GOVERNMENT OF INDIA MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE (IA DIVISION-INDUSTRY-1 SECTOR)

Dated: 06.12.2022

Date of Zero Draft MoM sent to EAC: 02.12.2022 Approval by Chairman on compiled Minutes: 06.12.2022 Uploading on PARIVESH:06.12.2022

MINUTES OF THE 18th EXPERT APPRAISAL COMMITTEE (INDUSTRY-1 SECTOR) MEETING HELD ON NOVEMBER 28-29, 2022

- Venue: Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi - 110003 through Hybrid Mode
- Time: 10:30 AM onwards

DAY-1: NOVEMBER 28, 2022 [MONDAY]

(i) **Opening Remarks by the Chairman, EAC**

Shri Rajive Kumar, Chairman EAC welcomed the Committee members and opened the EAC meeting for further deliberations.

Shri Rajive Kumar also appreciated the efforts of the Ministry's Team (Industry 1 Sector) for preparation and uploading the agenda of the EAC meetings and draft record of discussion very scientifically, systematically and timely on Parivesh Portal.

(ii) Details of Proposals and Agenda by the Member Secretary

Dr. R. B. Lal, Scientist 'E' & Member Secretary, EAC (Industry-1 Sector) appraised to the Committee about the details of Agenda items to be discussed during this EAC meeting.

(iii) Confirmation of the Minutes of the 17th Meeting of the EAC (Industry-1 Sector) held during November 14-16, 2022 at MoEF&CC through Hybrid Mode.

The EAC, having taken note that final minutes were issued after incorporating comments offered by the EAC (Industry-1 Sector) members on the minutes of its 17th Meeting of the EAC (Industry-1 Sector) held during November 14-16, 2022 conducted through Hybrid Mode, and one request has been received for modifications/factual correction, in the minutes of the 17th EAC meeting for the project/activities.

<u>Correction in the minutes of the EAC meeting w.r.t.</u> Proposed Integrated Cement Plant -Clinker (2 x 4.0 Million TPA), Cement (2 x 3.0 Million TPA), WHRS (2 x 25 MW), DG Set [2 x 1250 KVA {1000 KVA or 500 KVA, 250 KVA & 125 KVA}], Oxygen Plant (2 x 80 m³/hr) in phased manner along with installation of Railway Siding with Wagon Tippler at Village: Parewar, Tehsil: Shri Mohangarh, District: Jaisalmer (Rajasthan) by M/s. JK Cement Ltd. [Online Proposal No. IA/RJ/IND1/402352/2022; File No. IA-J-11011/498/2021-IA-II(IND-I)] – Consideration of TOR – regarding.

The instant ToR proposal was recommended by the EAC in its 17th meeting of the EAC for Industry-I sector held on 14-16th November, 2022. The Minutes were uploaded on Parivesh Portal on 24.11.2022. Further, PP vide e-mail dated 30.11.2022 requested for factual correction in the para 17.9.12 and 17.9.13 of the minutes of 17th EAC (Industry-1) meeting as follows:

Sl.	Page	Para /	Information as per Minutes of Meeting	Details to	Justification /
No.	No. of	Point		be	Remarks
	Minutes	No.		corrected	
1.	158	17.9.12	Certified Compliance Report from IRO:	This is a	Para 17.9.12
			The Status of compliance of earlier EC was	proposed	and 17.9.13
			obtained from Integrated Regional Office,	greenfield	and point
			Bangalore, based on the site visit dated	project and	17.9.14 (viii)
			22.07.2022 in the name of M/s. JK Cement	no certified	shall be
			Limited. Additional documents/information	compliance	deleted as the
			sought during the site visit were submitted by	report has	information
			Project proponent vide letter dated 21.10.2022.	been	pertaining to
			IRO has reviewed the same and has issued a	obtained by	CCR is not
			report vide letter F. No. EP/12.1/507/KAR/956	M/s. J.K.	related to the
			dated 15.11.2022	Cement	instant
2.	158	17.9.13	Written representations	Limited.	proposal and
			During the meeting, based on the deliberations	Therefore	has been
			made by the EAC, the project proponent vide	correction	inadvertently
			email dated 16.11.2022 submitted the CCR report	in the	included in
			obtained from IRO vide letter dated 15.11.2022	minutes are	the minutes of
3.	159	17.9.14	The Committee deliberated upon the certified	required.	the said
		(viii)	compliance report of IRO and found it		proposal.
			satisfactory.		

Deliberations by the EAC:

It was informed to the Committee members that the Ministry is in receipt of an email dated 30.11.2022 from M/s. J.K. Cement Limited w.r.t. ToR proposal which was earlier recommended by the EAC in its 17^{th} meeting of the EAC for Industry-I sector held on $14-16^{\text{th}}$ November, 2022.

The EAC based on the facts, noted that the request of PP may be accepted and recommended for the incorporation of the above mentioned corrections/modifications in the minutes of the meeting. Accordingly, Para 17.9.12, 17.9.13 and point 17.9.14 (viii) stands deleted from the minutes of 17th EAC (Industry-1) meeting.

The EAC also noted that no other request has been received for modifications/factual correction, in the minutes of the 17th EAC meeting for the project/activities, and confirmed the same.

Details of the proposals considered during the meeting **conducted** through **Video Conferencing**, deliberations made and the recommendations of the Committee are explained in the respective agenda items as under:

Consideration of Environmental Clearance Proposals

Agenda No. 18.1

18.1 5.0 MTPA Iron Ore Processing Plant & 3.0 MTPA Pellet Plant over an area of 26.44 Ha, Integrated with Downhill Pipe Conveyor over an area of 16.58 Ha by M/s MSPL Limited at Village Somalapura, Sandur Taluk, Bellary District, Karnataka - Consideration of Environmental Clearance.

[Proposal No.: IA/KA/IND1/402872/2022; File No. IA-J-11011/329/2021-IAII(IND-1)] [Consultant: M/s. Mineral Engineering Services; valid upto 15.05.2023 and M/s Ardra Consulting Services Pvt Ltd.: valid upto 29.12.2022]

- 18.1.1 M/s. **MSPL** Limited has made an online application vide proposal no. IA/KA/IND1/402872/2022 Dated 13.10.2022 along with copy of EIA/EMP report, 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 S. No. 2(b) Mineral Beneficiation and 3(a), Metallurgical industries (ferrous & non-ferrous) under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.
- 18.1.2 Name of the EIA consultant:

Beneficiation Plant: M/s. Mineral Engineering Services [S. No. 55, List of ACOs with their Certificate / Extension Letter No: NABET/EIA/2023/SA0163 valid till 15.05.2023; Rev. 25, Sept 05, 2022].

Pellet Plant: M/s Ardra Consulting Services Pvt Ltd. [S. No. 99, List of ACOs with their Certificate / Extension Letter No: NABET/EIA/1922/IA0055 valid till 29.12.2022; Rev. 25, Sept 05, 2022].

Details submitted by Project proponent

18.1.3 The details of the ToR are furnished as below:

Date of Application	Consideration	Details	Date of Accord	ToR Validity
09.10.2021	47 th meeting of EAC held on 28 th - 29 th Oct, 2021	Terms of Reference	15.11.2021	14/11/2025

01.01.2022	52 nd meeting of EAC	Amendment in	14.02.2022	
	held on 07.01.2022	ToR		
	27^{th} , 28^{th} and 31^{st} Jan 2022			

18.1.4 The project of M/s. MSPL Ltd., located in Somalapur Village, Sandur Tehsil, Ballari District, Karnataka State is for setting up of a new Beneficiation Plant & Pellet Plant integrated with Downhill Pipe Conveyor for production of 5.0 Million Tons Per Annum (MTPA) of Iron Ore Processing Plant & 3.0 MTPA of Pellet Plant.

18.1.5 Environmental Site Settings:

SNo	Particulars	Details		Remarks
i.	Total land	124.73 ha [Private: 29.04 ha; Govt: 81.7	1 ha; and	-
		Forest Land : 13.98 Ha.]		
		Land use breakup for Plant area at Som	alapura village	
		is as given below.		
		Description of the unit	Area in Ha	
		Iron Ore Processing	1.68	
		Pellet Plant	1.88	
		Green zone	9.82	
		Water storage	0.85	
		Raw material yard	4.56	
		Office space & Ancillary	5.95	
		Slime (tailing reject) storage &	1.70	
		Management in Plant	26.44	
		Total	26.44	
		Land use breakup for Plant area at Kalin Description of the unit	igeri village Area in Ha	
		Tailing dumping /stacking & Installation of filtration/dewatering unit.	20.32	
		Buildings, water complex & reservoir	8.10	
		system.		
		Internal roads & drainage system.	6.37	
		Future expansion for ancillary facilities	16.41	
		Green belt development.	30.51	
		Total	81.71	
2.	Land acquisition	The proposed land for plant layout at Soml	apura is owned	-
	details as per	by MSPL and the Tailing area at Kalinge	ri is applied to	
	MoEF&CC O.M.	Karnataka Udhyoga Mitra which are Non –a	agriculture land	
	dated 7/10/2014			
		Partially Acquired:		
		Acquired : 29.04 Ha,		
		10 be acquired : 95.69 Ha		

SNo	Particulars	Details			Remarks
ii.	Existence of	R&R is not involved.			-
	habitation &				
	involvement of	Yashwantnagar Village is abou	ıt 1.5 km		
	R&R if any.				
iii.	Latitude and	Plant area, Latitude N 15° 01	ant area, Latitude N 15° 01'26.10" to N 15 ⁰ 01'		
	project site	56.98° and Longitude E 76° 29'	47.22" to E 7	6 ⁰ 30' 11.74'	
		Tailing dump yard at Latitude 59'11.05' and Longitudetde E 18.68"	e N 14 ⁰ 58'31 76° 29' 30.86'	.3° to 140 ' to E 76° 30'	
iv.	Elevation of the	At Plant site : 609 m to 619 r	n AMSL,		-
	project site	Tailing storage area: 644 m t	to 673 m AM	SL	
v.	Involvement of Forest land if any.	Status of stage I Forest Clear vide File. no. FP/KA/MIN/144	Status of stage I Forest Clearance: Application submitted vide File. no. FP/KA/MIN/144985/2021 dated 19/07/2021		
		The of the forest fand involve			
vi.	Water body exists within the project site as well as study	<u>Project site</u> : Nil <u>Study area</u> :			-
	area	Water body	Distance	Direction	
		Narihalla Stream	0.32 km	W	
		Ankamanuhallu Kere	3.7 km	SE	
		Bandri Kere	6.4 km	SW	
		Tungabhadra river is located at 22.6 Kms from the proposed plant site. Only a small seasonal nallah starts adjacent to the plant area and joins Narihalla seasonal nallah/canal. Narihalla has a dam constructed downstream at a distance of 11.7 Kms. The HFL of Tungabhadra dam is at 498m AMSL and the proposed plant site has as elevation of 630m AMSL Therefore there is no impact of flood hazards for the plant site.			
vii.	Existence of ESZ/	Nil.			-
	ESA/ national park/				
	wildlife sanctuary/				
	biosphere	List of Reserved and protecte	d forests:		
	reserve/tiger	Kumaraswamy betta R.F. : 0.6	8 km/ E		
	reserve/ elephant	Kamgarh K. F. : 2.3 km/ N	Ţ		
	reserve etc. if any	Somalapur K. F. : 0.4/ km/ SV	V E		
	within the study	1 uniddaragudi K. F: 7.0 Km/ S	E		
	area				

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

S.		Unit Detail		Unit	Production Capacities
No				Configuration	
1.	Iron	ore	Beneficiation	5.0 MTPA	5.0 MTPA (through output)
	(Benefi	iciated ore)			
2.	Pellet F	Plant (Pelle	t)	3.0 MTPA	3.0 MTPA

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

S. No.	Raw Material	Quantity required per annum	Source	Distance from site (Kms)	Mode of Transportation
Benefic	ciation plant				
1	Iron Ore	50,00,000	NIOM Captive & Other Mines	4	Through DHPC & By road.
Pellet F	Pellet Plant				
1	Iron ore fines	33600000	Beneficiation Plant	4	Online Conveyor.
2	Bentonite	36000	Gujarat	2000	Road
3	Coke breeze	24000	Imported from Australia / Russia	-	Port/ road
4	Coal	96000	Imported	475	Port and by road
5	Limestone	24000	Lokapur, Karnataka	150	Rail/ road
6	Dolomite	24000	Lokapur, Karnataka	150	Rail / road

- 18.1.8 The water requirement for the project is estimated as 2491 KLD, which will be obtained from the Tungabhadra dam reservoir and the requirement of 336 m³/day during construction for three years will be met from the Bore well. The permission for drawl of surface water at operation stage is obtained from Karnataka Neravari Nigam Ltd., Vide Letter. No. KNN/Tungabadhra/Water to Factories/2022/0465 dated 25/04/2022 and in 35th proceedings of the committee formed water distribution to industries held on 04.08.2022 and the committee has recommended to provide the approval. The permission for drawl of groundwater has been obtained from Karnataka Ground Water Authority Vide Letter. No. KGWAN1673372668 dated 30.06.2022.
- 18.1.9 The power requirement for the project is estimated as 40 MW, which will be obtained from the Karnataka Power Transmission Corporation Limited.

Period	Post Monsoon Season (Oct 2021 to Dec 2021)
AAQ parameters	• $PM_{2.5} = 12 \text{ to } 36 \mu\text{g/m}^3$
at 12 Locations	• $PM_{10} = 29 \text{ to } 69 \ \mu g \ /m^3$
(min and max)	• $SO_2 = 5$ to 13 µg/m ³
	• NOx = 9 to 19 μ g/m ³
	• CO = 0.32 to $0.58 \ \mu g/m^3$
Incremental GLC	• $PM_{2.5} = 0.8 \ \mu g/m^3$ (Level at 0.5 .km in NE Direction)
level	• $PM_{10} = 2.0 \ \mu g/m^3$ (Level at 0.5 km in NE Direction)
	• $SO_2 = 0.1 \ \mu g/m^3$ (Level at 0.5 km in NE Direction)
	• NOx = 0.1 $\mu g/m^3$ (Level at 0.5 km in NE Direction)
	• CO = $0.1 \ \mu g/m^3$ (Level at 0.5 km in NE Direction)
Ground water	pH: 6.96 to 8.20, Total Hardness: 210 to 770 mg/l; Chlorides: 55 to 550 mg/l,
quality at 14	Fluoride: <0.1 to 1.70 mg/l
locations	

18.1.10 Baseline Environmental Studies:

Surface water quality at 10 locations	pH: 7.72 to 8.30; DO: min 5.3 to 5.8 mg/l and BOD: <2 to 2.4 mg/l.				
Noise levels Leq (Day and Night)	45.3 to 54.6 for th	he day time and	36.8 to 43.9 Fo	or the Night tim	ne.
Traffic assessment study findings	Traffic study has been conducted at SH-40 which is approximately 1.2 kms (distance) from the plant site. Transportation of raw material, fuel & finished product will be done 100 % by road. Existing PCU is 2127.5 PCU/day on SH-40 and existing level of service (LOS) is:				
	Road	V (Volume in PCU/day.)	C (Capacity In	Existing V/C, Ratio	LOS
	SH-40 Sandur –Kudgli Road	4571	PCU/day.)	0.304	B (very good)
	PCU load after proposed project will be 4571(Existing) + 1237 (Additional) PCU/day and level of service (LOS) will be: B good				
	Road	V (Volume	C (Capacity	Existing	LOS
	SH-40 Sandur –Kudgl Road	5808.3	15000	0.387	B (Very good)
	 * Note: Capacity as per IRC-64. Guide line for capacity for roads. Conclusion: The levels of service will same. After including additional traffic due to proposed project. 				
Flora and fauna	 Schedule-I species have been observed in the study area – Common Leopard, Sloth Bear, and Indian Rock Python. Wild life conservation plan is prepared and submitted to PCCF (Wildlife) and Chief Wildlife Warden, Karnataka vide letter dated 20.08.2022 and the same is forwarded to DCF (Ballari) vide letter No. PCCF(WL)/D/CR-60/2021-22 dated 20.09.2022 for review. 				

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

S. No.	Type of	Source	Quantity	Mode of	Disposal
	Waste		generated	Treatment	
Solid W	'aste				
1	Tailing	Beneficiation	0.9 MTPA	Tailings will be	Nearby Cement
		Plant		stored at Kalingeri	Industries, Brick,
				village about 6	Tiles, Paver
				Kms from within	Manufactures.
				the project site	
2	Fines collected	Pellet Plant	-	Will be recycled	l in pellet plant
	from ESP/Bag			alongwith c	concentrate
	filters				
Hazard	ous Waste				

S. No.	Type of Waste	Source	Quantity generated	Mode of Treatment	Disposal
1	Used Oil & Grease waste	Pump area, DG room	15 KL	KSPCB Authorized recyclers	By road
2	Waste Residue	Work shops	5 KL	KSPCB Authorized recyclers	By road

18.1.12 Public Consultation:

Details of advertisement given	07.06.2022
Date of public consultation	08.07.2022
Venue	Somlapura Village at Plant Site
Presiding Officer	District Magistrate
Major issues raised	Environmental pollution caused from plant, Local
	Employment, Women empowerment, Education
	scholarships

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

			Year of Implementation				
SI. No	Issues Raised during Public Hearing	Physical targets	1 st Year	2 nd Year	3 rd Year	Total amount (In Lakhs)	Remark
1	Pollution Control						
а	Air Pollution During Construction Period: Fugitive dust emission from construction activities.	 * Use of covered trucks, * Regular water sprinkling at vulnerable areas of construction site and roads * Development of green belt plantation • Plantation around boundary area of plant and boundary area of tailing disposal dump(15.6 Ha area @ 2500/Ha, 39,000 plants) • Plantation in open area 23.54 Ha with high canopy cover consisting of Neem, @ 1600 /Ha , 37664 trees * Supply of fruit bearing sapliings to Somalapur(300), Yeshwantanagar(450) , Kalingeri (300)and Ankanmanhall (150)villages in consultaion with the village committee and local administration 	30	30	30	90	The total plantation is been considered under EMP cost
	During Operation Period: Degradation of AAQ	ESP & bagfilter will be installed and all APCDs designed to meet emissions of <30 mg/Nm3	3190	35 50		3275	
	in the plant & vicinity due to Stack emission (mainly PM) Vehicular traffic may	Monitoring of process stacks. Ambient Air Monitoring, Fugitive emission monitoring in the plant and nearby areas	10	10	10	30	The respective capital cost is already been included in
	result in air pollution in nearby habitations	Fixed water sprinklers on raw material transport roads	20	2	2	24	EMP
	Fugitive emissions from material	Road Sprinkling by Tankers with Spray fittings	20	1.2	1.2	22.4	

			Y	ear of Imp	lementati	on	
SI. No	Issues Raised during Public Hearing	Physical targets	1 st Year	2 nd Year	3 rd Year	Total amount (In Lakhs)	Remark
	handling, transfer, loading and	Concreting/Blacktopping of internal roads (6 Km CC road)	1500	2	2	1504	
	unloading operations	Green belt development along the boundary of the plant	0.5	0.5	0.5	1.5	
	Sub total		4770.5	80.7	95.7	4946.9	
	Water Pollution Cont	rol					I
b	SurfacewaterDuringConstructionConstructionIncrease insuspendedsolidsfromstromwaterwaterrunoffduringheavyrain,situationscarryingloosesoil/constructionmaterial from site	All washable construction material will be stored under sheds or enclosed space to prevent spillage into the drainage network. Monitoring of pollutants on monthly basis	0.25	0.25	0.25	0.75	This cost is only for construction phase
	During Operation Period: Contamination of surface water due to flow of process water and surface runoff	* Process water from beneficiation plant is recycled and kept in closed circuit through thickeners, so there is no discharge of wastewater * STP based on MBBR technology for treatment of domestic wastewater * The tailing dump area will have toe walls and drainage channels followed by stabilization tanks into a tailing pond, from tailing pond water will be recirculate in the process.	1550	60	60	1670	
	Sub total		1550.25	60.25	60.25	1670.75	
	Noise Pollution Contr	ol				-	
С	During Construction Period: Movement of construction equipment's and vehicles, installation of machineries etc.	Vehicles with BS6 standards with PUC will only be deployed. No machinery or vehicle will be kept in idle running beyond 2 min time span. The whole plant is stabilized with honking zone. Workers will be provided with necessary PPE, e.g. Ear plug, Earmuffs	4	1	1	6	The mentioned procedures will be standard operating procedures under any or every contractual conditions
	During Operation Period: Equipments in the plant and auxiliaries	All noise generating equipment's including machine rooms will be covered with paddings for local noise attenuation. Equipment will be designed to confirm to occupational noise levels prescribed by regulatory agencies. A three tier tall plantation is planned all along the boundary wall to stabilization noise transmission beyond the boundary level. Workers will be provided with necessary PPE, e.g. Ear plug, Earmuffs	5	1	1	7	The cost of plantation and stabilize complied machinery cost are already incorporated in EMP Cost and the given cost is only for PPE's
	Sub total		9	2	2	13	

			Year of Implementation				
SI. No	Issues Raised during Public Hearing	Physical targets	1 st Year	2 nd Year	3 rd Year	Total amount (In Lakhs)	Remark
		About 1500 nos of manpower during construction activity.					The engagement of
2	Employment opportunity for the local people	During operation, Approximately 1652 nos of manpower is required (Direct 752 and 900 Indirect) and considering the suitability, and requirement of MSPL employment to the local shall be provided.					local man power during both construction and operation phase will be on and above the norms of employment as defined by Govt of Karnataka. Considering this above 70% of the work source will be sourced locally.
	Sub total		0	0	0	0	
3	Education for locals p	opulation					
a	School infrastructure development Projects (Smart class, science lab, Distribution of furniture, teaching and learning materials for schools)	10 Govt schools shall be supported	20	10	10	40	
	Sub total		20	10	10	40	
4	Health care facilities t	o the surrounding villages	_0				
a	Facilitating Doctors in dispensaries with provision of basic amenities	Initially Dispensary at Yashvant Nagar is been chosen for furnacing with check up table, autoclave, wall fitted test tube and jar hangers, providing two celling fans for operability. On second year based on the need assessment the second primary health care facility will be chosen for strengthening.	5	5	5	15	
b	Health Awareness program on Eye screening camps & operation camp and other general health camps	50 camps in a year and 150 such camps in 3 years.	12	12	12	36	
с	Artificial limbs and calliper camp (Jaipur foot camp)	1 camps in a year concluding the total 3 camps in 3 years	13	13	14	40	
	Sub Total		30	30	31	91	
5	Transport opportunity for the local truck drivers	Raw material iron ore fines are being transported directly through DHPC from nines. Hence, there is no requirement of engaging local trucks for this purpose.	0	0	0	0	

			Year of Implementation				
SI. No	Issues Raised during Public Hearing	Physical targets	1 st Year	2 nd Year	3 rd Year	Total amount (In Lakhs)	Remark
		Only product pellet will be transported by trucks by the purchasers directly. However, we will recommend the local transporters for this work to the pellet purchase vendors					
	Sub total		0	0	0	0	
6	Employment to the wo	omen, unemployed and disabled					
	people of the surround	ling villages of the taluk.					
А	Women empowerment through Self Help Groups	50 SHGs will be formed and provided revolving fund	10	10	10	30	
	Sub total		10	10	10	30	
7	Land Acquisition	Land under possession is litigation free					
8	Preservation of wild life The project doesn't come under the forest area. The Biodiversity survey conducted in 10 KM radius from project site, where we have found the Schedule-I fauna. Wild life conservation Plan is prepared and submitted to Chief Wild Life Warden as per TOR Condition.	10 Nos of awareness programme on wildlife and environment will be conducted in 3 villages every year. Conservation measures will be implemented such as construction of water bodies and maintenance, fruit bearing and shade giving trees around water bodies, erection of watch towers/walkie- talkie, provision of salt licks , anti-poaching guards, fire lines and budget has allocated every year.	15	5	5	25	
	Sub total		15	5	5	25	
9	Basic Infrastructure d	evelopment					
a	Providing drinking water facilities	will be installed at strategic public locations in 3 villages to meet the drinking water stabilization	10	0.5	0.5	11	
b	Provision of solar power street light	Solar street lights for 10 villages	5	5	5	15	
	Sub total		15	5.5	5.5	26	
	Grand Total		6419.75	203.45	219.45	6842.65	

18.1.13 The capital cost of the proposed project is Rs.1920 Crores and the capital cost for environmental protection measures is proposed as Rs. 75.14 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs. 1.47 Crores. The employment generation from the proposed project is 1652 [752 Nos. direct & 900 Nos. indirect]. The details of cost for environmental protection measures is as follows:

S.	Description of Item	Proposed (Rs. In Crores/lakhs)		
No.		Capital Cost	Recurring Cost	
1	Air Pollution Control/ Noise Management	1550	6.03	

S.	Description of Item	Proposed (Rs. In Crores/lakhs)		
No.		Capital Cost	Recurring Cost	
2	Water Pollution Control	50	2	
3	Green Belt Development	77	1.0	
4	Occupational health	5	31	
5	Fire extinguishers	12	3	
6	Fire hydrant with pipe line	100		
7	ESP & Stack	4000	25	
8	Bag filter system (PP+IOPB+IOGS)	190	33	
9	Filter press & Water Recovery	1500	60	
	Total	7514	147.03	

- 18.1.14 Proposed greenbelt will be developed in 39.14 ha which is about 36% 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 77055 saplings will be planted and nurtured in 39.14 Hectares in 3 years.
- 18.1.15 It is submitted that there is no violation under EIA notification 2006/no court cases/no show cause/no direction related to the project under consideration.

Deliberations by the Committee

- 18.1.16 The Committee noted the following:
 - 1. A representation has been received through email dated 23.11.2022 for rejection of the instant Environment Clearance application on multiple issues raised pertaining to the said project. The EAC is of the opinion that the project proponent shall submit the pointwise clarification on the issues raised in the representation dated 23.11.2022. The EAC advised the Ministry to forward the representation to project proponent for their clarification. In this context, representation has forwarded to PP.
 - 2. EAC noted that in the specific TOR prescribed by the earlier Committee there are very specific conditions stating to submit various action plans relating to erosion control, drainage protection, 100% waste utilisation etc. The PP needs to provide and submit the detailed action plans for mitigation. The Consultant/PP had provided very sketchy information in vague manner with arbitrary statements. Whereas it was noted during the EAC meeting that the project area is falling adjacent to thick lush green forest area and is significantly environmentally sensitive. Further, the PP is going to generate huge amount of waste tailings per year to the tune of about one million tonnes per year and has proposed to store them on a relatively high elevation of about 600 AMSL, which will cause serious pollution problems and land degradation at the dumping site as well as downstream. PP has not provided a concrete action plan to reuse the tailings or an MoU with end-user. Further, PP has to undertake ground water leaching study for heavy

metals of the tailing site. Therefore, the PP shall address all the above issues in detail scientifically and with engineering details and specific financial provisions.

- 3. The EAC noted in the application form on PARIVESH under section for Name of the Company/ Organization/User agency, the name appears as "Dr. Meda Venkataiah" which is also the name of the applicant whereas the name of the company is M/s. MSPL Limited. The EAC also noted that the Ministry has raised EDS also in this regard and issue has not been sorted at the end of project proponent. Taking into consideration that the whole process is online including generation of EC wherein data is fetched automatically from the application form on PARIVESH, it is advised that the same shall be rectified.
- 4. Total project land is 124.73 ha which also include 13.98 ha of Forest land. As reported, the proposed land for plant layout at Somalapura is owned by MSPL and the Tailing area at Kalingeri is applied to Karnataka Udhyoga Mitra. So far 29.04 ha has been acquired whereas 95.69 ha is yet to be acquired. Taking into consideration Ministry's O.M. vide F.No. 22-76/2014-IA-III dated 07.10.2014 which reads as *"While full acquisition of land may not be a prerequisite for the consideration of the case for EC, there should be some credible document to show the status of land acquisition w.r.t project site when the case is brought before the concerned EAC/SEAC for appraisal.....," EAC is of the opinion that, credible document showing the status of land acquisition shall be required at the time of appraisal in pursuance to the said O.M.*
- 5. The PP has reported that application for Forest Clearance has been submitted vide File. no. FP/KA/MIN/144985/2021 dated 19.07.2021. The EAC advised the PP to take note of Ministry's O.M. vide No. J-11013/41/2006-IA.II(I) dated 09.09.2011 as amended on 18.05.2012 and 19.06.2014 pertaining to procedure for grant of environment clearance under EIA Notification, 2006 which involve Forest land.
- 6. The nearest human settlement from the site is Yashwantnagar Village located at a distance of 1.5 Kms from the project site. Project Proponent shall prepare an action plan for environmental safeguard measures to minimise the impact on the habitation of the locals.
- 7. Narihalla Stream (0.32 km, W), Ankamanuhallu Kere (3.7 km, SE) and Bandri Kere (6.4 km, SW) exists within the study area of 10 km from the project site. A robust and full proof Drainage Conservation scheme with design and engineering details to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be submitted.
- 8. On perusal of kml file, the committee noticed that a railway line is passing through the project site. However, the PP/Consultant stated that the aforementioned railway line is passing adjacent to the project site. In this regard, the EAC is of the opinion that the PP/Consultant shall re-verify/recheck the kml file and submit the revised KML file.

- 9. The EAC noted that PP has not uploaded the covering letter forwarding of PH proceedings addressed to the Ministry. Also, EAC noted that there are several written representations received for the project. The EAC is of the view that PP shall submit the breakup of the written representations received categorically in favour of the project and against the project. The PP is also advised to share the video recording of the PH proceedings in the next consideration of proposal by EAC.
- 10. The Committee deliberated on the public hearing issues along with action plan submitted by the proponent to address the issues raised during the public hearing and is of the view that the submitted action is not sufficient to address all the issues. The EAC has advised PP to revise the action plan. The PP agreed to the advice of Committee and also committed to raise the cost of addressing PH issues to 1.5-2% of the total project cost.
- 11. The EAC noted that the TOR compliance in EIA/EMP report is general and vague and only reference is there. The PP/Consultant shall submit the gist of the TOR compliances and details of specific answers and accordingly revise EIA/EMP Report.
- 12. PP shall prepare a Village Adoption program consisting of need based community development activities and submit an undertaking for adoption of villages including the name of villages.
- 13. The EAC deliberated on the management of tailings generated out of Iron Ore beneficiation plant and is of the view that details related to generation, storage and disposal of tailings shall be submitted in a tabular form.
- 14. The Committee deliberated on the greenbelt development proposed by the project proponent and noted that proposed 30.51 ha greenbelt shall be developed at Kalingeri village. Since the total project area is distributed in pockets, PP shall clarify whether the greenbelt will be developed in all the pockets @33% as per the norms. PP shall submit a detailed action plan in this regard.
- 15. Action plan for the stock pile management including the details, financial aspects, drawings etc. shall be submitted.
- 16. In view of above, the PP requested the Committee to allow to reappear with the revised information/ clarification to the points deliberated during appraisal.

Recommendations of the Committee

18.1.17 In view of the foregoing and after detailed deliberations, the committee recommended to **defer the proposal** due to certain deficiencies in the proposal and sought requisite information on the points referred at para no. 18.1.16 above. The proposal shall be considered after submission of requisite information and updating the Report on Parivesh Portal.



Agenda No. 18.2

18.2 Expansion of Mild Steel, Sponge Iron, Steel Billets, Power Plant (AFBC), Power from Waste Heat Gases from Rotary Kiln by M/s. ASR Multimetals Pvt. Ltd., located at Survey no. 94/2, 398, 399 & 400, 394/1(P), 395, 397, NH-8A, Village: Chhadawada, Taluka: Bhachau, Dist. Kutch, Gujarat – Consideration of Environmental Clearance.

[Proposal No. IA/GJ/IND/269176/2007; File No. J-11011/251/2007-IA.II(I)] [Consultant: Enviro Resources; Valid upto: 28.12.2022]

- 18.2.1 M/s. ASR Multimetals Pvt. Ltd has made an online application vide proposal no. IA/GJ/IND/269176/2007 dated 10.11.2022 along with copy of EIA/EMP report, Form 2 and certified compliance report seeking Environmental Clearance under EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at schedule no. 3(a) Metallurgical Industries (ferrous & non-ferrous) and 1(d) Thermal power plant under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.
- 18.2.2 Name of the EIA consultant: M/s Enviro Resources [Sl. No. 70, List of ACOs with their Certificate / Extension Letter no. QCI/NABET/ENV/ACO/22/2406; valid upto 28.09.2022, Rev. 25, Sept 05, 2022. Further, QCI has extended the extension of validity of accreditation up to 28.12.2022].

