×40 MW, (3× 130 TPH CFBC, 4×75 TPH WHRB), Lime Plant: (1× 600 TPD)+ (1× 800 TPD) & Dolo Plant: 150 TPD] by **M/s. Electrosteel Steels Limited (ESL)** located

at Village Siyaljori, Bhagabandh, Budhibinor, Alkusha, Dhandabar, Bandhdih, Hutupathar, **District- Bokaro, Jharkhand** [Online Proposal No. IA/JH/IND/192305/2020; File No. J-11011/137/2006- IA.II(I)] – **Environment Clearance** – regarding.

30.9.1 M/s ESL Steel Limited (formerly M/s Electrosteel Steels Limited) has made an online application vide proposal no. IA/JH/IND/192305/2020 dated 11/01/2021 **under violation category** to IA -Violation sector along with copy of EIA/EMP report including remediation plan and the natural and community resource augmentation plan, Form-2 and seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at schedule no. 3(a) “Metallurgical industries (ferrous & non-ferrous)” under Category “A” of the schedule of the EIA Notification, 2006 and appraised at the Central level.

30.9.2 It was apprised to the EAC that aforesaid proposal was transferred from IA-Violation sector to IA-Industry 1 sector on 03/02/2021 for appraisal by the sectoral EAC. With the prior consent of the Chairman, EAC – Industry 1 sector, following members from EAC – Violation sector have been co-opted for appraisal of the instant proposal consideration.

- i. Shri K. Gowarappan
- ii. Shri. Ashok Agrawal

**Details submitted by Project proponent**

30.9.3 The details of the ToR are furnished as below:

Date of Application	Consideration	Details	Date of Accord
03/03/2020	35 <sup>th</sup> meeting of EAC (Violation) held on 6 <sup>th</sup> -7 <sup>th</sup> August, 2020	Terms of Reference	25 <sup>th</sup> August, 2020

30.9.4 The project of M/s ESL Steel Limited (formerly M/s Electrosteel Steels Limited) located in Siyaljori, Bhagabandh, Budhibinor, Alkusha, Dhandabar, Bandhdih and Hutupathar Villages, Chas and Chandankiyari Tehsil, Bokaro District, Jharkhand State is for existing Integrated Steel Plant for production of 3.0 Million Tons Per Annum (MTPA) of Crude Steel Production.

30.9.5 Environmental Site Settings

S. No.	Particulars	Details	Remarks
i.	Total land	374.81 ha [Private: 160.57 ha, Govt. Land: 30.01 ha, Forest Land: 184.23 ha]	Land use: Industrial
ii.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	All land parcels are already in possession of M/s ESL.	Plant already existing
iii.	Existence of habitation & involvement of R&R, if any.	-	Plant already existing. No additional land

S. No.	Particulars	Details	Remarks
			required for the proposed proposal.
iv.	Latitude and Longitude of the project site	Latitudes (North) - From 23.626356° To 23.664303° Longitudes (East) - From 86.245880° To 86.312349°	-
v.	Elevation of the project site	220 m Above Means Sea Level (AMSL)	-
vi.	Involvement of Forest land if any.	Yes, 184.23 ha	Stage-I FC for 184.23 ha obtained from MoEF&CC vide F. No. 8-21/2019-FC dtd. 17/12/2019.
vii.	Water body exists within the project site as well as study area	Project site: Yes (Seasonal Nala) Study area: Damodar River (North, ~6.0 km) Ijri River (South, Adjacent)	
viii.	Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area	Nil	-

30.9.6 Existing Plant configuration/capacity of present 1.5 MTPA (Crude Steel) Integrated Steel Plant:

Sl.	Plant	Unit	Present Configuration	Status	Present Capacity
1.	Coke Oven	CO1-NR (Vertical)	0.5 MTPA (4 X 35 Ovens)	Operational	0.5 MTPA
		CO2-NR (Horizontal)	0.5 MTPA (8 X 15 Ovens)	Partially Built	-
2.	Sinter Plants	SP1, SP2 (augmented)	2.744 MTPA (2 x 105 m <sup>2</sup> )	Operational	2.744 MTPA
3.	Blast Furnace	BF1	1050 m <sup>3</sup>	Partially Built	-
		BF2 & BF3	1.57 MTPA (1050 m <sup>3</sup> + 350 m <sup>3</sup> )	Operational	1.57 MTPA
4.	Pig Caster	-	0.35 MTPA	Operational	0.35 MTPA

Sl.	Plant	Unit	Present Configuration	Status	Present Capacity
5.	SMS	SMS1	1.5 MTPA (2 x 60 T BOF + 1 x 60 T LRF + (2 x 5) Strand Billet Caster)	Operational	1.5 MTPA
6.	Calcination Plant	LCP1	1 X 800 TPD	Operational	950 TPD
		DCP1	1 X 150 TPD	Operational	
7.	DI Pipe Plant	DIP	0.22 MTPA	Operational	0.22 MTPA
8.	Rolling Mills	WRM	0.5 MTPA	Operational	1.2 MTPA
		Rebar	0.7 MTPA	Operational	
9.	Captive Power Plants	Coal based	80 MW (2 X 130 TPH)	Operational	80 MW
		Waste Heat Recovery	2X 75 TPH	Operational	
10.	Oxygen Plant	ASP1	840 TPD	Operational	840 TPD
11.	RMHS	-	Stacker-cum-reclaimer: 01 (Iron ore)	Partially Built	-

30.9.7 The unit configuration and capacity of existing and proposed project is given as below:

Sl.	Plant	Unit	Existing Units		Proposed Units		Total (Existing + Proposed)		Remarks
			Configuration	Production	Configuration	Production	Configuration	Production	
1.	Coke Oven	CO1 (Vertical-NR)	4 X 35 Ovens	0.5 MTPA	-	-	4 x 35 Ovens + 8 x 15 Ovens	1.0 MTPA	Finishing the Partially Built Horizontal Coke Oven Battery
		CO2 (Horizontal-NR)	-	-	8 X 15 Ovens	0.5 MTPA			
2.	Sinter Plants	SP1, SP2 (augmented)	2 x 105 m <sup>2</sup>	2.744 MTPA	-	-	2 x 105 m <sup>2</sup>	2.744 MTPA	No Change
3.	Pellet Plant	PP	-	-	-	2.2 MTPA	-	2.2 MTPA	New Unit
4.	Hot Metal-Blast Furnace	BF1	1050 m <sup>3</sup> (Partially built)	-	1700 m <sup>3</sup>	1.90 MTPA	(1x1700 m <sup>3</sup> + 1x1050 m <sup>3</sup> + 1x350 m <sup>3</sup> )	3.47 MTPA	Dismantling the Partially built BF1 and installing larger capacity BF.
		BF2 & BF3	1050 m <sup>3</sup> + 350 m <sup>3</sup>	1.57 MTPA	-	-			
5.	Pig Caster	-	-	0.35 MTPA	-	-	-	0.35 MTPA	No Change
6.	Crude steel-SMS	SMS1	(2 x 60 T BOF + 1 x 60 T LRF + (2 x 5) Strand Billet Caster)	1.5 MTPA	-	-	4 x 60 T BOF + 4 x 60 T LRF + (2 x 5) + (2 x 4) Strand Billet Caster)	3.0 MTPA	New SMS2 similar to existing SMS1
		SMS2	-	-	(2 x 60 T BOF + 3 x 60 T LRF + (2 x 4) Strand Billet Caster)	1.5 MTPA			
7.	Calcination Plant	LCP1	-	800 TPD	-	-	1x800 TPD + 1x150 TPD + 1 x 600 TPD	1550 TPD	Installation of a new Vertical shift Lime Kiln of 600 TPD
		LCP2	-	-	-	600 TPD			
		DCP1	-	150 TPD	-	-			

Sl.	Plant	Unit	Existing Units		Proposed Units		Total (Existing + Proposed)		Remarks
			Configuration	Production	Configuration	Production	Configuration	Production	
									capacity
8.	DI Pipe Plant	DIP1	-	0.22 MTPA	-	-	1x0.22 MTPA + 1x0.18 MTPA	0.4 MTPA	Expansion of existing DIP Plant by 0.18 MTPA
		DIP2	-	-	-	0.18 MTPA			
9.	Rolling Mills	WRM1	-	0.5 MTPA	-	-	1x0.5 MTPA + 1x0.7 MTPA + 1x1.2 MTPA	2.4 MTPA	Installation of New Rebar Mill of 1.2 MTPA Capacity
		Rebar1	-	0.7 MTPA	-	-			
		Rebar2	-	-	-	1.2 MTPA			
10.	Captive Power Plants	Coal based	(2 x 130 TPH)	80 MW	(1 x 130 TPH)	40 MW	(3 x 130 TPH)	120 MW	Installation of a new 130 TPH CFBC boiler and a 160 TPH BF gas based Boiler. Waste heat recovery from new Coke Oven Batteries.
		Waste Heat Recovery	2 x 75 TPH	-	-	2 x 75 TPH	4 x 75 TPH	-	
		BF Gas based	-	-	-	1 x 160 TPH	1 x 160 TPH	40 MW	
11.	Oxygen Plant	-	-	840 TPD	-	1150 TPD	1x840 TPD + 1x1150 TPD	1990 TPD	Installation of a new air separation unit of 1150 TPD
12.	RMHS	-	Stacker-cum-reclaimer: 01		Stacker-cum-reclaimer: 02 Wagon Tippers: 02 Truck tippers: 02		Stacker-cum-reclaimer: 03 Wagon Tippers: 02 Truck tippers: 02		Installation of 2 new Stacker-cum-reclaimers and augmentation of existing stacker-reclaimer, installation of new railway wagon tippers and truck tippers

30.9.8 The details of the raw material requirement for the proposed project along with its source and mode of transportation is given as below:

SN	Raw material	Quantity required per annum		Sources	Distance from site (Kms)	Mode of Transportation
		Existing (At 1.5 MTPA Stage) (Tonnes)	Proposed (At 3.0 MTPA Stage) (Tonnes)			
<b>Coke Ovens</b>						
1	Coking Coal	671140	1342240	Imported (Australia, USA & Canada)	250	Sea / Rail
<b>Sinter Plant</b>						
2	Iron ore fines	1884800	1884800	Indigenous (Kendujhar & Sundargarh, Odisha)	200	Rail
3	Lime Stone Fines	284600	284600	Indigenous (Jukehi-Katni-Niwar, Central India)	600	Rail
4	Dolomite Fines	147000	147000	Indigenous (Sundargarh & Katni-Bilaspur)	600	Rail

SN	Raw material	Quantity required per annum		Sources	Distance from site (Kms)	Mode of Transportation
		Existing (At 1.5 MTPA Stage) (Tonnes)	Proposed (At 3.0 MTPA Stage) (Tonnes)			
5	Quartzite	30300	30300	Purchased locally	100	Rail
<b>Pellet Plant</b>						
6	Lime Stone	-	100800	Indigenous (Jukehi-Katni-Niwar, Central India)	200	Rail
7	Bentonite	-	21700	Purchased locally	50	Rail
8	Iron ore fines	-	2115900	Indigenous (Kendujhar & Sundargarh, Odisha)	200	Rail
9	Coal	-	63800	Imported	250	Sea / Rail
10	Dolomite	-	100800	Indigenous (Sundargarh & Katni-Bilaspur)	600	Rail
<b>Blast Furnace</b>						
11	Iron ore lump	614600	319000	Indigenous (Kendujhar & Sundargarh, Odisha)	200	Rail
12	Purchased Coke	70000	336600	Purchased locally	100	Rail
13	PCI Coal	209700	477500	Imported (Australia, Russia & Indonesia)	250	Sea /Rail
14	Lime stone	13400	85900	Indigenous (Jukehi-Katni-Niwar, Central India)	600	Rail
15	Dolomite	23200	76800	Indigenous (Sundargarh & Katni-Bilaspur)	600	Rail
16	Quartzite	60400	115500	Purchased locally	100	Rail
<b>Steel Melting Shop</b>						
17	Iron Ore	61700	80300	Indigenous (Kendujhar & Sundargarh, Odisha)	200	Rail
18	Ferro Alloys	9900	9900	Purchased locally	100	Rail
<b>Lime &amp; Dolo Kilns</b>						
19	Limestone	428000	835000	Imported (UAE & Oman)	250	Sea / Rail
20	Dolomite	90000	90000	Indigenous (Sundargarh & Katni-Bilaspur)	600	Rail
<b>DI Pipe plant</b>						
21	Magnesium	330	600	Imported (China)	250	Sea/Road
<b>Captive Power Plant &amp; Boilers</b>						
22	Boiler Coal	438000	657000	Indigenous (Tata mines, CCL etc.)	250	Rail

30.9.9 The water requirement for the project is estimated as 2285 m<sup>3</sup>/hr, and the entire fresh water requirement will be obtained from River Damodar. The permission for drawl of 36.50 million cubic meter per year surface water from the river Damodar is obtained WRD, Jharkhand vide Agreement no. B758440 dated 21/01/2012.

30.9.10 The power requirement for the project is estimated as 218 MW, out of which 120 MW will be generated from the augmented coal based CPP, 40 MW will be generated from the BF gas power plant and balance will be procured from DVC.

30.9.11 Baseline Environmental Studies:

Period	Winter Season 2019-20 (December, 2019 to February, 2020) Additional One Month during Post monsoon 2020 (October 2020)
AAQ parameters at 8 locations	PM <sub>2.5</sub> = 25 to 50 µg/m <sup>3</sup> PM <sub>10</sub> = 43 to 81 µg/m <sup>3</sup> SO <sub>2</sub> = 11 to 20.8 µg/m <sup>3</sup> NO <sub>x</sub> = 11.9 to 28 µg/m <sup>3</sup> CO = 500 to 620 µg/m <sup>3</sup>
AAQ modelling (Incremental GLCs)	PM <sub>10</sub> = 3.42 µg/m <sup>3</sup> SO <sub>2</sub> = 5.24 µg/m <sup>3</sup> NO <sub>x</sub> = 6.83 µg/m <sup>3</sup> PM <sub>2.5</sub> = 1.96 µg/m <sup>3</sup>
Ground water quality at 8 locations	pH: 7.5 to 7.9, Total Hardness: 80 to 464 mg/l, Chlorides: 64 to 241 mg/l, Fluoride: 0.16 to 0.76 mg/l. Heavy metals are within the limits.
Surface water quality at 8 locations	pH: 7.3 to 7.8; DO: 5.2 to 5.7 mg/l and BOD: 4.1 to 7.5 mg/l.
Noise levels	37.2 to 55.6 for the day time and 36.6 to 47.3 for the Night time.
Traffic assessment study findings	Existing infrastructure have sufficient capacities. Additionally, in future it has been proposed that the transportation will be undertaken by railway mode.
Flora and fauna	Schedule I fauna (Indian Pangolin, Indian Rock Python) present in Study Area. Site-specific Wildlife Conservation Plan has been prepared and submitted for approval.

30.9.12 The details of solid and hazardous waste generation along with its mode of treatment/disposal is furnished as below:

**Solid Waste Generation from 3.0 MTPA ISP of ESL**

S. No.	Type of Waste	Generation (TPA)			Mode of Treatment / Disposal
		Existing	Proposed	Total	
Coke Ovens					
1	Coke breeze	75800	75800	151600	Re-used in sinter making
Blast Furnace (BF)					
2	Blast Furnace Granulated slag	535600	649800	1185400	Selling to Cement Plants
3	Blast Furnace Flue Dust	9910	15530	25440	Reused in sinter making
4	Blast Furnace	35777	56068	91845	Reused in sinter

	GCP Dust				making
Steel Melting Shops					
5	GCP sludge	33600	75384	108984	Re-used in sinter making
6	Ladle Furnace(LF) Slag	275610	257610	533220	Re-used in sinter making Filling of low lying areas and road making
Rolling mill					
7	Mill scale	12061	19096	31157	Re used in Sinter
8	Scraps	250000	123400	373400	Re used in SMS
Lime calcinations Plants					
9	Dolo undersize Fines	22974	23000	45974	Re-used in Sinter Plant.
10	Dolo Sinter Dispatch	8875	8900	17775	
11	Lime undersize Fines	37537	65690	103227	
12	Lime Sinter Dispatch	54039	94568	148607	
13	Bag house Fines (Lime/Dolo dust)	5847	10232	16079	Re-used in sinter making
Refractory					
14	Used Refractory Bricks	1,477	3310	4787	Sold to Refractory manufacturers
Captive Power Plants					
15	Bottom Ash	56,272	42204	98476	Sold to Cement Plants & Brick klins
16	Fly Ash	179699	134774	314473	

**Hazardous Waste Generation from 3.0 MTPA ISP of ESL**

S. No.	Category	Generation (TPA)			Mode of Treatment / Disposal
		Existing	Proposed	Total	
1	Used oil & Grease	11	11	22	Sent to PCB authorized recyclers/reprocessors and TSDF
2	Zinc Dust	40	40	80	
3	Used Batteries	10	10	20	
4	Asbestos containing materials	05	05	10	
5	ETP Sludge	30	30	60	
6	Waste barrels containing hazardous wastes	10	10	20	

30.9.13 Public Consultation:

Details of advertisement given	Notices for the PH had been published on Prabhat Kharab (13.11.2020), Hindustan (13.11.2020) and The Pioneer (12.11.2020).
Date of public consultation	16/12/2020
Venue	Maitri Kreedha Sthal (Ground), 16 Khata, Plot No.-21, Siyaljori, Dist. Bokaro, Jharkhand
Presiding Officer	Chief Municipal Commissioner, Chas Nagar Nigam, Bokaro (Equivalent to Additional District Magistrate)
Major issues raised	The Project was largely welcomed by the Local Citizens. Major demands / issues were related to: i. Community Infrastructure Development ii. Employment/Livelihood generation iii. Education facilities iv. Health care facilities v. Environment protection & Pollution Control

Action plan as per MoEF&CC O.M. dated 30/09/2020

S. No	Concerns raised during the Public Hearing	Physical activity and action plan	Tentative Budget, Rs Lacs	Target date for implementation of action plan
1	Community Infrastructure Development	• Construction of 73 kms of Road (taken in NRCAP Plan)	NIL	3 yrs
2	Employment/Livelihood generation	• Vedanta ESL Skill School has been established to provide job linked vocational training to 550 youths from nearby villages in next 3 years	100	3 yrs
		• Under project JIVIKA 1500 SHG Women will be linked sustainable livelihood through mushroom cultivation, phenyl production, puff rice production, etc. in next 3 years	120	3 yrs
		• Project WADI will be started for 500 farmers in which 500 acres of land will be utilized for orchard development, irrigation facilities and inter-cropping to ensure the secured income (120 lakh in 4 years)	90	3 yrs

S. No	Concerns raised during the Public Hearing	Physical activity and action plan	Tentative Budget, Rs Lacs	Target date for implementation of action plan
3	Education facilities	<ul style="list-style-type: none"> <li>Infrastructure development of Govt. &amp; Private schools and conversion of 20 schools in Smart School. (taken in NRCAP Plan)</li> </ul>	NIL	3 yrs
		<ul style="list-style-type: none"> <li>Under Project PRERNA The students will be supported for engineering entrance preparations under Vedanta Excel 30 programme and they will also be awarded with the PRERNA Scholarship based on their merit</li> </ul>	120	3 yrs
4	Health care facilities	<ul style="list-style-type: none"> <li>Establishment of one 100 bed super specialty Hospital (taken in NRCAP Plan)</li> </ul>	NIL	3 yrs
		<ul style="list-style-type: none"> <li>Renovation of 5 nos. of existing PHC (taken in NRCAP Plan)</li> </ul>	NIL	3 yrs
		<ul style="list-style-type: none"> <li>Purchasing of Ambulance (taken in NRCAP Plan)</li> </ul>	NIL	3 yrs
		<ul style="list-style-type: none"> <li>Under project AAROGYA Existing Health Sub Centre at Dhandabar village will renovated and converted into Vedanta ESL Health Clinic with facilities of treatment, medicines and lab testing etc. Mobile Health Van will be attached with the clinic to provide free healthcare facilities in surrounding villages</li> </ul>	156	3 yrs
5	Environment protection & Pollution Control	<ul style="list-style-type: none"> <li>Replacement of OG system, Installation of High Frequency Transformer Rectifier, Greenbelt Development, Catchment area treatment Plan , Air &amp; water monitoring and other pollution control measures.</li> </ul>	2300	3 yrs

S. No	Concerns raised during the Public Hearing	Physical activity and action plan	Tentative Budget, Rs Lacs	Target date for implementation of action plan
		<ul style="list-style-type: none"> <li>State of the art Air pollution Control Equipments in upcoming project (Taken in EMP)</li> </ul>	NIL	5 yrs
<b>Total</b>			<b>2886</b>	<b>-</b>

30.9.14 The capital cost of the project is Rs 19374 Crores and the capital cost for environmental protection measures is proposed as Rs 579 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs 59 Crores. The employment generation from the proposed project / expansion is 13200 (Direct: 3200, Indirect: 10,000). The details of cost for environmental protection measures is as follows:

S. No.	Description	Capital Cost (Rs. in Crores)		Recurring Cost / annum (Rs. In Crores)
		Existing	Proposed	
i.	Air Pollution Control/ Noise	332	156	58
ii.	Water Conservation & Pollution Control Solid/ Waste Management System	50.41	39	
iii.	Rainwater harvesting Green belt development	0.89	1.2	20 lakhs for 5 years
<b>Sub-Total Cost for Environmental Protection Measures</b>		<b>383</b>	<b>196</b>	<b>59</b>
iv.	Addressal of Public Consultation concerns	-	28.86	-

30.9.15 Greenbelt will be developed in 124 ha (Existing 74 ha + Proposed 50 ha) which is about 33.08 % of the total project area. A 5m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB/MoEF&CC, New Delhi guidelines. Local and native species will be planted with a density of 1600 trees per hectare. Total no. of 80000 saplings will be planted and nurtured in 50 hectares in 3 years.