Date of application	Consideration	Details	Date of accord	ToR Validity
29.01.2019	4 th meeting of EAC held on 20-22 nd Feb, 2019	Terms of Reference	27.05.2019	26.05.2022
21.07.2020	21 st meeting of EAC held on 30 th July - 1 st August, 2020	Amendment in ToR	28.08.2020	20.05.2022

18.2.3 The detail of the ToR is furnished as below:

Chronology of events for Environment Clearance:

Date	Events
1 st ToR App	lication (Proposal No. IA/GJ/IND/27526/2015)
29.04.2015	1 st Online Application for TOR
07.07.2015	1 st TOR Granted
15 th March –	Baseline study was conducted during the period 15 th March – 15 th June 2015 for preparation
15 th June	of EIA report
2015	
14.05.2018	TOR Validity Extension Granted for further period of one year, i.e. upto 06.07.2019
	subject to the condition that the baseline data and public consultation shall not be more
	than three years at the time of submission of the proposal for Environmental Clearance to
	the Ministry.
07.08.2018	Public hearing was conducted at 11.00 hrs at Village: Chhadvada project site.
1 st EC Appli	cation (Proposal No. IA/GJ/IND/85547/2015)
10.12.2018	Online EC application
$9^{th} - 11^{th}$	The proposal was considered in the EAC meeting held during 9-11 th January 2019. The
January	committee recommended for rejection of the proposal and advised the Project Proponent
2019	on the basis of following observations

Date	Events						
	'The committee noted that the baseline data is more than three years old; the EIA report is						
	not in as per the generic structure as mandated in the Appendix –III of EIA Notification						
	2006; number of ToRs prescribed were not properly addressed. The committee noted that						
	the baseline data shall not be older than 3 years by the time of application for EC to the						
	Ministry as per the Office memorandum issued by the Ministry. Further the committee						
and ToD Am	observed that the details made in the presentation and EIA EMP report is not matching."						
2 10K App 20.01.2010	10K Application (Froposal No. IA/GJ/IND/93405/2019)						
29.01.2019	Ke-application for TOK						
	Application was considered in the EAC meeting held during $20-22^{nd}$ February 2019. The						
	committee did not considered the request to exempt Public Hearing and recommended						
	ToR with Public Hearing.						
27.05.2019	Project Proponent made representations vide letters dated 21.02.2019 and 07.03.2019 for						
	exemption of Public Hearing. After detailed examination, the Ministry prescribed fresh						
	ToR vide letter dated 27.05.2019 for undertaking EIA study with Public Hearing						
01.07.2019,	Again, the Project Proponent represented vide letters dated 01.07.2019, 27.0.2019 and						
27.0.2019	28.12.2019 for exemption of Public Hearing as the Public Hearing was not older than 3						
and	years at the time of consideration for fresh ToR. There is no industrial development was						
28.12.2019	taken place around the project in the study area, i.e no land use change in the study area						
16.03.2020	Ministry considered the request of project proponent and held a personal hearing on 16 March 2020 with project proponent and ELA consultant. The Ministry referred the proposal						
	to EAC based on the following facts which were noted during the meeting:						
	to EAC based on the following facts which were noted during the meeting.						
	i. At the time of earlier EC application, Public Hearing was valid and it was only six						
	months older. Since, the project has not been implemented and the concerns of the						
	Public Hearing will be the same. Conducting of Public Hearing for the same capacity						
	/same proposal is difficult task to the company and this may cause inordinate delay.						
	ii. EIA consultant mentioned that baseline data was already collected during the period						
	March – May 2019. There are no industrial developmental activities came up in the						
	vicinity of the project area and no change in the land use. Therefore, there is no						
	change in the environmental status of the study area and in the vicinity of the project						
	only Eventually the revised EIA report will also validate the data with fresh data. The						
	Revised FIA report will be ready within a week and FC application will be submitted						
	if the Ministry exempts the Public Hearing.						
TOR Amen	dment (Proposal No. IA/GJ/IND/164426/2020)						
21.07.2020	Online Application for TOR Amendment (Exemption in fresh Public Hearing)						
28.08.2020	Amendment of ToR granted for exemption of fresh public hearing for undertaking EIA						
	study and also agreed upon to use the baseline data collected during March 2019 to May						
	2019 for preparation of EIA report.						

Details submitted by the project proponent

- 18.2.4 The project of M/s. ASR Multimetals Pvt. Ltd located in Survey no. 394/2, 398, 399 & 400, 394/1(P), 395, 397, NH-8A Village Chhadawada, Tehsil Bhachau, District Kutch, Gujarat is for expansion of existing manufacturing unit for Sponge Iron from 5500 MT/Month to 15000 MT/Month, M.S. Billets from 12333 MT/Month to 24000 MT/month, TMT Bars from 12000 MT/Month to 24000 MT/Month and Power Generation (AFBC) from 4MW to 17 MW and WHRB from 4 MW to 8 MW.
- 18.2.5 Environmental site settings

S. No.	Particulars	Details	Remarks
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S. No.	Particulars	Details				Remarks		
1.	Total land	31.46 ha [Priva	Land use:					
2.	Land acquisition	The entire lar	The entire land has been purchased for the					
	details as per	project and 1s in	roject and is in possession of the company.					
	MOEFACC $O.M.$							
3	Existence of &	R&R not invol	ved			Status of R&R		
5.	habitation of	Real not myor	vea			Not Applicable		
	involvement	Habitation	Distance		Direction	- · · · · - · · · · · · · · · · · · · ·		
	R&R, if any.	Samkhiyali	2.92 km		E			
		Chhadwada	3.05 km		S			
4.	Latitude and	Point	Latitude	è	Longitude			
	Longitude of all	А	23°18'38.25	5"N	70°28'2.35"E			
	corners of the	В	23°18'36.23	3"N	70°28'2.19"E			
	project site.	C	23°18'31.53	8"N	70°28'0.26"E			
		D	23°18'22.04	"N	70°27'57.86"E			
		E	23°18'17.24	"N	70°27'55.15"E			
		F	23°18'16.98	<u>8"N</u>	70°27'57.64"E			
		G	23°18'16.75	5"N	70°28'3.99"E			
		H	23°18'18.69	<u>"N</u>	70°28'6.96"E			
			23°18 19.99		70°28'14.82"E			
			23 18 28.34	+ 1N)''NT	70 28 17.47 E			
			23°18'34 51	''N	70°28'17.43"E			
		M	23°18'35 52	2"N	70°28'15 58"E			
		N	23°18'41.60)"N	70°28'15.80"E.			
		0	23°18'42.27	/"N	70°28'10.25"E			
		Р	23°18'36.39)"N	70°28'7.27"E			
		Centre of	22010120 00	זאיי	70°20'0 00"E			
		Project Site	25 18 28.09		70 28 8.08 E			
5.	Elevation of the	37 M above m	ean sea level					
	project site							
6.	Involvement of Forest land if any.	No involvemer	nt of Forest La	and				
7.	Water body (Rivers,	Project site: N	il			-		
	Lakes, Pond, Nala,							
	Natural Drainage,	Study area						
	within the project	Water bod	ly Distan	nce	Direction			
	site as well as study	Samkhiyali L	ake 3.5					
	area		u 2.0		IN	-		
		Coastal water i	s about 14 Kr	m (S) away from the			
		project site.	I I IXI		, anay nom no			
8.	Existence of ESZ/	Nil				-		
	ESA/ national park/							
	wildlife sanctuary/							
	biosphere reserve/							
	tiger reserve/							

S. No.	Particulars	Details	Remarks
	elephant reserve		
	etc. if any within the		
	study area		

- 18.2.6 The existing project is operative from 2005. Initially company had installed rolling mill products at M/s. ASR Multimetals Private Limited located at Survey numbers: 394/2, 398, 399 & 400 Village: Chhadwada, Taluka: Bhachau, District: Kutch, Gujarat. The unit had obtained CC&A for rolling mill products with the Consent order no: 7987 dated 31/07/2006. Later on Company applied for expansion with project for sponge iron, pig iron and captive power plant. As these products were covered under EIA notification. EC was obtained for the same vide letter no. F. No. J- 11011/ 251/2007- IA II (I) dated 31st March 2008 with validity of five years. The project is operating and has obtained CTO from time to time. The latest Consent to Operate for the existing unit was accorded by GPCB State Pollution Control Board vide Ir. No. AWH 93776 dated 20/06/2018 and valid up to 13.05.2023.
- 18.2.7 Implementation status of the existing EC/CC&A:

S. No.	Facilities	Granted Capacity	Installed Capacity	Remark
1	Sponge Iron	6000 TPM	5500 TPM	CCA was renewed vide order
2	Captive power plant Coal/ lignite based CPP WHRB	20 MW [16 MW, 4 MW]	4 MW 4 MW	no. AWH 93776 dated 20/06/2018 and valid up to 13.05.23
3	Pig Iron	5400 TPM		Pig iron plant was not installed and accordingly Consent to operate was not obtained.

A. Products of Existing EC

B. Products of Existing CC&A

S. No.	Facilities	Units	As per EC dated 31/03/2008	Implementation Status as on 13/05/2023	Production as per CTO
1	MS (Mild Steel) Rods	TPM	-	5000	5000
2	MS (Mild Steel) Wires	TPM	-	2500	2500
3	MS (Mild Steel) Flats	TPM	-	2500	2500
4	Re-Rolled Steel Products of MS (i.e. Channels, Angles, Bars, Rounds, and Sections& Profiles etc.)	TPM	-	2000	2000
5	Steel Billets /Ingots (Semi Finished Products)	TPM	-	12333	12333
6	Sponge iron	TPM	6000	5500	5500

S. No.	Facilities	Units	As per EC dated 31/03/2008	As per EC datedImplementation31/03/200813/05/2023	
7	Captive power plant Coal/ lignite based CPP/ WHRB	20 I (16 MW	MW (, 4 MW)	4 MW, 4MW	4 MW, 4MW
8	Pig iron	TPM	5400	0	0

^{18.2.8} The unit configuration and capacity of existing and proposed unit are given as below:

Sr. No.	Name of Products /By Products & Intermediate Products	Existing quantity (TPM)	Proposed Quantity (TPM)	Total quantity TPM
1	MS (Mild Steel) Rods	5000		
2	MS (Mild Steel) Wires	2500		
3	MS (Mild Steel) Flats	2500	24000	26000
	Re-Rolled Steel Products of MS (i.e.		24000	30000
4	Channels, Angles, Bars, Rounds, and	2000		
	Sections& Profiles etc.)			
5	Steel Billets / Ingots (Semi Finished	12333	24000 (Along with	36333
	Products)		Preheater & LRF)	
	(Induction Furnace)	(3 Nos.)	(2x 30T)	
6	Sponge Iron	5500	15000	20500
	(Rotary Kiln)	(2x100T)	(2x250T)	
7	Power from AFBC Boiler	4 MW	17 MW	21 MW
	(Coal Based)			
8	Power from WHRB (Waste Heat	4 MW	8 MW	12 MW
	Gases from Rotary Kiln)			

18.2.9 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	Dow	Quantity	y required pe	r annum		Distance	Mode of
No.	Material	Existing	Expansion	Total	Source	from site (Kms)	Transportation
1	Sponge Iron/ Hot Briquetted iron (HBI)	90000	180000	270000	Local/Imported	50-100 km	Road / Sea
2	Scrap	102000	204000	306000	Indonesia & South Africa (Imported)		Road / Sea
3	Steel Billets / Ingots	156000	312000	468000	Local/Imported	50-100 km	Road
4	Iron Ore/ pellets	105600	288000	393600	Jindal Saw Limited imported/domestic	50-100 km	Road / Sea
5	Coal for Sponge iron	79200	216000	295200	Indonesia & South		Road / Sea
6	Dolomite for	2400	6000	8400	Domestic /local	50-100 km	Road / Sea

S	Dow	Quantity	v required pe	r annum		Distance	Mode of	
No.	Material	Existing	Expansion	Total	Source	from site (Kms)	Transportation	
	Sponge							
7	ЦСD	30	200	230	Local Markat	50, 100 km	Pood / Soo	
1	IISD	Liter/day	Liter/day	Liter/day	Local Market	30-100 KIII	Noau / Sea	
Q	IDO	1000	2000	3000	Local Markat	50, 100 km	Pood / Son	
0	LDU	Liter/day	Liter/day	Liter/day	Local Market	30-100 KIII	Kuau / Sea	
9	Limestone	2640	7200	9840	Local Market	50-100 km	Road / Sea	
	Coalfor				Indonesia & South			
10		20400	86400	106800	Africa		Road / Sea	
	CFF				(Imported)			
11	Char Coal	15600	67200	82800	In House		Convoyor/Truck	
11	for CPP	13000	07200	82800	Production		Conveyor/ Truck	

- 18.2.10 Existing Water requirement is 679 m³/day (540 m³/day Fresh water + 139 m³/day Recycle Water), water requirement is obtained from GWIL (Gujrat water Infrastructure Limited) and permission for the same has been obtained from GWIL (Gujrat water Infrastructure Limited) vides letter No GWIL/Kutch/Ind.conn./2294 dated 24.12.2019. The water requirement for the proposed project is estimated as 1980 m³/day, out of which 1540 m³/day of fresh water requirement will be obtained from the GWIL (Gujrat water Infrastructure Limited).
- 18.2.11 Existing power is 15.5 MW (8 MW- CPP and 7.5 MW SEB/Grid). The power requirement after the expansion project will be 46.5 MW out of which 33 MW will be sourced from Captive generation and 13.5 MW from State Electricity Board. Company has also proposed to install 3 nos. of DG Set for standby purpose.

18.2.12 Baseline Environmental Studies

Period	1st December 2021 to 28th February 2022				
AAQ parameters	• $PM_{2.5} = 36.88 \text{ To } 30.6 \ \mu\text{g/m}^3$				
at 8 Locations	• $PM_{10} = 85.5 \text{ To } 77.37 \ \mu\text{g/m}^3$				
(min and max)	• $SO_2 = 20.5$ to $18.0 \ \mu g/m^3$				
	• NOx = 25.0 To 2.5 μ g/m ³				
Incremental GLC	• $PM_{10} = 0.4 \ \mu g/m^3$ (Level at 0 km in None Direction)				
level	• $SO_2 = 3.0 \ \mu g/m^3$ (Level at 0 km in None Direction)				
	• Nox =NOx= $3.0 \ \mu g/m^3$ (Level at 0 km in None Direction)				
Ground water	• pH: 7. 90 to 7.30, Total Hardness: 2500.0 to 40.0 mg/l,				
quality at 8	Chlorides: 210 to 48.5 mg/l, Zinc:0.07 to 0.04 mg/l. TDS 2950				
locations	mg/l to 236.8 mg/l				
Surface water	pH: 9.30 to 7.71, DO: 7.9 to 7.2 mg/l and Total Alkalinity: 180 mg/l to				
quality at 3	150 mg/l. COD from38 to 22.0 mg/l				
locations					
Noise levels Leq	48.9 to 62.3 dB(A) for the day time and 48.3 to 58.3 dB(A) for the				
(Day and Night)	Night time.				
Traffic	Fraffic study has been conducted at the existing highway (NH-41) is a				
assessment study	six-lane road which is approximately 0.2 m from the plant site.				
findings	Transportation of raw material, fuel & finished product will be done				
	50% by road.				
	Existing PCU is 1189.9 PCU/hr on existing highway (NH-41) and				

	existing level of service (LOS) is: B-Very Good						
	PCU load after proposed project will be 1290.4 PCU/hr and level of service (LOS) will be: B-Very Good						
	Road	Expected PCU per Hour	C (PCU/day)	Existing V/C Ratio	LOS		
	Bhachau Samkhiyali Road (NH-41)	1290.4	5400*	0.23	B – Very Good		
	* Note: Capacity as per IRC 106-1990 Guide line for capacity for roads.						
	Conclusion: The level of service will B-Very Good after including additional traffic due to proposed project.						
Flora and fauna	No schedule I fauna area.	and endanger	ed Flora obse	rved within t	he study		

18.2.13 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)	Disposal	Remarks
1	Total Fly Ash	Power Plant	441 MT/Day	Will be sold to brick manufacturing unit or used as binding material for land filling	Proposed Will be: 294 MT/Day
2	Coal Char	Power Plant	220 MT/Day	Will be reused as raw material within the plant for power generation through AFBC boiler / sold to registered dealers	Proposed Will be: 160 MT/Day
3	Slag	Manufacturi ng Process	210 MT/Day	Will be sold form road construction activity or used as binding material for land filling	Proposed Will be 140 MT/Day

Solid Waste Generation

Hazardous Waste Generation

S. No.	Type of Waste	Source	Quantity generated (TPA)	Disposal	Remarks
		Machineries		Will be reused within plant	Proposed
1	Lube oil	and DG Set	111.365	Premises as lubrication oil/sent	Will be: 75
		operation		to registered recycler	MT/Annum

18.2.14 Public Consultation:

Details of advertisement given	Notice m	ade thr	ough adve	rtisem	ent i	n the	new	vspapers Th	e Indian
	Express"	dated	5/07/2018	and	in	the 1	ocal	newspaper	"Divya

	Bhaskar" dated 05/07/2018.
Date of public consultation	07/08/2018
Venue	M/s. ASR Multimetals Pvt. Ltd., NH - 8A, near RTO Check Post,
	village Chhadavada, Taluka Bhachau, Kutchh, Gujarat.
Presiding Officer	Collector and District magistrate, Kutch
Major issues raised	Increase the CSR fund parallel to the expansion of company,
	Employment can be provided to the local people as per the
	requirement and qualification of the company and medical centre
	should also be developed, health, education, medical.

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

		Year of			Total	
	Physical	activity and action plan	imple	ement	ation	Expenditure
S. No			(Bud	get in	INR)	(Rs. in
	Name of the Activity	Physical Targets	1st	2nd	3rd	Crores)
	Increase the CSR fund	Company will carry out CSR activity				
	parallel to the	of around Rupees 1 crore and 20 lakh	Rs. 1 0	Crore	and 20	Rs. 1 Crore
1	expansion of	in next 5 years and company has	Lakh a	alloca	ted for	and 20 Lakh
	company.	prepared the list of the activity to be	5	Year	S	
		carried out by them under CSR.				
	What activity has	Company has provided cost of				
	been corried out by	construction of 3 temples of				
	compony in last 12	Ramdevpir in Samakhiyali village,				
	company in fast 15	computer for school and qota stone	Rs. 1 0	Crore	and 20	Rs. 1 Crore
2	years and what will be	of Rs. 1.50 lakh for temple are given	Lakh a	alloca	ted for	and 20 Lakh
	future for	by company. Rs. 1 crore and 20 lakh	5	Year	S	
	development of	has been allotted for future CSR				
	Gewelchiveli villege?	activity and the same will be carried				
	Samakniyan village?	out in affected villages.				
		Company's representative replied				
	Company has not	that, your village will also be				
	Company has not	included in to the villages in which	Rs. 1 0	Crore	and 20	Rs. 1 Crore
3	neiped to village for D_{0} $5/$ till new For	CSR activity is to be carried out in	Lakh a	alloca	ted for	and 20 Lakh
	\mathbf{KS} . \mathbf{J} - \mathbf{III} \mathbf{IIOW} . \mathbf{FOI}	next 5 years. CSR activity will be	5	Year	S	
	ammais.	carried out as per the suggestion of				
		the representative of your village.				
	Company should allot					
	fund for PHC, Tree	Company is planning to form a				
	plantation, from the	committee including the member of				
	CSR fund.	village, but if the committee is				
		formed including the representative	Rs. 1 0	Crore	and 20	Rs. 1 Crore
4	Company should help	of the nearby companies and carry	Lakh a	alloca	ted for	and 20 Lakh
	Village sarpanch,	out health activity and other	5	Year	S	
	village leader and	activities, then CSR fund will be				
	representative from	utilized more and effectively and we				
	CSR fund, then it will	are ready for the same.				
	be appreciated.	-				

18.2.15 Existing capital cost of project was 250 Crores. The capital cost of the proposed project is Rs. 250 Crore and the capital cost for environmental protection measures is proposed as Rs.357

Lakhs. The annual recurring cost towards the environmental protection measures is proposed as Rs. 116 Lakhs. The employment generation from the Expansion project is Existing: 450 Persons; Additional: 400 Persons = Total Manpower: 850 Persons. The details of cost for environmental protection measures is as follows:

		Existing (Rs	s. In lakhs)	Proposed (Rs. In lakhs)		
S. No.	Description of Item	Capital Cost	Recurring Cost	Capital Cost	Recurring Cost	
(i).	Air Pollution Control/ Noise Management	171	11.28	250	75	
(ii).	Water Pollution Control	42	6.23	50	20	
(iii).	Environmental Monitoring and Management	7	9.23	07	03	
(iv).	Green Belt Development	5	3.74	12	06	
(v).	Addressal of Public Consultation concerns	126				
(vi)	Fire Fighting System	2	3.89	30	10	
(vii)	Occupational Health & Safety	5	5.52	05	01	
(viii)	Construction of Septic/ Soak pit	1	0.20			
(ix)	Packaged Type of STP			03	01	
	Details of adoption of villages, if any	None	None			

- 18.2.16 Existing green belt has been developed in 10.45 ha area which is about 47.4 % of the total project area of 22.025 ha with total sapling of 14245 Trees. Proposed greenbelt will be developed in 4.0193 ha which is about 42.5 % of the total project area. Thus total of 14.475 ha area (46.0 % of total project area) will be developed as greenbelt. 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 36188 saplings will be planted and nurtured in 14.4753 hectares in 5 years.
- 18.2.17 It is submitted that there is one Notice of direction from the GPCB to unit of the Environment (Protection) Act, 1986 and the Water (Prevention and Control of Pollution) act, 1974 and the Air (Prevention and Control of Pollution) act, 1981 which was received on dated 18/07/2018 for which the remedial action taken by unit. There is no court case pending against the project.
 - Show cause Notice dated on 18/04/2017 for which the remedial action taken by unit and reply submitted to the GPCB on date 24/04/2017.
 - Show cause Notice dated on 24/09/2018 for which the remedial action taken by unit and reply submitted to the GPCB on date 08/10/2018.
 - Show cause Notice dated on 04/01/2019 for which the remedial action taken by unit and reply submitted to the GPCB on date 19/02/2019.
 - Show cause Notice dated on 07/05/2021 for which the remedial action taken by unit and reply submitted to the GPCB on date 28/05/2021.

• Show cause Notice dated on 03/02/2022 for which the remedial action taken by unit and reply submitted to the GPCB on date 10/02/2022.

Certified Compliance Report from Regional Office

- 18.2.18 The Status of compliance of earlier EC was obtained from Integrated Regional Office, Gandhinagar vide letter no, J-11/58-2022-IROGNR dated 14.10.2022 in the name of M/s. ASR Multimetals Pvt. Ltd. IRO has reported that there is a partly complied condition and other general observations pertaining to the project as mentioned below:
 - a. The green cover must be strengthened and green belt development activities to be promoted by the unit.
 - b. Garland drains must be strengthened to avoid mixing of storm water with the effluent.
 - c. The scrap storage area should be repaired in atime bound manner.
 - d. The water storage area should be revamped.
 - e. The area around the kiln should be cleaned on an urgent basis and it is directed to install a dedicated sweeping machine fbr the area.
 - f. The green belt should be developed in the area available where future expansion is not planned.
 - g. The secondary fume extraction system should be installed.
 - h. Housekeeping practices must be strengthened.

Deliberations by the Committee

18.2.19 The Committee noted the following:

The existing project is operative from 2005. Initially company had installed rolling mill 1. products. The unit had obtained CC&A for rolling mill products with the Consent order no: 7987 dated 31/07/2006. Later on Company applied for expansion with project for sponge iron, pig iron and captive power plant. As these products were covered under EIA notification, EC was obtained for the same vide letter no. F. No. J- 11011/ 251/2007- IA II (I) dated 31st March 2008 with validity of five years. Instant application is for expansion of existing manufacturing unit for Sponge Iron from 5500 MT/Month to 15000 MT/Month, M.S. Billets from 12333 MT/Month to 24000 MT/month, TMT Bars from 12000 MT/Month to 24000 MT/Month and Power Generation (AFBC) from 4MW to 17 MW and WHRB from 4 MW to 8 MW. The chronology of events for obtaining EC is detailed in para 18.2.3 above. The latest amendment of ToR has been granted on 28.08.2020 for exemption of fresh public hearing for undertaking EIA study and also agreed upon to use the baseline data collected during March 2019 to May 2019 for preparation of EIA report. However, the project proponent has submitted the application almost after a gap of years. The EAC deliberated on the course of events and noted that at post grant of 2nd ToR dated 27.05.2019, the PP made representations and submitted that the Revised EIA report will be ready within a week and EC application will be submitted, if the Ministry exempts the Public Hearing. Accordingly, Ministry granted amendment in TOR on 28.08.2020 for exemption of fresh public hearing (considering the fact that at the time of grant of 2nd TOR dated 27.05.2019, the Public Consultation dated 07.08.2018 was still 6 months old). However, PP has made the instant application

for EC almost after a period of more than 2 years from the date grant of TOR amendment and as such the PH is more than 3 years old. In pursuance to Ministry's O.M. dated 08.06.2022 pertaining to standardising the validity of baseline data and public consultation, para 6 states that the baseline data and Public Hearing shall not be more than three years old at the time of submission of application for consideration of EC. In the instant case, though PP has recollected the baseline data (1st December 2021 to 28th February 2022), but the PH (07.08.2018) is now more than 3 years old. Therefore EAC is of the opinion that the comments of the policy sector of IA Division of the Ministry shall be obtained w.r.t. consideration of PH held on 07.08.2018.

- 2. The EAC noted that as per the documents uploaded on PARIVESH portal, the consultant validity is upto 28.09.2022, however during the appraisal of the proposal, the consultant presented the validity extension letter and is valid up to 28.12.2022. The EAC advised the PP/Consultant to upload the extension letter on PARIVESH portal alongwith the application.
- 3. The Committee noted that the proposed expansion project cost is Rs. 500 Crores. However, in the form on PARIVESH portal, Rs. 1980 crores is mentioned. The EAC also noted that the form is not filled properly and advised the PP/Consultant to revise the form and with the correct information in the form.
- 4. The EAC noted that PP has reported that existing green belt has been developed in 10.45 ha area. However, on perusal of kml file, the EAC observed that greenbelt development is not satisfactory and PP needs to improve the greenbelt development. Also, the IRO report dated 14.10.2022 also reported that the green cover shall be strengthened and greenbelt development activities to be promoted.
- 5. The Committee deliberated upon the certified compliance report of IRO dated 14.10.2022 and observed that there is a partly complied condition and other general observations pertaining to the project. The EAC noted that PP has not submitted the action taken report on the partial/non complied conditions and the final closure report of IRO based on the ATR.
- 6. The Committee also deliberated on the public hearing issues along with action plan submitted by the proponent to address the issues raised during the public hearing and observed that action plan is not in conformity to the MoEF&CC O.M. dated 30/09/2020 including Action Plan, Targets and Year-wise budget.
- 7. The Committee noted that PP has received multiple show cause /directions from the GPCB and as reported by PP, the remedial action has been submitted. The EAC is of the view that PP needs to summarise the show cause /directions issued by the SPCB and also to submit the closure Report of SPCB in this regard and to present before the Committee along with all the requisite documents.
- 8. In view of above, the Project Proponent requested the EAC to allow to reappear after revision of the application.

Recommendations of the Committee:

18.2.20 In view of the foregoing and after deliberations, the Committee recommended that proposal to be **returned in its present form** to address the shortcomings enumerated at para no. 18.2.19 above and submit the revised application as per the provisions of EIA Notification, 2006. The EAC also advised that Ministry shall take the comments of the policy sector of IA division regarding the Public Hearing issue.

<u>***</u> Consideration of TOR Proposal

Agenda No. 18.3

18.3 Expansion of Cement Plant with increase of production of Clinker from 1.20 to 1.50 TPA and Cement from 1.26 to 2.20 MTPA, by M/s Parasakti Cement Industries Ltd., located at Jettipalem (V), Rentachintala (M), Guntur District, Andhra Pradesh – Consideration of TOR under Violation category as per provisions of SOP dated 07.07.2021-Regarding

[Proposal No. IA/AP/IND1/401017/2022; File No. IA-J-11011/351/2006-IA-II(IND-I)] [Consultant: M/s. B.S. Envi Tech Pvt. Ltd.; valid upto 15.05.2023]

- 18.3.1 M/s Parasakti Cement Industries Ltd., has made an application online vide proposal No. IA/AP/IND1/401017/2022 dated 10.11.2022 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(b) Cement Plants under Category "A" of the schedule of the EIA Notification, 2006 and appraised at central level. PP has applied for appraisal of proposal under violation category as per the provisions contained in the MoEF&CC Standard Operating Procedures dated 07.07.2021 pertaining to consideration of violation cases as PP has reported that they operated without the NBWL clearance and also exceeded the production beyond the previously granted EC capacity (MOEF letter no. J-11011/38/2001-IA II dated 23.08.2002) in the year 2006-07, 2007-08, 2008-09 and 2009-10.
- 18.3.2 Name of the EIA consultant: M/s. B.S. Envi Tech Pvt. Ltd. [S. No. 147, List of ACOs with their Certificate / Extension Letter No: NABET/EIA/2023/SA 0157 valid till 15.05.2023; Rev. 25, Sept 05, 2022].

Details submitted by Project proponent

18.3.3 The project of M/s. Parasakti Cement Industries Ltd., located in Jettipalem village, Rentachintala Mandal, Guntur District, Andhra Pradesh is for expansion of Cement Plant with Increase of Clinker Production From 1.20 MTPA to 1.50 MTPA & Cement (OPC/PPC/SRPC) Capacity From 1.26 MTPA to 2.20 MTPA by Upgradation/Optimization.

S. No	Particulars	Details	Remarks
i.	Total land: 42.0 Ha.	The plant is presently located in an area of 42 Ha	Land use:
		own land of PCIL. 33% of the area i.e 14 Ha is	

18.3.4 Environmental site settings:

S. No	Particulars	Details				Remark	s	
		already developed under greenbelt. No additional					Cement Plant	Area
		area will	be re	quired for enh	ancem	ent. No R&R is	Built up area	Ha.
		involved.	involved. No Forest area is involved.					12.0
							Material/stock	
						piles		
							Road area	2.00
							CPP –	3.00
							WHRB	
							Greenbelt	1.00
							Colony	14.0
							TOTAL	42.0
	T 1	TT1 1 (•	.1 1 .	1 •	C 40 H	AREA	
11.	Land acquisition	The plant	1s pi	resently locate	d in ar	area of 42 Ha	-	
	details as per	own land	ot	CIL. 33% of	the ar	ea i.e 14 Ha is		
	MoEF&CC O.M.	already d	evelo	ped under gro	eenbelt	. No additional		
	dated 7/10/2014	area will	be re	quired for enh	ancem	ent. No R&R is		
		involved.	No Fo	prest area is inv	volved.			
iii.	Existence of	None, No	R&R	is involved			-	
	habitation &	Study Are	ea:					
	involvement of	Habitatio	n	Distance (Ki	m)	Direction		
	R&R, if any.	Jettipalem	1	2.26		S		
		Mallavara	m	3.35		SW		
iv.	Latitude and	S. No.	LA	TITUDE N"	LO	NGITUDE E"	-	
	Longitude of all	Α	16	°37'22.25"N	79	9°29'56.26"E		
	corners of the	В	16	°37'29.74"N	79	9°29'52.69"E		
	project site.	C	16	°37'40.23"N	79	9°29'52.88"E		
		D	16	°37'40.46"N	79	9°30'18.35"E		
		E	16	°37'34.37"N	79	9°30'19.90"E		
		F	16	°37'22.38"N	79	9°30'19.51"E		
v.	Elevation of the	106m abo	ove M	ISL.			-	
	project site							
vi.	Involvement of	No Forest	t Lan	d Involved			-	
	Forest land if any.							
vii.	Water body (Rivers,	Project s	ite:					
	Lakes, Pond, Nala,	No water	bodie	es are present				
	Natural Drainage,							
	Canal etc.) exists	<u>Study ar</u>	ea				HFL of K	rishna
	within the project	1. Krisł	ına R	iver - 0.65 km	- N		River is 50 m A	MSL
	site as well as study	2. Nagr	juna S	Sagar Dam – 0	.71 km	n - W		
	area	3. Goli	Vagu	– 1.90 km –E	NE		Plant site is 1	06 m
		4. Halli	a Riv	er – 3.67 km -	W		AMSL	
viii	Existence of	Nearest V	Wildl	ife Sanctuary	:		-	
	ESZ/ ESA/ national	Rajiv Gar	ndhi V	Wildlife Sanctu	iary - 5	5.28 km - W		
	park/ wildlife	Eco sensi	tive z	one - 4.2 km i	n West	ern direction		
	sanctuary/							
	biosphere reserve/	List of R	eserv	ed and protec	ted for	rests:		
	tiger reserve/	1. Goli	RF-	0.2 - NE				
	elephant reserve etc.	2 Virla	nalen	n RF = 5.8 km	- ENF			
	if any within the	$\frac{2}{3}$ Δday	radev	alpalli $RF = 1$	2 km =	N		
	study area	4 Tum	muru	kota $RF = 3.01$	z = S	W		
		5 Mall	achai	da RF = 3.2 lm	n = W/N	JW		
L		J. WIAIN	avna	JULL J.J MI	LL	1 1 1		

S. No	Particulars	Details	Remarks
ix	Interlinked Project	Captive Limestone Mine located adjacent to the cement plant is interlinked with Cement Plant. The	-
		Limestone requirement of the cement plant is met from this mine.	
		The limestone requirement of the plant after the proposed expansion will increase to 2.25 MTPA. PCIL has obtained TOR from MOEFCC (Non	
		Coal) for increasing the limestone production from present 2.00 MTPA to 2.25 MTPA vide TOR no J-11015/570/2007-IA.II(M) dated 28.06.2022.	

18.3.5 The existing project was accorded environmental clearance as per the details given below and PCIL has obtained Consent to Establishment (CTE) from APPCB vide letter No: APPCB/VJA/GTR/748/HO/CFE/2007-525 dated 08.06.2007 for Clinker 0.28 to 1.20 MTPA & Cement 0.297 to 1.26 MTPA. The Consent to Operate is obtained from time to time and current CTO obtained for Clinker - 1.20 MTPA, Cement:1.26 MTPA and WHRB Power: 6.85 MW from APPCB vide letter no APPCB/VJA/GTR/748/HO/CFO/2020- dated 28/07/2020 valid upto 31.10.2025.

Sl.	EC Letter	EC C	apacity	Status
No		Clinker	Cement	
		MTPA	MTPA	
1	MOEF letter no. J-11011/38/2001-IA II dt 23.08.2002 for 900 TPD in the name of M/s. Chola Cements Ltd.	0.28	0.297	Implemented
2	EC Transferred by MOEFCC in the name of M/s Parasakti Cements Ltd dated 29.09.2003	0.28	0.297	
3	EC obtained for expansion vide MOEFCC letter no J-11011/351/2006-IA II(I) dated 17.07.2007	0.28 to 1.20	0.297 to 1.26	Implemented

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

	Before E	xpansion	After Expansion		
	Clinker	Cement	Clinker	Cement	
Line – I	0.28	1.26	0.58	2.20	
Line – II	0.92		0.92		
Total	1.20	1.26	1.50	2.20	

Proposed Modifications for Enhancement of Cement Plant Capacity

S.	Section	Before	After Expansion	Upgradation/Optimization					
No		expansion	(with upgradation/						
			modernization)						
LINE	LINE – I								
1	Limestone	350 TPH	550 TPH	-					

S. No	Section	Before expansion	After Expansion (with upgradation/	Upgradation/Optimization
110		capulision	modernization)	
	crusher (Common for Line – I & II)			
2	Raw Mill,	80 TPH	132 TPH	 Proposal of Mill internal modifications for optimization of grinding pattern Proposal of High efficiency classifier modification Increasing performance of Tertiary crusher
3	Kiln & pre-heater	0.28 MTPA	0.58 MTPA	 Preheater: Pre-heater cyclone entry areas modification to increase collection efficiency Pre-heater fan modification, PH Top high efficiency cyclone modification. Calciner modification and RABH Fan modification, P.H. Fan modification Kiln Burner pipe and firing system modification Increasing Kiln speed to optimize of kiln filling and RABH Fan modification If required
4	Cooler	0.28 MTPA	0.58 MTPA	Cooler static grate modification and Cooler ESP Field Extension
5	Coal mill / Pet Coke mill	10 TPH	15 TPH	 Proposal of High efficiency separator installation. Proposal of Mill External Dryer for enhance the capacity of mill Mill main Bag filter chamber extension and Mill Fan volume Increasing
LINE	– II		1	
1	Raw Mill,	190 TPH	190 TPH	-
2	Kiln & pre-heater	0.92 MTPA	0.92 MTPA	-
3	Cooler,	0.92 MTPA	0.92 MTPA	-
4	Coal mill / Pet Coke mill,	19 TPH	19 TPH	-
5	Cement Mills of Line – I,	65 TPH	105 TPH	Up gradation of Existing cement mills 1 & 2 by implementation of pre-grinding technology i.e. Roller Press Technology
6	Cement Mills of Line – II,	120 TPH	200	-

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

Description	Before	After	Source	Distance
	Expansion	Expansion		
	MTPA	MTPA		
Lime stone	1.800	2.116	Captive limestone mines located	-
			adjacent to the plant	
Laterite/ Iron	0.060	0.159	Laterite from Tandur, Telangana	284 km
ore			Laterite from rajamundry	321km
Fly ash	0.0118	0.393	VTPS Vijayawada, NTPS	163km
			Badrachalam	246km
Gypsum	0.060	0.110	Vizag	510km
Slag		0.165	Vizag	510km
Coal	0.192	0.240	Krishnapatnam port nellur, Vizag	330km
			port Singareni kottagudem	510km
				205km

- 18.3.8 The existing water requirement is 1865 m³/day. No additional water is required for proposed expansion. Water requirement is met from River Krishna. PCIL has obtained permission for the withdrawl of 1865 m³/day water from time to time and the latest permission is renewed vide GO Ms No. 66 dated 10.12.2020 which is valid for 5 years w.e.f. 30.05.2020.
- 18.3.9 The existing peak power requirement of the cement plant is 21.875 MW. Presently the power requirement is met from the existing 6.875 MW WHRB power plant and 15 MW from grid. Additional power requirement will be 5.0 MW and the same will be sourced from Grid.
- 18.3.10 The capital cost of the project is Rs.90 Crores. No additional Manpower will be required for expansion by Upgradation/Optimization.

Violation Details

- 18.3.11 Following are reported by PP w.r.t. violation under EIA Notification, 2006/ court case/ show cause/ direction related to the project under consideration.
 - EC was obtained from MoEFCC vide letter no J-11011/351/2006-IA II(I) dated 17.07.2007 for expansion of Clinker from 0.28 to 1.20 MTPA & Cement from 0.297 to 1.26 MTPA with a Specific Condition 'xv' to obtain clearance from National Board for Wildlife prior to the commencement of construction activity since the project is located within 10 km of Rajiv Gandhi Wild Life Sanctuary."
 - Accordingly, PCIL has submitted application for Wild Life Board Clearance on 1.08.2007 to PCCF. Letter received from PCCF to deposit (Conservation Budget) Rs 39 Lakhs on 28.05.2008 - Wild life Board Clearance was obtained on 09.02.2010.
 - iii. However, PP operated without the NBWL clearance and also exceeded the production beyond the previously granted EC capacity (MOEF letter no. J-11011/38/2001-IA II dated 23.08.2002) in the year 2006-07, 2007-08, 2008-09 and 2009-10 as detailed below. Hence the proposal is filed under violation category.

CI.			Actual Production		EC Capacity	
SI. No	EC Letter	Year	Clinker	Cement	Clinker	Cement
INO			MTPA	MTPA	MTPA	MTPA
1	MOEF letter no. J 11011/38/2001-IA II d	2005-2006	0.1882	0.1891	0.28	0.297

CI.			Actual F	Production	EC Capacity	
SI. No	EC Letter	Year	Clinker	Cement	Clinker	Cement
INU			MTPA	MTPA	MTPA	MTPA
	23.08.2002 for 900 TPD (M/s Chola Cements Ltd)					
2	Transferred to M/s Parasakti Cements Ltd & 29.09.2003	2006-2007*	0.4551	0.4562	0.28	0.297
		2007-2008*	0.5072	0.5436	1.2	1.26
		2008-2009*	0.5167	0.6067	1.2	1.26
		2009-2010*	1.0681	1.0257	1.2	1.26
		2010-2011	0.8822	0.9341	1.2	1.26
		2011-2012	0.9491	1.0951	1.2	1.26
		2012-2013	0.9297	1.0310	1.2	1.26
	MOEFCC letter no J-	2013-2014	0.7755	0.8313	1.2	1.26
3	11011/351/2006-IA II(I) dated	2014-2015	0.7542	0.8502	1.2	1.26
	17.07.2007	2015-2016	0.7530	0.8685	1.2	1.26
		2016-2017	0.7532	0.8603	1.2	1.26
		2017-2018	0.8448	0.9559	1.2	1.26
		2018-2019	1.0307	1.1512	1.2	1.26
		2019-2020	0.6781	0.8158	1.2	1.26
		2020-2021	0.8270	0.8342	1.2	1.26
		2021-2022	0.9121	1.0396	1.2	1.26

Note:

• During 2006-2007 exceeded the production beyond the previously granted EC capacity (MOEF letter no. J-11011/38/2001-IA II dated 23.08.2002)

• During 2007-08, 2008-09 and 2009-10, operated without NBWL Clearance and with excess production beyond the previously granted EC capacity (MOEF letter no. J-11011/38/2001-IA II dated 23.08.2002).

<u>Compliance to violation standard operating procedure vide MOEFCC OM No F. No. 22-</u> 21/2020-IA.III dated 7th July, 2021

1.0 Details of Excess Production and Violation

Sl. No	EC Letter	Year	Actual Production Cement MTPA	EC Capacity Cement MTPA	Calculation	Excess production Million Tonnes			
Excess	Excess production above EC capacity								
1	MOEF letter no. J- 11011/38/2001-IA II dt 23.08.2002 (M/s Chola Cements Ltd) Transferred to M/s Parasakti Cements Ltd & 29.09.2003	2006-2007	0.4562	0.297	0.4562-0.297	0.1592			
Production without obtaining Wildlife Boad Clearnce during the period 2007-2010									
2	MOEFCC letter no J-	2007-2008	0.5436	*1.26	0.5436-0.297	0.2466			

Sl. No	EC Letter	Year	Actual Production Cement MTPA	EC Capacity Cement MTPA	Calculation	Excess production Million Tonnes		
	11011/351/2006-IA II(I)	2008-2009	0.6067	*1.26	0.6067-0.297	0.3097		
	dated 17.07.2007	2009-2010	1.0257	*1.26	1.0257-0.297	0.7287		
	Total 1.4442							
*EC Valid for 0.297 MTPA								

2.0 Compliance to SOP Standard Operating Procedure - Guiding Principles

S. No.	Points	Compliance status
Ι	Without prejudice to any other	Case will be filed at the 1st Class, Magistrate Court,
	consequences, action has to be	Gurazala Mandal for Credible Action case under EPA,
	initiated under section 15 read with	1986.
	section 19 of The Environment	
	(Protection) Act, 1986 against all	
	violations.	
Π	Projects not allowable/permissible, for	Not Applicable.
	grant of EC, as per extant regulations:	EC-1: MOEF letter no. J-11011/38/2001-IA II dt
	To be demolished.	23.08.2002 for 900 TPD & 10 MW coal based CPP In the
		name of M/s Chola Cements Ltd (transferred to Parasakti
		Cements Ltd on 29.09.2003 for 0.297 MTPA Cement
		EC-2; EC obtained for expansion vide MOEFCC letter no
		J-11011/351/2006-IA II(I) dated 17.07.2007 for 1.26
		MTPA Cement
III	Projects allowable/permissible, if prior	PCIL continued with permitted production of 1.26 MTPA
	EC had been taken as per extant	after receipt of NBWL clearance
	regulations: To be closed until EC is	
	granted (if no prior EC has been taken)	
	or to revert to permitted production	
	level (in case prior EC has been	
	granted).	
IV	Polluter pays: Violators to pay for	Penalty Calculation as per SOP Issued Vide OM F.No. 22-
	violation period - proportionate to the	21 /2020-IA.III dated 7 th July, 2021
	scale of project and extent of	Capital Cost – Rs 135 crores (1 % of Capital Cost – Rs 135
	commercial transaction.	Lakhs)
		Penalty in Rs @ 0.25 % of Turnover on Excess production
		of 1.44 million tonnes (1.44 X1000000XRs 3000 (per
		t)/100000) = 43200 Lakhs) = Rs 108 Lakhs @0.25 % as per
		SOP of MOEFCC
		Total Penalty = Rs 135 Lakhs + Rs 108 Lakhs = Rs 243
		Lakhs
		Penalty worked out as per SOP is Rs 243 /- Lakhs
V	Setting up a mechanism for reporting	PCIL on its own submitted the proposal as violation while

S. No.	Points					Compliance status						
	of	violation	to	the	regulatory	submitting	the	proposal	vide	EC	application	no.
	authority(ies).				IA/AP/IND-	-1/401	017/2022 c	on 10.1	1.2022	2		

18.3.12	Proposed Terms of Reference:	[Baseline data collection	period: March to May 2022]
	1	-	· · · ·

Attributes	Parameters	Sampling		Remarks	
		No. of	Frequency		
		Stations			
A. Air	Temperature, wind	1	24 hours	-	
a) Meteorological	speed, wind				
Parameters	direction, relative				
	humidity, rainfall,				
	and cloud cover				
			Twice a week per		
b) AAQ parameters	PM10, PM2.5,	10	month for three	-	
	SO2, NOx, and CO		months		
B. Noise	Day and Night	10	24 hour reading	-	
			will collected		
			once in the		
	0 0	10	monitoring season		
C. Water	Surface water as per	10			
Surface water/Ground water	CPCB	0	Once in	-	
quality parameters	Ground Water as	9	monitoring season		
	per 15 10500				
D. Land	As per CPCB	10	Onco	-	
a) Son quanty	ru Electrical	10	monitoring sosson		
	Conductivity		monitoring season		
	Exchangeable				
	Cations CEC				
	Organic Carbon				
	Organic Matter				
	available NPK and				
	Heavy Metals				
	5				
b) Land use	Remote sensing	10 km	-		
	satellite data	radial		-	
		distance			
E. Biological	Primary as well as secondary data will be conducted for flora and				
	fauna of the study are	a during monit	oring Season.		
a. Aquatic					
b. Terrestrial					
F. Socio-economic	Primary and Secondar	y Data Collec	tion		
parameters	Need Based Studies				

Written representations:

18.3.13 During the meeting, based on the deliberations made by the EAC, the project proponent vide letter dated 28.11.2022 through email dated 28.11.2022 submitted the revised PPT and PFR

incorporating Compliance to Violation SOP dated 07.07.2021 as presented to the EAC and MoEF&CC during the proposal appraisal. The same is updated at para 18.3.11 above.

Deliberation by the Committee

- 18.3.14 The Committee noted the following:
 - i. The instant proposal is for expansion of Cement Plant with Increase of Clinker Production From 1.20 MTPA to 1.50 MTPA & Cement (OPC/PPC/SRPC) Capacity From 1.26 MTPA to 2.20 MTPA by Upgradation/Optimization.
 - ii. The EAC deliberated on the proposal. Based on the KML file presented by the PP, the proposed Unit is brownfield project.
 - iii. The project proponent in the instant application has applied for ToR and decided to come before the committee for appraisal of proposal under violation category as per the provisions contained in the MoEF&CC Standard Operating Procedures dated 07.07.2021 pertaining to consideration of violation cases as PP has reported that they operated without the NBWL clearance and also exceeded the production beyond the previously granted EC capacity (MOEF letter no. J-11011/38/2001-IA II dated 23.08.2002) in the year 2006-07, 2007-08, 2008-09 and 2009-10.
 - iv. EC was obtained from MoEFCC vide letter no J-11011/351/2006-IA II(I) dated 17.07.2007 for expansion of Clinker from 0.28 to 1.20 MTPA & Cement from 0.297 to 1.26 MTPA with a Specific Condition 'xv' to obtain clearance from National Board for Wildlife prior to the commencement of construction activity since the project is located within 10 km of Rajiv Gandhi Wild Life Sanctuary." PCIL has submitted application for Wild Life Board Clearance on 1.08.2007 to PCCF. Letter received from PCCF to deposit (Conservation Budget) Rs 39 Lakhs on 28.05.2008 Wild life Board Clearance was obtained on 09.02.2010.
 - v. The EAC noted that it is a fit case of violation and to be apprised based on the provisions of the SOP dated 07.07.2021 [Violation Cases]. The Project proponent has to comply all the procedure as laid down in the SOP dated 07.07.2021.
 - vi. PP has submitted compliance to violation standard operating procedure vide MOEFCC OM No F. No. 22-21 /2020-IA.III dated 7th July, 2021 as detailed in para 18.3.11 above. The Committee deliberated on the same and found it satisfactory.
 - vii. The plant is presently located in an area of 42 Ha own land of PCIL. No additional area will be required for enhancement.
 - viii. Captive Limestone Mine located adjacent to the cement plant is interlinked with Cement Plant. The Limestone requirement of the cement plant is met from this mine. The limestone requirement of the plant after the proposed expansion will increase to 2.25 MTPA. PCIL has obtained TOR from MOEFCC (Non Coal) for increasing the limestone production from present 2.00 MTPA to 2.25 MTPA vide TOR no J-11015/570/2007-IA.II(M) dated 28.06.2022.

- ix. The nearest habitation to plant are Jettipalem (2.26 km, S) and Mallavaram (3.35 km, SW) from the project site boundary.
- Krishna River (0.65 km, N), Nagarjuna Sagar Dam (0.71km, W), Goli Vagu (1.90km, ENE) and Hallia River (3.67 km, W) are flowing within 10 Km. radius of the plant site. The EAC is of the opinion that water bodies shall not be disturbed. Mitigation measures w.r.t. safeguarding the water bodies shall be prepared and included in the EIA/EMP Report.
- xi. Rajiv Gandhi Wildlife Sanctuary is at a distance of 5.28 km from the project site in the Western direction. The eco sensitive zone lies at a distance of 4.2 km in Western direction. As reported Wild life Board Clearance has been obtained on 09.02.2010.
- xii. The existing water requirement is $1865 \text{ m}^3/\text{day}$ and is met from River Krishna. Ground water withdrawal is not permitted.

Recommendations of the Committee

- 18.3.15 The EAC noted that it is a fit case of violation and apprised based on the provisions of the SOP dated 07.07.2021 [Violation Cases]. After deliberations, the Committee recommended the project proposal for prescribing following specific ToRs for undertaking detailed EIA and EMP study subject to uploading the written submission on portal in addition to the generic ToRs enclosed at Annexure-1 read with additional ToRs at Annexure-2.
 - (i) PP needs to comply all the points of TOR for Violation Project and follow SOP dated 07.07.2021 issued by the Ministry of Environment, Forest & Climate Change, for identification & handling of Violation cases under EIA notification 2006.
 - (ii) The State Government/SPCB to take action against the project proponent under the provisions of the Environment (Protection) Act, 1986, and further no consent to operate to be issued till the project is granted EC for the Unit which violated under the provision of the EIA Notification 2006 i.e. 1.4 MTPA Iron Ore Pellet Plant.
 - (iii) Assessment of ecological damage with respect to air, water, land and other environmental attributes. The collection and analysis of data shall be done by an environmental laboratory duly notified under the Environment (Protection) Act, 1986, or an environmental laboratory accredited by NABL, or a laboratory of a Council of Scientific and Industrial Research (CSIR).
 - (iv) Preparation of EMP comprising remediation plan and natural and community resource augmentation plan corresponding to the ecological damage assessed and economic benefits derived due to violation.
 - (v) The remediation plan and the natural and community resource augmentation plan to be prepared as an independent chapter (13) in the EIA report by the accredited consultants.
 - (vi) Budget of remediation plan and natural and community resource augmentation plan corresponding to the ecological damage shall be completed within three years and to be prepared accordingly.
 - (vii) The project proponent shall require to submit a bank guarantee equivalent to the amount of remediation plan and natural and community resource augmentation plan with the SPCB
prior to the grant of EC. The quantum shall be recommended by the EAC and finalized by the regulatory authority. The bank guarantee shall be released after successful implementation of the EMP, followed by recommendations of the EAC and approval of the regulatory authority.

- (viii) Project proponent shall implement penalty provisions i.e., 1% of project cost attributable to the expansion, incurred up to the date of filing of application along with the EIA/EMP report as contained in the paragraph 12 of the Standard Operating Procedure dated 7/07/2021 shall be complied with.
 - (ix) The nearest habitation to plant are Jettipalem (2.26 km, S) and Mallavaram (3.35 km, SW) from the project site boundary. Project Proponent shall prepare an action plan for environmental safeguard measures to minimise the impact on the habitation of the locals. The company shall also include some of these locations in its environmental monitoring programme.
 - (x) Krishna River (0.65 km, N), Nagrjuna Sagar Dam (0.71km, W), Goli Vagu (1.90km, ENE) and Hallia River (3.67 km, W) are flowing within 10 Km. radius of the plant site. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be implemented.
 - (xi) The water requirement of 1865 m³/day shall be met from River Krishna after obtaining necessary permission from the Competent Authority. Ground water withdrawal is not permitted.
- (xii) Detailed description of micro flora and fauna (terrestrial and aquatic) existing in the study area with special reference to rare, endemic and endangered species. Details of flora and fauna existing in the study area shall be duly authenticated by the concerned DFO of the area. In case of existence of any endangered species and Schedule I fauna, authenticated conservation plan shall be submitted.
- (xiii) Explore possibilities for recycling and reusing of treated water in the unit to reduce the fresh water demand and waste disposal.
- (xiv) The PP should submit the photograph of monitoring stations & sampling locations. The photograph should bear the date, time, latitude & longitude of the monitoring station/sampling location. In addition to this PP should submit the original test reports and certificates of the labs which will analyze the samples.
- (xv) PP shall submit action plan for rainwater harvesting system.
- (xvi) Action plan for 100 % solid waste utilization shall be submitted.
- (xvii) Project proponent shall prepare layout plan showing all internal roads minimum 6m width and 9m turning radius with proper looping for smooth traffic flow, including fire tender as per NBC. Road network shall connect all service areas in layout. This drawing shall include area statement showing plot area, area under roads, parking, green belt with calculations and % with respect to plot area of project site and proper indexing.
- (xviii) Project proponent shall submit contour map of project site along with drainage disposal system with calculations and drawings supported with proper indexing including rain water harvesting details with calculations mentioning about GW recharge along with relevant drawing.

- (xix) Project proponent shall submit a study report on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitorable with defined time frames", when PP comes for EC proposal. This study shall be formulated keeping in view of India's Net-zero commitment at the COP-26 Climate Summit.
- (xx) As part of Corporate Environment Responsibility (CER) activity, company shall adopt nearby villages based on the socio-economic survey (10 Kms radial coverage from the project site) and undertake community developmental activities in consultation with the village Panchayat and the District Administration. In this regard, time bound action plan as per the MoEF&CC Office Memorandum dated 30/09/2020 shall be submitted.
- (xxi) Traffic study shall be carried out inter-alia including existing road details with traffic load, proposed quantum of material to be transported by sea/rail/road with anticipated vessels/rakes/vehicles details, line source modelling and infrastructure strengthening details etc., These details shall be included in the EIA report.
- (xxii) Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.
- (xxiii) Action plan to limit the dust emission from all the stacks below 30 mg/Nm³ shall be furnished. Action plan for fugitive emission control in the plant premises shall be provided.
- (xxiv) A Plan of Action for disposal of e-waste must be drawn up and implemented.
- (xxv) PP shall explore the possibility of plastic waste utilization in the Plant/Unit process.

Agenda No. 18.4

18.4 Expansion of Total Production Capacity from 92500 to 235000 MTPA and augmentation of integrating melting and rolling facility by M/s Kundlas Loh Udyog, located at Village Baliana, Tehsil Baddi & District Solan, Himachal Pradesh – Consideration of TOR.

[Proposal No. IA/HP/IND/288268/2022; File No. IA-J-11011/350/2017-IA-II(I)] [Consultant: M/s. Shivalik Solid Waste Management Limited; valid upto 16.08.2023]

18.4.1 M/s. Kundlas Loh Udyog has made an application online vide proposal no. IA/HP/IND/288268/2022 dated 15.11.2022 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 Non-ferrous) under Category "B" EIA Notification, 2006. However, due to the applicability of general condition i.e., interstate boundary of Haryana and Himachal Pradesh at distance of 3.16 Km in west direction, the project is being appraised at the Central level as Category 'A'.

18.4.2 Name of the EIA consultant: M/s. Shivalik Solid Waste Management Limited [S. No. 107, List of ACOs with their Certificate / Extension Letter No: NABET/EIA/2023/SA 0169 valid till 16.08.2023; Rev. 25, Sept 05, 2022].

Details submitted by Project proponent

18.4.3 The project of M/s Kundlas Loh Udyog located in Baliana Village, Baddi Tehsil , Solan District, Himachal Pradesh is for expansion of steel manufacturing plant unit for enhancement of production of Rolling Products from 92500 MTPA to 2,35,000 MTPA.

S.No.	Particulars			Details			Rem	arks	
i.	Total land	0.7789	ha [Priv	ate]			Land	use:	
							Industrial	use as it	
							is an	existing	
							project		
ii.	Land acquisition	The to	tal land	is acquired by	the company. I	No			
	Details as per	additio	onal land	required for pro	posed expansion	n.			
	MoEF&CC O.M.								
	dated 7/10/2014								
iii.	Existence of	Projec	t site: Na	me of village: l	Baliana		R&R not applicable		
	Habitation &						as it is ar	n existing	
	Involvement of	Study	Area: 10	km			project	and	
	R&R, if any.	Habit	ation	Distance	Direction		expansion	will be	
		Barc	otiwala	0.7 km	N		done on	existing	
		Shival	ik Nagar	1.20 km	Ν		premises o	only	
iv.	Latitude and	P	oint	Latitude	Longitude				
	Longitude of all	1	A	30°54'59.30	76°49'57.92				
	Corners of the]	3	30°54'59.11	76°49'58.59				
	project site.	(2	30°54'59.87	76°49'59.04				
		I)	30°54'59.83	76°50'1.55				
]	Ξ	30°54'56.47	76°50'3.50				
]	F	30°54'56.58	76°50'2.62				
		(ũ	30°54'58.71	76°49'57.59				
٧.	Elevation of the	448 m	above me	ean sea level					
	project site								
vi.	Involvement of	No inv	olvement	of forest land.					
	Forest land if any.								
vii.	Water body (Rivers,	Projec	t site: Ni	1			-		
	Lakes, Pond, Nala,								
	Natural Drainage,	Study	area:						
	Canal etc.) exists								
	Within the project	Water	r body	Distance	Direction				
	site as well as study	Sitoo	Majra Na	la 1.6	SE				
	area	Balad	Nadi	1.7 km	NW				
		Marha	nwali Na	di 2.6	SE				
		Nanak	pur Nadi	4.0	SE				
		Sirsa l	River	2.8	NW				
viii.	Existence of ESZ/	Nil.				-			

18.4.4 Environmental site settings:

S.No.	Particulars	De		Remarks				
	SA/ national park/							
	wildlife sanctuary/							
	biosphere reserve/	List of Reserved and p	rotected fo	prests:				
	tiger reserve/	Reserved/Protected	D:					
	elephant reserve etc.	Forest	Distance	Direction				
	if any within the	Khattapani PF	8.2	ESE				
	study area	Tibbi PF	7.8	ESE				
		Banoi PF	9	ESE				
		Kharota PF	8.8	ESE				
		Mandhala PF	5.9	ESE				
		Dhaular PF	5.6	Е				
		Jumalpur PF	8.0	Е				
		Nalki PF	5.7	ENE				
		Bowan PF	8.4	ENE				
		Balmu PF	6	ENE				
		Buliwala PF	5.2	NE				
		Dhanyawan PF	6.8	NE				
		Tujhar PF	7.2	NE				
		Baraghu PF	7.6	NE				
		Sukal PF	9.1	NE				
		Dasora PF	2.5	NE				
		Aleta PF	5.6	NE				
		Madphal PF	7.0	NE				
		Badheri PF	9.6	NE				
		Karoli PF	5.8	NE				
		Ambka RF	4.6	Ν				
		Gattiwala PF	9.4	NE				
		Phophla PF	8.0	Ν				
		Retwali RF	7.0	NNE				
		Jhakhar PF	8.4	NNW				
		Dharampur RF	6.0	NNW				
		Khol Dharampur RF	8.2	WNW				
		Thapal Nawannagar RF	4.9	SW				
		Marhanwala RF	4.0	SW				
		Lahrondi RF	5.0	S				
		Kol-hai-dun RF	6.7	SE				
ix.	SPA/CPA	The unit is located at H	Baddi, Him	nachal Pradesh.				
		As per Hon'ble NGT	As per Hon'ble NGT order dated 13.12.2018					
		"CPCB to rank industrial units on pollution						
		levels"; the CEPI score of Baddi, Himachal						
		Pradesh is 69.07 i.e., below 70, hence it falls						
		under SPA (Severely Pc	lluted Are	a).				

18.4.5 The existing project was accorded environmental clearance vide File No. J-11011/350/2017-IA. II (I) dated 08.05.2020 for expansion of Total Production Capacity and augmentation of integrating melting and rolling facility (from 54,000 TPA to 92,500 TPA). Consent to Operate for the existing unit was accorded by HP State Pollution Control Board vide Consent No. CTO/BOTH/RENEW/RO/2021/3196108 dated 01.04.2021. The validity of CTO is up to 31.03.2024.

10.4.0											
Sl.	Facilities	Units As per EC dated		Implementation	Production as per CTO						
No.			08.05.2020	Status as on date	dated 01.04.2021						

18.4.6 Implementation status of the existing EC

^{18.4.7} The unit configuration and capacity of existing and proposed project is given as below:

]	Existing	g facilities	EC date	ed 08.0	20			Final				
		Т	otal	Implem	ented	Ur	1-	٨	nor	Pr	oposed	(Fv	isting +	
GI	Plant	(A + B)		(A)		(B) (B)		CTO Un		Units (Example) Proposed)		oposed)		
51. No.	Equipment/ Facility	ation	ity	ation	ity	ation	ity	ation	ity	ation	ity	ation	ity	Remarks
		ungilno	Capac	onfigu	Capac	onfigun	Capac	onfigun	Capac	onfigun	Capac	onfigun	Capac	
		C		C	-	C		0		Ö		C		
1.	Induction	24	92,500	24 TPH	92,500			24	92,500	60	2,35,000	60	2,35,000	Replacement of
	Furnaces	TPH	TPA		TPA			TPH	TPA	TPH	TPA	TPH	TPA	existing Induction
														furnace proposed

18.4.8 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 (TPA)			Source	Distance from site	Mode of Transportation
		Existing	Expansion	Total		(Kms)	
1.	Scrap steel,	1,02,300	1,61,700	2,64,000	Orissa,	1800 km	Road
	Ferro Alloys,				Jharkhand,	1500 km	
	Sponge iron				Delhi	300 km	

- 18.4.9 The existing water requirement is 65 m³/day, which is obtained from borewell (I&PH Department, HP) and permission for the same has been obtained vide letter no. IPH-SE-P&I-II-EE-GWA/2019-20:676-79 dated 21.09.2019. The water requirement for the proposed project is estimated as 81 m³/day, out of which 67 m³/day of freshwater requirement will be obtained from the groundwater through tube well and the remaining requirement of 14 m³/day will be met from the treated wastewater from STP. The permission for drawl of groundwater is obtained from I&PH Department, HP vide Lr. No. IPH-SE-P&I-II-EE-GWA/2019-20:676-79 dated 21.09.2019.
- 18.4.10 The existing peak power requirement of 13.4 MW is obtained from Himachal Pradesh State Electricity Board. The power requirement for the proposed project is estimated as 18 MW, which will be obtained from Himachal Pradesh State Electricity Board.
- 18.4.11 The capital cost of the project is Rs 40 Crores and the capital cost for environmental protection measures is proposed as Rs. 0.4 Crores. The employment generation from the proposed expansion project is 351.

18.4.12 It is submitted that there is no violation under EIA notification 2006/no court cases/no show cause/no direction related to the project under consideration.