30.9.16 The proponent has reported the following court cases:

Details of Court Cases		Case 1	Case 2	Case 3
a.	Name of the Court (Districts Court / High Court / NGT / Tribunals / Supreme Court of India)	District Court	High Court and Supreme Court	District Court
	If name of Court: (Districts Court, High Court, NGT, Tribunals)	District Court of Bokaro	Supreme Court of India High Court of Jharkhand	District Court of Bokaro

Details of Court Cases		Case 1	Case 2	Case 3
b.	Name of the Sub-court	Chief Judicial Magistrate	ESL to Provide	Principal District and Sessions Judge
c.	Case No.	Complaint Case 941/2020	WPC 4850 of 2018 and WPC 1873 of 2018 WPC 2685 of 2020 SLP 11226 &11227 of 2020	Title Appeal 33/2007
d.	Orders / Directions of the court, if any and its relevance with the proposed project	Cognizance order of 21.12.2020	The Writs are pending for final disposal. Interim orders have been vacated, but have been stayed by the Hon'ble Supreme Court in the SLP.	Land in suit held to be Raiyati land and not Forest Land. This land and such other similar patches of land are within the plant premises, where the Forest Department claims to be forest land.
e.	Case Details	<i>U/S 15 of the Environment (Protection) Act, 1986</i>	Writ case filed against EC revocation order, non-acceptance of CTO application and violation aspect reported in the ToR letter of MoEF&CC dated 25/08/2020 and MoEF&CC letter issued to the State Government of Jharkhand On 28/08/2020.	Title Suit in favour of the Company and Raiyats. Divisional Forest Officer has filed an appeal, which is pending adjudication. No stay order has been granted.

**Violation aspect**

30.9.17 In compliance to the specific ToR No. i, the SPCB has undertaken credible action against M/s.ESL under the provisions of Environment (Protection) Act, 1986, by filing a court case no. 941 of 2020 before the Hon'ble Court of Chief Judicial Magistrate, Bokaro.

30.9.18 Summary of damage assessment report

<b>A. COST OF ENVIRONMENTAL / ECOLOGICAL DAMAGE</b>			
		<b>Rs. In Crores</b>	<b>Rs. In Crores</b>
1	Air Environment <ul style="list-style-type: none"> <li>• Damage to Ambient air quality</li> <li>• Damage to Crops</li> </ul>	101.6 1.05	102.65
2	Noise Environment	1.56	1.56
3	Water Environment <ul style="list-style-type: none"> <li>• Damage to Surface water resources</li> <li>• Damage to Groundwater resources</li> </ul>	11.46 9.09	20.55
4	Land Environment of Project Area <ul style="list-style-type: none"> <li>• Soil</li> <li>• Agriculture</li> </ul>	0.28 4.4	4.68
5	Biological Environment <ul style="list-style-type: none"> <li>• Loss of Greenbelt</li> </ul>	12.38	12.38
<b>Total (A)</b>			<b>141.82</b>
<b>B. SHARE OF PROFIT / ENV. MNGT. MEASURES</b>			
6	3% of the accrued profit during Violation Period		3.69
<b>C. TOTAL COST OF ENVIRONMENTAL DAMAGE</b> (including benefits accrued due to violation)= A+B			
			<b>Rs. 145.51 Crores</b>

30.9.19 Name of the EIA consultant: M/s MECON Limited [S.No. 47, List of ACOs with their Certificate / Extension Letter no. Rev. 06, Jan. 15, 2021].

**Certified compliance report from Regional Office**

30.9.20 Regional Office MoEFCC, Ranchi visited ESL Steel Ltd. on 12/11/2020 for site inspection as per the Specific ToR and issued the site Visit Report vide no. 103-564/ROR-2020/4409 on 18/12/2020. Action Taken Report (ATR) on the observations made by RO was submitted to RO, MoEF&CC on 28/12/2020 which have been forwarded to the Ministry on 07/01/2021. As per the RO inspection, following significant observations have been made:

- i. The water jet provided near the Stack-cum-reclaimer was also not in working condition. Raw materials were partly found to be kept in open as well as partly under tarpaulin cover. Arrangement of garland drain for collection of runoff water has not been observed around the raw material dump. Details not furnished on treatment of runoff water from the raw material storage area.
- ii. Online monitoring facility for all parameter as per the norms has not been provided in blast furnace stove. Manual monitoring data of blast furnace stove also has not been furnished.

- iii. Separate online monitoring systems for all boilers not reported. Online monitoring for SO<sub>2</sub> and NO<sub>x</sub> as per the norms of power plant not provided. Online monitoring has not been provided to WHRB 1 and WHRB 2. Mercury emission monitoring data has not been furnished.
- iv. Monitoring data of work zone dust emission has not been furnished.
- v. During visit profuse smoke was observed at DI Pipe unit, total smoke has not been channelize through the bag filter and stack.
- vi. Online monitoring system for treated effluent at ETP has not been provided. It was stated that sanitary disposal of sewage is being treated via septic tank and soak pit.
- vii. Covered shed not observed for the raw material storage, however, part of the material was found to be covered with tarpaulin cover and partly uncover, which may be a source of fugitive emission. Unloading and handling of raw material at the RMHS is also a source of fugitive emission. Fugitive emission monitoring data of CO and Pb have not been reported at blast furnace area and SMS area.
- viii. Green belt has not been developed at the site as per CPCB norms.
- ix. As per the continuous online ambient air quality data furnished, CO level exceeds the norms of 8 hourly averages at Power Plant and 16 khata monitoring station. Occasional SO<sub>2</sub> and NO<sub>2</sub> online monitoring data exceeds the norms of 24-hourly limit at Power Plant. PM<sub>2.5</sub> exceeds the NAAQS norms of Time weight average of 24-hourly limit at Near Coke oven Area, Near DI Pipe Area and Near RMHS and PM<sub>10</sub> exceeds the NAAQS norms of Time weight average 24 hourly limit at near coke oven area.
- x. Details of generation vis a vis utilization of LD slag has not been furnished. Runoff water collection facility has not been observed around the waste dump area. Details of permission from state pollution control board has not been furnished for dumping of fly ash. However, generation vis a vis utilization details of solid waste has not been furnished.
- xi. Load/ mass-based data as per the norms of Iron and steel plant for the coke oven plant has not been furnished.
- xii. Gross coke production (5%Moist) reported to be 644610 MT during 2019-20 and pig Iron production reported to be 447807 MT during 2015-16.
- xiii. As per the data furnished, turbidity of water is higher in the downstream of Izri River, and check dam compared to upstream. However, ground water quality monitoring data around the fly ash dump has not been furnished. Treated effluent quality monitoring report has also not been furnished.
- xiv. CREP recommendation such as 100 percent utilization of solid waste, Coke Oven flue gas is used for steam generation in WHRB, however, 100 percent utilization of by product gases generated are yet to be achieved, energy recovery of top blast furnace provided in one blast furnace, 15 online analyzer has been provided for continuous stack monitoring system, however, analyser has not been provided in all the major stack as per the norms, etc. are yet to be fully implemented.

Formal closure from RO on the aforesaid observations have not been submitted by the project proponent.

30.9.21 The proposal was considered by the EAC (Industry 1) in its 30<sup>th</sup> meeting of the Re-constituted EAC (Industry-I) held on 10<sup>th</sup> - 11<sup>th</sup> February, 2021. The observations and recommendations of EAC is given as below:

**Observations of the Committee**

30.9.22 The Committee noted the following:

- I. Instant proposal was considered on merit by EAC – Violation and confirmed the case to be of violation of the EIA Notification, 2006. Accordingly, ToR was prescribed by EAC – Violation and granted by MoEF&CC.
- II. Significant observations have been reported by RO with respect to the environmental compliance status of the existing units.
- III. Presentation made before the does not enumerated the findings of the EIA study and covered only observation of EAC – Violation made during 6-7<sup>th</sup> August, 2020.
- IV. There are several court cases pending before the Hon’ble Supreme Court, Hon’ble High Court and Hon’ble District Court with respect to the proposal under consideration. However, the details of these cases and its present status has not been enumerated in the EIA report in compliance to the generic ToR no. 12.
- V. Authenticated English translation of the Public Consultation proceedings have not been furnished as per the general point no. iii of the ToR letter dated 25/08/2020. Action plan to address the public hearing issues as per the MoEF&CC O.M. dated 30/09/2020 with physical targets have not been furnished.
- VI. Damage Assessment, remediation and NCRAP shortcomings
  - i. Saving in EMP cost: This should be revised considering 2017-18 and 2018-19 for monitoring and as well for maintenance.
  - ii. Ecological Attributes to be considered during construction are as following: Air, Water, Land use, solid waste, OHS, noise/Vibration, impact on neighbouring infra and Socio-economic impact:
    - a. Air: The progressive built up area of the plant year wise needs to be considered commencing from 2008, construction labour used and their consumption and SW, the period, etc., and accordingly damage assessment is to be assessed and corresponding remediation equating the same (PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub>). The discounted rate of 20% of EU 28/CPCB shall be revised to 30% considering the inflation as has been assumed in case of CPCB Guideline. The impacted area boundary shall be revisited as discussed, on the eastern side of northern boundary. Likewise, Damage assessment for operation period year wise and cumulative needs to be calculated for all the above referred attributes inclusive of RA&DM. Computation and assessment details for one sample year shall be submitted during operation.
    - b. Land: Agricultural loss shall be considered @[Rs:12500/](#); per acre, considering MSP from Bokaro Dist. report. Agricultural production loss due to Air emission in impacted area of 7355 ha shall be revised and damage calculated.

- c. Water: Natural ground water recharge shall be worked out based on 100% of the land area and accordingly the reduction shall be worked using different recharge coefficients as per the area type and the reduction shall be worked out between pre- and post-construction stage. Further the damage cost shall be worked based on the present 2nos of rain water harvesting structures and deficiency has to be worked out and damage cost assessed accordingly. (Damage cost -obstruction to GW recharge for all the years).
- d. Ground water consumption per day will get revised including the construction and labour, and hence water consumption rates will get revised to Rs:80 per Cum, Rs:4/: per Cum respectively and DA to be worked out.
- e. Surface water assessment and the damage cost shall be revised considering the revised quantities as per BUA and Virgin area and revised no of RWH structures.
- f. Biological Environment: No of trees to be planted @ 2500 trees per Ha as per CPCB. and the cost revised.
- g. The remediation, Natural and Community Resources augmentation plan shall be worked with the revised damage cost assessed to be complied in 3 years with site specific and monitorable activities.
- h. In Chapter 13.1 Hot Metal production from 2008 is given as 7.6 MTPA. Other products do not match with this production (page pdf 486).

In addition to the above, financial implications arising due to action plan or addressing Public Hearing issues should not be offset in Damage Assessment. Activities envisaged under the CSR cannot be considered under PH action plan. The expenses for Renovation of Pond and Construction of Ghats to improve water table and construction of 73km village road needs to be further clarified. Besides, the amount/money to be spent under Damage Assessment and PH action plan should be monitorable.

- VII. Raw Material Handling System (RMHS) shall be augmented with adequate pollution control measures especially fugitive dust and all the stock yards shall be paved floors surrounded by Garland drains, three tier Green belt and water sprinkling system of permanent type and much care needs to be taken in case of coal stock yards and to be located away from the village Bandidh settlement which is located abetting the plant compound.
- VIII. Likewise, Solid waste stockyards like BF Granulated Slag and fly ash needs adequate control measures to address fugitive dust generated during handling.
- IX. Two nos of Schedule -1 fauna is reported in the study area and this has to be addressed

by a suitable Wildlife Conservation Plan duly approved by the Competent Authority.

- X. MSIHC Rules, 2000: The inventory levels of two of the items are beyond the upper threshold levels prescribed in the said Rules.
- XI. Green belt has been completed in less than 20% total area as against the requirement of 33% of the total plant area.

### Recommendations of the Committee

- 30.9.23 In view of the foregoing observations at para 30.9.22 and deliberations, the committee recommended to return the proposal in present form.
- 30.10 Low Carbon Ferro Alloys Plant with capacity 18,000 TPA and Manganese Roasting Unit of 6000 TPA capacity over an area of 4.5 Acre by **M/s. Mohashakti Ferroalloys Pvt. Ltd.** located at Bargada Village, **Bayree of Jajpur District, Odisha.** [Online Proposal No. IA/OR/IND/97783/2019; File No. IA-J-11011/75/2019-IA.II(I)] – **Environment Clearance** – regarding.
  - 30.10.1 M/s Mohashakti Ferro Alloys Pvt. Ltd has made an online application vide proposal no. IA/OR/IND/97783/2019 dated 20/01/2021 along with copy of EIA/EMP report and Form-2 seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at schedule no. 3(a) “Metallurgical industries (ferrous & non-ferrous)” under Category “A” of the schedule of the EIA Notification, 2006 and appraised at the Central level.

### Details submitted by Project proponent

- 30.10.2 The details of the ToR are furnished as below:

Date of Application	Consideration	Details	Date of Accord
06/03/2019	5 <sup>th</sup> meeting of EAC held on 27-29 <sup>th</sup> March 2020	Terms of Reference	8 <sup>th</sup> May 2019
30/07/2019	10 <sup>th</sup> meeting of EAC held on 23-24 <sup>th</sup> August 2019	Amendment	28 <sup>th</sup> August 2019

- 30.10.3 The project of M/s Mohashakti Ferro Alloys Private Limited located in Baragada Village, Byree Tehsil, Jajpur District, Odisha State is for low carbon ferro alloys plant with capacity 18000 TPA and Manganese Roasting Unit of 6000 TPA capacity.

- 30.10.4 Environmental Site Settings

S. No.	Particulars	Details	Remarks
i.	Total land	1.82 ha [Private: 1.82 ha; Govt:0 ha; Agriculture:0 ha; and Grazing land:- 0 Ha]	Land use: Industrial Land belongs to M/s

S. No.	Particulars	Details			Remarks
					Mohashkti Ferro Alloys Pvt. Ltd.
ii.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	Land area of 1.82 ha has been already acquired by M/s Mohashkti Ferro Alloys Private Limited			
iii.	Existence of habitation & involvement of R&R, if any.	No habitation within the plant premises			
iv.	Latitude and Longitude of the project site	Points	Latitude	Longitude	-
		A	20°39'2.59"N	85°59'47.29"E	
		B	20°39'8.21"N	85°59'47.52E	
		C	20°39'7.97"N	85°59'42.95"E	
		D	20°39'2.39"N	85°59'43.22"E	
v.	Elevation of the project site	47 m Above Means Sea Level (AMSL)			-
vi.	Involvement of Forest land if any.	Nil			-
vii.	Water body exists within the project site as well as study area	<b>Project site:</b> No water body exists within the project site <b>Study area : Nil</b>			-
viii.	Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area	Nil			-

30.10.5 The existing project was accorded Consent to Establish vide letter no: 2033/CTE-181 dated 24/09/2018. It was informed that Consent to Operate for the existing unit has not been accorded by Odisha State Pollution Control Board as construction for the existing unit is under progress.

30.10.6 Implementation status of the existing CTE

Sl. No.	Facilities	Units	Implementation Status as on 11/02/2021	CTE Obtained vide letter No.2033/CTE-181on dated 24.09.2018
1.	Low Carbon Ferro	TPA	Construction under	6000

Sl. No.	Facilities	Units	Implementation Status as on 11/02/2021	CTE Obtained vide letter No.2033/CTE-181on dated 24.09.2018
	Manganese		process, Production not yet started	
2.	Ferro Vanadium	TPA		3000
3.	Ferro Molybdenum	TPA		3000
4.	Brick (From Slag) Nos/day			10,000

30.10.7 The unit configuration and capacity of existing and proposed project is given as below:

S. No.	Name	Existing Units		Proposed Units		Total (Existing +Proposed)	
		Configuration	Production TPA	Configuration	Production TPA	Configuration	Production TPA
a.	Low Carbon Ferro Manganese	--	6000	--	0	--	6000
b.	Ferro Vanadium	--	3000	--	0	--	3000
c.	Ferro Molybdenum	--	3000	--	0	--	3000
d.	Brick (From Slag) Nos/day	--	10000	--	0	--	10000
e.	Low Carbon Ferro Chrome	--	--	--	6000	--	6000
f.	Manganese Roasting Unit	--	--	--	6000	--	6000

30.10.8 The details of the raw material requirement for the proposed project along with its source and mode of transportation is given as below:

S. No.	Raw Material	Quantity required per annum			Source	Distance from site (Kms)	Mode of Transportation
		Existing	Expansion	Total			
1	Manganese Ore		6840 ton	6840 ton	Badbil /Joda/Daitari	200 Km	Truck
2	Roasted Manganese	2955 ton		2955 ton	Badbil /Joda/Daitari	200 Km	Truck
3	Chrome Concentrate		9375 ton	9375 ton	Sukinda	60 Km	Truck

S. No.	Raw Material	Quantity required per annum			Source	Distance from site (Kms)	Mode of Transportation
		Existing	Expansion	Total			
4	Aluminum scrap	4677 ton		4677 ton	Nalco , Anugul	100 Km	Truck
5	Mill Scale	3135 ton		3135 ton	Cuttack, Bhubaneswar	30-40 Km	Truck
6	Lime Powder	1846 ton		1846 ton	Katni, MP ,Sundargarh, Odisha	1500 km	Truck
7	Flurospar	469 ton		469 ton	Paradeep	100 Km	Truck
8	Vanadium Pentoxide Flake	3571 ton		3571 ton	Open Market (Mumbai)	2000 Km	Truck
9	Moly Oxide	3659 ton		3659 ton	Open Market (Mumbai)	2000 Km	Truck

30.10.9 The water requirement for the project is estimated as 5 m<sup>3</sup> /day, which will be obtained from the Borewell. Application for ground water approval has been made on 05/01/2021.

30.10.10 The power requirement for the project is estimated as 550 KW, which will be obtained from the Central Electricity Supply Board, Odisha.

30.10.11 Baseline Environmental Studies:

Period	March 2019 to May 2019
AAQ parameters at 8 locations	PM <sub>2.5</sub> = 21 to 52 µg/m <sup>3</sup> PM <sub>10</sub> = 50 to 69 µg/m <sup>3</sup> SO <sub>2</sub> = 4.2 to 11.2 µg/m <sup>3</sup> NO <sub>x</sub> = 10 to 21 µg/m <sup>3</sup>
AAQ modelling	PM <sub>10</sub> = 1.02 µg/m <sup>3</sup> SO <sub>2</sub> = 2.8 µg/m <sup>3</sup> NO <sub>x</sub> = 6.0 µg/m <sup>3</sup>
Ground water quality at 8 locations	pH: 6.5 to 7.2 Total Hardness: 31 to 194 mg/l, Chlorides: 8.5 to 25 mg/l, Fluoride 0.05 to 0.88 mg/l. Heavy metals are within the limits.
Surface water quality at 8 locations	pH: 6.5 to 7.6, DO: 6.1 to 7.2 mg/l and BOD: 0.46 to 5.5 mg/l, COD from 05 to 38 mg/l
Noise levels	44 to 69 dBA for the day time and 38 to 54 dBA for the Night time.
Traffic assessment study findings	Additional traffic load will be 13 trucks per day to the main highway i.e. NH 5
Flora and fauna	No Schedule 1 Fauna found in study area

30.10.12 The details of solid and hazardous waste generation along with its mode of treatment/disposal is furnished as below:

S. No.	Type of Waste	Source	Quantity generated (TPA)	Mode of Treatment / Disposal
1	Ferro Manganese Slag	Ferro manganese	6600	Slag will be completely utilized for manufacturing bricks and road construction.
2	Ferro Chrome Slag	Ferro chrome	7500	
3	Ferro Vanadium Slag	Ferro Vanadium	3264	
4	Ferro Molybdenum slag	Ferro Molybdenum	3248	
5	Bag filter dust		1800	Reused in the process

30.10.13 Public Consultation:

Details of advertisement given	19/09/2020
Date of public consultation	20/10/2020
Venue	Grampanchayat Office, Paria, Jajpur
Presiding Officer	Additional District Magistrate
Major issues raised	Environment pollution, Plantation, Education facility, Health care facility and Employment generation

Action plan as per MoEF&CC O.M. dated 30/09/2020

Issues Raised by Public	Commitment of the Project Proponent	Time Bound Action Plan proposed	Budgetary provision
Local Employment	Priority will be given to local villagers for employment as the owner belongs to Odisha. Out of the total employment 40-50% will be local people. Based on the qualification and experience.	Employment will be given with the commencement of the plant operation	As per state govt. Wage rule.
Environment pollution control measures	As there will not be any furnace and no coal utilisation as raw material, hence pollution will be very less. Rain water harvesting pond has been constructed within the plant premises.	Rain water harvesting pond already constructed	10,00,000.00
	Water sprinkler arrangement along the internal road, raw material storage area.	20 nos of water sprinklers will be installed within the plant premises (1 year)	5,00,000.00

<b>Issues Raised by Public</b>	<b>Commitment of the Project Proponent</b>	<b>Time Bound Action Plan proposed</b>	<b>Budgetary provision</b>
	Installation of pollution control equipments like dust extraction system, bag filter, dry fogging system	All the pollution control equipments will be installed before the operation of the plant	60,00,000.00
Education	Provide computers for computer training institute.	A computer training centre with 15 nos of computer and a part time instructor will be provided	5,00,000.00 1,20,000 per annum
Plantation	Plantation will be carried out along the connecting road to the plant site and the open space available with the permission of village panchayat	2000 saplings will be planted (2 years of Plant operation) and maintenance of the saplings for 5 years	5,00,000.00 80,000.00 per annum
Health	Health camp for the local people will be provided twice per annum	Every year	1,00,000.00 per annum

30.10.14 The capital cost of the project is Rs. 23.64 Crores and the capital cost for environmental protection measures is proposed as Rs 1.25 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs. 0.12 Crores. The employment generation from the proposed project / expansion is 25 nos. The details of cost for environmental protection measures is as follows:

<b>Description of Item</b>	<b>Cost (in Lakhs)</b>	<b>Recurring Cost (in Lakhs)</b>
Cost of Air Pollution Control Devices/ System	85.0	5.0
Cost of Water conservation & Pollution Control	5.0	2.0
Cost of Solid Waste Management System	10.0	1.0
Green belt development	5.0	1.0
Occupational Health Management	5.0	1.0
Risk Mitigation & Safety Plan	10.0	1.0
Setting Environmental Management Cell	5.0	1.0
<b>Grand Total</b>	<b>125.0</b>	<b>12.0</b>

30.10.15 Greenbelt will be developed in 0.61 ha which is about 33% of the total project area. A 7.5 m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as

greenbelt and green cover as per CPCB/MoEF&CC, New Delhi guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 1500 saplings will be planted and nurtured in 0.6 hectares in 2 years.