		S		
Attributes	Parameters	No. of stations	Frequency	Remarks
A. Air				
a. Meteorological parameters	Temperature, Relative humidity, Wind Speed & Wind Direction	1	hourly basis	at project site
b. AAQ parameters	PM10, PM2.5, SO2, NOx, CO, NH3, Pb, Benzo(a)pyrene, O3	8	24-hourly sample twice a week for 12 weeks. CO and ozone samples will be collected on 1- hour basis.	
B. Noise	Day-Night time Leq	8	Once during the study period	
C. Water				
Surface water quality parameters	pH, Temperature, Turbidity, Dissolved Oxygen, Biological Oxygen Demand, COD, Electrical Conductivity, TDS, Boron	6	Once during the study period	
Ground water quality parameters	Colour, odour, Turbidity pH, temperature, Chlorides (as Cl), Iron (as Fe), Fluoride (as F), Magnesium (as Mg2+), Nitrate (as NO3), Sulphate (as SO4), Calcium, Sodium, Potassium, Salinity, Total nitrogen, total phosphorus, DO, BOD, COD, Phenol, Cadmium (as Cd), TDS, Lead (as Pb), Chromium (as Cr), Cyanide (as CN), Zinc (as Zn), Copper (as Cu), Aluminum (as Al), Boron, Nickel (as Ni), Arsenic (as As), Mercury (as Hg), Total Alkalinity, Total Hardness (as CaCO3), Total coliforms, E-coli, Fecal coliforms.	8	Once during the study period	
D. Land				
a. Soil quality	Soil texture, particle size distribution, sand, clay, silt, bulk density, pH, electrical conductivity, Soil Moisture content, Organic matter, N, K, P, cation exchange	8	Once during the study period	

18.4.13 Proposed Terms of Reference: [Baseline data collection period: October 2022 to December 2022]

		S	ampling		
Attributes	Parameters	No. of	Frequency	7	Remarks
		stations			
	capacity, Na, Sodium absorption				
	ratio, water holding capacity,				
	Permeability, Porosity				
	Pre and Post operational Land use				
	Impact				
b. Land use	-	Core			
		and			
		buffer			
		zone			
E. Biological	Biodiversity survey	Core	once in	a	
a. Aquatic		and	season		
b. Terrestrial		buffer			
		zone			
F. Socio-economic	Socio-economic survey	Core	once in	a	
parameters		and	season		
		buffer			
		zone			

<u>Certified Compliance Report from IRO:</u>

18.4.14 The Status of compliance of earlier EC was obtained from Integrated Regional Office, Dehradun, vide Letter No. NC-IRO/ENV/HP/Monitoring/2022/802 dated 12.09.2022 based on the site visit dated 27.07.2022 in the name of M/s. Kundlaa Loh Udyog. ATR on the non-complied points/observations has been submitted by PP as follows:

S. No.	Observation raised	Action Taken			
1	Green Belt has been developed.	0.42 Acres additional land has been			
	However, it appears to be very less and	purchased at Ramgarh, Panchkula to			
	less than 33% of the project area. The	compensate the green area to be			
	project proponent needs to be increase	maintained at the project site. Land			
	the green belt around the project	documents and photograph showing the			
	perimeter substantially (Condition No:	plantation done at the additional land is			
	GreenBelt#1)	submitted.			
2	The Project proponent shall upload the	Status of compliance of the stipulated			
	status of compliance of the stipulated	environment clearance conditions,			
	environment clearance conditions,	including results of monitored data has			
	including results of monitored data on	been uploaded on the website.			
	their website and update the same on half				
	yearly basis (Condition No: Misc#3)				

Deliberation by the Committee

18.4.15 The Committee noted the following:

- i. The instant proposal is for expansion of steel manufacturing plant unit for enhancement of production of Rolling Products from 92500 MTPA to 2,35,000 MTPA.
- ii. The EAC deliberated on the proposal. Based on the KML file presented by the PP, the proposed Unit is brownfield project.
- iii. The unit is located at Baddi, Himachal Pradesh. As per Hon'ble NGT order dated 13.12.2018 "CPCB to rank industrial units on pollution levels"; the CEPI score of Baddi, Himachal Pradesh is 69.07, hence it falls under SPA (Severely Polluted Area). The EAC is of the opinion that PP shall comply with the CEPI guidelines.
- iv. The project land area is 0.7789 Ha. No additional area will be required for enhancement. The total land is in possession of the company.
- v. The nearest habitation to plant are Barotiwala (0.67 km, N) and Shivalik Nagar (1.20 km, N) from the project site boundary.
- vi. Sitoo Majra Nala (1.6 km, SE), Balad Nadi (1.7 km, NW), Marhanwali Nadi (2.6 km, SE), Nanakpur Nadi (4 km, SE). and Sirsa River (2.8 km, NW) are flowing within 10 Km. radius of the plant site. The EAC is of the opinion that water bodies shall not be disturbed. Mitigation measures w.r.t. safeguarding the water bodies shall be prepared and included in the EIA/EMP Report.
- vii. The water requirement for the proposed project is estimated as 81 m³/day, out of which 67 m³/day of freshwater requirement will be obtained from the groundwater through tube well and the remaining requirement of 14 m³/day will be met from the treated wastewater from STP.
- viii. The EAC deliberated on the certified compliance report of IRO and the ATR submitted on the non-complied points/observations and found it satisfactory.

Recommendations of the Committee

- 18.4.16 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 ToRs enclosed at **Annexure-1** read with additional ToRs at **Annexure-2**.
 - (i) In pursuance to MoEF&CC OMs dated 31st October, 2019 & 30th December, 2019 issued in compliance of the order of Hon'ble NGT in OA No. 1038/2018 dated 19th August, 2019, the compliance of all the conditions applicable to CEPI shall be followed.
 - (ii) The nearest habitation to plant are Barotiwala (0.67 km, N) and Shivalik Nagar (1.20 km, N) from the project site boundary. Project Proponent shall prepare an action plan for environmental safeguard measures to minimise the impact on the habitation of the locals. The company shall also include some of these locations in its environmental monitoring programme.
 - (iii) Sitoo Majra Nala (1.6 km, SE), Balad Nadi (1.7 km, NW), Marhanwali Nadi (2.6 km, SE), Nanakpur Nadi (4 km, SE). and Sirsa River (2.8 km, NW) are flowing within 10 Km. radius of the plant site. A robust and full proof Drainage Conservation scheme to protect

the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be implemented.

- (iv) The water requirement of $81 \text{ m}^3/\text{day}$, shall be met from the groundwater through tube well and the treated wastewater from STP after obtaining necessary permission from the Competent Authority.
- (v) Detailed description of micro flora and fauna (terrestrial and aquatic) existing in the study area with special reference to rare, endemic and endangered species. Details of flora and fauna existing in the study area shall be duly authenticated by the concerned DFO of the area. In case of existence of any endangered species and Schedule I fauna, authenticated conservation plan shall be submitted.
- (vi) Explore possibilities for recycling and reusing of treated water in the unit to reduce the fresh water demand and waste disposal.
- (vii) The PP should submit the photograph of monitoring stations & sampling locations. The photograph should bear the date, time, latitude & longitude of the monitoring station/sampling location. In addition to this PP should submit the original test reports and certificates of the labs which will analyze the samples.
- (viii) PP shall submit action plan for rainwater harvesting system.
- (ix) Action plan for 100 % solid waste utilization shall be submitted.
- (x) PP shall submit the status of the action plan submitted to address the issues raised during the public hearing during the grant of earlier EC dated 08.05.2020.
- (xi) Project proponent shall prepare layout plan showing all internal roads minimum 6m width and 9m turning radius with proper looping for smooth traffic flow, including fire tender as per NBC. Road network shall connect all service areas in layout. This drawing shall include area statement showing plot area, area under roads, parking, green belt with calculations and % with respect to plot area of project site and proper indexing.
- (xii) Project proponent shall submit contour map of project site along with drainage disposal system with calculations and drawings supported with proper indexing including rain water harvesting details with calculations mentioning about GW recharge along with relevant drawing.
- (xiii) Project proponent shall submit a study report on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitorable with defined time frames", when PP comes for EC proposal. This study shall be formulated keeping in view of India's Net-zero commitment at the COP-26 Climate Summit.
- (xiv) As part of Corporate Environment Responsibility (CER) activity, company shall adopt nearby villages based on the socio-economic survey (10 Kms radial coverage from the project site) and undertake community developmental activities in consultation with the village Panchayat and the District Administration. In this regard, time bound action plan as per the MoEF&CC Office Memorandum dated 30/09/2020 shall be submitted.
- (xv) Traffic study shall be carried out inter-alia including existing road details with traffic load, proposed quantum of material to be transported by sea/rail/road with anticipated

vessels/rakes/vehicles details, line source modelling and infrastructure strengthening details etc., These details shall be included in the EIA report.

- (xvi) Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.
- (xvii) Action plan to limit the dust emission from all the stacks below 30 mg/Nm³ shall be furnished. Action plan for fugitive emission control in the plant premises shall be provided.
- (xviii) A Plan of Action for disposal of e-waste must be drawn up and implemented.
- (xix) PP shall explore the possibility of plastic waste utilization in the Plant/Unit process.

Agenda No. 18.5

18.5 Expansion of existing Integrated Steel Plant to final capacity of Iron Ore Beneficiation Plant 2 MTPA, Pellet Plant 1.2 MTPA, Sponge Iron Plant 0.3 MTPA, Sinter Plant 1.75 MTPA, Blast Furnace 1.27 MTPA, Steel Products (SMS & Rolling Mill) 1.5 MTPA, Coal Washery 1 MTPA, Coke Oven Plant (Non-Recovery Type) 0.5 MTPA, Ferro Alloy Plant 0.125 MTPA, Lime Dolo Plant 0.165 MTPA, Oxygen Plant 0.302 MTPA, CPP- 215 MW of M/s Aarti Steels Ltd., located at Village - Ghantikhal, Tehsil - Athagarh, District-Cuttack, Odisha– Consideration of TOR.

[Proposal No. IA/OR/IND/278468/2022; File No. J-11011/287/2007-IA.II(I)] [Consultant: M/s Visiontek Consultant Services Private Limited; valid upto 16.12.2023]

- 18.5.1 M/s Steels Ltd. has made an application online vide Aarti proposal no. IA/OR/IND/278468/2022 dated 18/11/2022 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(b) Mineral Beneficiation, 1(d) Thermal Power Plants, 2(a) Coal Washeries & 4(b) Coke Oven Plants under Category "A" of the schedule of the EIA Notification, 2006 and appraised at central level.
- 18.5.2 Name of the EIA consultant: M/s. Visiontek Consultant Services Private Limited [S. No. 103, List of ACOs with their Certificate / Extension Letter No: NABET/EIA/2023/RA 0209 valid till 16.12.2023; Rev. 25, Sept 05, 2022].

Details submitted by Project proponent

18.5.3 The project of Aarti Steels Ltd. located in Village Ghantikhal, Tehsil Athagarh, District Cuttack, Odisha is for expansion of existing Integrated Steel Plant to final capacity of Iron Ore Beneficiation Plant 2.0 MTPA (Throughput), Pellet Plant 1.2 MTPA, Sponge Iron Plant 0.3 MTPA, Sinter Plant 1.75 MTPA, Blast Furnace 1.27 MTPA, Steel Products (SMS & Rolling Mill) 1.5 MTPA, Coal Washery Plant 1.0 MTPA (Throughput), Coke Oven Plant (Non-

Recovery Type) 0.5 MTPA, Chrome Ore Briquetting Plant 0.3 MTPA, Ferro Alloy Plant 0.125 MTPA, Lime-Dolo Plant 0.165 MTPA, Oxygen Plant 0.302 MTPA, CPP- 215 MW.

18.5.4 Environmental site settings:

S. No.	Particulars		D	etails			Remarks
1.	Total land	315.1 Ha					Land use:
		[Govt. Lar	nd through IDO	CO:20	65.47 Ha	l;	Aarti Steels Applied for
		Private La	nd through ID	CO:4	5.15 Ha	,	conversion of present land
		Directly p	urchased Pvt.	Land :	4.53 Ha]	kissam (Patita, Taila,
							Goda-II etc.) to industrial
	T and the second attices	Th 1 1			land on 06/07/2022.		
2.	Land acquisition	the compa	and is acquire	possession of	No additional land		
	MoFF&CC O M	uie compa	lly.				expansion
	dated 7/10/2014						expansion.
3.	Existence of	Project Si	te:				R & R is not applicable
	habitation &	No habitat	ion exists				
	involvement of R&R,						
	if any	Study Are	ea:				
		Habitati	on	Dis	tance	Direction	-
		Ghantikh	al	0.2	6 km	Е	
		Nidhipur		0.3	4 km	E	
		Mahakall	oasta	1.5	0 km	W	
4.	Latitude and	Point	Latitud	e	Lo	ngitude	-
	Longitude of all	A	20°31'22.63	3"N	85°4	3'11.05"E	
	site	B	20°31'6.65	<u>"N</u>	85°4	3'8.84"E	
	Site.		$20^{\circ}31^{\circ}12.09$	7"N	85°4	2'37.94"E	
		D	$20^{\circ}30^{\circ}51.1$	5"IN 7"'NI	85°4	251.97 E	
			$20\ 30\ 23.8$	/ IN 1 ''NI	85°/	13 3.41 E	
		G	$\frac{20^{\circ}30^{\circ}27.3}{20^{\circ}31^{\circ}20.27}$	7"N	85°4	4 8.95 E	
		H	20°31'56.0	/ 11 "N	85°4	4'19 97"E	
		I	20°32'0.58	"N	85°4	4'7.07"E	
		J	20°31'20.30	5"N	85°4	3'56.52"E	
5.	Elevation of the	29 to 80 m	above mean s	sea lev	el		-
	project site						
6.	Involvement of	No forest l	and involved				-
	Forest land if any						
7.	Water body exists	Project Si	te:				Authenticated HFL Data
	within the project site	$2 \text{ Nos. of } \mathbf{v}$	water bodies	תת			received from The Chief
	as well as the study	i) Water re	ter Harvesting	Dy PP Dond			Bhubaneswar vide letter
	area	II) Kailiwa	ter marvesting	1 Ullu			no
		Study Are	a :				TD/905/CE/VI/2020/383
		Water B	odv	Dist	ance	Direction	dated 31.03.2022.
		Sapua Na	ndi	2.09	km	WSW	
		Barha Joi	r	2.83	km	NW	HFL near Naraj (5.7 km
		Mahanad	i River	3.40	km	E	distance from project site)
		Kathajod	i River	5.84	km	SE	is 27.5 m AMSL against
		Bhuiyan	Jor	site elevation of 29 to 80			
0	Existence of EC7/	NH					III AMSL.
0.	EXISTENCE OF $ESZ/$	1111					-
	wildlife sanctuary/	Reserve F	orest:				
	biosphere reserve/	Fo	rest	Dista	ance	Direction	

S. No.	Particulars		Details		Remarks
	tiger reserve/ elephant	Oringa RF	Adjacent to	NW	
	reserve etc. if any		Project		
	within the study area.		boundary		
		Khalakhala RF	0.64 km	S	
		Brahmanabasta RF	0.66 km	E	
		Subasi RF	2.09 km	NW	
		Ranibania RF	5.09 km	NW	
		Sukasana RF	5.10 km	SW	
		Deulia RF	5.12 km	NNW	
		Bouda Banakhandi	5.46 km	SW	
		RF			
		Adala RF	5.67 km	NW	
		Suniamuhan RF	6.25 km	ENE	
		Sankhiapoi RF	6.65 km	NE	
		Gadabola RF	7.93 km	NW	
		Baula RF	8.13 km	ENE	

18.5.5 The existing project was accorded 1st Environmental Clearance vide File No. J-11011/158/2004-IA-II(I) dated 16.02.2005 and 2nd Environmental Clearance vide File No. J-11011/287/2008-IA-II(I) dated 13.05.2009. 1st CTE was obtained vide letter no. 25707, dated 15.12.2003, 2nd CTE vide letter no. 16176/IND-II-NOC-5130 dated 12.10.2009, 3rd CTE vide letter no. 786/IND-II-NOC-5130 dated 21.10.2010, 4th CTE vide letter no. 14797/IND-II-NOC-5130 dated 12.09.2014, 5th CTE vide letter no. 9140/IND-II-NOC-5987 dated 02.06.2016, 6th CTE vide letter no. 10214/IND-II-NOC-6162 dated 30.08.2018, and 7th CTE vide letter no. 7263/IND-II-CTE-6162 dated 20.07.2019. 1st CTO from OSPCB vide letter no. 33948-IND-I-CON-4904 dated 25.11.2005, 2nd CTO vide letter no. 9051-IND-I-4904 dated 10.06.2009, 3rd CTO vide letter no. 899-IND-I-4904 dated 19.01.2011, and latest CTO vide letter No. 3266/IND-I-CON-4904, dated. 21.03.2018 and CTO letter No. 10254/IND-I-CON-4904, dated. 01.10.2019.

S.No.	Facilities	Units	As per EC dated 13/05/2009	Implementation Status	Production as per CTO	Reason / Justification
1.	Coal Washery	2 x 10,00,000	20,00,000 TPA	1 X 10,00,000 TPA (Installed and Operational)	1.0 MTPA	Some units' i.e. Sinter Plant, Coke Oven (Non-
	vv asher y	TPA	ΠA	1 X 10,00,000 TPA (Not Implemented)	Not Implemented	Recovery Type) and MBF were
2.	Sinter Plant	1 x 36 m ²	3,43,000 TPA	Not Implemented	Not Implemented	not implemented due to financial
3.	Coke Oven (Non- Recovery Type)	NRCO 4x14 Nos. Oven	2,36,000 TPA	Not Implemented	Not Implemented	constraints and downturn market. However, now in
4.	Power Plant	2x50 MW CFBC + 2x10 MW WHRB + 1x40 MW	160 MW	100 MW (2x10 MW WHRB + 1x50 MW CFBC + 1x30 MW AFBC) (Installed and	100 MW = (2x10 MW WHRB + 1x50 MW CFBC + 1x30 MW	thepresentexpansionproposal,thesefacilitiesareproposedagain

18.5.6 Implementation status of the existing EC:

S.No.	Facilities	Units	As per EC dated 13/05/2009	Implementation Status	Production as per CTO	Reason / Justification
		AFBC		Operational)	AFBC)	with better
				60 MW		technology & low
				(1x50 MW CFBC +	Not	specific power
				IX10 MW AFBC)	Implemented	consumption and
				(Not Implemented)		as per market
5.	DRI Plant	4 x 500	6,00,000 TPA	(Installed and operational)	3,00,000 TPA	demand.
		IPD	IFA	2 x 500 TPD (Not	Not	
				Implemented)	Implemented	
6.	SMS	$IF -4x12.5 \\ T, \\ EAF - 2x35 \\ T, \\ LRF - 2x25 \\ T & 2x35 T, \\ AOD - \\ 1x35 T, \\ 1x2 Strand \\ & 1x3 \\ Strand \\ Billet \\ Caster, \\ 1x2 Bloom \\ Caster \\ \end{cases}$	0.5 MTPA	EAF - 1x35 T, LRF - 2x26 T, VD - 1x35 T, Billet Caster	2,08,333 TPA	
7.	MBF (Pig Iron)	3,00,0	00 TPA	Not Implemented	Not Implemented	
	Earro Alley	2 x 25 000		50,000 TPA	2x9 MVA +	
8.	Plant	2 x 23,000 ΤΡΔ	50,000 TPA	(Installed and	1x18 MVA	
	1 14111	117		Operational)	(50,000 TPA)	
9.	Rolling Mill	4,99,3	00 TPA	2,00,000 TPA (Installed and Operational)	2,00,000 TPA	
				2,99,300 TPA (Not Implemented)	Not Implemented	

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

S. No.Frain Equipment/ FacilityTotal (A + B)Implemented (A)Un-implemented (B)dated 21.03.2018 & 01.10.2019Proposed UnitsFinal (Existing + P)No.FracilityConfig.CapacityConfi	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	S. No.
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	
2. Pelletization Plant Image: space spac	1. B
3. Sponge Iron Plant 4X500 TPD $\frac{4x1,50,000}{TPA}$ $\frac{5,00,000}{TPA}$ 2X500 TPD $\frac{3,00,000}{TPA}$ TPA 2x500 TPD $\frac{3,00,000}{TPA}$ - - 2x500 TPD $\frac{3,00,000}{TPA}$	2. P
EAF -1x35 T, VD -1 25	3. S
$ 4. SMS \begin{array}{ c c c c c c c c c c c c c c c c c c c$	4.
5. Rolling Mill - $4,99,300$ - $2,00,000$ - $2,99,300$ - $13,00,000$ - $13,00,000$ - $15,$	5. R
IPA IPA IPA IPA IPA IPA IPA 6. Captive 2x50 MW 160 MW 100 MW 1x50 MW - 60 MW 100 MW 78 MW 115 MW 128 MW - 21	6.

	DI		Existing Fac	cilities as per E	C dated 13 th	May, 2009		As per late	est CTO				
S.	Equipment/	Total (A	$(\mathbf{A} + \mathbf{B})$	Implem	ented	Un-imple	mented	dated 21.03	3.2018 &	Propos	ed Units	Final (Existin	ng +Proposed)
No.	Facility	Config	Conscity	(A) Config) Conocity	(B) Config	Conocity	01.10.2 Config	Conscity	Config	Conscity	Config	Conscity
	Power Plant	CFBC	Capacity	1x50 MW –	Capacity	CFBC	Capacity	1x50 MW –	Capacity	CFBC	Capacity	CFBC	Capacity
		0120		CFBC		0120		CFBC		0120		0120	
										37 MW -		57 MW -	
		2x10 MW		2x10 MW -				2x10 MW -		WHRB		WHRB	
		WHKB		WHRB		-		WHRB		(Coke Oven		(DRI+Coke	
										Based)		Based)	
		1X40 MW		1x30 MW -		1x10 MW		1x30 MW -				30 MW -	
		AFBC		AFBC		AFBC		AFBC		-		AFBC	
	Coke Oven		0.00				0.00			4x50,000	5 00 000	4x50,000	5 00 000
7.	Plant (Non-	-	2,36,000 TPA	-	-	-	2,36,000 TPA	-	-	1PA & 4x75.000	5,00,000 TP A	1PA & 4x75 000	5,00,000 TPA
	Type)		IIA				117			TPA	IIA	4X75,000 TPA	IIA
0	Sinter Dlent	$1 x^{26} m^{2}$	3,43,000			$1 \times 26 \text{ m}^2$	3,43,000			$1x65 m^2 \&$	17,57,800	$1x65 \text{ m}^2 \&$	17,57,800
0.	Sinter Flain	1230 III	TPA	-	-	1230 III	TPA	-	-	$1 \times 105 \text{ m}^2$	TPA	$1 \times 105 \text{ m}^2$	TPA
9.	Blast	1x350 m ³	3,00,000	-	-	1x350 m ³	3,00,000	-	-	$1x450 \text{ m}^3 \&$	12,70,500	$1 \times 450 \text{ m}^3 \&$	12,70,500
	Furnace	$2 \times 10.00.000$	1PA 20.00.000	1x10.00.000	10.00.000	1v10.00.000	10.00.000	1v10.00.000	10.00.000	1x650 m ²	IPA	1×10.00000	1PA 10.00.000
10.	Washerv	2x10,00,000 TPA	20,00,000 TPA	TPA	TPA	TPA	TPA	TPA	TPA	-	-	TPA	TPA
	Earna Allasi		50.000		50.000			2x9 MVA	50.000				1 25 000
11.	Plant	-	30,000 TPA	-	30,000 ТРА	-	-	&	30,000 ТРА	-	75,000 TPA	-	1,23,000 TPA
			1171		1171			1x18MVA	1171		1.65.000		1 67 000
12.	Lime-Dolo Plant	-	-	-	-	-	-	-	-	2x250 TPD	1,65,000 TPA	2x250 TPD	1,65,000 TPA
										1x150 TPD		1x150 TPD	
										+ 1x180		+ 1x180	
13.	Oxygen Plant	-	-	-	-	-	-	-	-	TPD +	3,02,500 TPA	TPD +	3,02,500 TPA
	<i>J</i> C									1x300	, , ,	1x300	, ,
										1x260 TPD		1x260 TPD	

Details of Associated / Waste Recovery Plants

S.	Facilities	Existing as per CTO dtd.	Proposed	Total	Domorks
No.	Facilities	21.03.2018 & 01.10.2019	Toposed	Totai	Kelliai KS

		Config.	Capacity	Config.	Capacity	Config.	Capacity	
1.	Chrome Ore Briquetting Plant	1 x 25 TPH	1,50,000 TPA	1 x 25 TPH	1,50,000 TPA	2 x 25 TPH	3,00,000 TPA	Waste Recovery
2.	Fe-Cr Metal Recovery Plant	-	-	1 x 25 TPH	2,07,000 TPA	1 x 25 TPH	2,07,000 TPA	Plants

S. No.	Raw Material	Existing Quantity (TPA)	Proposed Quantity (TPA)	Total Quantity (TPA)	Source	Distance From Site (Kms)	Mode of Transportation
	Iron ore fines (Avg. Fe 58%)	-	20,00,000	20,00,000	Mines in Odisha		
1	High Grade Iron Ore Fines (Avg. Fe 62%)	-	7,08,010	7,08,010	Jharkhand/ OMC/ Other Private Mines	200-300	Road/Rail
2	Coal	10,06,000	8,29,860	18,35,860	Mines in Odisha, Jharkhand/ OMC/ Other Private Mines	200-300	Road/Rail
3	Coking Coal	-	6,75,000	6,75,000	Import/Open Market	80-120	Road/Rail
4	Coke	21,000	14,290	35,290	Kalinganagar, Jajpur	95-120	Road
5	Limestone	4,500	4,95,852	5,00,352	Rourkela/ Raigarh	280-330	Road/Rail
6	Dolomite	18,000	1,34,470	1,52,470	Rourkela/ Raigarh	280-330	Road/Rail
7	Chrome Lumps/ Fines	1,61,000	1,71,000	3,32,000	Sukinda, Odisha	90-110	Road
8	Qaurtz	11,000	16,500	27,500	Open market	95-120	Road
9	Bentonite	-	8,400	8,400	Rourkela/ Raigarh	280-330	Road/Rail
10	LDO	-	30,900	30,900	Paradeep	80-120	Road
11	Molasses	9,000	9,000	18,000	Open market	95-120	Road
12	Coke Breeze	-	97,117	97,117	Kalinganagar, Jajpur	95-120	Road/Rail

18.5.8 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:

Note: *For existing DRI Plant, 4,50,000 TPA iron ore is being outsourced as raw material. But, in the proposed expansion, in-house produced Pellet will be used in DRI Plant as raw material.

18.5.9 The total water requirement is 37,351 KLD (Mahanadi River – 34,433 KLD + Rainwater Harvesting – 2918 KLD). Existing water requirement of 11,582 KLD, is being obtained from Mahanadi River (3.40 km, E). The proposed water requirement of 22,851 KLD will also be sourced from Mahanadi River and rainwater harvesting. Permission for withdrawal of 23,803 KLD (4,760 KLD for drinking purpose & 19,043 KLD for Industrial) Surface Water from Mahanadi River has been obtained vide an agreement dated 28.04.2004. Permission for total has been obtained from Dept. of Water Resource, Bhubaneswar vide letter no. WII-DM-Misc.-5/2003/13857 dated 26.12.2003.

- 18.5.10 The total power requirement for the plant is 278 MW. Existing power requirement is 74 MW. The proposed power requirement for the expansion project is estimated to be 204 MW. For total 278 MW power requirement, 215 MW will be obtained from CPP & rest 63 MW will be obtained from nearest grid. Permission for 10 MW from GRIDCO for emergency startup power has been obtained vide letter no. Gridco-DC-89/2009/5994(12) dtd. 05.09.2009.
- 18.5.11 The capital cost of the project is Rs. 6112 Crores (Existing Rs. 1052 Crores & Proposed Rs. 5060 Crores) and capital cost for Environmental Protection Measures is proposed as Rs. 489 Crores. Direct Employment generation from the project is 6120 (Existing 2533, Proposed 3587). Indirect Employment generation will be around 12000.
- 18.5.12 It is submitted that there is no violation under EIA notification 2006/no court cases/no show cause/no direction related to the project under consideration.

Environmental	Frequency/ Parameters / Locations							
Aspect								
Micro	Frequency: Continuous recording of hourly micro-meteorological							
Meteorology	parameters for 3 months							
	Parameters: Temperature, Relative Humidity, Rainfall, Wind speed, Wind							
	lirection, Cloud cover,							
	Location: At/Near Project Site							
Ambient Air	Frequency: Twice a week on 24 hrs basis for 12 weeks							
Quality	Parameters: PM ₁₀ , PM _{2.5} , SO ₂ , NOx, CO, NH ₃ , O ₃ BaP & Fe							
	Locations: 12 locations within the study area covering core zone, upwind							
	directions, downwind directions, crosswind directions and nearby habitations							
	based on the predominant windrose.							
Ambient Noise	Frequency: Continuous monitoring for 24 hours (Day & Night) at each							
Levels	location, Once in a month for 3 months							
	Parameters: Leq Day Time, Leq Night Time							
	Locations: 10 locations within the study area covering core zone, various							
	land uses and nearby habitations.							
Surface Water	Frequency: Once during the study period							
Quality	Parameters: Colour, pH, Dissolved Oxygen (min), Conductivity, Total							
	Hardness, Turbidity, Chlorine (CI), Total Dissolved Solids, Oil & Grease							
	(max), BOD (3) days at 2/°C (max), Chemical Oxygen Demand (COD),							
	Arsenic (As), Lead (Pb), Cadmium (Cd) (max), Hexa Chromium as Cr ⁻³ ,							
	Copper (Cu) (max), Zinc (Zn) (max), Selenium (Se) (max), Cyanide (CN)							
	(max), Fluoride (F), Sulphates (SO4), Calcium (Ca), Magnesium (Mg),							
	Manganese (Mn), Boron (B), Mercury (Hg), Phenolic Compounds as							
	C_6H_5OH (max), Iron (Fe) (max), Nitrate (NO ₃), Anionic Detergents (max),							
	Total Collorm.							
	Locations: 8 locations within the study area covering major surface water							
Cround Water	Fragmanay Once during the study period							
Ouality	Decomptons: Color Odour Teste Turbidity pU Total Hardness (as							
Quality	Γ (and Γ (Fe) Chloride (Cl ⁻) Residual Free Chlorine Total Dissolved							

18.5.13 Proposed Terms of Reference: [Baseline data collection period: March to May 2022]

Environmental	Frequency/ Parameters / Locations							
Aspect								
	Solids as TDS, Calcium (Ca), Magnesium (Mg), Copper (Cu), Manganese							
	(Mn), Sulphate (SO ₄ ⁻), Nitrate (NO ₃), Fluoride (F), Phenolic Compounds as							
	C ₆ H ₅ OH, Mercury (Hg), Cadmium (Cd), Selenium (Se), Arsenic (As),							
	Cyanide (CN), Lead (Pb), Zinc (Zn), Total Chromium as Cr, Mineral Oil,							
	Alkalinity, Aluminium (Al), Boron (B), Total Coliform as TC, Amonia							
	Total, Barium (Ba), Molybdenum (Mo), Nickel (Ni), PAH & Pesticide.							
	Locations: 9 locations within the study area.							
Soil Quality	Frequency: Once during the study period							
	Parameters: Conductivity, Water Holding Capacity, Infiltration Rate, pH,							
	Texture, Sand, Silt, Clay, Bulk Density, Exchangeable Calcium,							
	Exchangeable Sodium, Exchangeable Magnesium, Available Potassium,							
	Available Phosphorus, Available Nitrogen, Organic Matter, Organic Carbon,							
	Water Soluble Chloride, Water Soluble Sulphate, Sodium Absorption							
	Residue, Aluminium, Iron, Manganese, Boron, Zinc, Chromium, Hexavalent							
	Chromium, Nickel, Copper, Cadmium, Iron, Silica, Lead, Available							
	Phosphorus.							
	Locations: 7 locations within the study area covering different land uses							
	such as agriculture land, park, waste land, etc.							
Hydrogeology	Frequency: During pre-monsoon & post-monsoon							
	Parameters: Drainage pattern, Ground water table depth, ground water							
	quality, ground water yield, etc.							
	Locations: villages within 10 km radius study area							
Land use land	Satellite imagery based land use study and preparation of land use land cover							
cover	maps based on latest LULC classifications & Ground truthing.							
	Parameters : Agricultural area, Water bodies, Industrial land, Barren land,							
	Built-up land, Forest area.							
Ecology &	Frequency: Primary survey during study period. Secondary data collection							
Biodiversity	from Forest department							
	Parameters: Terrestrial Flora & Fauna, Aquatic flora & fauna, Forests, etc.							
~ .	Location: 10 km radius study area							
Socio-economy	Frequency: Primary survey during study period. Secondary data collection							
	trom Govt. offices, Village Panchayats, Census of India records							
	Parameters: Demographic pattern, economic pattern, social amenities							
	availability							
	Location: 10 km radius study area							

Deliberation by the Committee

- 18.5.14 The Committee noted the following:
 - i. The project land area is 315.1 ha. The total land is acquired and is in the possession of the company. No additional area will be required for enhancement. However, Aarti Steels has applied for conversion of present land kissam (Patita, Taila, Goda-II etc.) to industrial land on 06/07/2022 which is pending.
 - ii. The nearest habitation to plant are Ghantikhal (0.26 km, E), Nidhipur (0.34 km, E) and Mahakalbasta (1.5 km, W) from the project site boundary. There is a school nearby at

150 m distance from the project site. The EAC is of the opinion that there is a need to inspect the area as the nearby area appears to have rich habitation.

- iii. Two nos. of water bodies viz. Water reservoir made by PP and Rainwater Harvesting Pond exists within the project site. Sapua Nadi (2.09 km, WSW), Barha Jor (2.83 km, NW), Mahanadi River (3.40 km, E), Kathajodi River (5.84 km, SE) and Bhuiyan Jor (8.74 km, E) are flowing within 10 Km. radius of the plant site. The EAC is of the opinion that water bodies are required to be conserved.
- iv. PP has reported that HFL near Naraj (5.7 km distance from project site) is 27.5 m AMSL against site elevation of 29 to 80 m AMSL.
- v. Thus, in view of the above observations the EAC is of the opinion that it is pertinent to undertake site visit to understand the ecological sensitivity of the area, overview of carrying capacity due to presence of other plant and mines unit and possible environmental/social impacts of the instant proposed project

Recommendations of the Committee

18.5.15 In view of the foregoing and after deliberations, the Committee recommended **to defer the proposed project and recommended for site visit** of the proposed project area by a subcommittee of EAC Industry-1 members comprising of Dr. S.K. Singh and Dr. Ranjit Prasad and Representative of MoEFCC to conduct the site visit and submit the Report. The proposal shall be appraised based on the findings of the sub-committee and deliberation of EAC.

DAY 2: NOVEMBER 29th, 2022 (TUESDAY)

Consideration of Environmental Clearance

Agenda No. 18.6

18.6 Proposed metallurgical unit Steel TMT Rebars and Wire Rods manufacturing rolling mill, DRI Manufacturing plant along with Captive Power Plant of 25 MW turbine and 50 TPH steam from Waste Heat Recovery Boiler facility, located at Survey. No. 652/P1; Welspun City, Village Varsamedi, Tahsil Anjar District: Kachchh, Gujarat by M/s. Anjar TMT Steel Private Limited- Re-Consideration of Environmental Clearance.

[Proposal No. IA/GJ/IND/221430/2021; File No. J-11011/289/2021-IA.II(I)] [Consultant: Shree Green Consultants; Valid upto: 24.02.2024]

- 18.6.1 M/s. Anjar TMT Steel Pvt. Ltd has made an online application vide proposal no. IA/GJ/IND/2 21430/2021 dated 5th July 2022 along with copy of EIA/EMP report, 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) and 1(d) Thermal Power Plants Under Category 'A' of the schedule of the EIA Notification, 2006) and appraised at Central Level.
- 18.6.2 Name of the EIA consultant: M/s. Shree Green Consultants [Sl. No. 30, List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2124/IA0072; Valid up to 24-02-24, Rev. 24, July 05, 2022].

Details submitted by Project proponent

18.6.3 The details of the ToR are furnished as below:

Date of	Consideration	Details	Date of	ToR Validity
application			accord	
02/08/2021	42 nd meeting of EAC	Terms of	31/08/2021	30/8/2025
	held on 12-13 th August	Reference		
	2021			

- 18.6.4 The project of M/s Anjar TMT Steel Limited located in Varsamedi Village, Anjar Tehsil, Kutch District Gujarat State is for setting up of a new steel manufacturing unit comprising of TMT Bars + Wire Rods- 4,50,000 TPA, 500 TPD DRI Kiln along with Captive Power Plant consisting of 25 MW turbine and 50 TPH steam from Waste Heat Recovery Boiler facility.
- 18.6.5 Environmental Site Settings:

Sr. No.	Particulars	Details	Remarks
1.	Total land	7.1592 ha \approx 7.16 ha (Private)	Land use: Industrial

Sr.	Particulars			Details		Remarks
No.						
2.	Land acquisition	M/s. Anjar TMT Steel Limited has taken the				Land documents
	details as per	land from M/s. Welspun Steel Limited on				is submitted
	MoEF&CC O.M.	lease bas	sis and	with the		
	dated 7/10/2014	for the sa	ime o	application		
3.	Existence of	Project s	site: -	Nil		There is no
	habitation &					R&R activity
	involvement of	Study A	rea: -			involved
	R&R, if any.	Habita	tion	Distance	Direction	
		Varsan	nedi	2.8	North-East	
4.	Latitude and	Point	Lati	itude	Longitude	
	Longitude of all	Α	23°	6'39.79"N	70° 5'6.31"E	
	corners of the	В	23°	6'39.74"N	70° 5'2.15"E	
	project site.	С	23°	6'53.74"N	70° 5'2.01"E	
		D	23°	6'53.98"N	70° 5'18.13"E	
		Е	23°	6'49.30"N	70° 5'18.33"E	
		F	F 23° 6'49.19"N 70° 5'6.32"E			
5.	Elevation of the	35 m above mean sea level				
	project site					
6.	Involvement of	No forest	t land			
	Forest land if any.					
7.	Water body (Rivers,	Project s	site: T	here is no w	ater body present	
	Lakes, Pond, Nala,	within pr	oject	site		
	Natural Drainage,					
	Canal etc.) exists	Study ar	rea:			
	within the project	Water I	body	Distance	Direction	
	site as well as study	Sang Ri	ver	0.6Km	South	
	area	Churwa	river	3.55 km	NNE	
		Pond		3.0 Km	NNE	
		Pond		3.7 km	NNW	
		Shinai I	Lake	5.66 km	SSW	
8.	Existence of ESZ/	Nil				
	ESA/ national park/					
	wildlife sanctuary/					
	biosphere reserve/					
	tiger reserve/					
	elephant reserve etc.					
	if any within the					
	study area					

18.6.6 PP reported that the unit has obtained CTE from the SPCB for manufacturing of 4,00,000 TPA TMT Bars vide CTE outward No. 597345 dated 07/08/2021. Accordingly construction work was started at project site. The unit applied for CCA vide application dated 02.07.2022 and the

provisional CCA has been obtained vide Consent Order No. WH-120111 dated 14.07.2022 and valid up to 01.07.2022. The PP informed that aforesaid project did not qualified to obtain EC under the provisions of EIA Notification, 2006 so EC was not obtained.

- 18.6.7 **Implementation status of the existing CTE:** The production has not started yet.
- 18.6.8 The unit configuration and capacity of proposed project is given as below:

Sr.	Plant Equipment/	Proposed Units				
No.	Facility	Configuration	Capacity			
1	TMT Bars + Wire Rod	1 X 4,50,000 TPA	4,50,000 TPA			
2	DRI (Sponge Iron)	1 X 500 TPD	1,65,000 TPA			
3	WHRB	1 x 50 TPH	50 TPH			
4	Turbine	1 x 25 MW	25 MW			

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

Sr. No.	Raw Material	Quantity (TPA)	Source	Distance from site (Kms)	Mode of Transportation
1	Iron Ore / Pellet	3,00,000 T	Karnataka /	1500	By
			Chhattisgarh /		Rail/Road/Sea
			Orissa/ Import		
2	Non-Coking	2,00,000 T	Indonesia/ South	7800	By Sea
	Coal		Africa		-
3	Dolomite	20,000 T	Rajasthan/ Import	600	By Road/Sea
4	Billet (Carbon	4,75,000 T	WSL/ other	0.5	Roller
	and Stainless		manufacturers		Table/Road/Rail
	Steel)				
5	Epoxy Resin	1200 T	Domestic supplier	8	By road

- 18.6.10 The water requirement for the project is estimated as 3861.00 m³/day (3,761.00 m³/day Industrial + 100.00 m³/day Domestic). The water will be sourced from sister concern unit M/s. Welspun India Limited from its 30 MLD Sewage treatment plant after recycling & reuse of municipal sewage generated from the nearby Municipalities. The total wastewater generation from the proposed project will be 321 KLD. It will be sent to M/s. Welspun India Limited for treatment and reuse as WIL having ETP with capacity of 24 MLD, Physical, Chemical and Biological Oxidation plant, UF and RO system of having the capacity to recycle & reuse 23 MLD of wastewater. MOU dated 01.11.2022 with M/s. Welspun India Limited is submitted.
- 18.6.11 The power requirement for the project is estimated as 12 MW, which will be obtained from the proposed captive power plant of 25 MW.
- 18.6.12 Baseline Environmental Studies:

|--|

Period	1 st March 2021 to 31 st May 2021				
AAQ parameters at	• $PM_{2.5} = 24.26 - 55.07 \ \mu g/m^3$				
8 Locations	• $PM_{10} = 40.06 - 89.36 \ \mu g/m^3$				
	• $SO_2 = 9.57 - 27.40 \ \mu g/m^3$				
	• NOx	• NOx = $15.11 - 38.57 \ \mu g/m^3$			
	• CO =	= 0.1 - 0.57 mg/m	1 ³ ,		
Incremental GLC	• PM ₁₀	$= 1.77 \ \mu g/m^3$ (Le	evel at 1.0 km in N	Iorth-east Direct	ion)
level	• $SO_2 =$	$= 1.58 \ \mu g/m^3$ (Lev	el at 1.0 km in No	orth-east Directio	n)
	• NOx	$= 1.62 \mu g/m^3$ (Le	vel at 1.0 km in N	orth-east Directi	on)
	• CO =	$0.792 \ \mu g/m^3$ (Le	vel at 1.0 km in N	orth-east Directi	on)
Ground water	• pH: 7	.05 – 7.68,			,
quality at 8	• Total	Hardness: 310–1	020 mg/l,		
locations	Chlor	ides: 241–2129 n	ng/l.		
	• Fluor	• Fluoride: <0.1 mg/l,			
	• Heav	v metals [Lead:	<0.01 mg/l. Merc	urv: <0.005 mg	/l. Nickel:
	< 0.01	mg/l, Arsenic: <	<0.01 mg/l, Zinc: <	<0.5 mg/l]	,
Surface water	• pH: 6	.66 – 7.86,	6 /		
quality at 8	• DO: 4	1.8 - 5.3 mg/l and	1		
locations	BOD:	x < 5 - 15.7 mg/l.			
	• COD:	• COD: $< 5 - 40.5 \text{ mg/l}$			
Noise levels Leq	43.5 to 78.7 for the day time and 36.9 to 68.7 for the Night time				
(Day and Night)					
Traffic assessment	• Traffic study has been conducted at NH-8A & SH-6 which is				
study findings	appro	ximately 2.0 and	5 km from the pro	oject site.	
	Trans	portation of raw	material, fuel &	finished produ	ct will be
	done	50 % by road.			
	 Existi 	ng PCU is 229.6	0 PCU/hr and 77.3	81 PCU/hr on NH	H 8A and
	SH 6	and existing leve	el of service (LOS) is:	
	Road	Road V (Volume C (Capacity Existing LOS In PCU/hr) in PCU/hr) V/C Patia			
	In PCU/hr.) in PCU/hr.) V/C Ratio				
	NH-8A	229.60	625	0.36	В
	SH-6 77.31 450 0.17 A				
	NH 8A	C 1) 0.02
	PCU load after proposed project will be 229.60 (Existing) + 8.83				
	(Additional) PCU/hr and level of service (LOS) will be:				
	SH6				
	SH6 DCU load after proposed project will be 77.21 (Evisting) + 7.25				
	(Additional) PCU/br and level of service (LOS) will be				
	(Additional) r CO/iii and level of service (LOS) will be:				
	Road V (Volume C (Capacity Proposed LOS				
		In PCU/hr.)	in PCU/hr.)	V/C Ratio	200
	NH-8A	238.43	625	0.38	В
	SH-6	84.56	450	0.19	А
	Conclusion:	The level of serv	vice will be "very	good and Excel	lent" after
	including add	litional traffic due	e to proposed proj	ect.	
Flora and fauna	Schedule I f	auna: Peacock o	or Indian peafow	l, Eurasian Spoo	onbill and

Period	1 st March 2021 to 31 st May 2021
	specific wildlife conservation plan has prepared and submitted to Forest
	department of Kutchh.

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

Sr.	Type of	Source	Quantity	Mode of
No.	Waste		generated	Treatment and Disposal
			(TPA)	
1.	Used or	Plant and	15 KL	Collection, Storage, Transportation,
	Spent Oil	Machineries		Disposal by reuse in Plant & Machinery as
				lubricant or sell it to authorized re-
				refiners/recycler.
2.	Mill scale	Rolling	8400	Collection, Storage, Transportation, and
		Mill		dispatched to Sinter Plant or it may be re-
				circulated to the steel making process of
				Steel Melt Shop.
3.	End Cuts	Process	16800	Dispose for remelting as steel scrap
	and Cobble			
	Cuts			
4	KILN &	CPP	33000	Dolochar and fine dust generated from our
	WHRB FES			proposed unit will be made into briquette
	dust (Fly			and reused in sinter plant of our sister
	Ash)			concern unit
5	Char &	DRI Kiln	51200	
	Dolochar			
6	Bag Filter	DRI Kiln	28250	Saleable
	dust			
7.	Wet	DRI Kiln	14850	Sale to brick manufacturers
	Scrapper			
	Sludge			

18.6.14 Public Consultation:

Details of advertisement given	Public Hearing Notice was published in English Newspaper	
	"Business Standard" dated 03.02.2022 and in Gujarati Newspaper	
	"Divya Bhaskar" dated 03.02.2022	
Date of public consultation	08/03/2022 at 11:00 hrs	
Venue	Survey No 588, Varsamedi Sim, Kandla Airport Road, Village:	
	Varsamedi, Taluka: Anjar, District: Kutch, Gujarat	
Presiding Officer	Resident Additional Collector & Additional District Magistrate	
	Bhuj-Kutch.	
Major issues raised	Education and Sports, Environment Pollution, Employment,	
	Health, Agriculture and Animal Husbandry.	

Sr. No.	Activities	Villages Identified	1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year	Total Amount in lakhs
1	As a part of Welspun's flagship program Wel-Netrutva - transforming the livelihoods of farmers & women folks in the project influence area		35	35	35	35	35	175
2	As a part of Welspun's green initiatives programs the unit will volunteer augmenting to the Social Forestry and Plantation activities like plant sapling distribution and mass plantation drives in Anjar and nearby areas		26	26	26	26	26	130
3	As a part of Welspun's flagship program Wel-Swasthya - To promote and protect communities through a range of initiatives by blood donation drives, improving health & hygiene facilities and organizing medical camps for awareness of women & adolescents health in the project influence area	Varsamedi, Ajapar, Pashwadi Mitha, Modvadar, Satapar	30	30	30	30	30	150
4	As a part of Welspun's flagship program Wel-Shiksha – to empower next generation learner's and their teachers with technology and digitisation		35	35	35	35	35	175
5	As a part of Welspun's commitments towards providing a better healthcare by providing mobile health vans, in addition to specialized health camps to enhance the levels of healthcare in nearby communities, with a particular emphasis on dedicated facilities for women, childrens & elderly in the project influence area		30	30	30	30	30	150
		Total	156	156	156	156	156	780

Action plan as per MoEF&CC O.M. F.No. 22-65/2017-IA.III dated 30/09/2020

18.6.15 The capital cost of the proposed project is Rs 470.0 Crores and the capital cost for environmental protection measures is proposed as Rs 14.88 Crores. The annual recurring cost

towards the environmental protection measures is proposed as Rs 2.43 Crores. The employment generation from the proposed project is 470 Nos. The details of cost for environmental protection measures is as follows:

Sr.	Particulars	Amount in INR, Lakhs			
No.		Capital Cost	Recurring Cost		
1	Air Pollution Control System	800.00	80.00		
2	Noise Control System45.007.00		7.00		
3	Green Belt Development	30.00	5.00		
4	Environmental Monitoring	28.00	15.00		
5	Water Pollution Control System	100.00	20.00		
6	Occupational Health & Safety	25.00	10.00		
7	Solid/ Hazardous Waste	200.00	45.00		
	Management	200.00	43.00		
8	Rain Water Harvesting System	10.00	1.50		
9	Fire Safety & Equipment	250.00	60.00		
	Total	1488.00	243.50		

- 18.6.16 Greenbelt will be developed in 2.363 ha which is about 33% of the total project area. A 10-20 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 5910 trees will be planted and nurtured in 2.363 ha in next 5 years.
- 18.6.17 It has been reported by PP that, there is no violation under EIA Notification, 2006/court case/show cause/direction related to the project under consideration.

Representation received on the project:

- 18.6.18 A representation has been received by the EAC (Industry-1) members through email dated 31.07.2022 for rejection of the instant Environment Clearance application on the grounds that in the instant application several important facts are concealed. Further, the company has started construction work prior to EC.
- 18.6.19 The proposal was initially considered in the 10th meeting of the EAC for Industry-I sector held on 1st - 3rd August, 2022 wherein after detailed deliberations, the committee recommended to defer the proposal and sought requisite information. The deliberation and recommendations of the EAC are as follows:

Deliberations by the Committee (EAC during 1st - 3rd August, 2022)

- 18.6.20 The Committee noted the following:
 - 1. A representation has been received through email dated 31.07.2022 for rejection of the instant Environment Clearance application on the grounds that in the instant application several important facts are concealed. Further, the company has started construction work prior to EC. The EAC is of the opinion that the project proponent shall submit the pointwise clarification on the issues raised in the representation dated 31.07.2022. The

EAC advised the Ministry to forward the representation dated 31.07.2022 to project proponent for their clarification.

- 2. On examination, the EAC observed that some ground work or preparation activity has been started though the project is greenfield, as reported in the Report. Also, EDS was raised by the Ministry regarding the same and Project Proponent submitted that the unit has obtained CTE from SPCB for manufacturing of TMT Bars vie letter dated 07.08.2021. Accordingly, construction work has been done to manufacture TMT bars. Project proponent is required to submit the details of the construction work undertaken so far and clarify why EC is not applicable under EIA Notification, 2006 for carrying out such work?. Further, EAC is of the view that factual report may be sought from IRO, MoEF&CC in this regard.
- 3. The EAC noted that the Sang River is at a distance of 0.6 km from the project site. As per specific ToR condition (viii), PP is required to submit the authenticated HFL data of the Sang River from the concerned Competent Authority. However, the same has not been submitted.
- 4. On perusal of PH proceedings, EAC observed that 212 people attended the PH, objections were raised against the project, however, only few people signed the attendence. EAC is of the view when People have concern then they should also need to sign in the attendance sheet.
- 5. A list of nearby industries is to be submitted along-with cumulative impact assessment of the project site.
- 6. There are Schedule I species reported in study area, namely Peacock or Indian peafowl and Eurasian Spoonbill. Specific wildlife Conservation plan has been prepared and submitted to Principal Chief Conservator of Forest (PCCF), Forest department of Kutchh for approval. The status of approval of conservation plan has to be submitted.
- 7. In ToR, Total water requirement is mentioned as 3646 m³/day. However, in the EC application total water requirement is estimated as 3861 m³/day. PP shall provide justification for the same with revised water balance diagram. Further, the water will be sourced from sister concern unit M/s. Welspun India Limited from its 30 MLD Sewage treatment plant after recycling & reuse of municipal sewage generated from the nearby Municipalities. Agreement made in the regard shall also be submitted.
- 8. GLC modelling details for CO shall be submitted.
- 9. Baseline data related to surface water and ground water shall be revisited and specific value range shall be submitted.
- 10. Noise levels in the baseline data shows higher values. Project proponent shall submit the justification along with the mitigation measures that will be undertaken to minimise the impact.

Recommendations of the Committee (EAC during 1st - 3rd August, 2022)

18.6.21 In view of the foregoing and after detailed deliberations, the committee recommended to defer the proposal and sought requisite information on the points referred at para no. 18.6.20 above. The proposal shall be considered after submission of requisite information from the PP and factual Report from the IRO, MoEFCC.

18.6.22 The proponent submitted the ADS reply vide letter dated 11/08/2022 uploaded on PARIVESH on 21/11/2022. Point-wise reply of ADS is given as below:

Sr. No.	ADS Point	Reply/Response of PP
1	A representation has been received	The unit has shown green field project in EIA report
	through email dated 31.07.2022 for	considering the fact while applying for TOR there was
	rejection of the instant Environment	no construction activity was going on. Later the unit
	Clearance application on the grounds that	has obtained consent to establish (CTE) from Gujarat
	in the instant application several	Pollution Control Board (GPCB) to set up an industrial
	important facts are concealed. Further,	plant at Survey No. 653, 655 Welspun city, Kutch
	the company has started construction	under section 25 of Water Act- 1974 and Section 21 of
	work prior to EC. The EAC is of the	Air Act 1981.
	opinion that the project proponent shall	
	submit the pointwise clarification on the	CTE-113913 issued vide letter No. GPCB/CCA-
	issues raised in the representation dated	KUTCH-1832/ID-82601/597345 dated 07.08.2021 for
	31.07.2022. The EAC advised the	setting up of 4,00,000 TPA TMT Bar. CTE Copy is
	Ministry to forward the representation	uploaded on Parivesh Portal.
	dated 31.07.2022 to project proponent for	
	their clarification	The unit has proposed to purchase hot billet (raw
2.	On examination, the EAC observed that	material) from adjoining M/s Welspun Steel limited.
	some ground work or preparation activity	Accordingly, they have started construction activities
	has been started though the project is	and site and obtained the provisional CCA from GPCB
	greenfield, as reported in the Report.	vide consent order No. WH- 120111 issued vide letter
	Also, EDS was raised by the Ministry	no.GPCB/CCA-KUTCH-1832/ID-82601/679643 dated
	regarding the same and Project Proponent	02/08/2022. CCA Copy is uploaded on Parivesh Portal.
	submitted that the unit has obtained CTE	
	from SPCB for manufacturing of TMT	For Hot rolling mill, EC is not applicable under EIA
	Bars vie letter dated 07.08.2021.	Notification, 2006. Notarized Undertaking for the same
	Accordingly, construction work has been	is uploaded on Parivesh Portal.
	done to manufacture IMI bars. Project	Further representative form IDO had visited the site
	proponent is required to submit the details	Further representative form IRO had visited the site
	of the construction work undertaken so	and submitted factual report from IRO, MOEF&CC in this record is uploaded on Derivesh Portal
	har and clarify why EC is not applicable	tills regard is uploaded off Parivesii Portai.
	under EIA Noullication, 2006 for carrying	Now with IBO report and ravised Executive summers
	view that factual report may be cought	of FIA report PP has submitted the reply to Ind 1
	from IBO MoEE&CC in this regard	Committee for obtaining FC
3	The FAC noted that the Sang River is at a	The rain fall data of Kutch district shows very less rain
5.	distance of 0.6 km from the project site	fall and for the last 100 years no flood was reported at
	As per specific ToR condition (viii). PP is	this region. The authenticated HFL data of the Sang
	required to submit the authenticated HFL	River is uploaded on Parivesh Portal.
	data of the Sang River from the	1
	concerned Competent Authority.	
	However, the same has not been	
	submitted.	
4.	On perusal of PH proceedings, EAC	All attendees signed the document and copy of the

Sr. No.	ADS Point	Reply/Response of PP
	observed that 212 people attended the PH, objections were raised against the project, however, only few people signed the attendance. EAC is of the view when People have concern then they should also need to sign in the attendance sheet	same is uploaded on Parivesh Portal.
5.	A list of nearby industries is to be submitted along-with cumulative impact assessment of the project site	Anjar is a town, a tehsil and a municipality in Kutch district in the state of Gujarat, India. This town has strong trade and social links with neighbouring Adipur, Bhuj, Gandhidham and Kandla. It is a town of historic importance, located in Southern Kutch, around 40 km away from one of the biggest ports in India-Kandla Port. Due to the presence of the GIDC (Gujarat Industrial Development Corporation) estate, trade and commerce is highly developed in Anjar. It is a base for salt, timber and food industries and there is also tremendous growth in number of engineering workshops, fabrication industry, chemical industry, etc. List of nearby industries (22 Nos.) along-with cumulative impact assessment of the project site is uploaded on Parivesh Portal.
6.	There are Schedule - I species reported in study area, namely Peacock or Indian peafowl and Eurasian Spoonbill. Specific wildlife Conservation plan has been prepared and submitted to Principal Chief Conservator of Forest (PCCF), Forest department of Kutchh for approval. The status of approval of conservation plan has to be submitted.	The unit has submitted the conservation plan to the competent authority vide letter dated 15.06.2022. The acknowledgement copy for the same is uploaded on Parivesh Portal. The conservation plan was principally accepted by DFO.
7.	In ToR, Total water requirement is mentioned as 3646 m ³ /day. However, in the EC application total water requirement is estimated as 3861 m ³ /day. PP shall provide justification for the same with revised water balance diagram. Further, the water will be sourced from sister concern unit M/s. Welspun India Limited from its 30 MLD Sewage treatment plant after recycling & reuse of municipal sewage generated from the nearby Municipalities. Agreement made in the regard shall also be submitted.	In ToR, Total water requirement is mentioned as 3646 m ³ /day. However, in the EC application total water requirement is estimated as 3861 m ³ /day. As per detailed study at the time of EIA report preparation and according to process technology PP increased the water requirement by 215 KLD (3646 KLD to 3861 KLD). And reduced waste water generation by 699 KLD (1020 KLD to 321 KLD). Total raw water consumption in the proposed unit will be approximately 3,861.00 m ³ /day (3,761.00 m3/day Industrial + 100.00 m ³ /day Domestic). Entire water will be sourced from sister concern unit, M/s. Welspun India Limited from its 30 MLD Sewage treatment plant where recycling & reuse of municipal sewage generated from the nearby Municipalities takes place. Revised water consumption & waste water generation details are uploaded on Parivesh Portal.
		MOU with M/s. Welspun India Limited dated

Sr. No.	ADS Point	Reply/Response of PP
		01.11.2022 is uploaded on Parivesh Portal.
8.	GLC modelling details for CO shall be	GLC modelling details for CO is uploaded on Parivesh
	submitted.	Portal. Maximum Incremental GLC for CO is 0.729 μ g /m ³ .
9.	Baseline data related to surface water and	Revised Baseline data related to surface water and
	ground water shall be revisited and	ground water is uploaded on Parivesh Portal.
	specific value range shall be submitted.	
		Ground Water: The nU of ground water showed a variation in the
		range of $7.05 - 7.68$ TDS levels varied in the range of
		971 - 6911 mg/L. Total hardness varied in the range of
		310 – 1020 mg/L. Alkalinity varied in the range of 140
		– 460 mg/L. The conductivity levels varied in the range
		of 1.59 – 11.1 mS/cm. Coliform bacteria were
		are absent in all samples
		are absent in an samples.
		Surface Water:
		The pH of surface water showed a variation in the range of 6.66. 7.86 TDS levels variation the range of
		612 - 2003 mg/L. Total hardness varied in the range of
		110 - 510 mg/L. Alkalinity varied in the range of $120 - 510$
		350 mg/L. The conductivity levels varied in the range
		of 0.97 – 3.19 mS/cm. Coliform bacteria were
		measured as Total Coliform and varied in the range 2 to 27 MPN/100 ml sample and E coli, these bacteria
		are found at a maximum value of 13 MPN/100 ml for
		Versamedi to a minimum value of below detectable
		limit at 4 locations.
10.	Noise levels in the baseline data shows	In baseline data only one place, maximum noise level
	submit the justification along with the	is fighter than the permissible limit out Leq value is
	mitigation measures that will be	PP will take following mitigation measure to prevent
	undertaken to minimize the impact.	Noise pollution
		• The acoustic enclosure will be designed for minimum
		25 dB(A) insertion loss for meeting the ambient noise
		Regular equipment maintenance and better work habits
		will be adopted. D.G. set is proposed to be housed in an
		inbuilt acoustic enclosure.
		• Noise levels generated will be maintained to comply
		with the Factories Act & Rules and will not exceed 75
		ub (A) at 1 m distance. • Implementation of green belt within the promises of
		plant will absorb the noise. Thus, is being/ will help to
		control the noise pollution.
		• Proper lubrication and housekeeping will be usually
		done to avoid excessive noise generation.
		• Supervisor is will be responsible to control the noise by

Sr. No.	ADS Point	Reply/Response of PP
		maintaining conditions of machineries and silencers.
		• Providing PPE (Personal Protective Equipment) to the
		personnel who are exposed continuously to the high
		noise zone/ operation area.

18.6.23 Based on the ADS reply by the proponent, the proposal was re-considered in the 18th meeting of the EAC for Industry-I sector held on 27-28th November, 2022. The deliberation and recommendations of the EAC are as follows:

Written representations:

- 18.6.24 During the meeting, based on the deliberations made by the EAC, the project proponent vide email dated 29.11.2022 and 30.11.2022 submitted the following :
 - Revised PH Action Plan: PP will adopt four villages i.e, Varsamedi, Ajapar, Pashwadi Mitha, Modvadar, Satapar. The same is updated at para 18.6.14 above.
 - Revised pointwise clarification on the issues raised in the representation dated 31.07.2022 and other representations dated 28.11.2022 in a tabular form.

Deliberations by the Committee

- 18.6.25 The Committee noted the following:
 - 1. The instant proposal is for metallurgical unit comprising of TMT Bars + Wire Rods 4,50,000 TPA, 500 TPD DRI Kiln along with Captive Power Plant consisting of 25 MW turbine and 50 TPH steam from Waste Heat Recovery Boiler facility.
 - 2. The unit has already obtained CTE from the SPCB for manufacturing of 4,00,000 TPA TMT Bars vide letter dated 07/08/2022. Accordingly, construction work was started at project site. The unit has applied for CCA vide application dated 02.07.2022 which is under process with SPCB as detailed in para 18.6.6 above.
 - 3. The EAC deliberated the inspection report of IRO, MoEFCC and the information submitted by the PP and observed that there is no violation case.
 - 4. The EAC, constituted under the provision of the EIA Notification, 2006 comprising Expert Members/domain experts in various fields, examined the proposal submitted by the Project Proponent in desired format along with EIA/EMP reports prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.
 - 5. The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP reports. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.
 - 6. The Committee noted that the EIA reports are in compliance of the ToR issued for the project, reflecting the present environmental status and the projected scenario for all the environmental components. The Committee deliberated on the proposed mitigation measure towards Air, Water, Noise and Soil pollutions. The Committee suggested that

the storage of toxic/explosive raw materials/products shall be undertaken with utmost precautions and following the safety norms and best practices.

- 7. There are Schedule I species reported in study area, namely Peacock or Indian peafowl and Eurasian Spoonbill. Specific wildlife Conservation plan has been prepared and submitted to Forest department of Kutchh on 15.05.2022 for approval. The acknowledgement copy for the same is uploaded on Parivesh Portal. PP has reported that the conservation plan was principally accepted by DFO.
- 8. The total project area is 7.16 ha. M/s. Anjar TMT Steel Limited has taken the land from M/s. Welspun Steel Limited on lease basis and lease deed has been executed for the same on 06.05.2021.
- 9. The proposed greenbelt will be developed in 2.363 ha which is about 33 % of the total project area (i.e., 7.16 ha). As proposed, total no. of 5910 trees will be planted and nurtured in 2.363 ha in next 5 years.
- 10. Total water requirement will be 3861 m³/day which will be sourced from sister concern unit M/s. Welspun India Limited from its 30 MLD Sewage treatment plant after recycling & reuse of municipal sewage generated from the nearby Municipalities. MOU dated 01.11.2022 with M/s. Welspun India Limited is submitted.
- 11. Sang River is at a distance of 0.6 km from the project site. Other water bodies such as Churwa river, Ponds, Shinai Lake also exists within the study area of 10 km from the project site. PP has reported that the rain fall data of Kutch district shows very less rain fall and for the last 100 years no flood was reported at this region. The HFL data of the Sang River is uploaded on Parivesh Portal. The water bodies shall not be disturbed. Mitigation measures w.r.t. safeguarding the water bodies shall be implemented.
- 12. The Committee has found that the baseline data and incremental GLC due to the proposed project within NAAQ standards. However EAC noted that Noise levels in the baseline data shows higher values and is of the opinion that mitigation measures shall be undertaken to minimize the impact in this regard.
- 13. The Committee deliberated on the action plan and budget allocation for green belt development and noted that the green belt development shall be completed within a year.
- 14. The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found them to be satisfactory.
- 15. The Committee also deliberated on the public hearing issues along with action plan submitted by the proponent to address the issues raised during the public hearing and found it satisfactory.
- 16. The Committee deliberated on the pointwise clarification of project proponent on the issues raised in the representation dated 31.07.2022 and found it satisfactory.
- 17. The EAC deliberated on the information furnished by the project proponent against the ADS raised by the EAC and found it satisfactory.
- 18. The EAC also deliberated on the written submissions submitted by the proponent pertaining to pointwise reply of PP to representations received against the project and found it satisfactory.
- 19. The EAC deliberated on the proposal with due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the

EAC found the proposal in order and recommended for grant of environmental clearance.

20. The environmental clearance recommended to the project/activity is strictly under the provisions of the EIA Notification 2006 and its subsequent amendments. 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. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

Recommendations of the Committee

18.6.26 In view of the foregoing and after detailed deliberations, the committee **recommended** the instant expansion proposal for grant of Environment Clearance **subject to uploading the written submission on portal** under the provisions of EIA Notification, 2006 subject to the stipulation of 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 Condition:

- i. The project proponent shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- ii. The project proponent shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing more than emitted. The implementation report shall be submitted to the IRO, MoEF&CC in this regard.
- iii. Performance test shall be conducted on all pollution control systems every year and report shall be submitted to Regional Office of the MoEF&CC.
- iv. Following additional arrangements to control fugitive dust shall be provided:
 - a. Fog / Mist Sprinklers at all conveyors point and on bulk raw material storage area (at the transfer points) like Iron Ore, Coal and for Fly Ash and similar solid waste storage areas.
 - b. Proper covered vehicle shall be used while transport of materials.
 - c. Wheel Washing mechanism shall be provided in entry and exit gates.
- v. Particulate matter emission from stacks shall be less than 30 mg/Nm³.
- vi. Total water requirement will be 3861 m³/day which will be sourced from sister concern unit M/s. Welspun India Limited from its 30 MLD Sewage treatment plant after recycling & reuse of municipal sewage generated from the nearby Municipalities. No ground water abstraction is permitted.
- vii. The company shall also undertake rain water harvesting measures as per the plan submitted in the EIA/EMP report.