30.10.16 Name of the EIA consultant: M/s Kalyani Laboratories Private Limited [S.No. 88, List of ACOs with their Certificate / Extension Letter no. Rev. 06, Jan. 15, 2021].

30.10.17 The proposal was considered by the EAC (Industry 1) in its 30<sup>th</sup> meeting of the Re-constituted EAC (Industry-I) held on 10<sup>th</sup> - 11<sup>th</sup> February, 2021. The observations and recommendations of EAC is given as below:

**Observations of the Committee**

30.10.18 It was appraised to the EAC that in the instant proposal under consideration, proponent has reported in their cover letter of application dated 20/01/2021 stating that they already commenced construction work at the site for the following products based on the consent to establish accorded by OSPCB without obtaining prior Environment Clearance.

S. No.	Name	Production TPA
a.	Low Carbon Ferro Manganese	6000
b.	Ferro Vanadium	3000
c.	Ferro Molybdenum	3000
d.	Brick (From Slag) Nos/ day	10000

It was opined to adopt the following principle in the instant proposal which was approved by the Competent Authority with respect to consideration of violation cases:

- i. Send the matter to the Sector EAC for consideration of the case on merit.
- ii. Take action against the alleged violation as per law.
- iii. Do not wait for either the evidence of action having been started or violation proceedings to finish before taking up the case on merit.
- iv. The EC if given after consideration on merit would be valid from the date it is given and not with retrospective effect. For the period before it, if violation is established by the court or the competent authority, the punishment/penalty as per law would be imposed.

30.10.19 The Committee noted the following:

- i. As per the provisions of EIA Notification 2006, the Ferro Alloy Plants irrespective of their capacity are covered under schedule 3(a), Category 'A' and requires prior Environment Clearance from MoEF&CC, New Delhi. However, in the instant case, project proponent has commenced the construction activity without obtaining prior Environment Clearance.
- ii. The EAC found that the EIA/EMP report is in order reflecting the present environmental concerns and the projected scenario for all the environmental components arising out of the proposed project with respective mitigation measures. The EAC also noted that the baseline data reported and incremental GLC due to the proposed project were within NAAQ standards.

- iii. The EAC also deliberated on the public hearing issues as well as action plan to address the issues raised during public hearing and found it satisfactory.

### **Recommendations of the Committee**

30.10.20 In view of the foregoing and after detailed deliberations, the committee recommended the following:

#### **I. Violation aspect – Action against alleged violation**

Ministry may take action against the M/s Mohashakti Ferro Alloys Private Ltd for carrying out the construction activities of Ferro Alloy Plant without obtaining prior EC by sending a letter to State Government of Odisha with a request to initiate legal action against PP under section 15 read with section 19 of the Environment (Protection) Act, 1986. Further, PP may also be directed under the provisions of Environment (Protection) Act, 1986 to stop the ongoing construction activities till the EC is obtained from MoEF&CC.

#### **II. Consideration of proposal on merit**

Instant proposal was considered on merit as per the directions of the Competent Authority and recommended for grant of Environment Clearance under the provisions of EIA Notification, 2006 subject to the following specific conditions and general conditions as per the Ministry's Office Memorandum No. 22-34/2018-III dated 9/8/2018 based on project specific requirements:

##### **A. Specific conditions**

- i. PM levels shall be maintained less than 30 mg/Nm<sup>3</sup>.
- ii. Briquetting and Jigging facility shall be provided to recover metallics from fines and solid waste.
- iii. Green belt shall be developed in 33% of the plant area with tree density of 2500 trees per hectare.
- iv. 100% solid waste generated shall be recycled/reused. Chrome waste shall be stored on impervious floor with runoff control and treatment. TCLP test shall be conducted for Chrome slag to decide safe disposal mode.
- v. Treated effluent from plant shall be reused/recycled.
- vi. Rain Water Harvesting and recharging shall be practiced extensively.

##### **B. General conditions**

###### **I. Statutory compliance:**

- i. The Environment Clearance (EC) granted to the project/ activity is strictly under the provisions of the EIA Notification, 2006 and its amendments issued from time to time. It does not tantamount/ construe to approvals/ consent/ permissions etc., required to be obtained or standards/conditions to be followed under any other Acts/Rules/Subordinate legislations, etc., as may be applicable to the project.

**II. Air quality monitoring and preservation**

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission as well as Continuous Ambient Air Quality Station (CAAQS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- iii. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- iv. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.
- v. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
- vi. Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration.
- vii. The project proponent shall ensure covered transportation and conveying of ore, coal and other raw material to prevent spillage and dust generation.
- viii. Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.
- ix. Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.

**III. Water quality monitoring and preservation**

- i. The project proponent shall monitor regularly ground water quality at least twice a year (pre- and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.
- ii. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.

**IV. Noise monitoring and prevention**

- i. Noise quality shall be monitored as per the prescribed Noise Pollution (Regulation and Control) Rules, 2000 and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.

**V. Energy Conservation measures**

- i. Energy conservation measures may be adopted such as adoption of solar energy and provision of LED lights etc., to minimize the energy consumption.

**VI. Waste management**

- i. Used refractories shall be recycled as far as possible.
- ii. Kitchen waste shall be composted or converted to biogas for further use.

**VII. Green Belt**

- i. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation.

**VIII. Public hearing and Human health issues**

- i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii. The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
- iii. Occupational health surveillance of the workers shall be done on a regular basis and records maintained.

**IX. Corporate Environment Responsibility**

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 30/09/2020.
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.

**X. Miscellaneous**

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by

- prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
  - iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
  - iv. The project proponent shall monitor the criteria pollutants level namely; PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub> (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
  - v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
  - vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
  - vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
  - viii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
  - ix. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
  - x. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
  - xi. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
  - xii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
  - xiii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.

xiv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

30.11 Expansion of Integrated Cement Plant - Clinker (2.0 to 3.5 MTPA), Cement (0.5 to 3.5 MTPA), CPP (27 to 30 MW) along with installation of WHRS (13 MW) by **M/s. UltraTech Cement Ltd. (Unit: Dalla Cement Works)** located at Village: Dalla (Kota), Tehsil: Robertsganj, **District: Sonebhadra (Uttar Pradesh)**. [Online Proposal No. IA/UP/IND/191589/2020; File No. J-11011/560/2007-IA.II(I)] – **Environment Clearance** – regarding.

30.11.1 M/s. UltraTech Cement Limited (Unit: Dalla Cement Works) has made an online application vide proposal no. IA/UP/IND/191589/2020 dated 30<sup>th</sup> January, 2021 along with copy of EIA/EMP report and Form-2 seeking Environment Clearance (EC) under provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at schedule no. 3(b) Cement plants under Category “A” of the schedule of the EIA Notification, 2006 and appraised at the Central level.

**Details submitted by Project proponent**

30.11.2 The details of the ToR are furnished as below:

<b>Date of Application</b>	<b>Consideration</b>	<b>Details</b>	<b>Date of Accord</b>
31 <sup>st</sup> May, 2020	Standard Terms of Reference (ToR) was issued by MoEF&CC, New Delhi.	Terms of Reference	18 <sup>th</sup> June, 2020

30.11.3 The project of M/s. UltraTech Cement Ltd. (Unit: Dalla Cement Works) located in Village-Dalla (Kota), Tehsil: Obra (Erstwhile Robertsganj), District: Sonebhadra (Uttar Pradesh) is for expansion of Integrated Cement Plant - Clinker (2.0 to 3.5 MTPA), Cement (0.5 to 3.5 MTPA), CPP (27 to 30 MW) along with installation of WHRS (13 MW).

30.11.4 Environmental Site Settings

<b>S. No.</b>	<b>Particulars</b>	<b>Details</b>	<b>Remarks</b>
i.	Total land	Total plant area is 67.0 ha which is industrial land.	Land use of the existing plant area is under industrial category.
ii.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	Total plant area is 67.0 ha which is totally under the possession of the company.	--
iii.	Existence of habitation & involvement of	No R&R is involved.	--

S. No.	Particulars	Details	Remarks
	R&R, if any.		
iv.	Latitude and Longitude of the project site.	Latitude: 24°26'45.61"N to 24°27'08.29"N Longitude: 83°01'38.13" E to 83°02'48.94" E	--
v.	Elevation of the project site	Elevation of the plant site is from 205 m to 235 m	--
vi.	Involvement of Forest land, if any.	No Forest land is involved.	--
vii.	Water body exists within the project site as well as study area	<b>Project site:</b> No natural water body is present within the plant site. <b>Study area:</b> There are 11 water bodies present within the study area. Name and its distance from the plant site is as follow: <ul style="list-style-type: none"> <li>○ Son River (2.5 km in NE direction)</li> <li>○ Rihand River (6.5 km in West direction)</li> <li>○ Kanhar River (9.0 km in ESE direction)</li> <li>○ Kajiahat Nala (2.0 km in NE direction)</li> <li>○ Naura Nala (2.5 km in SSW direction)</li> <li>○ Jatya Nala (7.0 km in ENE direction)</li> <li>○ Durhul Nala (8.5 km in SSE direction)</li> <li>○ Chhotaghagh Nala (8.0 km in SSW direction)</li> <li>○ Ghaghar Nadi (9.0 km in North direction)</li> <li>○ Chopan Pump Canal (8.0 km in NNE direction)</li> <li>○ Parewa Nala (8.5 km in NNW direction)</li> </ul>	--
iii.	Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area	<b>Study area:</b> Kaimur Wildlife Sanctuary (2.90 km in NE direction) and plant site is located outside the Eco-Sensitive Zone at a distance of 1.9 Km. Status of NBWL approval: Kaimur Wildlife Sanctuary is located at a distance of ~2.90 km in NE from the plant boundary and as per the MoEFCC notification S.O. 891 (E) dated 20 <sup>th</sup>	Map is authenticated by State Forest Department has been submitted as Annexure 3 of the EIA report.

S. No.	Particulars	Details	Remarks
		March 2017, the extent of Eco-sensitive zone shall be 1.0 km all around the boundary of Kaimur Wildlife Sanctuary, the plant is located outside the Eco-Sensitive Zone at distance ~1.90 km, Therefore, NBWL approval is not required.	

30.11.5 The existing project was accorded environmental clearance vide letter no. J-11011/560/2007-IA II (I) dated 29<sup>th</sup> Sept., 2008 in the name of M/s. Jaiprakash Associates Ltd. and the same has been transferred in the name of M/s. UltraTech Cement Ltd. (Unit: Dalla Cement Works) by MoEF&CC, New Delhi vide letter dated 27<sup>th</sup> Nov., 2017. Consent to Operate for the existing unit was accorded by Uttar Pradesh Pollution Control Board vide letter no. 69059 / UPPCB / Sonebhadra (UPPCBRO) / CTO / Water / SONBHADRA / 2019 dated 04<sup>th</sup> Feb., 2020 which is valid up to 31<sup>st</sup> Dec., 2024 and letter no. 66559 / UPPCB / Sonebhadra (UPPCBRO) / CT / air / SONBHADRA / 2019, dated 04<sup>th</sup> Feb., 2020 which is valid up to 31<sup>st</sup> Dec., 2024.

30.11.6 Implementation status of the existing EC

S. No.	Facilities	Units	As per EC dated 29 <sup>th</sup> Sept., 2008 and name change on 27 <sup>th</sup> Nov. 2017	Implementation Status as on date	Production as per CTO
1.	Clinker	MTPA	2.0	2.0	2.0
2.	Cement	MTPA	0.5	0.5	0.5
3.	CPP	MW	27	27	27

30.11.7 The unit configuration and capacity of existing and proposed project is given as below:

Unit	Existing Capacity	Optimization in Existing Capacity (Phase-I)	Additional Capacity (Phase - II)	Total Capacity After Expansion
Clinker (MTPA)	2.0	0.5	1.0	3.5*
Cement (MTPA)	0.5	0.1	2.9**	3.5
CPP (MW)	27	3	-	30
WHRS (MW)	-	-	13	13
D.G. Set (kVA)	2 X 10.86	-	-	2 X 10.86

\*Surplus Clinker will be transported to split Grinding Units of UltraTech Cement Ltd.  
 \*\* By installation of new Cement Mill

30.11.8 The details of the raw material requirement for the proposed project along with its source and mode of transportation is given as below:

S. No.	Name of Raw Material	Quantity (MTPA)				Source	Distance & Mode of Transportation
		Existing	Additional for optimization (Phase - I)	Additional (Phase - II)	Total		
1.	Limestone	2.95	0.73	1.47	5.15	Captive Mines	1.0 - 7.5 km & belt conveyor/ Road
2.	Red Mud	0.05	0.03	0.12	0.20	Hindalco Industries Ltd, Renukoot	35 km / Road
3.	Fly ash	0.175	0.035	1.015	1.22	OTPS Obra,	15 km / Road
						Hindalco Industries Ltd, Renukoot	35 km / Road
						Hindalco Industries Ltd, Renusagar	70 km / Road
4.	Gypsum (Chemical & Mineral)	0.025	0.005	0.145	0.175	Birla Copper Bharuch & M/s Alliance Import & Export, Dhamra Port) Odisha / Rajasthan	1400 & 889 km / Rail & Rail

30.11.9 The water requirement for the project is estimated as 4008 KLD (Existing - 2763 KLD & Additional - 1245 KLD), which is being / will be obtained from Groundwater. The permission for drawl of groundwater (4008 KLD) has already been obtained from CGWA vide *vide* letter no. 21-4/4824/UP/IND/2017/2332, dated 20<sup>th</sup> Dec., 2018 and was valid up to 26<sup>th</sup> Nov., 2020. Application for renewal of NOC has been submitted *vide* letter no. 21-4/4824/UP/IND/2017 dated 14<sup>th</sup> Sept., 2020 and the same is under process with the department.

30.11.10 The power requirement for the project is estimated as 37.96 MW (Existing - 24.66 MW and additional - 13.3 MW), which will be meet from CPP (30 MW), Proposed WHRS (13 MW) and remaining will be sourced from UP Electricity Board Grid.

30.11.11 Baseline Environmental Studies:

Period	Post-Monsoon Season (Oct., to Dec., 2019)
AAQ parameters at 12 locations	PM <sub>2.5</sub> - 32.2 to 96.2 µg/m <sup>3</sup> PM <sub>10</sub> - 61.1 to 149.4 µg/m <sup>3</sup> SO <sub>2</sub> - 6.9 to 29.6 µg/m <sup>3</sup> NO <sub>x</sub> - 16.9 to 45.4 µg/m <sup>3</sup> CO - 0.45 to 3.23 mg/m <sup>3</sup>
AAQ modelling (Incremental GLCs)	PM <sub>10</sub> - 2.5 µg/m <sup>3</sup> SO <sub>2</sub> - 4.3 µg/m <sup>3</sup> NO <sub>x</sub> - 8.1 µg/m <sup>3</sup>

Ground water quality at 12 locations	pH: 7.21 to 7.85, Total Hardness: 165.87 to 316.87 mg/l, Chlorides: 19.87 to 98.65 mg/l, Fluoride: 0.87 to 1.44 mg/l. Heavy metals are within the limits.
Surface water quality at 2 locations	pH: 7.56 to 7.65; DO: 6.0 to 6.3 mg/l and BOD: 5.2 to 5.6 mg/l, COD from 18.7 to 21.4 mg/l
Noise levels	50.4 Leq dB (A) to 67.9 Leq dB (A) for day time and 40.3 Leq dB(A) to 56.8 Leq dB (A) for Night time
Traffic assessment study findings	Transportation of raw materials and finished is being / will be done by SH - 5 A and its road network is good to bear the increased traffic load.
Flora and fauna	There are 18 Schedule - I fauna fall in the study area and Conservation Plan for Schedule - I species has been prepared and authentication by State Forest Department vide letter dated 24/12/2020.

30.11.12 The details of solid and hazardous waste generation along with its mode of treatment/disposal is furnished as below:

S. No.	Type of Waste	Source	Quantity generated	Mode of treatment / Disposal
<b>Non-Hazardous Solid waste</b>				
1.	Dust	Cement Plant	1633 TPD	Dust collected from various APCE is being / will be totally recycled into the process.
2.	Fly ash	CPP	16 TPD	Used in manufacturing of PPC grade cement
3.	STP Sludge	STP	10 kg/day	Used as manure for greenbelt development / plantation
<b>Hazardous waste</b>				
1.	Used Oil	Plant maintenance	250 KLA	Sold to CPCB authorized recycler
2.	Waste or residues containing Oil		30 kg/day	Sold to CPCB authorized recycler
3.	Empty barrels		50 Tonnes/annum	Sold to CPCB authorized recycler

30.11.13 Public Consultation:

Details of advertisement given	06 <sup>th</sup> October, 2020
Date of public consultation	09 <sup>th</sup> November, 2020
Venue	Village - Kota, Ward No. 1, Chauri Tola, Near Water Tank, Tehsil - Obra, Janpad - Sonebhadra
Presiding Officer	• Mr. S. Rajlingam (Collector, Sonebhadra)

	<ul style="list-style-type: none"> <li>• Mr. Yogendra Bahadur Singh (ADM, Sonebhadra)</li> <li>• Mr. Radheshyam (RO, UPPCB, Sonebhadra)</li> </ul>
Major issues raised	<ul style="list-style-type: none"> <li>I. Employment</li> <li>II. Environment</li> <li>III. Water resources</li> <li>IV. Land Acquisition</li> <li>V. Education</li> <li>VI. Health</li> <li>VII. Plantation</li> <li>VIII. CSR Activities related</li> </ul>

Action plan as per MoEF&CC O.M. dated 30/09/2020 – Time frame: three years

S. No.	Concerns raised during the Public Hearing	Physical activity and action plan	UOM	Tentative Budget, Rs. Lacs	Target date for implementation of action plan (Yr.)
<b>1.</b>	<b>Activities to be done at Village Dalla</b>				
	Proper facilities for drinking water & Infrastructure facilities should be provided	Construction of Bore Well	03 Nos.	5	2022
		Construction of Hand Pump	03 Nos.	2	2021
		Construction of toilets	10 Nos.	17	2024
		Repairing of Internal roads in Village	-	5	2023
		Construction of Water Tank	05 Nos.	5	2023
		Construction of Drainage system	800 meter length	5	2023
		Installation of Solar Lights	10 Nos.	2	2021
		Constriction of sport park for children	01 Nos.	10	2024
		Distribution of saplings and tree guard in the village Govt. offices and schools	800 Nos.	2	2022
		Establishment of training institutes beauty parlour and stitching	01 Nos.	20	2024
	Distribution of furniture in the school (Table & Chair)	500 Nos.	5	2022	
<b>2</b>	<b>Activities to be done at Village Kota</b>				
	Infrastructure facilities & Plantation	Construction of toilets	10 Nos.	17	2024
		Construction of Roof top rainwater harvesting system in School or Govt. Building	01 Nos.	5	2023
		Construction of concerted platforms around the old trees	100 Nos	2	2022
		Installation of Solar Lights	10 Nos.	2	2021
		Construction of Drainage system	1500 meter length	10	2024

S. No.	Concerns raised during the Public Hearing	Physical activity and action plan	UOM	Tentative Budget, Rs. Lacs	Target date for implementation of action plan (Yr.)
		Distribution of saplings and tree guard in the village, Govt. offices and schools	400 Nos.	1	2021
		Distribution of furniture in the school (Table & Chair)	500 Nos.	5	2024
		Construction of Community centre	02 rooms	10	2024
<b>3</b>	<b>Activities to be done at Village Billi</b>				
		Construction of toilets	10 Nos.	17	2024
		Installation of Solar Lights	10 Nos.	2	2022
		Construction of Drainage system	300 meter length	2	2024
		Construction of Water Tank	05 Nos.	5	2023
		Distribution of saplings and tree guard in the village, Govt. offices and schools	400 Nos.	1	2021
		Distribution of furniture in the school	500 Nos.	5	2022
<b>4</b>	<b>Activities to be done at Obra Town</b>				
	Infrastructure facilities & Plantation	Installation of Solar Lights	10 Nos.	2	2022
		Renovation of School	01 Nos.	10	2023
		Construction of Drainage system	800 meter length	5	2022
		Construction of Water Tank	05 Nos.	5	2023
		Distribution of saplings and tree guard in the village, Govt. offices and schools	400 Nos.	1	2021
		Distribution of furniture in the school	500 Nos.	5	2023
<b>5</b>	<b>Activities to be done at Village Kanach</b>				
	Infrastructure facilities & Plantation	Construction of toilets	10 Nos.	17	2024
		Installation of Solar Lights -	10 Nos.	2	2022
		Construction of Water Tank	05 Nos.	5	2023
		Construction of concerted platforms around the old trees	100 Nos	2	2021
		Construction of Drainage system	1500 meter length	10	2024
		Distribution of saplings and tree guard in the village, Govt. offices and schools	400 Nos.	1	2021
		Distribution of furniture in the school	500 Nos.	5	2023
<b>6</b>	<b>Activities to be done in Village Bar</b>				

S. No.	Concerns raised during the Public Hearing	Physical activity and action plan	UOM	Tentative Budget, Rs. Lacs	Target date for implementation of action plan (Yr.)
	Infrastructure facilities & Plantation	Construction of toilets	10 Nos.	17	2024
		Construction of Water Tank	05 Nos.	5	2023
		Installation of Solar Lights	10 Nos.	2	2022
		Construction of concerted platforms around the old trees	100 Nos	2	2021
		Construction of Drainage system	1500 meter length	10	2024
		Distribution of saplings and tree guard in the village, Govt. offices and schools	400 Nos.	1	2021
		Distribution of furniture in the school	500 Nos.	5	2023
<b>Total</b>				<b>274</b>	

30.11.14 The capital cost of the project is Rs. 210 Crores and the capital cost for environmental protection measures is proposed as Rs. 13.74 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs. 0.75 Crores. The employment generation from the expansion project is 133. The details of cost for environmental protection measures is as follows:

S. No.	Particulars	Existing (Rs. In Crores)	
		Capital Cost	Recurring Cost
1.	Pollution Control during construction stage (Dust suppression, waste water treatment and disposal, roads, monitoring, muck disposal)	3	-
2.	Air Pollution Control System	5	0.2
3.	Sewage Treatment Plant	0.75	0.2
4.	Environmental Monitoring Instruments and Laboratory	0.15	0.1
5.	Greenery Development	0.3	0.2
6.	Safety and Risk Management	1.8	0.05
7.	Addressal of Public Consultation concerns	2.74	-
<b>Total</b>		<b>13.74</b>	<b>0.75</b>

30.11.15 Greenbelt has already been developed in 25.0 ha which is about 37% of the total project area. Additional 2.92 ha area will be covered under greenbelt / plantation. Total 27.92 ha area (40% of the total plant area) will be covered under greenbelt / plantation. A 15 m wide greenbelt, consisting of at least 3 tiers around plant boundary has been/ will be developed as greenbelt and green cover as per CPCB/MoEF&CC, New Delhi guidelines. Local and

native species will be planted with a density of 2500 trees per hectare. At present, about 53000 saplings have been planted @2120 plants/ha in the plant area. Further, density of the plants will be increased up to 2500 plant per ha by gap filling with 9,500 plants.

30.11.16 It has been reported that there is no violation under EIA Notification, 2006/court case/show cause/direction related to the project under consideration:

30.11.17 Name of the EIA consultant: M/s J.M. EnviroNet Pvt. Ltd. [S.No. 39, List of ACOs with their Certificate / Extension Letter no. Rev. 06, Jan. 15, 2021].

**Certified compliance report from Regional Office**

30.11.18 The Status of compliance of earlier EC was obtained from Regional Office, Lucknow *vide* letter no. IV/ENV/UP/Ind-113/294/2008/1177 dated 19/01/2020 in the name of M/s. UltraTech Cement Ltd. (Unit: Dalla Cement Works). The Action taken report regarding partially condition was submitted to Regional officer MoEF&CC, Lucknow *vide* letter no. UTCL/DLCW/ENV./2021 dated 25.01.2021. MoEF&CC (RO), Lucknow evaluated the same. The details of the observations made by RO in the report dated 19/01/2021 along with its re-assessment / present status as furnished by the PP is given below:

S. No.	Non-compliance details	Observation of RO (abridged)	Condition no.			Re-assessment by RO / Response by PP
			EC date	Specific	General	
1.	Ground Water withdrawal permission related	Permission obtained for withdrawal of 6000 KLD of water for M/s. Dalla Cement from CGWA <i>vide</i> letter No. 21-4/4824/UP/IND/2017-2332 dated 20.12.2018. It is beyond the limit prescribed in the mentioned condition and therefore justification required. PA is requested to provide copy of NOC from CGWA to this office.	29/09/2008	10, 11	-	Initially permission was obtained from State Ground Water Department Mirzapur for drawl of 6000 m <sup>3</sup> /day water. After that PP obtained permission from CGWA for 4008 KLD as per actual consumption. Copy of the CGWA NOC is submitted.
2.	ETP Outlet Monitoring report	PA is requested to submit ETP outlet monitoring report from any accredited laboratory to this office.	29/09/2008	10	-	ETP Outlet Monitoring report of accredited laboratory is submitted with action taken

S. No.	Non-compliance details	Observation of RO (abridged)	Condition no.			Re-assessment by RO / Response by PP
			EC date	Specific	General	
						report.
3.	Water Balance record	PA is requested to provide water balance record for the period of April, 2020 to Sept., 2020 to this office.	29/09/2008	10	-	Water balance record for the period of April, 2020 to Sept., 2020 has been submitted with action taken report.
4.	Monitoring of E. coli bacterial concentration in treated waste water	PA is request to monitor E. coli bacterial concentration in treated waste water and submit report to this office.	29/09/2008	10	-	Monitoring report of E. coli bacterial concentration in treated waste water has been submitted with action taken report.
5.	Greenbelt development / plantation in mines area	PA is request to provide details of area (in ha) planted out of total 3155142 ha in mine area against the target of 542.44 ha plantation. During visit, few young plants were found dead in the mine area which needs to be replaced with suitable species.	29/09/2008	29	-	As per spec. cond. no. 29 we are sapling 1500 plantation every year. In 2020-21 we have planted 24273 saplings in mines area; 532.44 ha plantation will be done after closer of mines as per approved Mining Plan. We will maintain the density of plantation by gap filling and maintaining the survival rate.
6.	Advertisement for Environmental	PA is requested to provide justification why advertisement	29/09/2008	-	13	The EC for the project was issued in the

S. No.	Non-compliance details	Observation of RO (abridged)	Condition no.			Re-assessment by RO / Response by PP
			EC date	Specific	General	
	Clearance letter	could not be made within seven days from the date of issuance of clearance letter and published at least two local newspapers.				year 2008 and at that time, the EC letters were received only through Post and take some time to reach at project site. Hence, the publication of advertisement in newspaper within 07 days from the date of issue of EC letter was not possible. However, the earlier project proponent M/s. Jaiprakash Associate Limited has published the EC newspaper advertisement within 07 days of receipt of EC letter.

30.11.19 The proposal was considered by the EAC (Industry 1) in its 30<sup>th</sup> meeting of the Re-constituted EAC (Industry-I) held on 10<sup>th</sup> - 11<sup>th</sup> February, 2021. The observations and recommendations of EAC is given as below:

**Written submission made during the course of meeting**

30.11.20 PP has submitted written clarifications on the following points during the course of meeting:

- i. Time bound action plan to address the issues raised during public hearing as per MoEF&CC O.M. dated 30/09/2020.

**Observations of the Committee**

30.11.21 The EAC noted the following:

- i. The EAC found that the EIA/EMP report is in order reflecting the present environmental concerns and the projected scenario for all the environmental components arising out of the proposed project with respective mitigation measures. The EAC also noted that the baseline data reported and incremental GLC due to the proposed project were within NAAQ standards.
- ii. The EAC also deliberated on the public hearing issues as well as action plan to address the issues raised during public hearing and found it satisfactory.
- iii. The Committee also deliberated upon the findings of the Regional Office report and satisfied with the corrective action taken by the PP against the RO observations.
- iv. The EAC noted that the written submissions made by the project proponent during the course of meeting are addressing the concerns of the Committee and acceded to the same.

### **Recommendations of the Committee**

30.11.22 In view of the foregoing and after detailed deliberations, the committee recommended the instant proposal for grant of Environment Clearance under the provisions of EIA Notification, 2006 subject to the following specific conditions and general conditions as per the Ministry's Office Memorandum No. 22-34/2018-III dated 9/8/2018 pertaining to integrated cement plants based on project specific requirements:

#### **A. Specific conditions**

- i. Stack emission from all the stacks shall not exceed 25 mg/Nm<sup>3</sup>.
- ii. CEMS shall be installed on Raw Mill; Kilns, Cooler, coal mill and Cement Grinding Mills and stacks of Captive Power Plant
- iii. Roads shall be paved and industrial vacuum cleaners shall be deployed for regular cleaning of roads.
- iv. All belt conveyors shall be covered.
- v. Pet coke shall be used in kiln only.
- vi. 100% waste utilisation shall be practiced.
- vii. Low NO<sub>x</sub> burners are proposed to control NO<sub>x</sub> in the kiln.
- viii. In case of co-processing, monitoring of dioxin and furans shall be undertaken on yearly basis.
- ix. Extensive rain water harvesting shall be done.
- x. Plant shall treat all effluents and shall recycle and reuse the treated water.
- xi. An internal service road shall be constructed to avoid direct entry of trucks through main gate.
- xii. PP shall create around the plant boundary 3 tier Buffer plantation and maintain as part of 40 % regulatory plantation@2500 trees per hectare.
- xiii. The project proponent shall provide separate roads for smooth entry of vehicles coming from plant towards the highway and those moving from highway towards plant.
- xiv. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest

Department. The implementation report shall be furnished along with the six-monthly compliance report.

**B. General conditions**

**I. Statutory compliance:**

- i. The Environment Clearance (EC) granted to the project/ activity is strictly under the provisions of the EIA Notification, 2006 and its amendments issued from time to time. It does not tantamount/ construe to approvals/ consent/ permissions etc., required to be obtained or standards/conditions to be followed under any other Acts/Rules/Subordinate legislations, etc., as may be applicable to the project.

**II. Air quality monitoring and preservation**

- i. The project proponent shall install 24x7 Continuous Emission Monitoring System (CEMS) at process stacks to monitor stack emission as well as 4 Nos. Continuous Ambient Air Quality Station (CAAQS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognized under Environment (Protection) Act, 1986.
- iii. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.
- iv. The project proponent shall ensure covered transportation and conveying of ore, coal and other raw material to prevent spillage and dust generation; Use closed bulkers for carrying fly ash;
- v. The project proponent shall provide wind shelter fence and chemical spraying on the raw material stock piles;
- vi. Efforts shall be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land by the use of covered conveyor belts/railways as a mode of transport, and
- vii. Ventilation system shall be designed for adequate air changes as per the prevailing norms for all tunnels, motor houses, cement bagging plants.

**III. Water quality monitoring and preservation**

- i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R. No. 612 (E) dated 25<sup>th</sup> August, 2014 (Cement)and subsequent amendment dated 9<sup>th</sup> May, 2016 (Cement)and 10<sup>th</sup> May, 2016(in case of Co-processing Cement)as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants)as amended from time to time) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification

through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.

- ii. The project proponent shall regularly monitor ground water quality at least twice a year (pre- and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.
- iii. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
- iv. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off
- v. Water meters shall be provided at the inlet to all unit processes in the cement plant.
- vi. The project proponent shall make efforts to minimise water consumption in the cement plant complex by segregation of used water, practicing cascade use and by recycling treated water.

#### **IV. Noise monitoring and prevention**

- i. Noise quality shall be monitored as per the prescribed Noise Pollution (Regulation And Control) Rules, 2000 and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.

#### **V. Energy Conservation measures**

- i. Waste heat recovery system shall be provided for kiln and cooler.
- ii. The project proponent make efforts to achieve power consumption less than 65 units/tonne for Portland Pozzolona Cement (PPC) and 85 units/tonne for Ordinary Portland Cement (OPC) production and thermal energy consumption of 670 Kcal/Kg of clinker.
- iii. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly.
- iv. Provide the project proponent for LED lights in their offices and residential areas.
- v. Maximize utilization of fly ash, slag and sweetener in cement blend as per BIS standards.
- vi. Maximize utilization of alternate fuels and Co-processing to achieve best practice norms.

#### **VI. Waste management**

- i. Used refractories shall be recycled as far as possible.
- ii. Kitchen waste shall be composted or converted to biogas for further use.

#### **VII. Green Belt**

- i. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration by trees in the plant premises.

**VIII. Public hearing and Human health issues**

- i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii. The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
- iii. Occupational health surveillance of the workers shall be done on a regular basis and records maintained.

**IX. Corporate Environment Responsibility**

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 30/09/2020.
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.

**X. Miscellaneous**

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environmental clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely; PM10, SO<sub>2</sub>, NO<sub>x</sub> (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.

- vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- viii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- ix. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- x. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xi. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xiv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

30.12 Expansion of Steel Plant (1000 TPD Sponge Iron; 1000TPD Billets; 50 MW captive Power, 1000 TPD TMT Rod to 1000 TPD Sponge Iron; 3000 TPD Billets; 3000 TPD TMT; 50 MW captive Power) by **M/s Om Sairam Steels and Alloys** located at Plot no. 1,2, 3,8,9,10 Add. MIDC, Phase-II and Gut No 46 & 63 at Village Daregaon, **District Jalna, Maharashtra**. [Online Proposal No. IA/MH/IND/195309/2015; File No. IA- 11011/57/2015-IA-II(I)] – **Environment Clearance** – regarding.

30.12.1 M/s Om Sairam Steels and Alloys has made an online application vide proposal no. IA/MH/IND/195309/2015 dated 29<sup>th</sup> January, 2021 along with copy of EIA/EMP report and Form-2 seeking Environment Clearance (EC) under provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at schedule no. **3(a) Metallurgical industries (ferrous & nonferrous)** under Category “A” of the schedule of the EIA Notification, 2006 and appraised at the Central level.

**Details submitted by Project proponent**

30.12.2 The details of the ToR are furnished as below:

Date of Application	Consideration	Details	Date of Accord
24/04/2019	8 <sup>th</sup> meeting of EAC held on 26 <sup>th</sup> June, 2019	Terms of Reference	05/09/2019

30.12.3 The project of M/s Om Sairam Steel & Alloy Ltd. located at Plot no 1,2,3,8,9,10 Add.MIDC,Phase-II and Gut No46 & 63at Village Daregaon, Dist Jalna, Maharashtra is for Expansion of Steel Plant (from 1000 TPD Sponge Iron, 1000 TPD Billets,50 MW captive Power, 1000 TPD TMT Rod to 1000TPD Sponge Iron; 3000 TPD billets, 3000 TPD TMT , 50 MW captive Power).

30.12.4 Environmental Site Settings:

SN	Particulars	Detail		
i.	Total land	6.86 ha [Private: 0.00 ha; Govt 6.86 ha; Agriculture: 0.00 ha; and Grazing land: -0.00]		
ii.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	Proposed enhancement project is coming within the existing plant premises. Hence no land acquisition is required.		
iii.	Existence of habitation & involvement of R&R, if any.	Proposed enhancement project is coming within the existing plant premises. Hence no land acquisition is required. Hence no R&R is required.		
iv.	Latitude and Longitude of the project site	<b>Corner</b>	<b>Latitude</b>	<b>Longitude</b>
		A	19°50'53.65"	75°50'45.04"
		B	19°50'51.09"	75°50'45.15"
		C	19°50'51.12"	75°50'45.68"
		D	19°50'46.50"	75°50'41.26"
		E	19°50'46.36"	75°50'33.88"
		F	19°50'45.56"	75°50'33.93"
		G	19°50'45.42"	75°50'31.96"
		H	19°50'46.34"	75°50'31.85"
		I	19°50'46.07"	75°50'29.11"
		J	19°50'48.98"	75°50'28.76"
		K	19°50'50.00"	75°50'35.75"
L	19°50'52.74"	75°50'35.53"		
v.	Elevation of the project site	530m above MSL		
vi.	Involvement of Forest land if any.	No forest Land involved.		
vii.	Water body exists within the project site as well as study area	Project site: No water Body within the Project Site Study area: Following water bodies are present Moti Talab:2.24 km		

SN	Particulars	Detail
		Mukteswar Talab: 3.2 km Kundalika River:3.9 km
viii.	Existence of ESZ/ESA/national park/wildlife sanctuary/biosphere reserve/tiger reserve/ elephant reserve etc. if any within the study area	No Existence of ESZ/ESA/national park/wildlife sanctuary/biosphere reserve/tiger reserve/elephant reserve etc. within the study area.

30.12.5 Chronology of Statutory Clearances:

Date	Statutory Order
30.12.2015	Consent to Operate for MS Bar vide letter no. MPCB-15/15704 dtd:-30.12.2015 valid up to 31.08.2025
02.12.2016	Consent to Operate for MS Billet vide letter no. BO/JD (APC)/ EIC No.AD-18272- 16/ R/CC-10758 dtd:-2.12.2016 valid up to 31.05.2021
29/12/2010	SEAC-2009/CR-200/TC-2 for 2 x 30 T IF along with existing 1 x 25 T & 1 x 30T Furnaces for manufacturing TMT bars 1000 TPD.
22/01/2018	Environmental Clearance for production of Billet/ Ingots (528 to 1000 TPD), Sponge Iron (1000 TPD) and Captive Power Plant (50 MW) vide letter no.J11011/57/2015-IA-II(I) dated 22.01.2018
05.06.2018	Consent to Establish for MS Billet vide letter no. BO/JD (APC) //E/UAN No. 39959/ CC-1806000216 dated 05.06.2018 valid up to 31.05.2021
17.09.2019	Amendment in Environment Clearance for change in configuration of Induction Furnace 1 x 25T, 4 x 30 T vide letter no. J-11011/57/2015-IA.II(I) dated 17.09.2019

30.12.6 Implementation status of the existing EC

S. No.	Facilities	Units	As per EC dated 29/12/2010 & 22/01/2018	Implementation Status as on date	Production as per CTO
1.	Sponge Iron	TPD	1000	Nil	Nil
2.	Billets/ Ingots	TPD	1000	1000	1000
3.	TMT bars	TPD	1000	1000	1000
4.	Power generation	MW	50	Nil	Nil

30.12.7 The unit configuration and capacity of existing and proposed project is given as below:

EC Details	Induction Furnace	Sponge iron	CPP	Rolling Mills (TMT Bars)
SEAC-2009/CR-200/TC-2; dt. 29.12.2010	Additional 2 x 30 T IF along with existing 1 x 25 T & 1 x 30T Furnaces	--	-	1000 TPD
J-11011/57/2015-IA-II(I) dt.22.01.2018	Additional 1 x30 T	1000 TPD	50 MW (24 MW FBC + 26 MW WHRB)	1000 TPD
EC Amendment dt. 17.09.2019 Vide proposal No.IA/MH/IND/62864/2015 dt.09.10.2018	Configuration change from 1 x 25T + 4 x 30T to 1 x 40T & 3 x 30T furnace capacity	No Change	No Change	1000 TPD
Implementation as on Date	1 x 25 T, 1 x40 T & 1 x 30T	Nil	Nil	1000 TPD
Proposed Capacity	2 x 40 T & 3 x 60 T by modification of existing 1 x 25 T furnace to 40 T furnaces & all 30 T furnace to 60 T furnace	Nil	Nil	2000TPD
<b>Final Configuration after modification &amp; up gradation</b>	<b>2 x 40 T &amp; 3 x 60 T</b>	<b>2 x 500 TPD</b>	<b>50 MW</b>	<b>3000 TPD</b>

30.12.8 The details of the raw material requirement for the proposed project along with its source and mode of transportation is given as below:

S. No.	Raw Material	Quantity required per annum MTPA			Source	Distance from site (Km)	Mode of Transportation
		Existing	Expansion	Total			
1	Iron Ore Pellets	495000	0	495000	Local market	400	Road
2	Indian Coal	142800	10500	153300	Chandrapur	800	Road
3	DRI Grade Coal (B Gr)	40800	355200	396000	Raigarh	700	Road
4	Iron Scrap	34000	631000	665000	Mumbai and	100	Road

S. No.	Raw Material	Quantity required per annum MTPA			Source	Distance from site (Km)	Mode of Transportation
		Existing	Expansion	Total			
					Local Sources		
5	Pig Iron	27200	77800	105000	Raipur, Bellari	400	Road
6	Silico Manganese	3400	6600	10000	Local Purchase	700	Road
7	Dolomite	16500	0	16500	Bhilwara	800	Road

30.12.9 The water requirement for the project [Post expansion] is estimated as 9910 m<sup>3</sup>/day, out of which fresh water requirement of 832 m<sup>3</sup>/day will be obtained from Government Water Source (MIDC).