- viii. Sang River is at a distance of 0.6 km from the project site. Other water bodies such as Churwa river, Ponds, Shinai Lake also exists within the study area of 10 km from the project site. The water bodies shall not be disturbed. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be implemented.
 - ix. Air cooled condensers shall be used in the Power plant.
 - x. Action plan for 100 % solid waste utilization shall be implemented as committed in EIA/EMP report.
 - xi. A proper action plan must be implemented to dispose of the electronic waste generated in the industry.
- xii. Mitigation measures to minimize the impact of noise shall be undertaken as committed.
- xiii. Three tier Green Belt shall be developed in a time frame of one year with native species all along the periphery of the project site of adequate width and tree density shall not be less than 2500 per ha. Survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years. Green belt development shall also be developed towards Sang River which is located at a distance of 600 m from the plant boundary. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.
- xiv. Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface.
- xv. No construction activity/ infringement shall take place in flood plain of Sang River.
- xvi. The proposed project shall be designed as "Zero Liquid Discharge" Plant. There shall be no discharge of effluent from the plant.
- xvii. The total wastewater generation from the proposed project will be 1020.00 KLD. As proposed, it shall be sent to M/s. Welspun India Limited ETP for treatment and reuse.
- xviii. All internal road and connecting road from project site to main highway shall be developed and maintained with suitable Million Axle Standard (MSA) as per the traffic load due to existing and proposed project.
 - xix. Internal roads of plant premises shall be concreted and maintained in good condition. Industrial vacuum cleaners shall be used regularly to clean roads to reduce fugitive emissions.
 - xx. All stockyards shall be having impervious flooring and shall be equipped with water spray system for dust suppression. Stock yards shall also have garland drains to trap the run off material.
 - xxi. All the commitments made to the public during the Public Hearing/Public Consultation shall be satisfactorily implemented. The action plan based on the social impact assessment study of the project as per the EMP in accordance to the Ministry's OM dated 30.09.2020 shall be strictly implemented and progress shall be submitted to the Regional Office of MoEF&CC.
- xxii. The Plastic Waste Management Rules 2016, inter-alia, mandated banning of identified Single Use Plastic (SUP) items with effect from 01/07/2022. In this regard, CPCB has

issued a direction to all the State Pollution Control Boards (SPCBs)/Pollution Control Committees (PCCs) on 30/06/2022 to ensure the compliance of Notification published by Ministry on 12/08/2021. The technical guidelines issued by the CPCB in this regard is available at https://cpcb.nic.in/technical-guidelines-3/. All the project proponents are hereby requested to sensitize and create awareness among people working within the Project area as well as its surrounding area on the ban of SUP in order to ensure the compliance of Notification published by this Ministry on 12/08/2021. A report, along with photographs, on the measures taken shall also be included in the six monthly compliance report being submitted by the project proponents.

xxiii. The project proponent shall adopt the Clean Air practices like mechanical collectors, wet scrubbers, fabric filters (bag houses), electrostatic precipitators, combustion systems (thermal oxidizers), condensers, absorbers, adsorbers, and biological degradation. Controlling emissions related to transportation shall include emission controls on vehicles as well as use of cleaner fuels. Sufficient numbers of additional truck mounted Fog/Mist water cannons shall be procured and operated regularly inside the project premises and also in the surrounding villages to arrest suspended dust in the atmosphere.

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 06 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.
- 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. 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. 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.
- vi. The project proponent shall ensure covered transportation and conveying of ore, coal and other raw material to prevent spillage and dust generation.
- vii. The project proponent shall provide primary and secondary fume extraction system at all melting furnaces.
- vi. 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 31st March 2012 (Integrated iron & Steel); G.S.R 414 (E) dated 30th May 2008 (Sponge Iron) 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 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.
- iii. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
- iv. The project proponent shall provide the ETP for effluents of rolling mills to meet the standards prescribed in G.S.R 277 (E) 31st March 2012 (applicable to IF/EAF) as amended from time to time.
- 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/exit of the plant gates.

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.
- 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.
- ii. Project proponent shall submit a study report on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon capture, use and storage and offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitor able with defined time frames.

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. Environment Management

- 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. As part of Corporate Environment Responsibility (CER) activity, company shall adopt nearby villages based on the socio-economic survey and undertake community developmental activities in consultation with the village Panchayat and the District Administration as committed.
- ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures and balances have proper checks and to bring into focus to anv 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, 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.
- 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. The PP shall put all the environment related expenditure, expenditure related to Action Plan on the PH issues, and other commitments made in the EIA/EMP Report etc. in the company web site for the information to public/public domain. The PP shall also put the information on the left over funds allocated to EMP and PH as committed in the earlier ECs and shall be carried out and spent in next three years, in the company web site for the information.
 - x. 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).
 - xi. 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.
- xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiv. 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.

 xv. 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.

Amendments in Environmental Clearance

Agenda No. 18.7

18.7 Expansion of Crude Steel Production from 2.2 MTPA to 4.5 MTPA and Cold Rolling Mill from 1.6 MTPA to 2.6 MTPA within the existing Steel Plant by M/s Jindal Stainless Limited, located at Kalinganagar Industrial Complex, Jajpur, Odisha– Consideration of Modification/ Bifurcation/ Partial Transfer of Environmental Clearance.

[Proposal No. IA/OR/IND/287346/2022; File No. IA-J-11011/281/2007-IA.II(I)] [Consultant: M.N. Dastur & Company (P) Ltd., valid upto 22.02.2023]

- 18.7.1 M/s. Jindal Stainless Limited (JSL) has made an online application vide proposal no. IA/OR/IND/287346/2022 dated 07/10/2022 along with Form 4 and addendum EIA report and sought for amendment in Environmental Clearance accorded by the Ministry vide File no. IA-J-11011/281/2007-IA.II(I) dated 01.06.2022 following the transfer of Iron making facilities of 2.35 MTPA and Steel making facilities of 2.3 MTPA from Jindal Stainless Limited (JSL) to JSL Ferrous Limited (JSLFL) and further amendment in existing Blast Furnaces facilities of 1 x 720 m³ + 1 x 1,680 m³ (total volume 2,400 m³) to 1 x 2,307 m³ and Sinter Plant of 1 x 240 m² to 1 x 248 m² with no change in production capacity under JSL Ferrous Limited at Kalinganagar Industrial Complex, Jajpur, Odisha. In addition to this, M/s. JSL Ferrous Limited also submitted an application vide proposal no. IA/OR/IND/285473/2022 dated 23.09.2022 in Form 7 for part transfer of said Iron making facilities of 2.35 MTPA and Steel making facilities of 2.35 MTPA in their name.
- 18.7.2 Name of the EIA consultant: M/s .N. Dastur & Company (P) Ltd. [Extension of Validity of Accreditation vide Certificate : QCI/NABET/ENV/ACO/22/2588 dated 23.11.2022; valid upto with a validity upto 22.02.2023].

Details submitted by the project proponent

18.7.3 M/s. Jindal Stainless Limited (JSL) was originally accorded environmental clearance vide letter No. IA-J-11011/281/2007- IA.II(I), dated 01.06.2022 for expansion of Crude Steel Production from 2.2 MTPA to 4.5 MTPA and Cold Rolling Mill Production from 1.6 MTPA to 2.6 MTPA within the existing Steel Plant at Kalinga Nagar Industrial Complex, Jajpur Road, Odisha. As per the said EC following is the product capacities of various process units.

S No. Plant Equipment/ Facility	Final
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		Configuration	Capacity
	Iron Making	-	2.35 MTPA
1	Blast Furnace	$1 \text{x} 720 \text{ m}^3$	2.35 MTPA
		$1 \times 1680 \text{ m}^3$	
2	Sinter Plant	$1 \times 120 \text{ m}^2$	3.64 MTPA
		$1x240 \text{ m}^2$	
SMS	_		4.5 MTPA
3	EAF	2x150 T	-
4	Induction Furnace	3x30 T +	-
		2x6 T +	
		1x200 kg	
5	Cr Converter	1x70 T	-
6	BOF	1x110 T	-
		1x150 T	
	AOD	3x150 T	-
	LF	4x150 T	-
7	Caster Shop	4x1 Strand	-
CRM	1	-	2.6 MTPA
8	HAPL	3 lines	2 x 0.8 MTPA +
			1 x 1.0 MTPA
9	CAPL	3 lines	$2 \times 0.45 \text{ MTPA} + 1 \times 10^{-5} \text{ MTPA}$
10			0.5 MTPA
10	Tandem mill	1 mill	1 x 1.0 MTPA
11	Zmill	2 mills	2 x 0.15 MTPA
12	Bright annealing	2 lines	2 x 0.075 MTPA
13	Finishing lines	20 lines	
	(Slitting, cut to length, Skin		-
	pass mill etc.)		
Ferro A	Lloy Complex	-	0.33 MTPA
14	ore	I unit	0.7 MIPA
15	SAF – Ferro Chrome	2x60 MVA + 3x27.6	0.25 MTPA Increase
		MVA	in Fe-Cr production
			by change of feed
			from briquette to
1.6			palletized sinter)
16	WHRB	2x28.5 TPH	13 MW
1/	AFBC	50 IPH	100 701
18	Briquette Plant	180 IPH	180 IPH
19	Jigging Plant Thermol Device Direct	150 IPH	150 IPH
20	Thermal Power Plant		250 MW
		14 M W	
Flux Co	Dela Calainina Diant	-	0.74 MITPA
22	Line – Dolo Calcining Plant	א מעט דרט + 12450 דסה	-
22	Hydrated Lima Dlant		
23	Air Separation Diant	200 IFD $2_{\text{v}}/25 \text{ TPD} + 1_{\text{v}}000 \text{ TDD}$	- 2 x /25 TDD + 1
24		2A+2J IID + IX700 IFD	$\begin{array}{c} 2 \times 423 \text{ II } D + 1 \times 3 \\ 900 \text{ TPD} \end{array}$
25	Metal Recovery	2x50 TPH +	340 TPH

S No.	Plant Equipment/ Facility	Final			
		Configuration	Capacity		
		3x80 TPH			
26	Railway siding with wagon tippler	3nos. wagon tippler with 12 nos. line including ICD facility	-		

18.7.4 Detail of Consent to Establishment/ Consent to Operate:

	Date	Details
CTE	16.09.2022	Consent to Establish for said expansion project was accorded by SPCB, Odisha vide letter No. 16913/IND-II-CTE-6660; dated :
		16.09.2022.
СТО	19/03/2021	Latest Consent to Operate for the units prior to expansion was accorded by Odisha State Pollution Control Board vide lr. No. 4558/ IND-I-CON-5136 dated 19/03/2021. The validity of CTO is up to 31/03/2023.

18.7.5 The implementation status of the EC dated 01.06.2022 is furnished as below.

S No.	Plant Equipment/	Fina	al	Implementation Status
	Facility	Configuration	Capacity	(Proposed facilities yet to
				<u>install)</u>
	Iron Making	-	2.35 MTPA	2.35 MTPA
1	Blast Furnace	$1 \text{x} 720 \text{ m}^3$	2.35 MTPA	$1 \text{ x } 720 \text{ m}^3$
		$1 \text{x} 1680 \text{ m}^3$		$1 \text{ x } 1680 \text{ m}^3$
2	Sinter Plant	$1 \times 120 \text{ m}^2$	3.64 MTPA	$1 \ge 120 \text{ m}^2$
		$1x240 m^2$		$1 \ge 240 \text{ m}^2$
				(3.64 MTPA)
SMS			4.5 MTPA	2.3 MTPA
3	EAF	2x150 T	-	-
4	Induction Furnace	3x30 T +	-	2 x 30T
		2x6 T +		
		1x200 kg		
5	Cr Converter	1x70 T	-	1 x 70 T
6	BOF	1x110 T	-	1 x 110 T
		1x150 T		1 x 150 T
	AOD	3x150 T	-	1 x 150 T
	LF	4x150 T	-	2 x 150 T
7	Caster Shop	4x1 Strand	-	2 x 1 Strand
CRM	I	-	2.6 MTPA	1.0 MTPA
8	HAPL	3 lines	2 x 0.8	1 x 1.0 MTPA
			MTPA +	
			1 x 1.0	
			MTPA	
9	CAPL	3 lines	2 x 0.45	1 x 0.5 MTPA
			MTPA + 1 x	
			0.5 MTPA	
10	Tandem mill	1 mill	1 x 1.0	1 x 1.0 MTPA

S No.	Plant Equipment/	Fina	al	Implementation Status		
	Facility	Configuration	Capacity	(Proposed facilities yet to install)		
			MTPA			
11	Z mill	2 mills	2 x 0.15	2 x 0.15 MTPA		
			MTPA			
12	Bright annealing	2 lines	2 x 0.075	2 x 0.075 MTPA		
	Dright annearing		MTPA			
13	Finishing lines	20 lines		10 lines		
	(Slitting, cut to		_			
	length, Skin pass					
	mill etc.)					
Ferre	o Alloy Complex	-	0.33 MTPA	0.08 MTPA		
14	Pelletisation & Sintering of Cr ore	1 unit	0.7 MTPA	0.7 MTPA		
15	SAF – Ferro	2x60 MVA +	0.25 MTPA			
	Chrome	3x27.6 MVA	Increase in			
			Fe-Cr			
			production by			
			change of			
			feed from			
			briquette to			
			palletized			
		• • • • • • • • • • •	sinter)			
16	WHRB	2x28.5 TPH	13 MW	-		
17	AFBC	50 TPH	100 551	-		
18	Briquette Plant	180 TPH	180 TPH	-		
19	Jigging Plant	150 TPH	150 TPH	50 TPH		
20	Thermal Power	2x125 MW	250 MW	-		
21	Plant (DE)	1 4 1 4 1 4 1 1 7 7	1 4 3 4337	1.4 \$ 4337		
21	IKI (BF)	14 MW	14 MW	14 MW		
Flux	Complex	- 2 (00 TDD	0.74 MIPA	0.39 MIPA		
22	Lime –Dolo Coloining Dlant	$3 \times 000 \text{ IPD} +$ $1 \times 450 \text{ TDD}$	-	2 X 000 IPD		
22	Lacining Plant	1X430 TPD				
23	Plant	200 IPD	-			
24	Air Separation	2×425 TDD	2 x 425 TPD	1 Y 000 TDD		
24	Plant	2x423 IT D + $1 \times 000 \text{ TPD}$	$2 \times 423 \Pi D$ + 1 x 900	1 X 900 11 D		
	1 Iani	12700 11 D				
25	Metal Recovery	2x50 TPH +	340 TPH	1 x 50 TPH + 2 x 80 TPH		
25		3x80 TPH				
26	Railway siding	3nos. wagon	_	2 nos. Wagon Tippler with 7nos.		
	with wagon tippler	tippler with 12		Line from Jakhapura/ Sukinda		
		nos. line		Road Station and ICD facilities		
		including ICD				
		facility				

18.7.6 The instant proposal is for amendment in Environmental Clearance letter no. IA-J-11011/281/2007-IA.II(I) dated 01.06.2022 following the transfer of Iron making facilities of 2.35 MTPA and Steel making facilities of 2.3 MTPA from Jindal Stainless Limited (JSL) to JSL Ferrous Limited (JSLFL) and further amendment in existing Blast Furnaces facilities of 1 x 720 m³ + 1 x 1,680 m³ (total volume 2,400 m³) to 1 x 2,307 m³ and Sinter Plant of 1 x 240 m² to 1 x 248 m² with no change in production capacity under JSL Ferrous Limited at Kalinganagar Industrial Complex, Jajpur, Odisha. The reasons for part transfer of the said facilities is that M/s. JSL as a group company intends to enter into the Carbon Steel business as a separate entity.

No.Equipment/ Facility01.06.2022Jindal Stainless Limited (JSL)JSL Ferrous Limited (JSL)by the PP (JSL)IIron-2.352.35Making-2.352.35MTPA1Blast $1x720 \text{ m}^3$ 2.351x720 m^32.35In JSLFL,1Furnace $1x1680 \text{ m}^3$ 2.35 1x720 m^32.35In JSLFL,2Sinter Plant $1x120 \text{ m}^2$ 3.641x120 m^23.64-1x120 m^22Sinter Plant $1x240 \text{ m}^2$ 3.641x120 m^23.64In JSLFL, SP2Sinter Plant $1x20 \text{ m}^2$ 3.641x120 m^23.64In JSLFL, SP2Sinter Plant $1x120 \text{ m}^2$ 3.641x240 m^2MTPAamended to 1x 1200 m^21x240 m2 $x8xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx$	S	Plant	Existing as per	r EC dated	Detail	Submitted			
Facility Configuration Capacity C	No.	Equipment/	01.06.2	022	Jindal Stainle	ess Limited	JSL Ferrous	Limited	by the PP
Configuration Configuration Capacity Configuration Capacity Configuration Capacity I Making - 2.35 - - 2.35 1 Blast 1x720 m³ 2.35 - - 1x720 m³ 2.35 Furnace 1x1680 m³ MTPA - 1x1680 m³ MTPA Facility to be amended to 1 x 2.30 m³ 2 Sinter Plant 1x120 m² 3.64 - - 1x120 m² 3.64 In JSLFL, SP m³ 2 Sinter Plant 1x120 m² 3.64 - - 1x240 m² MTPA manded to 1 x 2.30 m³ m³ manded to 1 x 2.40 m² m³ instead of 1 x 2.40 m² x 248 m² instead of 1 x 2.40 m² x 120 m² + 1 x 2.40 m² instead of 1 x 2.40 m² x 120 m² + 1 x 2.40 m² instead of 1 x 2.20 m² + 1 x 2.40 m² instead of 1 x 2.20 m² + 1 x 2.40 m² instead of 1 x 2.20 m² + 1 x 2.40 m² instead of 1 x 1.20 m² + 1 x 2.40 m² instead of 1 x 1.20 m² + 1 x 2.40 m² instead of 1 x 1.20 m² + 1 x 2.40 m² instead of 1 x 2.20 m²		Facility		T	(JSI	L)	(JSLF)	L)	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			Configuration	Capacity	Configuration	Capacity	Configuration	Capacity	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		Iron	-	2.35	-	-	-	2.35	
1 Blast Furnace $1x120 \text{ m}^2$ 2.35 - - $1x1680 \text{ m}^3$ MTPA $1x1680 \text{ m}^3$ MTPA Bracily to be amended to 1 x 2.307 m ³ instead of 1 x 720 m ³ 2 Sinter Plant $1x120 \text{ m}^2$ 3.64 - - $1x120 \text{ m}^2$ 3.64 In JSLFL, with an of 1 x 720 m ³ 2 Sinter Plant $1x120 \text{ m}^2$ 3.64 - - $1x120 \text{ m}^2$ 3.64 In JSLFL, with an of the amended to 1 x 2.307 m ³ 2 Sinter Plant $1x120 \text{ m}^2$ 3.64 - - $1x120 \text{ m}^2$ 3.64 In JSLFL, with an of the amended to 1 x 120 m ² + 1 x 240 m ² SMS 4.5 MTPA 2.2 MTPA 2.3 MTPA MTPA x 240 m ² SMS 4.5 MTPA 2.2 MTPA 2.3 MTPA x 240 m ² with no change of final production capacity - 3 EAF 2x150 T - 2.2 MTPA 2.3 MTPA 3 EAF 2x150 T - - - 4 Induction 2x6 T + 2x200 kg 1x200 kg - - - 5 Cr 1x70 T - -	1	Making	1 520 3	MTPA			1 720 3	MTPA	
Purhace IX1680 m MTPA MTPA IX1680 m IX1200 m IX120 m	1	Blast	$1x/20 \text{ m}^3$	2.35	-	-	$1x/20 \text{ m}^3$	2.35	In JSLFL,
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		Furnace	1x1080 m	MIPA			1x1080 m	MIPA	be amonded
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$									to 1×2307
2 Sinter Plant 1x120 m ² 3.64 - - 1x120 m ² 3.64 n JSLFL, SP 2 Sinter Plant 1x240 m ² 3.64 - - 1x120 m ² 3.64 In JSLFL, SP 2 Sinter Plant 1x240 m ² 3.64 - - 1x120 m ² 3.64 In JSLFL, SP 3 EAF 2x150 T - - 1x240 m ² MTPA x 248 m ² 3 EAF 2x150 T - 2x150 T - - - 4 Induction 3x30 T + - - - - - 5 Cr 1x70 T - 1x70 T - - - 6 BOF 1x110 T - - - - - 4 Induction 1x150 T - - - - - 6 BOF 1x110 T - - - - - 1x100 T									m^3
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$									instead of 1
2 Sinter Plant $Ix120 m^2$ 3.64 - $Ix120 m^2$ 3.64 In JSLFL, SP 2 Sinter Plant $Ix240 m^2$ $MTPA$ $Ix240 m^2$ 3.64 In JSLFL, SP $Ix240 m^2$ $Ix240 m^2$ $Ix240 m^2$ $MTPA$ $Ix240 m^2$ $MTPA$ $Ix240 m^2$ $Ix240 m^2$ $Ix240 m^2$ $Ix240 m^2$ $Ix240 m^2$ $Ix240 m^2$ $Ix20 m^2 + 1x$ $X 248 m^2$ $Ix20 m^2 + 1x$ $X 248 m^2$ $Ix20 m^2 + 1x$ $X 240 m^2$ SMS 4.5 MTPA 2.2 MTPA $Ix20 m^2 + 1x$ $X 248 m^2$ $Ix10 m^2 + 1x$ $X 240 m^2$ SMS 4.5 MTPA 2.2 MTPA $Ix10 m^2$ $Ix10 m^2$ $Ix10 m^2$ SMS 4.5 MTPA 2.2 MTPA $Ix10 m^2$ $Ix10 m^2$ $Ix10 m^2$ 3 EAF 2x150 T $Ix200 kg$ $Ix10 m^2$ $Ix10 m^2$ 3 EAF 2x150 T $Ix10 T$ $Ix10 T$ $Ix10 T$ $Ix10 T$ 4 Induction $Ix200 kg$ $Ix200 kg$									x 720 m ³
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$									+ 1 x 1680
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$									m^3
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	2	Sinter Plant	$1 x 1 20 m^2$	3.64	-	-	$1 \times 120 \text{ m}^2$	3.64	In JSLFL, SP
Image: series of the serie			$1x240 \text{ m}^2$	MTPA			$1x240 \text{ m}^2$	MTPA	facility to be
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$									amended to 1
SMS 4.5 MTPA 2.2 MTPA $x 243 \text{ m}$ 3 EAF 2x150 T - 2.2 MTPA 4 Induction 3x30 T + - 2.2 MTPA 5 Cr 2x6 T + 2x6 T + - 1x200 kg - - - 6 BOF 1x110 T - - 1x150 T - - - - AOD 3x150 T - 3x150 T - - 1LF 4x150 T - 2x150 T - - 6 BOF 1x110 T - - - - 1LF 4x150 T - 2x150 T - - - 2x150 T - 2x150 T - - - - AOD 3x150 T - 2x150 T - - - - 1LF 4x150 T - 2x150 T - 2x150 T - - 1LF 4x150 T - 2x150 T - - - - 1									$x 120 m^2 + 1$
Image: Simple interval of the second sec									instead of 1
SMS 4.5 MTPA 2.2 MTPA 2.3 MTPA 3 EAF $2x150 T$ - - - 4 Induction $3x30 T +$ - $2x30 T +$ - - 4 Induction $3x30 T +$ - $2x6 T +$ - - 5 Cr $1x70 T$ - - - - 6 BOF $1x110 T$ - - - - AOD $3x150 T$ - $3x150 T$ - - - LF $4x150 T$ - $2x150 T$ - - - 6 BOF $1x110 T$ - - - - - LF $4x150 T$ - $2x150 T$ - - - - RMPA - $2x150 T$ - - - - - 6 BOF $1x110 T$ - - - - - - ILF $4x150 T$ - $2x150 T$ - 2x150 T - -									$x 120 m^2 + 1$
SMS 4.5 MTPA 2.2 MTPA $2.3 \\ MTPA$ 3 EAF 2x150 T -									$x 240 m^2$
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$									with no
SMS 4.5 MTPA 2.2 MTPA 2.3 MTPA 3 EAF $2x150$ T - $2x150$ T - - - 4 Induction $3x30$ T + - $2x6$ T + $2x6$ T + - - 4 Induction $3x30$ T + - $2x6$ T + - - 5 Cr $1x70$ T - $1x200$ kg - - 6 BOF $1x110$ T - - - - AOD $3x150$ T - $3x150$ T - - - LF $4x150$ T - $2x150$ T - - - LF $4x150$ T - $2x150$ T - 2x150 T - 7 Caster Shop $4x1$ Strand - $2x1$ Strand - 2x1 Strand - 7 Caster Shop $4x1$ Strand - $2x1$ Strand - - 8 HAPL 3 lines $2x 0.8$ 3									change of
SMS 4.5 MTPA 2.2 MTPA 2.3 MTPA 3 EAF 2x150 T - 2x150 T -									final
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $									production
SMS 4.5 MTPA 2.2 MTPA 2.3 MTPA 3 EAF $2x150$ T - 2 4 Induction $3x30$ T + - $3x30$ T + - 4 Induction $3x30$ T + - $3x30$ T + - - 4 Induction $3x30$ T + - $3x30$ T + - - - 5 Cr $2x6$ T + $2x6$ T + $2x6$ T + - - - 6 BOF $1x70$ T - $1x70$ T - - - 6 BOF $1x110$ T - - - - - 6 BOF $1x110$ T - - - - - 1x150 T - $3x150$ T - $3x150$ T - - - AOD $3x150$ T - $3x150$ T - $2x150$ T - Partial 7 Caster Shop $4x1$ Strand - $2x1$ Strand - 2x1 Strand - - 7 Caster Shop	~-	- ~							capacity
3 EAF $2x150 T$ - $2x150 T$ - -	SN	15		4.5 MTPA		2.2 MTPA		2.3 МТРА	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	3	EAF	2x150 T	_	2x150 T	-	-	-	
Furnace $2x6 T + 1x200 kg$ $2x6 T + 1x200 kg$ $1x200 kg$ 5 Cr $1x70 T$ $ 1x70 T$ $ -$ 6 BOF $1x110 T$ $ 1x110 T$ $-$ 6 BOF $1x110 T$ $ 1x110 T$ $-$ 6 BOF $1x110 T$ $ 1x150 T$ $-$ AOD $3x150 T$ $ 3x150 T$ $ -$ LF $4x150 T$ $ 2x150 T$ $ 2x150 T$ $-$ 7 Caster Shop $4x1$ Strand $ 2x1$ Strand $ -$ 8 HAPL 3 lines $2 x 0.8$ 3 lines $2 x 0.8$ $ -$	4	Induction	3x30 T +	-	3x30 T +	-	-	-	
$ \begin{array}{ c c c c c c c c c } \hline & & & & & & & & & & & & & & & & & & $		Furnace	2x6 T +		2x6 T +				
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $			1x200 kg		1x200 kg				
Converter Ix110 T - - - 1x110 T - - 1x110 T - - 1x110 T - - 1x110 T - - 1x150 T - - 1x150 T - - 1x150 T - - 1x150 T - - - 1x150 T - <t< td=""><td>5</td><td>Cr</td><td>1x70 T</td><td>-</td><td>1x70 T</td><td>-</td><td>-</td><td>-</td><td></td></t<>	5	Cr	1x70 T	-	1x70 T	-	-	-	
6 BOF $1x110 T$ - - - $1x110 T$ - AOD $3x150 T$ - $3x150 T$ - - $1x150 T$ - LF $4x150 T$ - $2x150 T$ - $2x150 T$ - Partial 7 Caster Shop $4x1$ Strand - $2x1$ Strand - $2x1$ Strand - Partial CRM - 2.6 MTPA - $2x 0.8$ 3 lines $2x 0.8$ $-$ - -		Converter							
Ix150 T Ix150 T Ix150 T AOD 3x150 T - 3x150 T - - LF 4x150 T - 2x150 T - 2x150 T - 7 Caster Shop 4x1 Strand - 2x1 Strand - 2x1 Strand - Partial Transfer CRM - 2.6 MTPA - 2.6 MTPA - - - 8 HAPL 3 lines 2 x 0.8 3 lines 2 x 0.8 - -	6	BOF	1x110 T	-	-	-	1x110 T	-	
AOD $3x150 T$ - $3x150 T$ LF $4x150 T$ - $2x150 T$ - $2x150 T$ -Partial Transfer7Caster Shop $4x1$ Strand- $2x1$ Strand- $2x1$ Strand-Partial TransferCRM-2.6 MTPA-2.6 MTPA8HAPL3 lines $2 x 0.8$ 3 lines $2 x 0.8$			1x150 T		0 1 7 0 F		1x150 T		
LF $4x150T$ - $2x150T$ - $2x150T$ - $2x150T$ -Partial Transfer7Caster Shop $4x1$ Strand- $2x1$ Strand- $2x1$ Strand-Partial Transfer7Caster Shop $4x1$ Strand- $2x1$ Strand- $2x1$ Strand-Partial TransferCRM-2.6 MTPA-2.6 MTPA8HAPL3 lines $2 x 0.8$ 3 lines $2 x 0.8$		AOD	3x150 T	-	3x150 T	-	-	-	
7 Caster Shop 4x1 Strand - 2x1 Strand - 2x1 Strand - Partial Transfer CRM - 2.6 MTPA - 2.6 MTPA - - - 8 HAPL 3 lines 2 x 0.8 3 lines 2 x 0.8 - -		LF	4x150 T	-	2x150 T	-	2x150 T	-	Partial
7 Caster Shop 4X1 Strand - 2X1 Strand - 2X1 Strand - Faithar CRM - 2.6 MTPA - 2.6 MTPA - - - 8 HAPL 3 lines 2 x 0.8 3 lines 2 x 0.8 - -	7	Castor Shop	Av1 Strond		2v1 Strand		2v1 Strond		Dortiol
CRM - 2.6 MTPA - 2.6 MTPA -	/	Caster Shop	471 Strand	-	2x1 Strand	-	2x1 Stranu	-	Transfer
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	CF	RM	-	2.6 MTPA	-	2.6 MTPA	-	-	1 fullster
	8	HAPL	3 lines	2×0.8	3 lines	2×0.8	_	-	
MTPA + MTPA +				MTPA +		MTPA +			

S	Plant	Existing as per	EC dated	Details after amendment/transfer			Submitted	
No.	Equipment/	01.06.2	022	Jindal Stainle	ess Limited	JSL Ferrous	Limited	by the PP
	Facility			(JSI	2)	(JSLFI	L)	·
	ě	Configuration	Capacity	Configuration	Capacity	Configuration		
		e e u a gar a de care	$1 \times 1 0$	e on angle worker	1×10	e o na gar a o na a	Capacity	
			ΜΤΡΔ		ΜΤΡΔ			
9	CAPI	3 lines	2×0.45	3 lines	2×0.45			
2	CAL	5 11105	$\frac{2 \times 0.43}{\text{MTDA} + 1}$	5 111105	$\frac{2 \times 0.43}{\text{MTD} \Lambda + 1}$	-	-	
			$\mathbf{v} = \mathbf{v} + \mathbf{i}$		$\mathbf{x} = \mathbf{x}$			
			Α 0.5 ΜΤΡΔ		Λ 0.5 ΜΤΡΔ			
10	Tandam	1 mill	$1 \times 1 0$	1 mill	1×10			
10	mill	1 111111		1 111111		-	-	
11	7 mill	2 mill_{0}	$\frac{1}{2} \times 0.15$	2 mill_{6}	2×0.15			
11		2 111115	2 X 0.13 MTDA	2 111115		-	-	
12	Dright	2 lines	$\frac{1}{2} \times 0.075$	2 lines	$\frac{1}{2} \times 0.075$			
12	onnooling	2 111105	2 X U.U73	2 mies	2 X 0.073	-	-	
12	Einishing	20 1:000	MIPA	20 1:000	MIPA			
15	Finishing	20 lines		20 lines		-	-	
	lines (Slitting							
	(Shtting,							
	cut to		-		-			
	length, Skin							
	pass mill							
-	etc.)							
Fe	rro Alloy	-	0.33	-	0.33 MTPA	-	-	
Co	mplex		MTPA					
14	Pelletisation	l unit	0.7 MTPA	l unit	0.7 MTPA	-	-	
	& Sintering							
	of Cr ore	A (A A A A A A A A A A	0.05	a <i>c</i> o b c t	0.05.16775.4			
15	SAF – Ferro	2x60 MVA +	0.25	2x60 MVA +	0.25 MTPA	-	-	
	Chrome	3x27.6 MVA	МТРА	3x27.6 MVA	Increase in			
			Increase		Fe-Cr			
			in Fe-Cr		production			
			production		by change			
			by change		of feed			
			of feed		from			
			from		briquette to			
			briquette		palletized			
			to		sinter)			
			palletized					
			sinter)					
16	WHRB	2x28.5 TPH	13 MW	2x28.5 TPH	13 MW	-	-	
17	AFBC	50 TPH		50 TPH		-	-	
18	Briquette	180 TPH	180 TPH	180 TPH	180 TPH	-	-	
	Plant							
19	Jigging	150 TPH	150 TPH	150 TPH	150 TPH	-	-	
L	Plant							
20	Thermal	2x125 MW	250 MW	2x125 MW	250 MW	-	-	
	Power Plant							
21	TRT (BF)	14 MW	14 MW	14 MW	14 MW	-	-	
Fh	ix Complex	-	0.74	-	0.74 MTPA	-	-	
	1		МТРА					
22	Lime –Dolo	3 x 600 TPD +	-	3 x 600 TPD +	-	-	_	
	Calcining	1x450 TPD		1x450 TPD				
	Plant							
23	Hydrated	200 TPD		200 TPD	_	_	_	
	11 Janutou	200 IID		200 11 D				

S	Plant	Existing as per	EC dated	Detail	s after amer	ndment/transfe	r	Submitted
No.	Equipment/	01.06.2	022	Jindal Stainle	ss Limited	JSL Ferrous	Limited	by the PP
	Facility			(JSL	<i>.</i>)	(JSLF)	L)	
		Configuration	Capacity	Configuration	Capacity	Configuration	Capacity	
	Lime Plant							
24	*Air	2x425 TPD +	2 x 425	2x425 TPD +	1 x 425	-	-	Amendment
	Separation	1x900 TPD	TPD + 1 x	1x900 TPD	TPD +			in
	Plant		900 TPD		1x1450			configuration
					TPD			of one no.
								Air
								Separation
								Plant from
								900 TPD to
								1450 TPD
25	Metal	2x50 TPH +	340 TPH	2x50 TPH +	340 TPH	-	-	
	Recovery	3x80 TPH		3x80 TPH				
26	Railway	3nos. wagon	-	3nos. wagon	-	-	-	
	siding with	tippler with 12		tippler with 12				
	wagon	nos. line		nos. line				
	tippler	including ICD		including ICD				
		facility		facility				

- 18.7.7 With respect to the EC amendment and part transfer, the project proponent submitted following documents.
 - Form 4 for amendment in EC and Form 7 for transfer of Environment Clearance.
 - No objection Certificate from M/s. Jindal Stainless Limited by way of affidavit in an India non-judicial stamp dated 17.06.2022 for partial transfer of Environment clearance dated 01.06.2022 to M/s. JSL Ferrous Limited.
 - Undertaking from M/s. JSL Ferrous Limited by way of affidavit in an India non-judicial stamp dated 17.06.2022 stating that they will be comply with all the applicable conditions as stipulated in the Environment Clearance dated 01.06.2022.
 - Copy of the board resolution passed by the Board of Directors of Jindal Stainless Limited at their meeting held on 25.07.2022, wherein decision has been taken for such arrangements pertaining to transfer of firm from M/s. Jindal Stainless Limited to M/s. JSL Ferrous Limited.
 - Certificate of Incorporation of M/s. JSL Ferrous Limited from ROC, Ministry of Corporate Affairs dated 21.11.2019 bearing CIN Number U27200HR2019PLC083764.
 - Certificate of Incorporation of M/s. Jindal Stainless Limited from ROC, Ministry of Corporate Affairs dated 07.12.2011 bearing CIN Number L26922HR1980PLC010901.
 - Facility matrix showing devolution of production facilities between JSL and JSLFL.
 - Project Information Matrix between JSL and JSLFL
 - Matrix of applicability of stipulations of EC and subsequent amendments between JSL and JSLFL.
 - The addendum EIA report inter-alia including process details, emission levels, solid and hazardous waste management, raw material and fuel requirement, the Environmental Management Plan (EMP), etc. for the project.