30.12.10 The power requirement for the project is estimated as 58 MW, which will be obtained from the captive Power Plant (50 MW) and balance 8 MW shall be from MSEDCL. Two Dg set of 2\* 750 KVA shall be installed for standby.

30.12.11 Baseline Environmental Studies:

Period	December 2018 to February 2019
AAQ parameters at 8 locations	PM <sub>2.5</sub> - 18.9 to 27.9 µg/m <sup>3</sup> PM <sub>10</sub> - 42.4 to 62.2 µg/m <sup>3</sup> SO <sub>2</sub> - 10 to 10.40 µg/m <sup>3</sup> NO <sub>x</sub> - 11 to 28.41 µg/m <sup>3</sup>
AAQ modelling	PM <sub>10</sub> - 0.411 µg/m <sup>3</sup> SO <sub>2</sub> - 0.595 µg/m <sup>3</sup> NO <sub>x</sub> - 0.540 µg/m <sup>3</sup>
Ground water quality at 5 locations	pH: 7.2 to 7.8, TDS: 668-689 mg/l, Total hardness: 265 – 284.2 mg/l, Iron: 0.05 - 0.2 mg/l, fluoride: 0.28 - 0.62 mg/l, chloride: 152 – 173 mg/l, Sulphate 113 – 152 mg/l.
Surface water quality at 7 locations	pH: 7.3 to 7.8, Total Hardness: 341 to 451 mg/l, COD varies 9.8-11.2 mg/lit. BOD varies 2.1 – 3.1mg/lit.
Noise levels	40.4 Leq dB (A) to 72.6 Leq dB (A) for day time and 36.4 Leq dB(A) to 56.4 Leq dB (A) for Night time
Traffic assessment study findings	It is observed that, where there is industrial activity, the traffic flow increases between 3 PM and 9PM. Otherwise the general traffic flow reflects the peak hour traffic conditions. All the industrial flow of traffic is observed in T-Lock-1-T-Lock-2 and T-lock-3 monitoring locations. As T-Lock-3 is at the outer ring of the Jalna on NH-30, the differential average flow of traffic is an indicator of traffic absorption in industries for the timeline of permissible traffic on road after 7 PM. In general, it is observed that the traffic flow is minimum during the mid-day period between 12 Noon and 5 PM. Further the trend is lower due to non-

	availability of traffic flow data between 12 Noon and 3 PM in each location. However, it may be concluded that the lowest traffic is during the Noon hours and the highest traffic due to Industrial activities are observed between 7- 10 Pm each day.
Flora and fauna	No such area within 15km radius of the proposed project which are protected, important or sensitive species of flora or fauna for breeding, nesting, foraging, resting, over wintering, migration.

30.12.12 The details of solid and hazardous waste generation along with its mode of treatment/disposal is furnished as below:

S. No.	Type of Waste	Source	Quantity generated (TPA)	Mode of Treatment / Disposal
1	Spent/ Used Oil: Hazardous waste	Mechanical workshop	1.2KL/annum	Stored separately and incinerated in Kiln
2	Used Cotton: Hazardous waste	Mechanical workshop	12Kg /annum	Stored separately and incinerated in furnace
3	STP Sludge: solid waste	Domestic	0.340	Used as manure
4	Inert	Refractory	144	To be used as building material
5	Dolochar		254320	Will be used in FBC
6	Slag		80240	Sale, Can be used as alternative building material after due leachate test
7	Ash		40120	Will be sent to brick manufacturer

30.12.13 Public Consultation:

Details of advertisement given	08/01/2020
Date of public consultation	10/02/2020
Venue	M/s Om Sairam Steels and Alloys (Proposed Site) Plot no. F-1,2,3,8,9,10 Add. MIDC, Phase-II and Gut No 46 & 63 at Village Daregaon, & Plot No. D-53/1, D-52/6 & D-52/7 District Jalna, Maharashtra
Presiding Officer	Additional District Magistrate
Major issues raised	Environmental Pollution, CSR, Employment, Rainwater Harvesting etc.

- 30.12.14 The capital cost of the project is **Rs. 103.85 Crore** [Expansion] and the capital cost for environmental protection measures is proposed as **Rs. 13.25 Crore**. The annual recurring cost towards the environmental protection measures is proposed as **Rs 5.09 Crores**. The employment generation from the proposed project/ expansion is 610 nos. The details of cost for environmental protection measures is as follows:

S.No.	Description of Item	Existing (Rs. In lakhs)	
		Capital Cost	Recurring Cost
i.	Air Pollution Control/Noise	1140.00	388.00
ii.	Water Pollution Control	65.00	36.00
iii.	Environmental Monitoring and Management	15.00	24.00
iv.	Green Belt Development	16.50	12.00
v.	Addressing Public Consultation concerns	88.50	49.00
<b>Total</b>		<b>1325.00</b>	<b>509.00</b>

- 30.12.15 Greenbelt will be developed in 2.74 ha which is about 40 % of the total project area. A 2.5 m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB/MoEF&CC, New Delhi guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 6850 saplings will be planted and nurtured in 2.74 hectares in 3 years.
- 30.12.16 It has been reported that there is no violation under EIA Notification, 2006/court case/show cause/direction related to the project under consideration:
- 30.12.17 Name of the EIA consultant: M/s Ardra Consulting Services Pvt. Ltd, Bhubaneswar [S.No. 86, List of ACOs with their Certificate / Extension Letter no. Rev. 06, Jan. 15, 2021].

**Certified compliance report from Regional Office**

- 30.12.18 The Status of compliance of earlier EC dated 22/01/2018 has been obtained from RO, MoEF&CC, Nagpur vide Letter No. EC-409/RON/2017-NGP/7549 dated 07.12.2020. As per the report, RO has reported that during the site inspection, it was observed that only expansion of metallurgical industry (528 TPD to 1000 TPD) has been carried out. Sponge iron plant and captive power plant have not been set up. Most of the conditions of the EC pertain to sponge iron plant and captive power plant. PP submitted that the same will be complied during the construction and operation of the plants. Besides, the RO reported that PP is yet to establish Environment Management Cell and six monthly compliance reports are not being regularly submitted to the Regional Office.
- 30.12.19 The proposal was considered by the EAC (Industry 1) in its 30<sup>th</sup> meeting of the Re-constituted EAC (Industry-I) held on 10<sup>th</sup> - 11<sup>th</sup> February, 2021. The observations and recommendations of EAC is given as below:

**Observations of the Committee**

- 30.12.20 The Committee noted the following:

- i. The issues raised during public consultation have not been adequately addressed in the EIA report in the form of an action plan with physical targets as per the MoEF&CC O.M. dated 30/09/2020.
- ii. TOR point # 9 pertaining to Corporate Environment Policy is not addressed in EIA.
- iii. Format used for EIA team declaration is not as per NABET requirement.
- iv. EIA report is generic. Impacts and mitigation measures have not been quantified and EMP chapter does not describe administrative measures to be taken to implement the EMPs. Quantified EMPs have also not been furnished.

#### **Recommendations of the Committee**

30.12.21 In view of the foregoing observations and deliberations, the committee recommended to return the proposal in present form.

30.13 Greenfield Integrated Steel Plant [Sponge Iron – 0.60 MTPA, Pelletisation Plant with Coal Gasifier – 1.40 MTPA, Iron ore beneficiation Plant – 2.0 MTPA, Steel Melting Shop – 0.4 MTPA, Blast Furnace - 0.4 MTPA, Sinter Plant – 0.375 MTPA, Rolling Mill (Round & Flat Products) – 0.4 MTPA, Ferro Alloys plant (with AOD Converter/Ferro Chrome/Titanium Slag) – 0.06 MTPA and Power generation – 70 MW (24 MW Power Generation (CFBC) Coal Based)] by **M/s. Shri Bajrang Steel Corporate Limited** located at Village Jalso, Tehsil Tilda, **District Raipur, Chhattisgarh**. [Online Proposal No. IA/CG/IND/195467/2021; File No. J-11011/37/2021-IA.II(I)] – **Prescribing of Terms of Reference** – regarding.

30.13.1 M/s. Shri Bajrang Steel Corporate Limited (SBSCL) has submitted an application online vide proposal no. IA/CG/IND/195467/2021 dated 29/01/2021 along with the application in prescribed format (Form-I), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(a) Metallurgical industries (Ferrous and Nonferrous) under Category “A” of the schedule of the EIA Notification, 2006 and appraised at Central Level.

#### **Details submitted by Project proponent**

30.13.2 The project of M/s. Shri Bajrang Steel Corporate Limited located in Village Jalso, Tehsil Tilda, District Raipur, Chhattisgarh State is for setting up of a Greenfield Integrated Steel Plant.

30.13.3 Environmental site settings

<b>S.No.</b>	<b>Particulars</b>	<b>Details</b>
i.	Total land	The land proposed for the project is 309.72 acres (PvtLand - 201.667 acres + Govt Land 108.054 acres). The present land use is Dry Land with about 20000 eucalyptus trees. Entire area of 309.72 acres will be developed for the plant. Non agriculture conversion of 44.51 Acres of land done
ii.	Existence of habitation & involvement of R&R, if	No R&R is involved

S.No.	Particulars	Details
	any.	
iii.	Latitude and Longitude of the project site	Latitude : 21°27'51.71"N - 21°28'30.79" N & Longitude 81°47'18.98"E - 81°48'29.85"E
iv.	Elevation of the project site	290 m (avg) above msl
v.	Involvement of Forest land if any.	No Forest Land Involved
vi.	Water body exists within the project site as well as study area	Project site: No water Bodies exists in project area  Study area 1. Kirna Tank – Adjacent – W 2. Bhatapara Branch (Maha Nadi CanaL) – 0.7 km – NW (under construction) 3. Krishna Irrigation Chennal – 1.1 km – WNW
vii.	Existence of ESZ/ESA/national park/wildlife sanctuary/biosphere reserve/tiger reserve/elephant reserve etc. if any within the study area	Nil

30.13.4 The unit configuration and capacity of proposed project is given as below:

S.No	Description	Capacity	
1	Sponge Iron	0.6 MTPA (3x500 TPD + 1x350 TPD)	
2	Pelletization Plant with Coal Gasifier (2 X 17000 Nm <sup>3</sup> /Hr)	1.40 MTPA	
3	Iron ore beneficiation Plant	2.0 MTPA	
4	Steel Melting Shop	0.40 MTPA	
5	Rolling Mill (Long as well as Flat Products)	0.40 MTPA	
6	Ferro Alloy Plant	Titanium Slag	18,000 TPA
		Ferro Chrome	21000 TPA
		Ferro Alloys with AOD Converter	21000 TPA
7	Power Generation (70 MW)	Waste Heat Recovery Based Power Plant (WHRB)	46 MW (4x10 MW) + (1x6 MW)
		Coal based Power plant (CFBC)	24 MW (2x12 MW)
8	Oxygen Plant	2x250 TPD	

9	Blast Furnace (1x400 M <sup>3</sup> )	0.4 MTPA
10	Sinter Plant (1x35 M <sup>2</sup> )	0.375 MTPA
11	Fly Ash Brick plant	2 crore Bricks Per Annum

30.13.5 The details of the raw material requirement for the project along with its source and mode of transportation is given as below:

S. No.	Raw Materials (Input)	Quantity (TPA)	Source	Mode of Transportation
<b>Sponge Iron Plant</b>				
1.	Iron Ore	960000	Linkage from N.M.D.C./ Captive Iron Ore Mine/ Open Market	By Rail/Road
2.	Dolomite	36000	Open Market	By Road
3.	Non Coking Coal	600000	Linkage from S.E.C.L/Imported Coal	By Rail/Road
<b>Blast Furnace</b>				
4.	Iron Ore Lumps	100000	Linkage from N.M.D.C./ Captive Iron Ore Mine/ Open Market	By Rail/Road
5.	Sinter /Pellet	540000	Captive	By Road
6.	Coke	156000	Open Market	By Rail/Road
7.	Pulverized Coal	60000	Open Market	By Rail/Road
8.	Other Fluxes	40000	Open Market	By Road
<b>Iron Ore Beneficiation Plant</b>				
9.	Iron Ore	20,00,000	Linkage from N.M.D.C./ Captive Iron Ore Mine/ Open Market	By Rail/Road
<b>Pelletization Plant</b>				
10.	Beneficiated Iron Ore	14,28,000		
11.	Pulverized Fuel	49,000		
12.	Bentonite	11,200	Open Market	By Rail/Road
13.	Lime stone	21,000	Open Market	By Road
<b>Ferro Alloys Plant (Ferro Manganese/Silico Manganese)</b>				
A	<b>Ferro Manganese</b>			
14.	Manganese	46200	Linkage From MOIL/Imported	By Rail/Road
15.	Coke	5250	Open Market	By Rail/Road
16.	Coal	8400	SECL/Imported	By Rail/Road
17.	Fluxes	4200		

S. No.	Raw Materials (Input)	Quantity (TPA)	Source	Mode of Transportation
<b>B</b>	<b>Silico Manganese</b>			
18.	Manganese	42000	Linkage From MOIL/Imported	By Rail/Road
19.	Ferro Manganese Slag	10500		
20.	Coke	5775	Open Market	By Rail/Road
21.	Coal	9450	SECL/Imported	By Rail/Road
22.	Fluxes	2625		
	<b>Titanium Slag</b>			
23.	Coke/Coal	6300	Open Market	By Rail/Road
24.	Ilmenite Ore	36000	Open Market	By Rail/Road
25.	Graphite	450		
	<b>Ferro Chrome</b>			
26.	Chrome Ore	32400	Open Market	By Road
27.	Aluminum	11376	Open Market	By Road
28.	M.S. Scrap	2124	Open Market	By Road
29.	Coal	7200	Open Market	By Rail/Road
30.	Barium Peroxide/ Sodium Nitrate	2592	Open Market	By Road
	<b>Steel Melting Shop</b>			
31.	Sponge Iron	208000	Captive plant	<b>Internal generation</b> - - -
32.	Hot Metal	220000	Captive plant	
33.	Melting Scrap	20000	Captive plant	
34.	Ferro Alloys	6000	Captive plant	
35.	Fluxes	40000		
	<b>Hot Re-Rolling Mill</b>			
36.	Billets & Blooms	420000	Captive plant	-
37.	Furnace Oil	9600		
38.	<b>Sinter Plant</b>			
39.	Iron Ore fines	262500		
40.	Return Sinter fines	75000	Captive use	
41.	Fluxes	131250	Open market	<b>Road</b>
42.	Non Coking Coal	22500	Open market	By Rail/Road
43.	<b>Coal Gasifier</b>	<b>(2 X 17000)</b>		

S. No.	Raw Materials (Input)	Quantity (TPA)	Source	Mode of Transportation
		Nm <sup>3</sup> /Hr		
44.	Raw Coal (Coal Gasifier)	75,000	SECL	By Rail/Road

30.13.6 The water requirement for the project is estimated as 8236 m<sup>3</sup>/day. This will be met from River Shivanth. SBSCL has applied for tapping the water from River Shivanth. No groundwater will be abstracted. The water will be drawn from a reservoir from the proponents another company situated at village Tandwa & Kundru. Separate meter shall be provisioned for checking the consumption of the proposed plant. The company has constructed Anicut, Intake well and laid Pipe Line for existing Tilda project long back which shall be utilized for this project also.

30.13.7 The electric power requirement for the project will be fulfilled from Captive Power plant. The details of captive Power plant are as follows;

S. No.	
1.	WHRB – 3 X 10 MW +1x6 MW =36 MW
2.	Blast F/C – 10 MW
3.	CFBC -2x12 MW =24 MW
<b>Total</b>	<b>70 MW</b>

Requirement of Power to be fulfilled by proposed Captive Power Plant of 70 MW. However, Power to the tune of 4 MW will be required at 132 KV supply voltage from Chhattisgarh State Power Distribution Company Limited

30.13.8 The capital cost of the project is Rs. 1400 Crores and the capital cost for environmental protection measures is proposed as Rs. 140 Crores. The employment generation from the proposed project is 2500.

30.13.9 The project proponent has reported that there is no violation under EIA Notification, 2006/court case/show cause/direction related to the project under consideration.

30.13.10 Name of the EIA consultant: M/s. B.S.Envi Tech Pvt.Ltd [S.No. 137, List of ACOs with their Certificate / Extension Letter no. Rev. 06, Jan. 15, 2021]

30.13.11 Proposed Terms of Reference (Baseline data collection period: March to May, 2021)

Attributes	Parameters	Sampling		Remarks
		No. of Stations	Frequency	
A. Air a) Meteorological Parameters	Temperature, wind speed, wind direction, relative humidity, rainfall, and cloud cover	1	3 months continuously  24 hourly	-Near Project Site

Attributes	Parameters	Sampling		Remarks
		No. of Stations	Frequency	
b) AAQ parameters	PM10, PM2.5, SO2, NOx, and CO	8 Location	Twice a week per month for three months	-
B. Noise	day and night Time Leq levels	8 Location	24 hourly reading will be collected once in the monitoring season	-
C. Water Surface water/Ground water quality parameters	IS10500 & GSR 422(E) Standards	Surface water – 4 locations  Ground water – 8 locations	Once in monitoring season	-
D. Land a) Soil quality	as per CPCB covering Texture, pH, Electrical Conductivity, Exchangeable Cations, CEC, Organic Carbon, Organic Matter available NPK and Heavy Metals	8	Once in monitoring season	-
b) Land use	Remote sensing satellite data	10 km radial distance	-	-
E. Biological a. Aquatic b. Terrestrial	Primary as well as secondary data will be conducted for flora and fauna of the study area during monitoring Season.			
F. Socio-economic parameters	Socio-economic aspects like infrastructural availability, amenities and demographic structure will be covered based on the Census documents along with primary data collection through socio-economic survey			

30.13.12 The proposal was considered by the EAC (Industry 1) in its 30<sup>th</sup> meeting of the Re-constituted EAC (Industry-I) held on 10<sup>th</sup> - 11<sup>th</sup> February, 2021. The observations and recommendations of EAC is given as below:

### Observations of the Committee

30.13.13 The Committee noted the following:

- i. Nearest settlement is Nakti Khapra, 800 m away in direction NNE.
- ii. Nearest water body s Kirna Tank adjacent to the plant boundary. Mahanadi canal at a distance of 700 m is under construction. Krishna Irrigation canal is 1.1 Km away. Site is 3-10 m above the level of Kirna Tank.
- iii. A road is passing through the proposed plot.
- iv. Details of two more sites studied are not available.
- v. Alternate sites and technologies have not been discussed.
- vi. A PGP is also to be installed, details of which are not available in pre-feasibility report.
- vii. Jigging and briquetting plant details in Fe Cr Circuit are not given.
- viii. Most of the details sought in the Form I have not been adequately filled in.

### Recommendations of the Committee

30.13.14 In view of the foregoing observations and after deliberations, the committee recommended to return the proposal in present form.

30.14 Proposed Production Billets (3,45,600 TPA) and Structural Steel (1,20,000 TPA) by **M/s. Captain Steel India Limited** at village Debipur, PO Kalyaneshwari, **District Pashim Bardhman, West Bengal** [Online Proposal No. IA/WB/IND/193150/2021; File No. J-11011/47/2021-IA.II(I)] – **Prescribing of Terms of Reference** – regarding.

30.14.1 M/s. Captain Steel India Ltd. has submitted an application online vide proposal no. IA/WB/IND/193150/2021 dated 01/02/2021 along with the application in prescribed format (Form-I), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(a) Metallurgical industries (Ferrous and Nonferrous) under Category “A” of the schedule of the EIA Notification, 2006 and attracts general condition due to interstate boundary within 5.0 km radius of proposed project site and appraised at Central Level.

### Details submitted by Project proponent

30.14.2 The project of M/s Captain Steel India Ltd. located in Village Debipur, PO Kalyaneshwari, District Pashim Bardhman, West Bengal is for setting up of a new induction furnace and rolling mill for production of Billets -3,45,600 Tons Per Annum (TPA) and Structural Steel 1,20,000 Tons Per Annum (TPA).

30.14.3 Environmental site settings

S.no.	Particular	Details
1	Total land	4.48 ha (Pvt. Land)
2	Existence of habitation & involvement of R&R, if any.	Not Applicable

S.no.	Particular	Details																																	
3	Latitude and Longitude of the project site	<table border="1"> <thead> <tr> <th>Point</th> <th>Latitude</th> <th>Longitude</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>23°47'2.31"N</td> <td>86°49'58.28"E</td> </tr> <tr> <td>B</td> <td>23°47'1.78"N</td> <td>86°50'0.52"E</td> </tr> <tr> <td>C</td> <td>23°47'2.99"N</td> <td>86°50'1.11"E</td> </tr> <tr> <td>D</td> <td>23°47'2.57"N</td> <td>86°50'8.10"E</td> </tr> <tr> <td>E</td> <td>23°47'0.19"N</td> <td>86°50'9.90"E</td> </tr> <tr> <td>F</td> <td>23°46'59.67"N</td> <td>86°50'9.71"E</td> </tr> <tr> <td>G</td> <td>23°46'59.99"N</td> <td>86°50'6.74"E</td> </tr> <tr> <td>H</td> <td>23°46'57.35"N</td> <td>86°50'5.32"E</td> </tr> <tr> <td>I</td> <td>23°46'59.98"N</td> <td>86°49'57.84"E</td> </tr> <tr> <td>J</td> <td>23°47'1.14"N</td> <td>86°49'57.57"E</td> </tr> </tbody> </table>	Point	Latitude	Longitude	A	23°47'2.31"N	86°49'58.28"E	B	23°47'1.78"N	86°50'0.52"E	C	23°47'2.99"N	86°50'1.11"E	D	23°47'2.57"N	86°50'8.10"E	E	23°47'0.19"N	86°50'9.90"E	F	23°46'59.67"N	86°50'9.71"E	G	23°46'59.99"N	86°50'6.74"E	H	23°46'57.35"N	86°50'5.32"E	I	23°46'59.98"N	86°49'57.84"E	J	23°47'1.14"N	86°49'57.57"E
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J	23°47'1.14"N	86°49'57.57"E																																	
4	Elevation of the project site	127-m																																	
5	Involvement of Forest land if any.	No forest land is involved																																	
6	Water body exists within the project site as well as study area	Project site: No water body within Proposed project site. <b>Study area :</b> Maithon Reservoir – 1.5 km, NW Barakar River - 1.3 Km (W)																																	
7	Existence of ESZ/ESA/national park/wildlife sanctuary/biosphere reserve/tiger reserve/elephant reserve etc. if any within the study area	Nil																																	

30.14.4 The unit configuration and capacity of proposed project is given as below:

S.no.	Name	Proposed Unit	
		Configuration	Production TPA
1	Induction Furnace	4 x 20 TPH	3,45,600 TPA
2	Rolling Mill	1x20 TPH	1,20,000 TPA
3	Producer Gas Plant	1X3750 Nm <sup>3</sup> /hr	27,00,000 Nm <sup>3</sup> /Month
4	Reheating Furnace	1 x 20 TPH	

30.14.5 The details of the raw material requirement for the project along with its source and mode of transportation is given as below:

Sr. No.	Raw Material	Quantity per Annum (TPA)	Source	Distance	Mode of Transportation
1	Sponge Iron	280164	Open Market	100-km	Road
2	Pig Iron	96543	Open Market	100-km	Road
3	Alloys	1,893	Open Market	100-km	Road

- 30.14.6 The fresh water requirement for the project is estimated as 260 m<sup>3</sup> /day, Fresh water requirement will be obtained from the Damodar Valley Corporation Water Supply and Rainwater harvesting. The permission for drawl of surface water is in process.
- 30.14.7 The power requirement for the project is estimated as 65 MW, which will be obtained from the Damodar Valley Corporation Substation:
- 30.14.8 The capital cost of the project is Rs 90.0 Crores and the capital cost for environmental protection measures is proposed as Rs.11.0Crores. The employment generation from the proposed project is 1000 nos.
- 30.14.9 The project proponent has reported that there is no violation under EIA Notification, 2006/court case/show cause/direction related to the project under consideration.
- 30.14.10 Name of the EIA consultant: M/s AmplEnviron Pvt. Ltd., Hyderabad [S.No. 124, List of ACOs with their Certificate / Extension Letter No. Rev. 06, Jan. 15, 2021]
- 30.14.11 Proposed Terms of Reference (Baseline data collection period: **March 2021 to May 2021**)

Attributes	Parameter	Sampling		Remarks
A. Air		No. of stations	Frequency	
a. Meteorological parameters	Wind Speed, Wind Direction, Temperature, Humidity, Rain fall, Solar Radiation	1	3 months Continuously	Near Project Site
b. AAQ parameters	PM10, PM2.5, SO <sub>2</sub> , NO <sub>x</sub> , CO and Specific Parameter defined by EAC.	8 Locations	24 hourly Twice a week at each location for 3 months	
B. Noise	Day Leq and Night Leq	8 Locations	Once in season at each location	
C. Water				
Surface	<b>Surface Water:</b> as			

Attributes	Parameter	Sampling		Remarks
water/Ground water quality parameters	per CPCB Norms <b>Ground Water:</b> 32 parameters as per Drinking Water standards	<b>Surface:</b> 4 location	Frequency: Once in a Season	
		<b>Ground:</b> 8 location	Frequency: Once in a Season	
<b>D. Land</b>				
a. Soil quality	<b>Soil Quality</b> AS per ICAR Guidelines/MoEFCC Guidelines  Land Use: National Remote Sensing Centre (NRSC)Guidelines and MOEFCC Guidelines	<b>Locations:</b> 8 locations	Frequency: Once in a Season	
b. Land use		Covering 10 km study area		
E. Biological a. Aquatic b. Terrestrial	As per MOEFCC Guidelines	Covering core and Buffer Zone	Frequency: Once in a Season	Primary as well as secondary data will be conducted for flora and fauna of the study area during monitoring Season.
F. Socio-economic parameters	As Per MOEFCC Guideline	Covering 10 km radius study Area	Frequency: Once in a Season	Socio-economic aspects like infrastructural availability, amenities and demographic structure will be covered based on the Census documents along with

Attributes	Parameter	Sampling		Remarks
				primary data collection through socio-economic survey

30.14.12 The proposal was considered by the EAC (Industry 1) in its 30<sup>th</sup> meeting of the Re-constituted EAC (Industry-I) held on 10<sup>th</sup> - 11<sup>th</sup> February, 2021. The observations and recommendations of EAC is given as below:

**Observations of the Committee**

30.14.13 The Committee noted the following:

- i. The proposal is a Green Field project and involves production of billets and structural steel.
- ii. 11.07 Acre land is required for the project.
- iii. 260 KLD water is required and same shall be arranged from DVC.

**Recommendations of the Committee**

30.14.14 After deliberations, the Committee recommended the project proposal for prescribing following specific ToRs for undertaking detailed EIA and EMP study in addition to the generic ToR enclosed at Annexure-1 read with additional ToRs at Annexure-2:

- i. PM emissions from all the stacks shall be less than 30 mg/Nm<sup>3</sup>.
- ii. No ground water shall be used.
- iii. 85-90 % billets shall be hot charged. Balance can be rolled through RHF operating on LDO or FO.
- iv. Plan for treatment of phenolic wastewater shall be submitted.
- v. Tree density of 2500 trees per ha shall be maintained in green belt.
- vi. Extensive rain water harvesting shall be done.

30.15 Greenfield Project for Installation of Production Facilities for Pelletization Plant (0.6 MTPA), DRI Plant (0.42 MTPA), SMS with Caster (0.6 MTPA), Captive Power Plant (97 MW), Re-Rolling Mill (0.20 MTPA), RHF unit (0.36 MTPA), Mini Blast Furnace (0.26 MTPA), Sinter Plant (0.40 MTPA), DIP Plant (0.24 MTPA) & Coal Washery Unit (0.98 MTPA) by **M/s. Swadesh Metallics Private Limited** at Village-Kesda, Tehsil-Singa, **District-Balodabazar-Bhatapara, Chhattisgarh** [Online Proposal No. IA/CG/IND/195913/2021; File No. J-11011/46/2021-IA.II(I)] – **Prescribing of Terms of Reference** – regarding.

30.15.1 M/s Swadesh Metallics Private Limited., has made an application online vide proposal no. IA/CG/IND/195913/2021 dated 1/02/2021 along with the application in prescribed format (Form-I), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed

project activity is listed at S. No. 3 (a), Metallurgical industries (ferrous & Non-ferrous) & 2 (a) Coal Washeries Under Category “A” of the schedule of the EIA Notification, 2006 and being appraised at Central Level.

30.15.2 The project of M/s Swadesh Metallics Private Limited., located in Village-Kesda, Tehsil-Simga, District-Balodabazar-Bhatapara-493332, Chhattisgarh is for setting up of a Greenfield Project for Installation of Production Facilities for Pelletization Plant (0.6 MTPA), DRI Plant (0.42 MTPA), SMS with Caster (0.6 MTPA), Captive Power Plant (97 MW), Re-Rolling Mill (0.20 MTPA), RHF unit (0.36 MTPA), Mini Blast Furnace (0.26 MTPA), Sinter Plant (0.40 MTPA), DIP Plant (0.24 MTPA) & Coal Washery Unit (0.98 MTPA).

30.15.3 Environmental site settings: -

SL.No	Particulars	Details	Remarks
1	Total land	Total Land - 84.98 ha Private Land – 0 ha Government Land – 0 ha Agriculture – 84.98 ha Grazing Land – 0 ha	land use is agricultural and will be diverted for industrial purpose.
2	Existence of habitation & involvement of R&R, if any.	No R & R involved in the project	
3	Latitude and Longitude of the project site	Latitude - 21°36'21.02"N Longitude - 81°49'31.39"E	
4	Elevation of the project site	MSL – 281 m	
5	Involvement of Forest land if any.	No Forest land involved	
6	Water body exists within the project site as well as study area	<b>Project site:</b> No <b>Study Area:-</b> Jamuniya Nadi – 1.2 km, East Ghughua Pond – 5.20 km, West Manpur Dam – 7 km, SE	
7	Existence of ESZ/ESA/national park/wildlife sanctuary/biosphere reserve/ tiger Reserve / elephant reserve etc. if any within the study area	Nil	

- 30.15.4 Total water requirement for the project is 5,552 KL/day. Source of the water will be ground water/surface water and permission will be obtained from the competent authority.
- 30.15.5 It is estimated that about 118 MW of electricity will be required for operation of proposed plant; 97 MW power will be sourced from CPP and remaining will be sourced from State Electricity Board.
- 30.15.6 The capital cost of the project is Rs 1480.50 Crores and the capital cost for environmental protection measures is proposed as Rs 25 Crores. The employment generation from the proposed project are Admin Staff – 100 and Production Staff – 1800.
- 30.15.7 Name of the EIA consultant:- M/s Grass Roots Research and Creation India (P) Ltd., [SL.No. 161, List of ACOs with their Certificate / Extension Letter no. Rev. 06, Jan. 15, 2021].
- 30.15.8 The proponent has mentioned that there is no court case or violation under EIA Notification to the project or related activity.
- 30.15.9 Proposed Terms of Reference (Baseline data Collection period: March-2021 to May-2021).

<b>Attributes</b>		<b>Sampling</b>	
<b>Air</b>		No of Stations	Frequency
Meteorological parameters	Rainfall, Temperature, Relative humidity, wind speed	Project Site	Daily.
AAQ Parameters	PM2.5, PM10, SO <sub>2</sub> ,NO <sub>2</sub> & CO	08	Twice in a week
<b>Noise</b>	Leq, dB(A)-Day Leq, dB(A)-Night	08	Once in study a period
<b>Water</b>			
Surface water	Total Parameters -32	04	Once in a month
Ground water quality parameters	Total Parameters -32	08	Once in a month
<b>Land</b>			
Soil Quality	Total Parameters -20	08	Once in a Study Period
Land Use	10 KM Buffer Area		
<b>Biological</b>			
Aquatic	10 KM Buffer Area	NA	Once in a Study Period
Terrestrial			
Socio-economic parameters	10 KM buffer Area	NA	Once in a Study Period

#### Observations of the Committee

- 30.15.10 The Committee noted the following:

- i. Most of details sought in Form I have not been filled in properly.
- ii. 210 acres of prime agriculture land is being diverted for industry.
- iii. The PFR is incomplete, information related to processes given is not correct and there are several gaps in PFR like;
  - a. Fuel for Pellet plant is not clear PCI or PGP.
  - b. Details of iron ore beneficiation plant is not given.
  - c. Kiln configuration for pellet manufacture not clear.
  - d. Details of RHF for DRI production not furnished.
  - e. DI plant details are not available.
  - f. Tailing and slag are projected to be generated from pellet plant and RHF which is incorrect.
  - g. It is mentioned that DI plant generates no solid waste, which is wrong.

### Recommendations of the Committee

30.15.11 In view of the foregoing observations and after deliberations, the Committee recommended to return the proposal in present form.

### Any other item with the permission of the Chair

30.16 Change in Plant Configuration and Product Mix of Proposed 3.0 MTPA Integrated Steel Plant including 1.5 MTPA Cement Plant and 200MW CPP by **M/s. Welspun Metallics Limited** located at Village: Versamedi, Tehsil: Anjar, District: Kutch, Gujarat. [Online Proposal No. IA/GJ/IND/190956/2021; File No. J-11011/136/2015-IA II (I)] - **Part transfer of EC with respect to DI pipe unit in the name of M/s. Welspun DI Pipes Limited – regarding.**

30.16.1 **M/s Welspun Metallics Limited (WML)** has made an online application vide proposal no. IA/GJ/IND/190966/2021 dated 06/01/2021 along with copy of EIA/EMP report and Form-2 seeking Environment Clearance (EC) under the provisions of the para 7(ii) of EIA Notification, 2006 for the project mentioned above.

30.16.2 The proposal cited above was considered by the EAC in its meeting held on 18-19<sup>th</sup> January, 2021 and recommended for grant of EC under para 7(ii) of EIA Notification, 2006 with following product slate:

S. No.	Name	Existing Units		Proposed Units		Total (Existing + Proposed)	
		Configuration	Production MTPA	Configuration	Production MTPA	Configuration	Production MTPA
1	Coke Ovens	2X58 Ovens	1.37	-	-	2X58 Ovens	1.37
2	Sinter Plant	1X496 m <sup>2</sup>	5.28	-	-	1X496 m <sup>2</sup>	5.28

S. No.	Name	Existing Units		Proposed Units		Total (Existing + Proposed)	
		Configuration	Production MTPA	Configuration	Production MTPA	Configuration	Production MTPA
3	Blast Furnace (Along with Pig Casting Machine of matching Capacity)	1X4300 m <sup>3</sup>	3.34	-	-	1X4300 m <sup>3</sup>	3.34
4	SMS	BOF - 2 X 165 T LF - 2 X 165 T VD - 1 X 165 T	3.1	(Unpropose) BOF - 1 X 165 T LF - 1 X 165 T	(-) 1.55	BOF - 1 X 165 T LF - 1 X 165 T VD - 1 X 165 T	1.55
5	Continuous Slab Casting	1 x 1 strand	1.6	-	-	1 x 1 strand	1.6
6	Continuous Billet Casting	1 x 6 strand	1.4	(Unpropose) 1 x 6 strand	(-) 1.4	-	0
7	Rebar & Wire Rod Mill	1 Unit	1.37	1 Unit	(-) 1.37	-	0
8	Captive Power Plant	Gas based	200 MW	Gas based	200 MW	Gas based	200 MW
9	Lime & Dolo Plant	2 x 600 TPD	0.34	(Unpropose) 1 x 600 TPD	(-) 0.17	1 x 600 TPD	0.17
10	Cement Grinding Plant	1 Unit	1.5	1 Unit	1.5	1 Unit	1.5
11	DI Pipe Plant (Including Induction Furnaces, Convertor, Centrifugal Casting Machine, Annealing Furnace, Finishing Line.)	-	-	2 Units	0.5 (2x0.25)	2 Units	0.5

S. No.	Name	Existing Units		Proposed Units		Total (Existing + Proposed)	
		Configuration	Production MTPA	Configuration	Production MTPA	Configuration	Production MTPA
12	Foundry Shop for Metal Fitting and other casting using Heating and Melting Furnace (Induction Furnace) and Sand Moulding Facility.	-	-	1 Unit	0.1	1 Unit	0.1

30.16.3 M/s. WML has submitted another application vide proposal no. IA/GJ/IND/190956/2021 dated 6/01/2021 with a request to part transfer the 0.5 MTPA DI pipe unit in the name of M/s. Welspun DI Pipes Limited. The said proposal was considered by the EAC in its meeting held on 18-19<sup>th</sup> January, 2021 when the committee formed a sub-committee comprising of the following to examine the documents submitted by the project proponent and furnish a report to the EAC for taking appropriate view in the matter.

- i. Shri. R.P.Sharma, EAC Member,
- ii. Shri. J.S. Kamyotra, EAC Member,

For the above purpose, Shri. Sundar Ramanathan, Scientist 'E', MoEF&CC was recommended to be co-opted as a member of the above subcommittee.

30.16.4 In this regard, the sub-committee has submitted its report after examination of the following documents:

- i. "NOC" from M/s Welspun Metallics Limited
- ii. "Undertaking" from M/s Welspun DI Pipes Limited (WDIPL)
- iii. Revised Plant Layout with area and green belt detail by WML and WDIPL
- iv. EC condition compliance Responsibility Matrix between WML and WDIPL

Sl.	Item	Total Capacity as per EC recommended under para 7(ii)	Facilities/ Utilities after amendment in EC and subsequent partial transfer of DI Pipe Plant from EC of Parent Company (WML) to New Company (WDIL)	
			Parent Company (WML)	New Company (WDIPL)
A	Title of the	Installation of 3.0 MTPA	Installation of 3.0	Transfer of 0.5 MTPA

Sl.	Item	Total Capacity as per EC recommended under para 7(ii)	Facilities/ Utilities after amendment in EC and subsequent partial transfer of DI Pipe Plant from EC of Parent Company (WML) to New Company (WDIL)	
			Parent Company (WML)	New Company (WDIPL)
	<b>Project</b>	Integrated Steel Plant including 1.5 MTPA Cement Plant and 200MW CPP by M/s Welspun Steel Ltd., located at Village Versamedi, Tehsil Anjar, District Kutch, Gujarat	MTPA Integrated Steel Plant including 1.5 MTPA Cement Plant and 200MW CPP by M/s Welspun Steel Ltd., located at Village Versamedi, Tehsil Anjar, District Kutch, Gujarat	DI Pipe Plant from EC for Installation of 3.0 MTPA Integrated Steel Plant including 1.5 MTPA Cement Plant and 200MW CPP by M/s Welspun Steel Ltd., located at Village Versamedi, Tehsil Anjar, District Kutch, Gujarat to WDIPL
<b>B</b>	<b>Location</b>	Village Versamedi, Tehsil Anjar, District Kutch, Gujarat Latitude- 23° 6'23"N to 23° 7'53"N Longitude-70° 4'3"E to 70° 5'56"E	Village Versamedi, Tehsil Anjar, District Kutch, Gujarat Latitude- 23° 6'23"N to 23° 7'53"N Longitude-70° 4'3"E to 70° 5'56"E	Village Versamedi, Tehsil Anjar, District Kutch, Gujarat Latitude- 23° 6'56"N to 23° 7'14.9"N Longitude- 70° 5'22.6"E to 70° 5'34"E
<b>C</b>	<b>Units/Facilities</b>			
1.	Coke Ovens & By-products Recovery Plant (COBP)	2 X 58 No. Ovens -1.37 MTPA Gross Coke	2 X 58 No. Ovens -1.37 MTPA Gross Coke	-
2.	Sinter Plant	1 x 496 sq m - 5.28 MTPA	1 x 496 sq m - 5.28 MTPA	-
3.	Blast Furnace	1 x 4300 m <sup>3</sup> - 3.34 MTPA Hot Metal	1 x 4300 m <sup>3</sup> - 3.34 MTPA Hot Metal	-
4.	Steel Melt Shop	BOF - 1 X 165 T LF - 1 X 165 T VD - 1 X 165 T 1.55 MTPA	BOF - 1 x 165 T LF - 1 x 165 T VD - 1 x 165 T 1.55 MTPA	-
5.	Continuous Casting -Slab Casting	Slab caster – 1x1 strand 1.6 MTPA	Slab caster – 1x1 strand 1.6 MTPA	-
6.	DI Pipe Plant (Including Induction Furnaces, Convertor, Centrifugal	2x0.25 MTPA-0.5 MTPA	-	2 X 0.25 MTPA- 0.5 MTPA

Sl.	Item	Total Capacity as per EC recommended under para 7(ii)	Facilities/ Utilities after amendment in EC and subsequent partial transfer of DI Pipe Plant from EC of Parent Company (WML) to New Company (WDIL)	
			Parent Company (WML)	New Company (WDIPL)
	Casting Machine, Annealing Furnace, Finishing Line.)			
7.	Foundry shop for Metallic Fittings and casting using Heating & Melting Furnace (Induction Furnace and Sand Moulding Facility)	0.1 MTPA	0.1 MTPA	-
8.	Lime/dolo Calcining Plant 1 x 600 TPD	1x600 TPD 0.17 MTPA	1x600 TPD 0.17 MTPA	-
9.	Power Plant Gas based	2 X 100 MW (Gas based) 165 MW BF-TRT, CDQ & Sinter Cooler 35 MW	2 X 100 MW (Gas based) 165 MW BF-TRT, CDQ & Sinter Cooler 35 MW	-
10.	Cement Grinding unit	1.5 MTPA	1.5 MTPA	-
<b>D</b>	<b>Process Description</b>	<ul style="list-style-type: none"> <li>• Production of coke in Coke Ovens</li> <li>• Production of Sinter in Sinter plant</li> <li>• Production of Steel through BF-BOF route, with Blast Furnace having hot metal production capacity of 3.34 MTPA followed by 1.6 MTPA slab casting.</li> </ul>	<ul style="list-style-type: none"> <li>• Production of coke in Coke Ovens</li> <li>• Production of Sinter in Sinter plant</li> <li>• Production of Steel through BF-BOF route, with Blast Furnace having hot metal production capacity of 3.34 MTPA followed by 1.6 MTPA slab casting.</li> </ul>	<ul style="list-style-type: none"> <li>• Production of DI Pipes using Blast furnace Hot metal from WML followed by desulphurization (if required) and scrap charging</li> <li>• Superheating of molten metal in induction furnace,</li> <li>• Magnesium treatment in convertor;</li> </ul>