S	Name of Company	CIN No	Change of Ownership		
No					
1	M/s. Jindal	L26922HR1980PLC010901	As per Sl. No 1 (f) of Form -7, the		

S	Name of Company		ompany	CIN No	Change of Ownership
No					
	Stain	less Li	imited		project proponent has submitted
2	M/s.	JSL	Ferrous	U27200HR2019PLC083764	that the proposal involves change
	Limit	ed			in ownership between M/s. Jindal
					Stainless Limited and M/s. JSL
					Ferrous Limited. Further the CIN
					numbers of the both companies
					are found different. In view of the
					same the proposal involves
					transfer of Environment Clearance
					from M/s. Jindal Stainless Limited
					to M/s. JSL Ferrous Limited.

18.7.8 The EAC examined the aforementioned documents and noted that following are the changes may be arising out of the EC amendment followed by the part transfer of the facilities:

Sl. No.	Parameter		JSL			JSLFL		
1	Project Name	Amendment of EC of Jindal Iro Stainless Limited for Crude Steel an production of 2.2 MTPA and Cold M Rolling Mill of 2.6 MTPA in the existing Plant post transfer of Iron making facilities of 2.35 MTPA and Steel making facilities of 2.3 MTPA located at Kalinganagar Industrial Complex, Jajpur, Odisha.					aking facilitie eel making located a ial Complex, J	s of 2.35 MTPA facilities of 2.3 t Kalinganagar ajpur, Odisha.
2	Location	Kalinga Nagar Industrial Complex Village - Danagadi Tehsil – Danagadi District – Jajpur State - Odisha				Kalinga Nagar Industrial Complex Village - Danagadi Tehsil – Danagadi District – Jajpur State - Odisha		
3	Coordinates	Sl. No.	Lat (N)	Long (E)		Sl. No.	Lat (N)	Long (E)
		1	20.943441°	86.041976°		1	20.943441°	86.041976°
4		2	20.952971°	86.038322°		2	20.952971°	86.038322°
		3	20.956561°	86.048814°		3	20.956561°	86.048814°
		4	20.954780°	86.049820°		4	20.954780°	86.049820°
		5	20.951177°	86.045451°		5	20.951177°	86.045451°
		6	6 20.946848° 86.047905°				20.946848°	86.047905°
	Land Area		348 ha	a			89.03	ha
5		(860.18 acre)					(220 ac	re)
	Greenbelt		127.07	ha			29.4 h	ia
			(314 Ac	re)			(73 Ac	re)
6	Utilities		Water: 1391	m ³ /hr			Water: 350	m ³ /hr

I. <u>Project Information Matrix</u>

		Power: 333 MW	Power: 126 MW
7	Manpower	Construction phase: 1080	Construction phase: 1100
		Operation phase: 1300	Operation phase: 940
8	Project Cost	INR 11955 crore	INR 3249 crore
9	EMP Cost	INR 1088 crore	INR 324.2
10	CER and PH	INR 34.41 crore	INR 20 crore
	raised issues		
	implementation		
	Cost		

II. <u>Raw Material Requirement</u>

Sl. No.	Raw Material	JSL	JSLFL
1	Lime stone	1.94 MTPA	_
2	Dolomite	0.20 MTPA	_
3	Pyroxenite	0.03 MTPA	-
4	Quartz	0.03 MTPA	-
5	Ferro alloy	0.07 MTPA	_
6	Hot Rolled Coil	0.97 MTPA	-
7	Coke	-	1.11 MTPA
8	PCI Coal	-	0.25 MTPA
9	Coke Breeze	-	0.19 MTPA
10	Lump Iron Ore	-	0.35 MTPA
11	Iron Ore Fines	-	3.15 MTPA

III. <u>Risk Matrix</u>

Sl.	Event	Likelihood of	Likelihood of detection	Severity of	Risk
A. 2	M/s. Jindal Stainless Limited	occurrence	utition	consequence	
i	Fuel gas leaks from the pipe line/valves/gas holders	High (4)	Low (4)	High (10)	80
ii	Propane storage and handling	Very low (1)	High (2)	High (10)	30
iii	Unsafe disposal of oily wastes of Rolling Mills	Moderate (3)	Low (4)	Moderate (8)	56
iv	Occurrence of static electricity/electric spark in the Mill Cellar Room	Very low (1)	Very low (5)	High (10)	60
v	Leakage of acids/alkalis	Low (2)	Very low (5)	Moderate (8)	56
vi	Uncontrolled dust emissions/failure of emission control system	High (4)	Moderate (3)	Moderate (8)	56
vii	Oil wastes/oil sludge handling	Low (2)	High (2)	Moderate (8)	32
viii	Release of untreated wastewater	Low (2)	Very High (1)	High (10)	30
ix	Collapsing of acid/alkali storage tanks	Very low (1)	High (2)	High (10)	30
B. 2	B. M/s. JSL Ferrous Limited				
i	Fuel gas leaks from the pipe	High (4)	Low (4)	High (10)	80

Sl.	Event	Likelihood of	Likelihood of	Severity of	Risk
INO.		occurrence	detection	consequence	potential
	line/valves/gas holders				
ii	Propane storage and handling	Very low (1)	High (2)	High (10)	30
iii	Unsafe disposal of oily wastes of Rolling Mills	Moderate (3)	Low (4)	Moderate (8)	56
iv	Occurrence of static electricity/electric spark in the Mill Cellar Room	Very low (1)	Very low (5)	High (10)	60
v	Leakage of acids/alkalis	Low (2)	Very low (5)	Moderate (8)	56
vi	Failure of emission control system	High (4)	Moderate (3)	Moderate (8)	56
vii	Oil wastes/oil sludge handling	Low (2)	High (2)	Moderate (8)	32
viii	Release of untreated wastewater	Low (2)	Very High (1)	High (10)	30
ix	Collapsing of acid/alkali storage tanks	Very low (1)	High (2)	High (10)	30
х	Failure of Gas Cleaning Plant/ Fume Extraction System	Moderate (3)	High (2)	High (10)	50
xi	Wet scrubbers running dry	Low (2)	Moderate (3)	High (10)	50
xii	Collapsing of Gas holder	Very low (1)	High (2)	High (10)	30
xiii	Splashing of molten metal and slag	Low (2)	Very High (1)	High (10)	30

IV. <u>EC conditions compliance matrix</u>

SL	Present Conditions of JSL as per	Conditions remain with JSL	Condition transferred to JSLFL
NO.	EC		
A. Sp	pecific Conditions:		
i	Three tier Green Belt shall be developed in a time frame of one year covering 35% of total area (as committed by PP) with native species all along the periphery of the project site of adequate width and tree density shall not be less than 2500 per ha. Survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years. Compliance status in this regard, shall be submitted to concern Regional Office of the MoEF&CC.	Three tier Green Belt shall be developed in a time frame of one year covering 35% of total area (as committed by PP) with native species all along the periphery of the project site of adequate width and tree density shall not be less than 2500 per ha. Survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years. Compliance status in this regard, shall be submitted to concern Regional Office of the MoEF&CC. Compliance: JSL as a group company has planted 343374 nos. of trees covering an area of 194.04 Ha (about 38.7 % of the total area) of green belt inside the plant premises till August' 2022. Further Avenue Plantation of about 159180 nos. samplings have been made outside the plant & 95999 nos. samplings have been	Three tier Green Belt shall be developed in a time frame of one year covering 35% of total area (as committed by PP) with native species all along the periphery of the project site of adequate width and tree density shall not be less than 2500 per ha. Survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years. Compliance status in this regard, shall be submitted to concern Regional Office of the MoEF&CC. Compliance: Out of 220 Acre of total plant area, around 73 Acres of land has been earmarked for green belt development.
		and educational institutions till March' 2022.	
ii	Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil	Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface. Compliance:	Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface.

SL NO.	Present Conditions of JSL as per EC	Conditions remain with JSL	Condition transferred to JSLFL
	surface.	At present, Greening and Paving has been implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface. The same shall be adopted in the said expansion project.	Compliance: Noted and agreed
iii	41,784 m ³ /day of water requirement after the proposed expansion shall be met from Brahmani River and by Internal recycling after prior approval of the Competent Authority. No ground water abstraction is permitted.	33,384 m ³ /day of water requirement after the proposed expansion shall be met from Brahmani River and by Internal recycling after prior approval of the Competent Authority. No ground water abstraction is permitted. Compliance: Post expansion of JSL, 33,384 m3/day water shall be met from Brahmani River and by Internal recycling with the approval of the Competent Authority. No ground water abstraction is permitted.	8,400 m ³ /day of water requirement after the proposed expansion shall be met from Brahmani River and by Internal recycling after prior approval of the Competent Authority. No ground water abstraction is permitted. Compliance: Noted and agreed.
iv	Cold Rolling Mill shall have its independent ETP. Hazardous waste generated in CRM shall be sent to TSDF and oily waste shall be sent to registered recyclers. Acid Recovery Plant shall be provided in CRM.	Cold Rolling Mill shall have its independent ETP. Hazardous waste generated in CRM shall be sent to TSDF and oily waste shall be sent to registered recyclers. Acid Recovery Plant shall be provided in CRM. Compliance: At present an independent ETP has been installed and the ETP sludge (hazardous waste) generated is being sent to SPCB approved CHWTSDF, Ramky at Sukinda. The same practice will be adopted in the expansion project.	Not Applicable.
v	Covered sheds and toe walls shall be provided for raw material storage to check any attrition of raw materials. Storage sheds shall have garland drains, material traps and shall be built on concrete platforms.	Covered sheds and toe walls shall be provided for raw material storage to check any attrition of raw materials. Storage sheds shall have garland drains, material traps and shall be built on concrete platforms. Compliance: At present Covered sheds with concrete flooring, toe walls, garland drains and settling pits have been made for storage of raw materials. The same practice will be adopted in the expansion project.	Covered sheds and toe walls shall be provided for raw material storage to check any attrition of raw materials. Storage sheds shall have garland drains, material traps and shall be built on concrete platforms. Compliance: Noted and agreed
vi	Top Recovery Turbine, Dry Gas Cleaning and Stove gas waste heat recovery systems shall be installed in BF.	Compliance: Not Applicable	Top Recovery Turbine, Dry Gas Cleaning and Stove gas waste heat recovery systems shall be installed in BF. Compliance: Noted and agreed
vii	Sinter Plant shall be equipped with Sinter cooler waste recovery system and suitable technology for control of dioxins and furans emissions from the plant.	Compliance: Not Applicable	Sinter Plant shall be equipped with Sinter cooler waste recovery system and suitable technology for control of dioxins and furans emissions from the plant. Compliance: Noted and agreed
viii	TCLP analysis of the AOD slag shall be carried out periodically. In case of presence of hazardous material, the same shall be sent to TSDF. In case of non-hazardous material, AOD slag shall be	TCLP analysis of the AOD slag shall be carried out periodically. In case of presence of hazardous material, the same shall be sent to TSDF. In case of non-hazardous material, AOD slag shall be utilized at project site for brick manufacturing and construction work	Compliance: Not Applicable

SL NO.	Present Conditions of JSL as per EC	Conditions remain with JSL	Condition transferred to JSLFL
	utilized at project site for brick manufacturing and construction work after the recovery of metal.	after the recovery of metal. Compliance: At present, TCLP analysis of AOD slag is being carried out by IMMT(CSIR – Institute of Minerals and Materials Technology), Bhubaneswar and the AOD slag is found to be non hazardous in nature. The slag after metal recovery is being used as low laying area filling and road construction at NHAI. The same practice will be adopted in the expansion project.	
ix	The Oil scum and oily waste from CRM shall be sent to registered recyclers	The Oil scum and oily waste from CRM shall be sent to registered recyclers. Compliance: At present, the Oil scum and oily waste generated from CRM is being sent to authorized recyclers. The same practice will be adopted in the expansion project.	Compliance: Not Applicable
X	Following additional arrangements to control fugitive dust shall be provided: a. Fog / Mist Sprinklers at all conveyors point and on bulk raw material storage area (at the transfer points) like Iron Ore, Coal and for Fly Ash and similar solid waste storage areas. b. Proper covered vehicle shall be used while transport of materials. EC Identification No EC22A008OR182825 File No IA-J-11011/281/2007-IA.II(I) Date of Issue EC - 01/06/2022 Page 6 of 13 c. Wheel washing mechanism shall be provided in entry and exit gates with complete recirculation system.	 Following additional arrangements to control fugitive dust shall be provided: a. Fog / Mist Sprinklers at all conveyors point and on bulk raw material storage area (at the transfer points) like Iron Ore, Coal and for Fly Ash and similar solid waste storage areas. Compliance: At present, Dry fog systems have been installed at conveyors points and gun sprinklers were also installed at raw material storage yard to control fugitive emission. The same practice shall be followed in the said expansion project. b. Proper covered vehicle shall be used while transport of materials. EC Identification No EC22A0080R182825 File No IA-J-11011/281/2007-IA.II(I) Date of Issue EC - 01/06/2022 Page 6 of 13 Compliance: At present, all the raw materials are transporting through rail and covered vehicles and the same shall be followed in the said expansion project. c. Wheel washing mechanism shall be provided in entry and exit gates with complete recirculation system has been installed. 	Following additional arrangements to control fugitive dust shall be provided: a. Fog / Mist Sprinklers at all conveyors point and on bulk raw material storage area (at the transfer points) like Iron Ore, Coal and for Fly Ash and similar solid waste storage areas. Compliance: Noted and agreed b. Proper covered vehicle shall be used while transport of materials. EC Identification No EC22A008OR182825 File No IA-J- 11011/281/2007-IA.II(I) Date of Issue EC - 01/06/2022 Page 6 of 13 Compliance: Noted and agreed c.Wheel washing mechanism shall be provided in entry and exit gates with complete recirculation system. Compliance: Noted and agreed
xi	All internal road and connecting road from project site to main highway shall be developed and maintained with suitable Million Axle Standard (MSA) as per the traffic load due to existing and proposed project.	All internal road and connecting road from project site to main highway shall be developed and maintained with suitable Million Axle Standard (MSA) as per the traffic load due to existing and proposed project. Compliance: At present, all the internal roads and connecting road from project site to main highway are made with RCC/PCC and the same shall be followed in the said expansion project	All internal road and connecting road from project site to main highway shall be developed and maintained with suitable Million Axle Standard (MSA) as per the traffic load due to existing and proposed project. Compliance: Noted and agreed
xii	Performance test shall be	Performance test shall be conducted on all	Performance test shall be conducted on

SL NO.	Present Conditions of JSL as per EC	Conditions remain with JSL	Condition transferred to JSLFL
	conducted on all pollution control systems every year and report shall be submitted to Regional Office of the MoEF&CC.	pollution control systems every year and report shall be submitted to Regional Office of the MoEF&CC. Compliance: Performance test will be conducted on all pollution control systems every year and report will be submitted to Regional Office of the MoEF&CC.	all pollution control systems every year and report shall be submitted to Regional Office of the MoEF&CC. Compliance: Noted and agreed
xiii	Particulate matter emission from stacks shall be less than 30 mg/Nm3.	Particulate matter emission from stacks shall be less than 30 mg/Nm3. Compliance: Suitable Pollution Control equipments will be installed to confirm the Particulate Matter emission from stacks less than 30 mg/Nm3.	Particulate matter emission from stacks shall be less than 30 mg/Nm3. Compliance: Noted and agreed
xiv	85-90 % of billets shall be rolled directly in hot stage. RHF shall operate using only Light Diesel Oil as a fuel.	 85-90 % of billets shall be rolled directly in hot stage. RHF shall operate using only Light Diesel Oil as a fuel. Compliance: Slabs from SMS are being rolled directly in hot stage. RHF is operating using only Light Diesel Oil as a fuel. 	Compliance: Not Applicable
xv	Submerged Arc Furnace and Electric Arc Furnace shall be of closed type with 4th hole extraction system.	Submerged Arc Furnace and Electric Arc Furnace shall be of closed type with 4th hole extraction system.	Compliance: Not Applicable
xvi	The progress made in CER shall be submitted along with six monthly compliance report to the IRO and also upload on the company web site.	The progress made in CER shall be submitted along with six monthly compliance report to the IRO and also upload on the company web site. Compliance: CER compliance status is being given in Half Yearly EC Compliance report and submitted to RO, SPCB.	The progress made in CER shall be submitted along with six monthly compliance report to the IRO and also upload on the company web site. Compliance: Noted and agreed.
В.	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.	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. Compliance: Agreed	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. Compliance: Noted and agreed
II.	Air quality monitoring and preserva	tion	
1	The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission as well as four Continuous Ambient Air Quality Station (CAAQS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules	The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission as well as four 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	The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission as well as four 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

SL NO.	Present Conditions of JSL as per EC	Conditions remain with JSL	Condition transferred to JSLFL
	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.	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. Compliance: At present, CEMS have been installed at all major process stacks and connected to SPCB/CPCB servers and the same practice shall be followed in the said expansion project. Four numbers of continuous on-line ambient air quality monitoring systems (CAAQMS) have been installed in consultation with SPCB and the data is continuously transmitted to both SPCB & CPCB server.	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. Compliance: Noted and agreed
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.	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. Compliance: At present, fugitive emission monitoring at various locations is being carried out through NABL accredited laboratory on monthly basis. The same practice shall be followed in the said expansion project.	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. Compliance: Noted and agreed
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.	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. Compliance: At present, appropriate Air Pollution Control (APC) system have been provided for all the dust generating points including fugitive dust from all vulnerable sources to comply with prescribed stack emission and fugitive emission standards. The same practice shall be followed in the said expansion project.	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. Compliance: Noted and agreed
iv	The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.	The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags. Compliance: Leakage detection and mechanized bag cleaning facilities will be provided for better maintenance of bags.	The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags. Compliance: Noted and agreed
v	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.	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. Compliance: At present, the fines collected from Pollution Control Equipments are being reused in the process after briquetting. The same practice shall be followed in the said expansion project. The project proponent shall ensure covered	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. Compliance: Noted and agreed The project proponent shall ensure

SL NO.	Present Conditions of JSL as per EC	Conditions remain with JSL	Condition transferred to JSLFL
	covered transportation and conveying of ore, coal and other raw material to prevent spillage and dust generation.	transportation and conveying of ore, coal and other raw material to prevent spillage and dust generation. Compliance: At present, all the raw materials are transporting through rail and covered vehicles to prevent spillage/dust generation and the same shall be followed in the said expansion project.	covered transportation and conveying of ore, coal and other raw material to prevent spillage and dust generation. Compliance: Noted and agreed
vii	The project proponent shall provide primary and secondary fume extraction system at all melting furnaces.	The project proponent shall provide primary and secondary fume extraction system at all melting furnaces. Compliance: Primary and secondary fume extraction system will be provided at all melting furnaces.	The project proponent shall provide primary and secondary fume extraction system at all melting furnaces. Compliance: Noted and agreed
viii	Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.	Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars. Compliance: At present, all the ventilation system for adequate air changes has been designed as per ACGIH document for all tunnels, motor houses and shop floors.	Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars. Compliance: Noted and agreed
III.	Water quality monitoring and prese	rvation	
i	The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 (G.S.R 414 (E) dated 30th May 2008; G.S.R 277 (E) dated 31st March 2012 (applicable to IF/EAF); 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 recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.	The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 (G.S.R 414 (E) dated 30th May 2008; G.S.R 277 (E) dated 31st March 2012 (applicable to IF/EAF); 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 recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories. Compliance: At present, Continuous Effluent Monitoring System has been installed at ETP of Cold Rolling Mill and connected to SPCB/CPCB server. The same shall be followed in the said expansion project.	The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 (G.S.R 414 (E) dated 30th May 2008; G.S.R 277 (E) dated 31st March 2012 (applicable to IF/EAF); 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 recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories. Compliance: Noted and agreed
lii	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.	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. Compliance: At present, ground water quality is being monitored twice in a year (pre- and post- monitored twice in a year (pre- and post-	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.
		monsoon) through NABL accredited laboratory. The same shall be followed in the	Noted and agreed

SL NO.	Present Conditions of JSL as per EC	Conditions remain with JSL	Condition transferred to JSLFL
	-	said expansion project.	
iii	Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.	Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards. Compliance: At present, Three nos. of Sewage Treatment have been installed for treatment of domestic waste water to meet the prescribed standards.	Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards. Compliance: Noted and agreed
iv	The project proponent shall provide the ETP for effluents of rolling mills to meet the standards prescribed in G.S.R 277 (E) 31st March 2012 (applicable to IF/EAF) as amended from time to time.	The project proponent shall provide the ETP for effluents of rolling mills to meet the standards prescribed in G.S.R 277 (E) 31st March 2012 (applicable to IF/EAF) as amended from time to time. Compliance: At present, Continuous Effluent Monitoring System has been installed at ETP of Cold Rolling Mill and connected to SPCB/CPCB server. The same shall be followed in the said expansion project.	Compliance: Not applicable
v	Garland drains and collection pits shall be provided for each stock pile to arrest the runoff in the event of heavy rains and to check the water pollution due to surface run off.	Garland drains and collection pits shall be provided for each stock pile to arrest the runoff in the event of heavy rains and to check the water pollution due to surface run off. Compliance: At present, Garland drains and collection pits have been provided for each stock pile to arrest the runoff in the event of heavy rains and to check the water pollution due to surface run off. . The same shall be followed in the said expansion project	Compliance: Noted and agreed
vi	Tyre washing facilities shall be provided at the entrance/exit of the plant gates.	Tyre washing facilities shall be provided at the entrance/exit of the plant gates. Compliance: Wheel washing system with complete recirculation system has been installed.	Tyre washing facilities shall be provided at the entrance/exit of the plant gates. Compliance: Noted and agreed
IV.	Noise monitoring and prevention		
i V.	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.	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. Compliance: Noise quality is being monitored as per the prescribed Noise Pollution (Regulation and Control) Rules, 2000 and report is being submitted to Regional Officer of the Ministry as a part of six-monthly compliance report. The same shall be followed in the said expansion project.	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. Compliance: Noted and agreed
i .	conservation measures may be	Energy conservation measures may be adopted	Energy conservation massures may be
1	adopted such as adoption of solar energy and provision of LED lights etc., to minimize the energy consumption.	such as adoption of solar energy and provision of LED lights etc. to minimize the energy consumption. Compliance: At present, LED lights are provided where ever	adopted such as adoption of solar energy and provision of LED lights etc. to minimize the energy consumption. Compliance: Noted and agreed

SL NO.	Present Conditions of JSL as per EC	Conditions remain with JSL	Condition transferred to JSLFL
		possible and same shall be followed in the said expansion project. Floating solar project is being installed at water reservoir of JSL for generation of 7.3 MW power as RE power.	
VI.	Waste management		
i	Used refractories shall be recycled.	Used refractories shall be recycled. Compliance: At present, Used refractories generated from SMS are being recycled in process and same shall be followed in the said expansion project.	Used refractories shall be recycled. Compliance: Noted and agreed
11	Kitchen waste shall be composted or converted to biogas for further use.	Kitchen waste shall be composted or converted to biogas for further use. Compliance: At present, An organic Waste Converter of capacity 100 kg/day has been installed and the compost produced is used for greenbelt development.	Kitchen waste shall be composted or converted to biogas for further use. Compliance: Noted and agreed
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.	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. Compliance: Noted and agreed	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. Compliance: Noted and agreed
ii VIII	Project proponent shall submit a study report on De-carbonization program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon capture, use and storage and offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitor able with defined time frames.	Project proponent shall submit a study report on De-carbonization program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon capture, use and storage and offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitor able with defined time frames. Compliance: Noted and agreed	Project proponent shall submit a study report on De-carbonization program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon capture, use and storage and offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitor able with defined time frames. Compliance: Noted and agreed
VIII.	Public hearing and Human health is	sues	
i	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented. Compliance: Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan will be implemented.	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented. Compliance: Noted and agreed
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	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.	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

SL NO.	Present Conditions of JSL as per EC	Conditions remain with JSL	Condition transferred to JSLFL
	(PPE) as per the norms of Factory Act.	Compliance: Presently, Heat stress analysis for the workmen who work in high temperature work zone is being carried out and Personal Protection Equipment (PPE) as per the norms of Factory Act is being provided to the workman. The same shall be followed in the said expansion project.	Factory Act. Compliance: Noted and agreed
iii	Occupational health surveillance of the workers shall be done on a regular basis and records maintained.	Occupational health surveillance of the workers shall be done on a regular basis and records maintained. Compliance: Presently, Annual health check up of workers is being carried out and records are maintained. The same shall be followed in the said expansion project.	Occupational health surveillance of the workers shall be done on a regular basis and records maintained. Compliance: Noted and agreed
IX.	Environment Management		
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. As part of Corporate Environment Responsibility (CER) activity, PP has committed to adopt 20 nearby villages for development activities. Out of 20 villages PP has already identified six villages namely Tikar, Kumbhiragadia, Manpur, Balungabandhi, Marurtikar and Khurunti villages.	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. As part of Corporate Environment Responsibility (CER) activity, PP has committed to adopt 15 nearby villages for development activities. Out of 15 villages PP has already identified six villages namely Tikar, Kumbhiragadia, Manpur, Balungabandhi, Marurtikar and Khurunti villages. Compliance : Noted and Agreed.	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. As part of Corporate Environment Responsibility (CER) activity, PP has committed to adopt 5 nearby villages for development activities. Compliance: Noted and agreed
ii	The company shall have a well laid down environmental policy duly approve 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.	The company shall have a well laid down environmental policy duly approve 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. Compliance: JSL already has framed Environmental Policy as a part of the QEOHS (Quality, Environment, Occupational Health & Safety) policy framework and is committed to maintain environment friendly, safe, healthy and sustainable working condition in all its operations. The same shall be followed in the	The company shall have a well laid down environmental policy duly approve 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. Compliance: Noted and agreed
iii	A separate Environmental Cell both at the project and company head quarter level, with qualified	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be

SL NO.	Present Conditions of JSL as per EC	Conditions remain with JSL	Condition transferred to JSLFL
	personnel shall be set up under the control of senior Executive, who will directly to the head of the organization	control of senior Executive, who will directly to the head of the organization Compliance: At present, JSL already has a well-constituted Environment, Horticulture & Safety (EHS) department with qualified and experienced officers under the administrative control of Head EHS and Head EHS directly report to the Plant Head.	set up under the control of senior Executive, who will directly to the head of the organization. Compliance: Noted and agreed
X.	Miscellaneous		
1	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.	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. Compliance: Advertisement on grant of Environment Clearance have been published in newspapers namely ORISSA POST (English) and PRAMEYA (Odia) on 07.06.2022 respectively. Environment Clearance is displayed in the website of the company	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. Compliance: Noted and agreed
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.	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. Compliance: The copies of the environmental clearance has been submitted to the Heads of local bodies, Panchayats.	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. Compliance: Noted and agreed
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.	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. Compliance: Presently, six-monthly reports on the status of the compliance of the stipulated environmental conditions uploaded on company website and same shall be continued.	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. Compliance: Noted and agreed
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	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.	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

SL NO.	Present Conditions of JSL as per EC	Conditions remain with JSL	Condition transferred to JSLFL
	convenient location for disclosure to the public and put on the website of the company.	Compliance: Both online and manual Stack Monitoring is being carried out and the data are displayed on the display board installed at main gate for public view. The same shall be continued in the said expansion project.	put on the website of the company. Compliance: Noted and agreed
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.	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. Compliance: Presently, six-monthly reports on the status of the compliance of the stipulated environmental conditions is being submitted to MOEF&CC and also uploaded on MoEF&CC website.	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. Compliance: Noted and agreed
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	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. Compliance: Presently, environmental statement for each financial year in Form-V is being submitted to SPCB, Odisha in due time and also display on company website. The same shall be continued in the said expansion project.	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. Compliance: Noted and agreed
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.	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. Compliance: Noted and agreed	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. Compliance: A Noted and agreed
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.	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. Compliance: Noted and agreed	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. Compliance: Noted and agreed
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).	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). Compliance: Noted and agreed	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). Compliance: Noted and agreed
Λ	submission of false/fabricated data	false/fabricated data may result in revocation	of false/fabricated data may result in

SL NO.	Present Conditions of JSL as per EC	Conditions remain with JSL	Condition transferred to JSLFL
	may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986	of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986 Compliance: Noted and agreed	revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986 Compliance: Noted and agreed
xi	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory. Compliance: Noted and agreed	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory. Compliance: Noted and agreed
xii	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions. Compliance: Noted and agreed	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions. Compliance: Noted and agreed
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.	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. Compliance: Noted and agreed	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. Compliance: Noted and agreed
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.	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. Compliance: Noted and agreed	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. Compliance: Noted and agreed

V. Environmental Monitoring Plan Matrix

Sl. No.	Parameter	Location	Schedule of monitoring	Under the scope of
1.	Meteorology: Dry bulb temp, wet bulb temp, relative humidity, wind speed, wind direction and rainfall	Meteorology data would be recorded at one (1) permanent station which is already installed in the plant premises near Security barracks.	Online continuous monitoring	JSL (Common for all group companies)
2.	Air Quality Monitoring Parameters: PM2.5, PM10, SO2, NOx & CO.	Four (4) monitoring stations already installed by JSL Group Company covering all four directions which will be common for JSLFL. The details of the location as follows: NE - Nursery	Continuous ambient air quality monitoring stations (CAAQMS)	JSL (Common for all group companies)

Sl.	Parameter	Location	Schedule of	Under the
No.			monitoring	scope of
		South - Rohit Gate East -Security Barrack West -Tata Corner		
3	Stack Emission Monitoring: PM, SO2, NOx, CO	All major stacks as per stack schedule. (For DE stacks only PM would be monitored)	Online continuous monitoring system (CEMS) as per OSPCB's guidance	JSLFL and JSL
4	Water Quality - effluents water quality, surface and ground as per CPCB standard.	Ground water quality Surface water - One location River - Brahmani	Ground water quality analysis- Half Yearly Surface water quality - Monthly once Surface & ground	JSL (Common for all group companies)
		Wastewater quality	 water - in pre & post monsoon Waste water - All parameters monthly once and weekly monitoring of common parameters 	JSLFL and JSL
5	Ambient noise level	Noise levels are monitored at the boundary of JSL group and will be continued for expansion project	Monthly once for each location	JSL
6	Fugitive dust emission and work zone dust monitoring	Near stock yard and other fugitive dust emitting sources like SMS building, BF Stock house, Sinter Discharge Section, CRM etc.	Monthly once	JSLFL and JSL
7	Work zone noise level	Existing locations of work zone noise monitoring will be continued with new locations in the proposed project	Monthly once for each location	JSL and JSLFL
8	Soil quality	Two locations within the plant (raw material storage area, solid waste storage area) and two from outside plant area.	As per soil nutrient cycle by NABL/MoEFCC approved agency	Inside plant (JSLFL and JSL) Outside plant (JSL)
9	TCLP test for solid wastes	One location for hazardous waste storage	Once in six (6) months or as directed by OSPCB	JSLFL and JSL
10	Inventory of solid Waste	Within plant premises	Monthly once or as directed	JSLFL and JSL