Sl.	Item	Total Capacity as per EC recommended under para 7(ii)	Facilities/ Utilities after amendment in EC and subsequent partial transfer of DI Pipe Plant from EC of Parent Company (WML) to New Company (WDIL)	
			Parent Company (WML)	New Company (WDIPL)
		<ul style="list-style-type: none"> <li>• Power generation through waste heat recovery.</li> <li>• Cement Grinding unit based on BF Slag</li> <li>• Production of DI Pipes using Blast furnace Hot metal from WML followed by desulphurization (if required) and scrap charging</li> <li>• Superheating of molten metal in induction furnace,</li> <li>• Magnesium treatment in convertor;</li> <li>• Centrifugally casting of pipes using molten metal in CCMs;</li> <li>• Heat treatment in annealing furnace to give ductility to the casted pipes;</li> <li>• Cement lining, zinc and bitumen coatings &amp; stampings</li> </ul>	<ul style="list-style-type: none"> <li>• Power generation through waste heat recovery.</li> <li>• Cement Grinding unit based on BF Slag</li> </ul>	<ul style="list-style-type: none"> <li>• Centrifugally casting of pipes using molten metal in CCMs;</li> <li>• Heat treatment in annealing furnace to give ductility to the casted pipes;</li> <li>• Cement lining, zinc and bitumen coatings &amp; stampings</li> </ul>
<b>E</b>	<b>Land Requirement</b>	231.58 ha (77.2 ha-33.3% Greenbelt)	207.08 ha (68.33 ha-33% Greenbelt)	24.5 ha (8.97 ha-36.6% Greenbelt)
<b>F</b>	<b>Raw Material</b>	<ul style="list-style-type: none"> <li>• Iron Ore (Fines) – 4.08 MTPA</li> <li>• Iron ore (Lump) – 1.91 MTPA</li> <li>• Coking Coal – 2.01 MTPA</li> <li>• Non Coking Coal – 0.09 MTPA</li> <li>• PCI Coal – 0.64 MTPA</li> <li>• Limestone – 1.22 MTPA</li> <li>• Dolomite – 0.51 MTPA</li> </ul>	<ul style="list-style-type: none"> <li>• Iron Ore (Fines) – 4.08 MTPA</li> <li>• Iron ore (Lump) – 1.88 MTPA</li> <li>• Coking Coal – 2.01 MTPA</li> <li>• Non Coking Coal – 0.09 MTPA</li> <li>• PCI Coal – 0.64 MTPA</li> <li>• Limestone – 0.92 MTPA</li> </ul>	<ul style="list-style-type: none"> <li>• Hot Metal – 0.4 MTPA from WML</li> <li>• Zinc Wire – 2600 TPA</li> <li>• Fe-Si – 16,800 TPA</li> <li>• Mg – 6600 TPA</li> <li>• Steel Scrap – 0.08 MTPA</li> </ul>

Sl.	Item	Total Capacity as per EC recommended under para 7(ii)	Facilities/ Utilities after amendment in EC and subsequent partial transfer of DI Pipe Plant from EC of Parent Company (WML) to New Company (WDIL)	
			Parent Company (WML)	New Company (WDIPL)
		<ul style="list-style-type: none"> <li>• Steel Scrap – 0.08 MTPA</li> <li>• Zinc Wire – 2600 TPA</li> <li>• Fe-Si – 16,800 TPA</li> <li>• Mg – 6600 TPA</li> <li>• Calcined Lime – 600 TPA</li> </ul>	<ul style="list-style-type: none"> <li>• Calcined Lime – 600 TPA</li> <li>• Dolomite – 0.41 MTPA</li> </ul>	
<b>H</b>	<b>Water Requirement</b>	42120 m <sup>3</sup> /day (1755 m <sup>3</sup> /hr)	37224 m <sup>3</sup> /day	4896 m <sup>3</sup> /day
<b>I</b>	<b>Power Requirement</b>	211 MW	195 MW	~ 16 MW
<b>J</b>	<b>Fuel Requirement</b>	<ul style="list-style-type: none"> <li>• Coke Oven gas (COG) – 48127 Nm<sup>3</sup>/hr</li> <li>• BF Gas (BFG) – 587155 Nm<sup>3</sup>/hr</li> <li>• BOF Gas (BOFG) – 28310 Nm<sup>3</sup>/hr</li> <li>• Propane – 20 TPD</li> <li>• Fuel Oil – 600 TPD</li> </ul>	<ul style="list-style-type: none"> <li>• Coke Oven gas (COG) – 48127 Nm<sup>3</sup>/hr</li> <li>• BF Gas (BFG) – 542064 Nm<sup>3</sup>/hr</li> <li>• BOF Gas (BOFG) – 14155 Nm<sup>3</sup>/hr</li> <li>• Propane – 20 TPD</li> </ul>	<ul style="list-style-type: none"> <li>• BF Gas – 45091 Nm<sup>3</sup>/hr</li> </ul>
<b>K</b>	<b>Pollutants</b>	<ul style="list-style-type: none"> <li>• PM-273.1 Kg/hr</li> <li>• SO<sub>2</sub>-551.8 Kg/hr</li> <li>• NO<sub>x</sub> – 869.3 Kg/hr</li> </ul>	<ul style="list-style-type: none"> <li>• PM – 258.9 Kg/hr</li> <li>• SO<sub>2</sub> – 547 Kg/hr</li> <li>• NO<sub>x</sub> – 862 Kg/hr</li> </ul>	<ul style="list-style-type: none"> <li>• PM – 14.2 Kg/hr</li> <li>• SO<sub>2</sub> – 4.8 Kg/hr</li> <li>• NO<sub>x</sub> – 7.3 Kg/hr</li> </ul>
<b>L</b>	<b>Pollution Mitigation Measures</b>			
<b>1</b>	<b>Air Pollution Control</b>	<ul style="list-style-type: none"> <li>• Dry fogging and bag filter based DE system in material handling</li> <li>• Charging and pushing Emission control in coke ovens</li> <li>• Electrostatic Precipitator (ESP) based process gas cleaning in Sinter plant and CPP</li> <li>• ESP based DE systems in BF Cast house, stock house and SMS</li> <li>• Bag Filter based DE systems</li> </ul>	<ul style="list-style-type: none"> <li>• Dry fogging and bag filter based DE system in material handling</li> <li>• Charging and pushing Emission control in coke ovens</li> <li>• Electrostatic Precipitator (ESP) based process gas cleaning in Sinter plant and CPP</li> <li>• ESP based DE systems in BF Cast house, stock house and SMS</li> </ul>	<ul style="list-style-type: none"> <li>• Bag Filter based DE systems</li> <li>• Low NO<sub>x</sub> oxy-fuel burners in Annealing furnaces</li> </ul>

Sl.	Item	Total Capacity as per EC recommended under para 7(ii)	Facilities/ Utilities after amendment in EC and subsequent partial transfer of DI Pipe Plant from EC of Parent Company (WML) to New Company (WDIL)	
			Parent Company (WML)	New Company (WDIPL)
		<ul style="list-style-type: none"> <li>• Low NOx oxy-fuel burners in Annealing furnaces</li> </ul>		
2	<b>Noise Pollution Control</b>	<ul style="list-style-type: none"> <li>• Plugging leakages in high-pressure gas/air pipelines.</li> <li>• Reducing vibration of high speed rotating machines by regular monitoring of vibration and taking necessary steps.</li> <li>• Design of absorber system for the shift office and pulpit operator's cabin.</li> <li>• Noise absorber systems in pump houses.</li> <li>• Noise level at 1m from equipment will be limited to 85 dB (A).</li> <li>• The fans and ductwork will be designed for minimum vibration.</li> <li>• All the equipment in different units will be designed/operated in such a way that the noise level shall not exceed 85 dB (A).</li> <li>• Periodical monitoring of work zone noise and outside plant premises.</li> <li>• Un-manned high noise zone will be marked as "High Noise Zone".</li> <li>• In shops where measures are not feasible, attempts shall be made to provide operators with sound-</li> </ul>	<ul style="list-style-type: none"> <li>• Plugging leakages in high-pressure gas/air pipelines.</li> <li>• Reducing vibration of high speed rotating machines by regular monitoring of vibration and taking necessary steps.</li> <li>• Design of absorber system for the shift office and pulpit operator's cabin.</li> <li>• Noise absorber systems in pump houses.</li> <li>• Noise level at 1m from equipment will be limited to 85 dB (A).</li> <li>• The fans and ductwork will be designed for minimum vibration.</li> <li>• All the equipment in different units will be designed/operated in such a way that the noise level shall not exceed 85 dB (A).</li> <li>• Periodical monitoring of work zone noise and outside plant premises.</li> <li>• Un-manned high noise zone will be marked as "High Noise Zone".</li> </ul>	<ul style="list-style-type: none"> <li>• Plugging leakages in high-pressure gas/air pipelines.</li> <li>• Reducing vibration of high speed rotating machines by regular monitoring of vibration and taking necessary steps.</li> <li>• Design of absorber system for the shift office and pulpit operator's cabin.</li> <li>• Noise absorber systems in pump houses.</li> <li>• Noise level at 1m from equipment will be limited to 85 dB (A).</li> <li>• The fans and ductwork will be designed for minimum vibration.</li> <li>• All the equipment in different units will be designed/operated in such a way that the noise level shall not exceed 85 dB (A).</li> <li>• Periodical monitoring of work zone noise and outside plant premises.</li> <li>• Un-manned high noise zone will be marked as "High Noise Zone".</li> </ul>

Sl.	Item	Total Capacity as per EC recommended under para 7(ii)	Facilities/ Utilities after amendment in EC and subsequent partial transfer of DI Pipe Plant from EC of Parent Company (WML) to New Company (WDIL)	
			Parent Company (WML)	New Company (WDIPL)
		<p>proof enclosure to operate the system.</p> <ul style="list-style-type: none"> <li>Workers exposed to noise level will be provided with protection devices like earmuffs and will be advised to use them regularly, while at work.</li> <li>Workers exposed to noisy work place shall be provided with rotational duties.</li> <li>All workers will be regularly checked medically for any noise related health problem and if detected, they will be provided with alternative duty.</li> </ul>	<ul style="list-style-type: none"> <li>In shops where measures are not feasible, attempts shall be made to provide operators with sound-proof enclosure to operate the system.</li> <li>Workers exposed to noise level will be provided with protection devices like earmuffs and will be advised to use them regularly, while at work.</li> <li>Workers exposed to noisy work place shall be provided with rotational duties.</li> <li>All workers will be regularly checked medically for any noise related health problem and if detected, they will be provided with alternative duty.</li> </ul>	<ul style="list-style-type: none"> <li>In shops where measures are not feasible, attempts shall be made to provide operators with sound-proof enclosure to operate the system.</li> <li>Workers exposed to noise level will be provided with protection devices like earmuffs and will be advised to use them regularly, while at work.</li> <li>Workers exposed to noisy work place shall be provided with rotational duties.</li> <li>All workers will be regularly checked medically for any noise related health problem and if detected, they will be provided with alternative duty.</li> </ul>
3	<b>Effluents Generation And Management</b>	<ul style="list-style-type: none"> <li>Zero Liquid Discharge outside plant boundary</li> <li>Effluent generated from coke ovens would be separately treated in Biological Oxidation and Dephenolization (BOD) treatment unit for removal of phenolic compounds and cyanide</li> <li>Cooling tower blow downs and treated effluent from BOD</li> </ul>	<ul style="list-style-type: none"> <li>Zero Liquid Discharge outside plant boundary</li> <li>Effluent generated from coke ovens would be separately treated in Biological Oxidation and Dephenolization (BOD) treatment unit for removal of phenolic compounds and cyanide</li> </ul>	<ul style="list-style-type: none"> <li>Zero Liquid Discharge outside plant boundary</li> <li>Treatment of plant sanitary waste water including canteen effluent in a sewage treatment plant for separation of floating oil and reduction of BOD level.</li> <li>ETP shall be provided for DI plant exclusively with the</li> </ul>

Sl.	Item	Total Capacity as per EC recommended under para 7(ii)	Facilities/ Utilities after amendment in EC and subsequent partial transfer of DI Pipe Plant from EC of Parent Company (WML) to New Company (WDIL)	
			Parent Company (WML)	New Company (WDIPL)
		<p>plant of coke ovens would be taken to the CETP for further treatment and reuse as make-up water.</p> <ul style="list-style-type: none"> <li>• Treatment of plant sanitary waste water including canteen effluent in a sewage treatment plant for separation of floating oil and reduction of BOD level.</li> <li>• ETP shall be provided for DI plant exclusively with the provision of safe handling of hazardous waste generated in DI Plant.</li> </ul>	<ul style="list-style-type: none"> <li>• Cooling tower blow downs and treated effluent from BOD plant of coke ovens would be taken to the CETP for further treatment and reuse as make-up water.</li> <li>• Treatment of plant sanitary waste water including canteen effluent in a sewage treatment plant for separation of floating oil and reduction of BOD level.</li> </ul>	<p>provision of safe handling of hazardous waste generated in DI Plant.</p>
4	<b>Solid and Hazardous Wastes</b>	<ul style="list-style-type: none"> <li>• All non-hazardous solid wastes shall be utilized in-house in Sinter Plant/BOF.</li> <li>• BF/BOF Slag shall be utilized in house or sold to cement manufacturers or used for road construction.</li> <li>• Coal tar sludge and BOD sludge would be recycled for coke making by mixing with the coal charge.</li> <li>• All other hazardous wastes shall be disposed in secured landfill/ handed over to authorized dealers for disposal as per statutory norms</li> </ul>	<ul style="list-style-type: none"> <li>• All non-hazardous solid wastes shall be utilized in-house in Sinter Plant/BOF.</li> <li>• BF/BOF Slag shall be utilized in house or sold to cement manufacturers or used for road construction.</li> <li>• Coal tar sludge and BOD sludge would be recycled for coke making by mixing with the coal charge.</li> <li>• All other hazardous wastes shall be disposed in secured landfill/ handed over to authorized dealers for disposal as per statutory norms</li> </ul>	<ul style="list-style-type: none"> <li>• All non-hazardous solid wastes including Mg dust and Bag filter dust shall be utilized in Sinter Plant of WML.</li> <li>• All other hazardous wastes shall be disposed in secured landfill/ handed over to authorized dealers for disposal as per statutory norms</li> <li>• 100 % use / recycle of solid waste generated in DI plant shall be ensured.</li> </ul>

Sl.	Item	Total Capacity as per EC recommended under para 7(ii)	Facilities/ Utilities after amendment in EC and subsequent partial transfer of DI Pipe Plant from EC of Parent Company (WML) to New Company (WDIL)	
			Parent Company (WML)	New Company (WDIPL)
		<ul style="list-style-type: none"> <li>100 % use / recycle of solid waste generated in DI plant shall be ensured.</li> </ul>		

Sl. No.	Environment Clearance Condition	M/s Welspun Metals Limited	M/s Welspun DI Pipes Limited
<b>A. Specific conditions as per the EC recommended under para 7(ii)</b>			
i.	CEMS shall be provided on all process stacks and the signal shall be received in plant control room for central control of APCDs installed in the plant.	CEMS shall be provided on all process stacks and the signal shall be received in plant control room for central control of APCDs installed in the plant.	CEMS shall be provided on all process stacks and the signal shall be received in plant control room for central control of APCDs installed in the plant.
ii.	Ventilation system for odour control in bitumen coating area shall be included.	Not Applicable	Ventilation system for odour control in bitumen coating area shall be included.
iii.	Zn dust monitoring in AAQ in DI plant shall. Be carried out.	Not Applicable	Zn dust monitoring in AAQ in DI plant shall. Be carried out.
iv.	ETP shall be provided for DI plant exclusively with the provision of safe handling of hazardous waste generated in DI Plant.	Not Applicable	ETP shall be provided for DI plant exclusively with the provision of safe handling of hazardous waste generated in DI Plant.
v.	PM level from the stacks shall be less than 30 mg/Nm <sup>3</sup> .	PM level from the stacks shall be less than 30 mg/Nm <sup>3</sup> .	PM level from the stacks shall be less than 30 mg/Nm <sup>3</sup> .
vi.	100 % use / recycle of solid waste generated in DI plant shall be ensured.	Not Applicable	100 % use / recycle of solid waste generated in DI plant shall be ensured.
vii.	Tree density in Green belt shall be 2500 trees per ha. WDI Plant shall have 36.6 % green belt as committed by PP.	Tree density in Green belt shall be 2500 trees per ha. Plant shall have 33 % green belt as committed by PP.	Tree density in Green belt shall be 2500 trees per ha. WDI Plant shall have 36.6 % green belt as committed by PP.

Sl. No.	Environment Clearance Condition	M/s Welspun Metalics Limited	M/s Welspun DI Pipes Limited
viii.	Both plants shall have their independent green belts.	Both plants shall have their independent green belts.	Both plants shall have their independent green belts.
ix.	Validity of split ECs shall be from Feb 2017.	Validity of split ECs shall be from Feb 2017.	Validity of split ECs shall be from Feb 2017.
x.	More efficient bags such as PTFE bags shall be used in the filter bag house and designed for 150% of normal design air flow.	More efficient bags such as PTFE bags shall be used in the filter bag house and designed for 150% of normal design air flow.	Not Applicable
xi.	PP shall use ultralow NO <sub>x</sub> burner with three stage combustion, flue gas recirculation and auto combustion control system.	PP shall use ultralow NO <sub>x</sub> burner with three stage combustion, flue gas recirculation and auto combustion control system.	Not Applicable
<b>B. General conditions as per the EC recommended under para 7(ii)</b>			
<b>I. Statutory compliance</b>			
	The Environment Clearance (EC) granted to the project/ activity is strictly under the provisions of the EIA Notification, 2006 and its amendments issued from time to time. It does not tantamount/ construe to approvals/ consent/ permissions etc., required to be obtained or standards/conditions to be followed under any other Acts/Rules/Subordinate legislations, etc., as may be applicable to the project.	Applicable	Applicable
<b>II. Air quality monitoring and preservation</b>			
i.	The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission as well as Continuous Ambient Air Quality Station (CAAQS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier	Applicable	Applicable

Sl. No.	Environment Clearance Condition	M/s Welspun Metals Limited	M/s Welspun DI Pipes Limited
	specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.		
ii.	The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.	Applicable	Applicable
iii.	The cameras shall be installed at suitable locations for 24X7 recording of battery emissions on the both sides of coke oven batteries and videos shall be preserved for at least one-month recordings.	Applicable	Not Applicable
iv.	Sampling facility at process stacks and at quenching towers shall be provided as per CPCB guidelines for manual monitoring of emissions.	Applicable	Applicable
v.	Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.	Applicable	Applicable
vi.	The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.	Applicable	Applicable
vii.	Secondary emission control system shall be provided at SMS Converters.	Applicable	Not Applicable
viii.	Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.	Applicable	Applicable
ix.	Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration.	Applicable	Not Applicable
x.	The project proponent use leak proof trucks/dumpers carrying coal and	Applicable	Not Applicable

Sl. No.	Environment Clearance Condition	M/s Welspun Metals Limited	M/s Welspun DI Pipes Limited
	other raw materials and cover them with tarpaulin.		
xi.	Facilities for spillage collection shall be provided for coal and coke on wharf of coke oven batteries (Chain conveyors, land based industrial vacuum cleaning facility).	Applicable	Not Applicable
xii.	Land-based APC system shall be installed to control coke pushing emissions.	Applicable	Not Applicable
xiii.	Monitor CO, HC and O <sub>2</sub> in flue gases of the coke oven battery to detect combustion efficiency and cross leakages in the combustion chamber.	Applicable	Not Applicable
xiv.	Vapor absorption system shall be provided in place of vapour compression system for cooling of coke oven gas in case of recovery type coke ovens.	Applicable	Not Applicable
xv.	In case concentrated ammonia liquor is incinerated, adopt high temperature incineration to destroy Dioxins and Furans. Suitable NO <sub>x</sub> control facility shall be provided to meet the prescribed standards.	Applicable	Not Applicable
xvi.	The coke oven gas shall be subjected to desulphurization if the sulphur content in the coal exceeds 1%.	Applicable	Not Applicable
xvii.	Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.	Applicable	Not Applicable
xviii.	Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.	Applicable	Applicable
xix.	The project proponent shall install Dry Gas Cleaning Plant with bag filter for Blast Furnace and SMS converter.	Applicable	Not Applicable
xx.	Dry quenching (CDQ) system shall be installed along with power generation facility from waste heat recovery from hot coke.	Applicable	Not Applicable
<b>III. Water quality monitoring and preservation</b>			
i.	The project proponent shall install 24x7 continuous effluent monitoring	Applicable	Applicable

Sl. No.	Environment Clearance Condition	M/s Welspun Metals Limited	M/s Welspun DI Pipes Limited
	system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R 277 (E) dated 31 <sup>st</sup> March 2012 (Integrated iron & Steel); G.S.R 414 (E) dated 30 <sup>th</sup> May 2008 (Sponge Iron) as amended from time to time; S.O. 3305 (E) dated 7 <sup>th</sup> December 2015 (Thermal Power Plants) as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.		
ii.	The project proponent shall monitor regularly ground water quality at least twice a year (pre- and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.	Applicable	Applicable
iii.	The project proponent shall provide the ETP for coke oven and by-product to meet the standards prescribed in G.S.R 277 (E) dated 31 <sup>st</sup> March 2012 (Integrated iron & Steel); G.S.R 414 (E) dated 30 <sup>th</sup> May 2008 (Sponge Iron) as amended from time to time; S.O. 3305 (E) dated 7 <sup>th</sup> December 2015 (Thermal Power Plants) as amended from time to time as amended from time to time;	Applicable	Not Applicable
iv.	Adhere to 'Zero Liquid Discharge'	Applicable	Applicable
v.	Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.	Applicable	Applicable
vi.	Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.	Applicable	Not Applicable

Sl. No.	Environment Clearance Condition	M/s Welspun Metals Limited	M/s Welspun DI Pipes Limited
vii.	Tyre washing facilities shall be provided at the entrance of the plant gates.	Applicable	Applicable
viii.	CO <sub>2</sub> injection shall be provided in GCP of SMS to reduce pH in circulating water to ensure optimal recycling of treated water for converter gas cleaning.	Applicable	Not Applicable
ix.	The project proponent shall practice rainwater harvesting to maximum possible extent.	Applicable	Applicable
x.	Treated water from ETP of COBP shall not be used for coke quenching.	Applicable	Not Applicable
xi.	Water meters shall be provided at the inlet to all unit processes in the steel plants.	Applicable	Applicable
xii.	The project proponent shall make efforts to minimize water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.	Applicable	Not Applicable
<b>IV. Noise monitoring and prevention</b>			
i.	Noise pollution shall be monitored as per the prescribed Noise Pollution (Regulation And Control) Rules, 2000 and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.	Applicable	Applicable
<b>V. Energy Conservation measures</b>			
i.	The project proponent shall provide TRTs to recover energy from top gases of Blast Furnaces.	Applicable	Not Applicable
ii.	Coke Dry Quenching (CDQ) shall be provided for coke quenching for the coke oven plant.	Applicable	Not Applicable
iii.	Waste heat shall be recovered from Sinter Plants coolers and Sinter Machines.	Applicable	Not Applicable
iv.	Use torpedo ladle for hot metal transfer as far as possible. If ladles not used, provide covers for open top ladles.	Applicable	Not Applicable
v.	Use hot charging of slabs and billets/blooms as far as possible.	Applicable	Not Applicable

Sl. No.	Environment Clearance Condition	M/s Welspun Metals Limited	M/s Welspun DI Pipes Limited
vi.	Waste heat recovery systems shall be provided in all units where the flue gas or process gas exceeds 300°C.	Applicable	Not Applicable
vii.	Explore feasibility to install WHRS at Waste Gases from BF stoves; Sinter Machine; Sinter Cooler, and all reheating furnaces and if feasible shall be installed.	Applicable	Not Applicable
viii.	Restrict Gas flaring to < 1%.	Applicable	Not Applicable
ix.	Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;	Applicable	Applicable
x.	Provide LED lights in their offices and residential areas.	Applicable	Applicable
xi.	Ensure installation of regenerative type burners on all reheating furnaces.	Applicable	Applicable
<b>VI. Waste management</b>			
i.	An attrition grinding unit to improve the bulk density of BF granulated slag from 1.0 to 1.5 Kg/l shall be installed to use slag as river sand in construction industry.	Applicable	Not Applicable
ii.	Tar Sludge and waste oil shall be blended with coal charged in coke ovens.	Applicable	Not Applicable
iii.	Carbon recovery plant to recover the elemental carbon present in GCP slurries for use in Sinter plant shall be installed.	Applicable	Not Applicable
iv.	Waste recycling Plant shall be installed to recover scrap, metallic and flux for recycling to sinter plant and SMS.	Applicable	Not Applicable
v.	Used refractories shall be recycled as far as possible.	Applicable	Not Applicable
vi.	SMS slag after metal recovery in waste recycling facility shall be conditioned and used for road making, railway track ballast and other applications. The project proponent shall install a waste recycling facility to recover metallic and flux for recycle to sinter plant. The project proponent shall establish	Applicable	Not Applicable

Sl. No.	Environment Clearance Condition	M/s Welspun Metals Limited	M/s Welspun DI Pipes Limited
	linkage for 100% reuse of rejects from Waste Recycling Plant.		
vii.	100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office.	Applicable	Not Applicable
viii.	Oil Collection pits shall be provided in oil cellars to collect and reuse/recycle spilled oil. Oil collection trays shall be provided under coils on saddles in cold rolled coil storage area.	Applicable	Applicable
ix.	Kitchen waste shall be composted or converted to biogas for further use.	Applicable	Applicable
<b>VII. Green Belt</b>			
i.	The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration by trees.	Applicable	Applicable
<b>VIII. Public hearing and Human health issues</b>			
i.	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.	Applicable	Applicable
ii.	The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.	Applicable	Applicable
iii.	Occupational health surveillance of the workers shall be done on a regular basis and records maintained.	Applicable	Applicable
<b>IX. Corporate Environment Responsibility</b>			
i.	The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 30/09/2020.	Applicable	Applicable
ii.	The company shall have a well laid down environmental policy duly approve by the Board of Directors.	Applicable	Applicable

Sl. No.	Environment Clearance Condition	M/s Welspun Metals Limited	M/s Welspun DI Pipes Limited
	The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.		
iii.	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.	Applicable	Applicable
<b>X. Miscellaneous</b>			
i.	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.	Applicable	Applicable
ii.	The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.	Applicable	Applicable
iii.	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and	Applicable	Applicable

Sl. No.	Environment Clearance Condition	M/s Welspun Metals Limited	M/s Welspun DI Pipes Limited
	update the same on half-yearly basis.		
iv.	The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.	Applicable	Applicable
v.	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.	Applicable	Applicable
vi.	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.	Applicable	Applicable
vii.	The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.	Applicable	Applicable
viii.	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.	Applicable	Applicable
ix.	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).	Applicable	Applicable
x.	Concealing factual data or submission	Applicable	Applicable

Sl. No.	Environment Clearance Condition	M/s Welspun Metallics Limited	M/s Welspun DI Pipes Limited
	of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.		
xi.	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Applicable	Applicable
xii.	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.	Applicable	Applicable
xiii.	The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.	Applicable	Applicable
xiv.	Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.	Applicable	Applicable

### Observations and recommendations of the Committee

30.16.5 The report of the sub-committee was placed before the EAC on 11.02.2021 and the findings of the sub-committee was deliberated upon. After deliberations, the Committee accepted the sub-committee report and recommended the following:

- i. Amendment in the Environmental Clearance recommended by the EAC under para 7(ii) of EIA Notification, 2006 in its meeting held on 18-19<sup>th</sup> January, 2021 by excluding 0.5 MTPA Ductile Iron Pipe Plant (2×0.25 MTPA) and also modifying the specific as well as general conditions as per the compliance matrix given above.
- ii. Part transfer of Ductile Iron Pipe Plant 2×0.25 MTPA facilities in the name of the M/s. Welspun DI pipes Limited by issuing a part transfer EC letter along with prescription of specific as well as general conditions as per the compliance matrix given above.

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**ANNEXURE –1**

**GENERIC TERMS OF REFERENCE (ToR) IN RESPECT OF INDUSTRY SECTOR**

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. The project proponent shall furnish the requisite documents from the competent authority in support of drawl of ground water and surface water and supply of electricity.
  - ix. Process description along with major equipment and machineries, process flow sheet (Quantitative) from raw material to products to be provided
  - x. Hazard identification and details of proposed safety systems.
  - xi. Expansion/modernization proposals:
    - a. Copy of all the Environmental Clearance(s) including Amendments thereto obtained for the project from MoEF&CC/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 circular dated 30<sup>th</sup> 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/PCC 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. Co-ordinates (lat-long) of all four corners of the site.
- iv. Google map-Earth downloaded of the project site.
- v. 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.
- vi. Photographs of the proposed and existing (if applicable) plant site. If existing, show photographs of plantation/greenbelt, in particular.
- vii. 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)
- viii. A list of major industries with name and type within study area (10km radius) shall be incorporated. Land use details of the study area
- ix. Geological features and Geo-hydrological status of the study area shall be included.
- x. 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)
- xi. Status of acquisition of land. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.
- xii. 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. Land use 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 PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>x</sub>, 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 (60m upstream and downstream) 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.
  - 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 Assessment 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 well 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, if the effluent is proposed to be discharged in to the local drain, then Water Quality Modelling study should be conducted for the drain water taking into consideration the upstream and downstream quality of water of the drain.
  - 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 disposal. Copies of MOU regarding utilization of solid and hazardous waste 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. Details of existing Occupational & Safety Hazards. What are the exposure levels of above mentioned 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,

- 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 analysed data of abovementioned parameters as per age, sex, duration of exposure and department wise.
- iii. Annual report of health status of workers with special reference to Occupational Health and Safety.
- iv. Plan and fund allocation to ensure the occupational health & safety of all contract and casual workers.

**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. To address the Public Hearing issues, provisions contained under Ministry's Office Memorandum vide F.No. 22-65/2017-IA.III dated 30/09/2020 shall be complied.
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 ToRs.
14. The ToRs prescribed shall be valid for a period of three years for submission of the EIA-EMP reports along with Public Hearing Proceedings (wherever stipulated).

The following general points shall be noted:

- i. All documents shall be properly indexed, page numbered.
- ii. Period/date of data collection shall be clearly indicated.
- iii. Authenticated English translation of all material in Regional languages shall be provided.

- iv. The letter/application for environmental clearance shall quote the MOEF&CC file No. and also attach a copy of the letter.
- v. The copy of the letter received from the Ministry shall be also attached as an annexure to the final EIA-EMP Report.
- vi. The index of the final EIA-EMP report must indicate the specific chapter and page no. of the EIA-EMP Report
- vii. While preparing the EIA report, the instructions for the proponents and instructions for the consultants issued by MOEF&CC vide O.M. No. J-11013/41/2006-IA.II (I) dated 4<sup>th</sup> August, 2009, which are available on the website of this Ministry shall also be followed.
- viii. The consultants involved in the preparation of EIA-EMP report after accreditation with Quality Council of India (QCI)/National Accreditation Board of Education and Training (NABET) would need to include a certificate in this regard in the EIA-EMP reports prepared by them and data provided by other organization/Laboratories including their status of approvals etc. Name of the Consultant and the Accreditation details shall be posted on the EIA-EMP Report as well as on the cover of the Hard Copy of the Presentation material for EC presentation.
- ix. ToRs' prescribed by the Expert Appraisal Committee (Industry) shall be considered for preparation of EIA-EMP report for the project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. Where the documents provided are in a language other than English, an English translation shall be provided. The draft EIA-EMP report shall be submitted to the State Pollution Control Board of the concerned State for conduct of Public Hearing. The SPCB shall conduct the Public Hearing/public consultation, district-wise, as per the provisions of EIA notification, 2006. The Public Hearing shall be chaired by an Officer not below the rank of Additional District Magistrate. The issues raised in the Public Hearing and during the consultation process and the commitments made by the project proponent on the same shall be included separately in EIA-EMP Report in a separate chapter and summarized in a tabular chart with financial budget (capital and revenue) along with time-schedule of implementation for complying with the commitments made. The final EIA report shall be submitted to the Ministry for obtaining environmental clearance.

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**ANNEXURE-2**

**ADDITIONAL ToRS FOR INTEGRATED STEEL PLANT**

1. Iron ore/coal linkage documents along with the status of environmental clearance of iron ore and coal mines
2. Quantum of production of coal and iron ore from coal & iron ore mines and the projects they cater to. Mode of transportation to the plant and its impact
3. For Large ISPs, a 3-D view i.e. DEM (Digital Elevation Model) for the area in 10 km radius from the proposal site. MRL details of project site and RL of nearby sources of water shall be indicated.
4. Recent land-use map based on satellite imagery. High-resolution satellite image data having 1m-5m spatial resolution like quickbird, Ikonos, IRS P-6 pan sharpened etc. for the 10 Km radius area from proposed site. The same shall be used for land used/land-cover mapping of the area.
5. PM (PM<sub>10</sub> and P<sub>2.5</sub>) present in the ambient air must be analysed for source analysis – natural dust/RSPM generated from plant operations (trace elements) of PM<sub>10</sub> to be carried over.
6. All stock piles will have to be on top of a stable liner to avoid leaching of materials to ground water.
7. Plan for the implementation of the recommendations made for the steel plants in the CREP guidelines.
8. Plan for slag utilization
9. Plan for utilization of energy in off gases (coke oven, blast furnace)
10. System of coke quenching adopted with justification.
11. Trace metals Mercury, arsenic and fluoride emissions in the raw material.
12. Trace metals in waste material especially slag.
13. Trace metals in water
14. Details of proposed layout clearly demarcating various units within the plant.
15. Complete process flow diagram describing each unit, its processes and operations, along with material and energy inputs and outputs (material and energy balance).
16. Details on design and manufacturing process for all the units.
17. Details on environmentally sound technologies for recycling of hazardous materials, as per CPCB Guidelines, may be mentioned in case of handling scrap and other recycled materials.
18. Details on requirement of energy and water along with its source and authorization from the concerned department. Location of water intake and outfall points (with coordinates).
19. Details on toxic metal content in the waste material and its composition and end use (particularly of slag).
20. Details on toxic content (TCLP), composition and end use of slag.

### **ADDITIONAL ToRs FOR PELLET PLANT**

1. Iron ore/coal linkage documents along with the status of environmental clearance of iron ore and coal mines
2. Quantum of production of coal and iron ore from coal & iron ore mines and the projects they cater to. Mode of transportation to the plant and its impact
3. Recent land-use map based on satellite imagery. High-resolution satellite image data having 1m-5m spatial resolution like quickbird, Ikonos, IRS P-6 pan sharpened etc. for the 10 Km radius area from proposed site. The same shall be used for land used/land-cover mapping of the area.
4. PM(PM<sub>10</sub> and P<sub>2.5</sub>) present in the ambient air must be analysed for source analysis – natural dust/RSPM generated from plant operations (trace elements) of PM<sub>10</sub> to be carried over.
5. All stock piles will have to be on top of a stable liner to avoid leaching of materials to ground water.
6. Plan for the implementation of the recommendations made for the steel plants in the CREP guidelines.
7. Plan for slag utilization
8. Plan for utilization of energy in off gases (coke oven, blast furnace)
9. System of coke quenching adopted with justification.
10. Trace metals Mercury, arsenic and fluoride emissions in the raw material.
11. Trace metals in waste material especially slag.
12. Trace metals in water

### **ADDITIONAL ToRs FOR CEMENT INDUSTRY**

1. Limestone and coal linkage documents along with the status of environmental clearance of limestone and coal mines
2. Quantum of production of coal and limestone from coal & limestone mines and the projects they cater to;
3. Present land use shall be prepared based on satellite imagery. High-resolution satellite image data having 1m-5m spatial resolution like quickbird, Ikonos, IRS P-6 pan sharpened etc. for the 10 Km radius area from proposed site. The same shall be used for land used/land-cover mapping of the area.
4. If the raw materials used have trace elements, an environment management plan shall also be included.
5. Plan for the implementation of the recommendations made for the cement plants in the CREP guidelines must be prepared.
6. Energy consumption per ton of clinker and cement grinding
7. Provision of waste heat recovery boiler
8. Arrangement for co-processing of hazardous waste in cement plant.
9. Trace metals in waste material especially slag.

**ADDITIONAL ToRs FOR PULP AND PAPER INDUSTRY**

- i. A note on pulp washing system capable of handling wood pulp shall be included.
- ii. Manufacturing process details for the existing and proposed plant shall be included. Chapter on Pulping & Bleaching shall include: no black liquor spillage in the area of pulp mill; no use of elemental chlorine for bleaching in mill; installation of hypo preparation plant; no use of potcher washing and use of counter current or horizontal belt washers. Chapter on Chemical Recovery shall include: no spillage of foam in chemical recovery plant, no discharge of foul condensate generated from MEE directly to ETP; control of suspended particulate matter emissions from the stack of fluidized bed recovery boiler and ESP in lime kiln
- iii. Studies shall be conducted and a chapter shall be included to show that Soda pulping process can be employed for *Eucalyptus/Casuarina* to produce low kappa (bleachable) grade of pulp.
- iv. Commitment that only elemental Chlorine-free technology will be used for the manufacture of paper and existing plant without chemical recovery plant will be closed within 2 years of issue of environment clearance.
- v. A commitment that no extra chlorine base bleaching chemicals (more than being used now) will be employed and AOx will remain within limits as per CREP for used based mills. Plan for reduction of water consumption.

**ADDITIONAL ToRs FOR LEATHER/SKIN/HIDE PROCESSING INDUSTRY**

1. Justification for engaging a particular type of process (raw hide/skin into semi finishing or finished leather, semi-finished leather to finished leather, dry finishing operations, chrome/vegetable tanning, *etc.*).
2. Details regarding complete leather/ skin/ hide processing including the usage of sulphides, nitrogen compounds, chromium or other tanning agents, post-tanning chemicals, biocides, *etc.*, along with the material balance shall be provided.
3. In case of chrome tanning, details of the chrome recovery plant, management of shavings/solid waste including safe disposal.
4. Details on reuse of soak liquor / saline stream from membrane system, if applicable, to the extent possible in pickling activity after required treatment. Also, mention the salt recovery measures.

**ADDITIONAL ToRs FOR COKE OVEN PLANT**

1. Justification for selecting recovery/non-recovery (beehive) type batteries with the proposed unit size.
2. Details of proposed layout clearly demarcating various facilities such as coal storages, coke making, by-product recovery area, *etc* within the plant.
3. Details of coke oven plant (recovery/non-recovery type) including coal handling, coke oven battery operations, coke handling and preparation.
4. Scheme for coal changing, charging emission centre, Coke quenching technology, pushing emission control.
5. Scheme for coke oven effluent treatment plant details including scheme for meeting cyanide standard.

**ADDITIONAL ToRs FOR ASBESTOS MILLING AND ASBESTOS BASED PRODUCTS**

1. Type of the project – new/expansion/modernization
2. Type of fibres used (Asbestos and others) and preference of selection from techno-environmental angle should be furnished
3. As asbestos is used in several products and as the level of precautions differ from milling to usage in cement products, friction products gasketing, textiles and also differ with the process used, it is necessary to give process description and reasons for the choice for selection of process
4. Technology adopted, flow chart, process description and layout marking areas of potential environmental impacts
5. National standards and codes of practice in the use of asbestos particular to the industry should be furnished
6. In case of newly introduced technology, it should include the consequences of any failure of equipment/ technology and the product on environmental status.
7. In case of expansion project asbestos fibre to be measured at slack emission and work zone area, besides base line air quality.
8. In case of green field project asbestos fibre to be measured at ambient air.

**ADDITIONAL ToRs FOR METALLURGICAL INDUSTRY (FERROUS AND 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. Emission from sulphuric acid plant and sulphur muck management.
3. Details on installation of Continuous Emission Monitoring System with recording with proper calibration system
4. Details on toxic metals including fluoride emissions
5. Details on stack height.
6. Details on ash disposal and management
7. Complete process flow diagram describing process of lead/zinc/copper/ aluminium, etc.
8. Details on smelting, thermal refining, melting, slag fuming, and Waelz kiln operation
9. Details on Holding and de-gassing of molten metal from primary and secondary aluminium, materials pre-treatment, and from melting and smelting of secondary aluminium
10. Details on toxic metal content in the waste material and its composition and end use (particularly of slag).
11. Trace metals in waste material especially slag.
12. Plan for trace metal recovery
13. Trace metals in water

## **Executive Summary**

Executive summary of the report in about 8-10 pages incorporating the following:

- i. Project name and location (Village, Dist, State, Industrial Estate (if applicable))
- ii. Products and capacities. If expansion proposal, then existing products with capacities and reference to earlier EC.
- iii. Requirement of land, raw material, water, power, fuel, with source of supply (Quantitative)
- iv. Process description in brief, specifically indicating the gaseous emission, liquid effluent and solid and hazardous wastes. Materials balance shall be presented.
- v. Measures for mitigating the impact on the environment and mode of discharge or disposal.
- vi. Capital cost of the project, estimated time of completion
- vii. Site selected for the project – Nature of land – Agricultural (single/double crop), barren, Govt/private land, status of its acquisition, nearby (in 2-3 km.) water body, population, within 10km other industries, forest, eco-sensitive zones, accessibility, (note – in case of industrial estate this information may not be necessary)
- viii. Baseline environmental data – air quality, surface and ground water quality, soil characteristic, flora and fauna, socio-economic condition of the nearby population
- ix. Identification of hazards in handling, processing and storage of hazardous material and safety system provided to mitigate the risk.
- x. Likely impact of the project on air, water, land, flora-fauna and nearby population
- xi. Emergency preparedness plan in case of natural or in plant emergencies
- xii. Issues raised during public hearing (if applicable) and response given
- xiii. CSR plan with proposed expenditure.
- xiv. Occupational Health Measures
- xv. Post project monitoring plan

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**Email**

**Sundar Ramanathan**

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**Re: MoM EAC 30**

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**From :** cnpandey@iitgn.ac.in Wed, Feb 17, 2021 09:57 PM  
**Subject :** Re: MoM EAC 30 📎 1 attachment  
**To :** Sundar Ramanathan <r.sundar@nic.in>, Sujit Kumar  
Bajpayee <sujit.baju@gov.in>

Dear Mr Sundar,  
The approved MoM of the 30th EAC meeting held on 10th and 11th February, 2021 is sent herewith as the attached file. You may go ahead with further necessary action regarding uploading it on the Parivesh.  
With regards,  
C. N. Pandey