Sl. No.	Parameter	Location	Schedule of monitoring	Under the scope of
1100			by OSPCB	
11	Water Consumption	Water meter at pump house	Continuous	JSL and JSLFL (At inlet from common water reservoir)
12	Energy Consumption	All consumer points through energy meter	Continuous	JSL and JSLFL

VI. <u>Implementation of Mitigation Measures</u>

Construction Ph Air Er environment to ac ad en im	Phase Emission of dust due o construction activities leading to adverse health & environmental mpacts	JSL Water sprinkling to arrest fugitive dust emission. Wind barrier screen provided to reduce the wind speed and consequently, reduce the fugitive dust emission.	JSLFL Water sprinkling to arrest fugitive dust emission. Wind barrier screen provided to reduce the wind speed and consequently, reduce the fugitive dust	Project - I/C
Construction PhAirE1environmenttoacadenvironmentim	Phase Emission of dust due o construction activities leading to adverse health & environmental mpacts	Water sprinkling to arrest fugitive dust emission. Wind barrier screen provided to reduce the wind speed and consequently, reduce the fugitive dust emission.	Water sprinkling to arrest fugitive dust emission. Wind barrier screen provided to reduce the wind speed and consequently, reduce the fugitive dust	Project - I/C
Air En environment to ac ad en im	Emission of dust due o construction activities leading to adverse health & environmental mpacts	Water sprinkling to arrest fugitive dust emission. Wind barrier screen provided to reduce the wind speed and consequently, reduce the fugitive dust emission.	Water sprinkling to arrest fugitive dust emission. Wind barrier screen provided to reduce the wind speed and consequently, reduce the fugitive dust	Project - I/C
		Logistics would be designed to minimize movement of trucks transporting construction materials and optimize storage of construction materials at site	emission. Logistics would be designed to minimize movement of trucks transporting construction materials and optimize storage of construction materials at site	
Water quality Di co wa sa wa ca he im	Discharge of construction wastewater including anitary and kitchen wastewater causing adverse health & ecological mpacts	Labour hutments would be provided with proper sanitation facilities. The stockpiles would be protected with toe wall of adequate height along with concrete garland drain & catch pits to prevent uncontrolled discharge of runoffs during monsoon.	Labour hutments would be provided with proper sanitation facilities. The stockpiles would be protected with toe wall of adequate height along with concrete garland drain & catch pits to prevent uncontrolled discharge of runoffs during monsoon.	Project - I/C
Noise Index	ncrease in noise evel due to construction activities causing health effects	Provision of Personal Protective Equipment (PPE) like ear muffs, ear plugs etc. Noise prone construction activities such as piling, drilling, excavation, cutting, etc. would be done during daytime only	Provision of Personal Protective Equipment (PPE) like ear muffs, ear plugs etc. Noise prone construction activities such as piling, drilling, excavation, cutting, etc. would be done during daytime only	Project - I/C

Discipline	Potential	Mitigation measures		Administrative
	Impacts	ISL	ISLFL	Authority
ment	land due to dumping of solid waste C & D waste, Plastic waste and MSW like construction & demolition debris, excess concrete & Cement, rejected components, packing & shipping materials and domestic waste	wastes and use of recyclable materials within the plant/ sell to external agencies for secondary use Handling & disposal of wastes by authorized agencies as per prevalent regulations	wastes and use of recyclable materials within the plant/ sell to external agencies for secondary use Handling & disposal of wastes by authorized agencies as per prevalent regulations	
Socio- Economics	Continued opportunities of contractual work with low payments Continued levels of local underemployment due to lack of technical and vocational training amongst youth and women groups – Dhanurjoya Pur , Dhuligarh, Sarangapur, Duburi, Dhapanki and Kacherigan Influx of migrants in the region due to the proposed expansion Continued employment of migrant workers (with required skill set) by JSL. Contractors also provide economic opportunities to migrants due to non- availability of technically competent local	During the Construction phase, peak work force to be employed would be around 1080 The work force to be employed under direct and indirect employment during the phase of operation would be around 1300 respectively The employment opportunities are primarily based on the prevailing guidelines of wage structure, notified by the Government of Odisha in the official gazette Support towards vocational and industrial training of local population (having basic qualification) is being provided for up-gradation of skill and will be continued	During the Construction phase, peak work force to be employed would be around 1080 comprising both direct and indirect. The work force to be employed under direct and indirect employment during the phase of operation would be around 1300 comprising both direct and indirect. The employment opportunities are primarily based on the prevailing guidelines of wage structure, notified by the Government of Odisha in the official gazette Support towards vocational and industrial training of local population (having basic qualification) is being provided for up- gradation of skill and will be continued	Head - HR/IR & Project - I/C
	candidates Waste water discharge may increase in Ganda Nala and Kanar Nala by industry, with continued contamination of surface water bodies,	Strict adherence to mitigation measures as mentioned in Chapter 2 & 4 (Air & Water Pollution Control Measures) and adoption of Zero Liquid Discharge (ZLD) Augmentation of existing	Strict adherence to mitigation measures as mentioned in Chapter 2 & 4 (Air & Water Pollution Control Measures) and adoption of Zero Liquid Discharge (ZLD) Augmentation of existing	Project - I/C

Discipline	Potential	Mitigation measures		Administrative
	impacts			Authority
	Γ	JSL	JSLFL	
	impact- ing human & aquatic health of Balunga Bandi & Kacherigan Dust Pollution may	Rain Water Harvesting programmes	Rain Water Harvesting programmes	
	increase in the industrial zone, with continued negative impact on the air and surface water quality, agricultural yield and human health (TB & Allergies) - Kacherigan			
Ecology	Adverse effect on the ecology of the plant area not envisaged since there would be no removal of vegetation as plant premises already has built up areas	Strengthening of greenbelt & peripheral plantation	-	Head - EHS
Operation Pha	ase			
environment	No impact on the land environment in terms of loss of agricultural land or loss of vegetation Potential negative impact due to temporary storage of raw materials and solid waste	All stockplies would be on top of a concreted area to avoid leaching of materials during monsoon. Maximum reuse/recycling of the solid wastes through practicable ventures. Monitoring of ground water quality to detect contamination due to leaching	All stockplies would be on top of a concreted area to avoid leaching of materials during monsoon. Maximum reuse/recycling of the solid wastes through practicable ventures. Monitoring of ground water quality to detect contamination due to leaching	Head- Operations
Surface Water Resource & quality	Marginal negative impact on surface water resource due to additional water requirement for expansion Plant designed on ZLD, no impact on surface water quality	Optimization of water requirement by recycling treated wastewater to the maximum extent and implementation of ZLD Collection & storage of rainwater for reuse, especially during lean months	Optimization of water requirement by recycling treated wastewater to the maximum extent and implementation of ZLD Collection & storage of rainwater for reuse, especially during lean months	Head - Utility
Ground water	 No impact on resource as groundwater extraction not envisaged Minimal impact on groundwater quality due to 	 concrete box drains to prevent seepage and ground water contamination. temporary solid wastes storage yard to be lined with suitable liner to avoid leaching through soil bed leading to contamination 	 concrete box drains to prevent seepage and ground water contamination. temporary solid wastes storage yard to be lined with suitable liner to avoid leaching through soil bed leading to contamination of 	Head - Civil

Discipline	Potential	Mitigation measures		Administrative
	impacts	ICI	ISI EI	Authority
	soonage and leaching	JSL of ground water	JSLFL ground water	
Air Environment	seepage and leaching Adverse impacts on health & environment due to emission of PM, SOx, NOx.	of ground water. Selection & maintenance of APC equipment for fugitive & point source emissions Process optimization to control emission Interlocking of APC equipment to shut down plant units in case of APC failure Pneumatic or covered conveying of raw material Maintenance of Plant roads and use of industrial vacuum cleaners & water sprinkling at regular intervals. Operation & maintenance of tyre washing system at the strategic locations of the	ground water. Selection & maintenance of APC equipment for fugitive & point source emissions Process optimization to control emission Interlocking of APC equipment to shut down plant units in case of APC failure Pneumatic or covered conveying of raw material Maintenance of Plant roads and use of industrial vacuum cleaners & water sprinkling at regular intervals. Operation & maintenance of tyre washing system at the strategic locations of	Head – Operations
Noise	Detrimental impact on the health of working personnel in and around the plant premises.	plant Noise levels for the new equipment and machineries to be fixed at 85 dB(A) Leq within 3 m distance from the noise prone equipment. Highly noise prone equipment having Leq above 90 dB(A) would either be housed separately or the attending personnel need to be housed in a noise-shielded cubicle. Noise prone rotating/ vibrating equipment provided with vibration dampening anchoring. Use of appropriate PPEs	the plant Noise levels for the new equipment and machineries to be fixed at 85 dB(A) Leq within 3 m distance from the noise prone equipment. Highly noise prone equipment having Leq above 90 dB(A) would either be housed separately or the attending personnel need to be housed in a noise-shielded cubicle. Noise prone rotating/vibrating equipment provided with vibration dampening anchoring. Use of appropriate PPEs	Project-I/C
Socio-		Employment of 1300		
Ecology	Insignificant impact on ecology of the study area No adverse impact on aquatic ecology as plant is based on 'ZLD' concept	Strengthening of greenbelt within plant premises	Strengthening of greenbelt within plant premises	Head - EHS

18.7.9 The proposal was initially considered in the 16^{th} meeting of the EAC for Industry-I sector held on 3^{rd} November, 2022 wherein after detailed deliberations, the committee recommended to defer the proposal and sought requisite information. The deliberation and recommendations of the EAC are as follows:

Deliberations by the Committee (EAC during 3rd November, 2022)

- 18.7.10 The Committee noted the following
 - i. M/s. Jindal Stainless Limited (JSL) has been recently accorded environmental clearance vide letter dated 01.06.2022 for expansion of Crude Steel Production from 2.2 MTPA to 4.5 MTPA and Cold Rolling Mill Production from 1.6 MTPA to 2.6 MTPA within the existing Steel Plant. The PP has submitted that they have not implemented the complete facilities as envisaged in the EC dated 01.06.2022.
 - ii. Instant proposal is for amendment in EC dated 01.06.2022 following the transfer of Iron making facilities of 2.35 MTPA and Steel making facilities of 2.3 MTPA from Jindal Stainless Limited (JSL) to JSL Ferrous Limited (JSLFL) and further amendment in existing Blast Furnaces facilities of $1 \times 720 \text{ m}^3 + 1 \times 1,680 \text{ m}^3$ (total volume 2,400 m³) to $1 \times 2,307 \text{ m}^3$ and Sinter Plant of $1 \times 240 \text{ m}^2$ to $1 \times 248 \text{ m}^2$ with no change in production capacity under M/s. JSL Ferrous Limited. The EAC noted that PP intends to enter into the Carbon Steel business as a separate entity. The EAC deliberated that if PP wanted to enter into the Carbon Steel business as a separate entity then transferee i.e. M/s. JSL Ferrous Limited could have applied directly for EC in the first place since EC has been granted recently on 01.06.2022. Therefore, EAC advised PP to submit the justified reasons for amendment/transfer of the said facilities in the proposed application.
 - iii. The EAC noted that project proponent has not submitted any requisite document pertaining to transfer of firm from M/s. Jindal Stainless Limited to M/s. JSL Ferrous Limited such as copy of board resolution wherein decision has been taken for such arrangements as proposed in the instant application.
 - iv. A valid certified compliance report on the compliance of conditions of the existing EC's needs to be submitted for assessing the implementation status of facilities envisaged and status of compliance of conditions of the existing EC from the IRO MoEFCC.
 - v. The EAC further deliberated on the furnished information in the Addendum EIA Report and is of the view that PP shall clearly spell out the liability and responsibility matrix pertaining to project activities for M/s. JSL and M/s. JSLFL.
 - vi. The EAC also asked the PP to submit revised name of the project for M/s. Jindal Stainless Limited and name of the project for M/s. JSL Ferrous Limited as part of Project Information Matrix detailed in para 18.7.8 above.
 - vii. The PP was unable to provide the reply, hence the proposal was not discussed by the EAC and the Committee was of the view that first PP submit all the details for further deliberation in the EAC meeting.

Recommendations of the Committee (EAC during 3rd November, 2022)

18.7.11 In view of the foregoing and after detailed deliberations, the committee recommended to **defer the proposal** due to certain deficiencies in the proposal and sought requisite information on the points referred at para no. 18.7.10 above. The proposal may be considered after submission of requisite information in next EAC meeting. The PP shall upload the requisite information on Parivesh Portal.

18.7.12 The proponent submitted the ADS reply uploaded on PARIVESH on 22.11.2022. Point-wise reply of ADS is given as below:

SI. No	ADS Points	Reply/Response of PP
i.	M/s. Jindal Stainless Limited (JSL) has been recently accorded environmental clearance vide letter dated 01.06.2022 for expansion of Crude Steel Production from 2.2 MTPA to 4.5 MTPA and Cold Rolling Mill Production from 1.6 MTPA to 2.6 MTPA within the existing Steel Plant. The PP has submitted that they have not implemented the complete facilities as envisaged in the EC dated 01.06.2022 .	Based on the Environmental Clearance received for the said project from MoEF&CC Jindal Stainless Limited (JSL) applied for Consent to Establish (CTE) application to State Pollution Control Board (SPCB), Odisha for expansion of Crude Steel Production from 2.2 MTPA to 4.5 MTPA and Cold Rolling Mill Production from 1.6 MTPA to 2.6 MTPA, and the same has been accorded by SPCB, Odisha on 16.09.2022.
ii.	Instant proposal is for amendment in EC dated 01.06.2022 following the transfer of Iron making facilities of 2.35 MTPA and Steel making facilities of 2.3 MTPA from Jindal Stainless Limited (JSL) to JSL Ferrous Limited (JSLFL) and further amendment in existing Blast Furnaces facilities of 1 x 720 m ³ + 1 x 1,680 m ³ (total volume 2,400 m ³) to 1 x 2,307 m ³ and Sinter Plant of 1 x 240 m ² to 1 x 248 m ² with no change in production capacity under M/s. JSL Ferrous Limited. The EAC noted that PP intends to enter into the Carbon Steel business as a separate entity. The EAC deliberated that if PP wanted to enter into the Carbon Steel business as a separate entity then transferee i.e. M/s. JSL Ferrous Limited could have applied directly for EC in the first place since EC has been granted recently on 01.06.2022. Therefore, EAC advised PP to submit the justified reasons for amendment/transfer of the said facilities in the proposed application.	 Application for Amendment of EC submitted by JSL for transfer of facilities of Carbon Steel of 2.3 MTPA from JSL to JSL Ferrous Limited (JFL) and further amendment in existing Blast Furnaces facilities of 1 x 720 m³ + 1 x 1,680 m³ (total volume 2,400 m³) to 1 x 2,307 m³ and Sinter Plant of 1 x 240 m² to 1 x 248 m² with no change in production capacity under JFL. The justification for this transfer of Iron making facilities to JFL is mainly due to: a. JSL is presently venturing their stainless-steel products into EU market. As a part of statutory requirement, JSL should be ESG complied. To ensure the ESG compliance, the carbon footprint shall be reduced and in case carbon steel production is included in JSL business, it would be difficult to achieve the ESG goal. The shareholder objected for inclusion of Carbon steel production in present stainless steel business. In view of this, JSL intends to transfer the carbon steel business to newly formed JFL. b. Achieving the goals for de-carbonisation (setting up of blast furnace would result in more carbon emission). c. Not to dilute the JSL brand image as being reputed Stainless manufacturer.
iii.	The EAC noted that project proponent has not submitted any requisite document pertaining to transfer of firm from M/s. Jindal Stainless Limited to M/s. JSL Ferrous	Secretary has been uploaded on PARIVESH portal. The copy of the board resolution signed by the Company Secretary, wherein decision has been taken for such arrangements has been submitted. The same is updated in para 18.7.7 above.
	Limited such as copy of board resolution wherein decision has been taken for such arrangements as proposed in the instant	

Sl. No	ADS Points	Reply/Response of PP
	application.	
iv.	A valid certified compliance report on the compliance of conditions of the existing EC's needs to be submitted for assessing the implementation status of facilities envisaged and status of compliance of conditions of the existing EC from the IRO MoEFCC.	The valid certified Compliance Report of the EC conditions from the IRO MoEF&CC, Bhubaneswar has been uploaded on PARIVESH portal. The said report was submitted by IRO, Bhubaneswar on 10 th January, 2022, where there was no non- compliance observed.
v.	The EAC further deliberated on the furnished information in the Addendum EIA Report and is of the view that PP shall clearly spell out the liability and responsibility matrix pertaining to project activities for M/s. JSL and M/s. JSLFL.	The liability and responsibility matrix pertaining to Project activities for M/s. JSL and M/s. JFL is updated in the Addendum EIA Report. A copy of the same has been uploaded on PARIVESH portal.
vi.	The EAC also asked the PP to submit revised name of the project for M/s. Jindal Stainless Limited and name of the project for M/s. JSL Ferrous Limited as part of Project Information Matrix detailed in para 18.7.8 above.	Name of the Project for M/s. Jindal Stainless Limited (JSL) and name of the project for M/s. JSL Ferrous Limited (JFL) as part of Project Information Matrix has been included. The same is updated in para 18.7.8 above. Project Name of JSL : <i>Amendment of EC of Jindal Stainless Limited for Crude Steel</i> <i>production of 2.2 MTPA and Cold Rolling Mill of 2.6 MTPA in</i> <i>the existing Plant post transfer of Iron making facilities of 2.35</i> <i>MTPA and Steel making facilities of 2.3 MTPA from Jindal</i> <i>Stainless Limited to JSL Ferrous Limited.</i> Project Name of JFL : <i>Transfer of EC in the name of JSL Ferrous Limited (JFL) for</i> <i>Iron making facilities of 2.35 MTPA and Steel making facilities</i> <i>of 2.3 MTPA post transfer from Jindal Stainless Limited.</i>

18.7.13 Based on the ADS reply by the proponent, the proposal was re-considered in the 18th meeting of the EAC for Industry-I sector held on 27-28th November, 2022. The deliberation and recommendations of the EAC are as follows:

Written representations:

- 18.7.14 During the meeting, based on the deliberations made by the EAC, the project proponent vide letter dated 02.12.2022 and email dated 02.12.2022 submitted the following :
 - Undertaking dated 29.11.2022 by JSL for compliance of EC Conditions post transfer of facilities to JSLFL through Non-Judicial stamp paper duly signed by Notary, Govt. of Odisha.
 - Copy of extension of validity of NABET Accreditation of M/s. M.N. Dasur & Company Private Limited, Kolkata, valid till February 22, 2023.

Deliberations by the Committee

- 18.7.15 The Committee noted the following:
 - M/s. Jindal Stainless Limited (JSL) was originally accorded environmental clearance vide letter No. IA-J-11011/281/2007- IA. II(I), dated 01.06.2022 for expansion of Crude Steel Production from 2.2 MTPA to 4.5 MTPA and Cold Rolling Mill Production from

1.6 MTPA to 2.6 MTPA within the existing Steel Plant at Kalinga Nagar Industrial Complex, Jajpur Road, Odisha.

- ii. PP has not implemented the complete facilities as envisaged in the EC dated 01.06.2022 as detailed at para 18.7.5 above. Consent to Establish for said expansion project was accorded by SPCB, Odisha vide letter No. 16913/IND-II-CTE-6660 dated 16.09.2022.
- iii. Instant proposal is for amendment in Environmental Clearance letter no. IA-J-11011/281/2007-IA.II(I) dated 01.06.2022 following the transfer of Iron making facilities of 2.35 MTPA and Steel making facilities of 2.3 MTPA from Jindal Stainless Limited (JSL) to JSL Ferrous Limited (JSLFL) and further amendment in existing Blast Furnaces facilities of 1 x 720 m³ + 1 x 1,680 m³ (total volume 2,400 m³) to 1 x 2,307 m³ and Sinter Plant of 1 x 240 m² to 1 x 248 m² with no change in production capacity under JSL Ferrous Limited at Kalinganagar Industrial Complex, Jajpur, Odisha. The reasons for part transfer of the said facilities is that M/s. JSL as a group company intends to enter into the Carbon Steel business as a separate entity.
- iv. The EAC also deliberated the provisions of Para 2 (modernization/amendments) and Para 11 (Transfer of EC) of the EIA Notification, 2006 and found that the proposal is in order.
- v. The EAC deliberated on the reply submitted by the project proponent on the issues raised by EAC and found it satisfactory

Recommendations of the Committee

- 18.7.16 In view of the foregoing and after deliberations, the Committee **recommended** the following proposals, **subject to uploading the written submission** on portal for following:
 - (a) Amendment in the Environmental Clearance dated 01.06.2022 in the name of M/s. Jindal Stainless Limited for transfer of Iron making facilities of 2.35 MTPA and Steel making facilities of 2.3 MTPA from Jindal Stainless Limited to JSL Ferrous Limited as detailed in para 18.7.6 above and also modifying the other parameters including project specific information, raw material requirement, risk matrix, specific as well as general conditions as per the EC compliance matrix, Environmental Monitoring Plan, implementation of mitigation measures etc. given above at para no. 18.7.8. The additional conditions are as follows:
 - i. As committed, if any of the condition of the existing EC is missed / not allotted to either of the two companies, then the responsibility of compliance of the said condition will be of M/s. Jindal Stainless Limited.
 - ii. All the other terms and conditions stipulated in environmental clearance vide letter no IA-J-11011/281/2007-IA.II(I) dated 01.06.2022 shall remain unchanged.
 - (b) Part transfer of facilities of aforesaid EC dated 01.06.2022 namely iron making facilities of 2.35 MTPA and Steel making facilities of 2.3 MTPA from Jindal Stainless Limited to JSL Ferrous Limited as detailed in para 18.7.6 above by issuing a part transfer EC letter along with prescribing the other parameters including project specific information, raw material requirement, risk matrix, specific as well as general conditions

as per the EC compliance matrix, Environmental Monitoring Plan, implementation of mitigation measures etc. given above at para no. 18.7.8. All the other terms and conditions stipulated in environmental clearance vide letter no. IA-J-11011/281/2007-IA.II(I) dated 01.06.2022 shall remain unchanged.

Agenda No. 18.8

18.8 Amendment in Environmental Clearance for DRI TK Pelletisation Plant (0.15 MTPA) & Iron ore Beneficiation plant (0.30 MTPA) at Sy. No. 25, 26, 27, 28, Vlllege Taranagar. Taluka Sandur. District Bellary in Karnataka by M/s KEJ Minerals Pvt. Ltd.– Consideration of Amendment in Environmental Clearance.

[Proposal No. IA/KA/IND/279293/2022; File No. J-11011/427/2010-IA-II(I)]

18.8.1 M/s KEJ Minerals Private Limited has made an online application vide proposal no. IA/KA/IND/279293/2022 dated 21.11.2022 along with Form-4 and addendum EIA report and sought for amendment in Environmental Clearance accorded by the Ministry vide File no. J-11011/427/2010-IA-II(I) dated 17.11.2011 and subsequent amendment dated 08.01.2016 w.r.t. replacement of survey numbers 25, 26, 27 and 28 with Sy. No. 26/1, 26/2, 27/1B, 27/1A & 27/2, 28/A, B, C, D & E.

Details submitted by Project proponent

18.8.2 M/s KEJ Minerals Private Limited was granted environmental Clearance by MoEF&CC vide letter No. J-11011/427/2010-IA-II(I) dated 17.11.2011 for Proposed DRI TK Pelletisation Plant (0.15 MTPA) & Iron Ore Beneficiation Plant (0.30 MTPA) at Sy. No. 25, 26, 27, 28, Village Taranagar, Taluka Sandur, District Bellary in Karnataka. Further, amendment to EC was obtained vide letter dated 08.01.2016 for beneficiation of additional ores of Manganese and Laterite along with Iron Ore. Consent to Operate (CTO) from Karnataka State Pollution Control Board was obtained periodically from time to time and current Consent to Operate obtained from KSPCB vide Consent Order No. AW-319629 dated 17.08.2020 and is valid till 30.06.2025.

S.	Facilities	Units	As per EC dated	Implementation	Production
No.			17.03.2011	Status as on date	as per CTO
1.	DRI TK	MTPA	0.15 MTPA	Not implemented	-
	Pelletisation Plant				
2.	Mineral	MTPA	0.30 MTPA	Implemented	0.30 MTPA
	Beneficiation Plant				

18.8.3 Implementation status of existing EC:

18.8.4 The instant proposal is for seeking amendment in EC dated 17.11.2011 and subsequent amendment dated 08.01.2016 w.r.t. replacement of survey numbers 25, 26, 27 and 28 with Sy. No. 26/1, 26/2, 27/1B, 27/1A & 27/2, 28/A, B, C, D & E.

Description	Existing EC	Amendment Sought by PP
Project	Sy No. 25, 26, 27, 28 of	Sy No. 26/1, 26/2, 27/1A, 27/1B, 27/2,
Location	Taranagar Village, Sandur Taluk,	28/A, B, C, D & E Taranagar Village,
	Bellary District.	Sandur Taluk, Bellary District.

- 18.8.5 There is no change in configuration & capacity of units in granted EC, land area, and Pollution load.
- 18.8.6 **Reason for Amendment:** Earlier PP had obtained Environmental Clearance from MoEF&CC on 17th March 2011 and amended EC on 08.01.2016. As survey number 25 which was proposed earlier was not purchased by PP and was also not converted needs to be removed from the environmental clearance letter. The Sy no 25 was also not proposed in the land use breakup earlier. Sy No. 26 was bifurcated to Sy No 26/1 and 26/2, Sy No 27 was bifurcated to 27/1B, 27/1A & 27/2 and Sy No. 28 was bifurcated to 28/A, 28/B, 28/C, 28/D & 28/E. These Sy No 26/1 and 26/2, 27/1B, 27/1A & 27/2, 28/A, 28/B, 28/C, 28/D & 28/E must be replaced in place of Sy No. 26, 27 & 28. Remaining details including the project site area and production capacity will remain same.
- 18.8.7 The total project area is 35 acres and 11.55 acres (33% of the total area) covered under greenbelt/ afforestation. The total no. of saplings planted are 8,000 nos. PP has submitted that they will plant remaining 3,690 saplings to complete the plantation of 11,690 saplings (@2500 saplings/ ha) in a year.
- 18.8.8 It has been reported by PP that, there is no violation under EIA Notification, 2006/court case/show cause/direction related to the project under consideration.

Written representations

18.8.9 During the meeting, based on the deliberations made by the EAC, the project proponent vide email dated 29.11.2022 submitted the the letter from the KSPCB dated 08.06.2022 asking us to submit an Amendment of EC as proposed in the instant application.

Deliberation by the Committee

- 18.8.10 The Committee noted the following:
 - The instant proposal is for seeking amendment in EC vide File no. J-11011/427/2010-IA-II(I) dated 17.11.2011 and subsequent amendment dated 08.01.2016 w.r.t. replacement of survey numbers 25, 26, 27 and 28 with Sy. No. 26/1, 26/2, 27/1B, 27/1A & 27/2, 28/A, B, C, D & E.
 - M/s KEJ Minerals Private Limited was granted environmental Clearance by MoEF&CC vide letter No. J-11011/427/2010-IA-II(I) dated 17.11.2011 for Proposed DRI TK Pelletisation Plant (0.15 MTPA) & Iron Ore Beneficiation Plant (0.30 MTPA) at Sy. No. 25, 26, 27, 28, Village Taranagar, Taluka Sandur, District Bellary in Karnataka. Further,

amendment to EC was obtained vide letter dated 08.01.2016 for beneficiation of additional ores of Manganese and Laterite along with Iron Ore. Consent to Operate (CTO) from Karnataka State Pollution Control Board was obtained periodically from time to time and current Consent to Operate obtained from KSPCB vide Consent Order No. AW-319629 dated 17.08.2020 and is valid till 30.06.2025.

- iii. The Committee also noted the following:
 - a. M/s KEJ Minerals Private limited had earlier submitted an application for amendment in EC letter dated 17.03.2011 vide on line proposal No. IA/KA/IND/271544/2022 to the Ministry, however, it was returned to proponent due to shortcoming.
 - b. Further, M/s KEJ Minerals Private Limited vide letter dated 28.04.2022 had requested to the State Level Environment Impact Assessment Authority (SEIAA), Banglore, Karnataka for amendment in Environmental Clearance dated 17.03.2011.
 - c. The State Level Environment Impact Assessment Authority (SEIAA)-Karnataka vide letter dated 01.08.2022 submitted to the Ministry that M/s KEJ Minerals Private Limited requested for issue the amendment to EC granted by MoEFCC for the above mentioned project. Therefore, to send the relevant File to SEIAA Bangalore.
 - d. Further, Ministry noted that PP has already submitted the application at Central level and at present PP is yet to submit the EDS reply on Parivesh Portal.
 - e. The Policy Division of MoEF&CC advised that it may be prudent to consider the amendment proposal at the central level itself so as to avoid unnecessary delay to the project proponent. Accordingly, SEIAA and PP were informed for consideration of proposal at the Ministry level.
- iv. Instant proposal is for amendment in EC dated 17th March 2011 and amended EC on 08.01.2016. The PP submitted that earlier they had obtained Environmental Clearance from MoEF&CC on 17th March 2011 and amended EC on 08.01.2016. As survey number 25 which was proposed earlier was not purchased by PP and was also not converted needs to be removed from the environmental clearance letter. The Sy no 25 was also not proposed in the land use breakup earlier. Sy No. 26 was bifurcated to Sy No 26/1 and 26/2, Sy No 27 was bifurcated to 27/1B, 27/1A & 27/2 and Sy No. 28 was bifurcated to 28/A, 28/B, 28/C, 28/D & 28/E. These Sy No 26/1 and 26/2, 27/1B, 27/1A & 27/2, 28/A, 28/B, 28/C, 28/D & 28/E must be replaced in place of Sy No. 26, 27 & 28. Remaining details including the project site area and production capacity will remain same.
- v. The EAC noted that there is no change in configuration & capacity of units in granted EC.
- vi. The Committee noted that KSPCB vide letter dated 08.06.2022 while recommending for CFE has asked PP to submit an amendment of EC as per the instant proposal.
vii. The EAC noted that the Consultant M/s. Horizon Ventures is accredited by NABET for Category "B" projects. Further, EAC is of the opinion that taking into consideration the nature of the amendment required, there is no need for engagement of consultant. However, considering the correspondence of the PP with the Ministry and SEIAA pertaining to the instant amendment proposal as detailed in point iii above, the EAC warned the consultant for not guiding the project proponent properly with respect to submitting of instant application to Ministry and SEIAA.

Recommendations of the Committee

18.8.11 After deliberations, the Committee recommended the proposal subject to uploading the written submission on portal for amendment in EC granted vide File no. J-11011/427/2010-IA-II(I) dated 17.11.2011 and subsequent amendment dated 08.01.2016 w.r.t. replacement of survey numbers 25, 26, 27 and 28 with Sy. No. 26/1, 26/2, 27/1B, 27/1A & 27/2, 28/A, B, C, D & E.

Consideration of Terms of Reference Proposal (TOR)

Agenda No. 18.9

18.9 Expansion of project by Installation of 2 x 4.5 MTPA Iron Ore Grinding Unit, 10 MTPA Thickening and Filtration unit and 2 x 4.0 MTPA Iron Ore pellet Plant, by M/s Lloyds Metals and Energy limited, located at MIDC Konsari, Village: Konsari, Tahsil: Chamorshi, District: Gadchiroli, Maharashtra – Consideration of TOR.

[Proposal No. IA/MH/IND1/403913/2022; File No. IA-J-11011/465/2022-IA-II(IND-I)] [M/s Pollution and Ecology Control Services, valid upto 14.01.2023]

- 18.9.1 M/s. Lloyds Metals and Energy Limited has made an application online vide proposal no. IA/MH/IND1/403913/2022 dated 22nd November 2022 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) under Category "A" of the schedule of the EIA notification, 2006 being appraised at Central Level.
- 18.9.2 Name of the EIA consultant: M/s Pollution and Ecology Control Services [Sl. No. 75, List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2023/SA 0165; valid upto 14.01.2023, Rev. 25, Sept 05, 2022].

Details submitted by Project proponent

18.9.3 The project of M/s. Lloyds Metals and Energy Limited located in MIDC Konsari, Village: Konsari, Tahsil: Chamorshi, District Gadchiroli, Maharashtra is for expansion of Project by Installation of 2 x 4.5 MTPA Iron Ore Grinding Unit, 10 MTPA Thickening & Filtration Unit and 2 X 4 MTPA Iron Ore Pellet Plant.

S. No.	Particulars		Remarks			
i.	Total land	50.18 ha [Govt.]	-			
ii.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	100% land is in possession. 50.18 ha. of land is allotted by MIDC to Lloyds Metals and Energy Limited			-	
iii.	Existenceofhabitation&involvementofR&R, if any.	No involvement of Ra Nearest Village: Konsari 0.5 Km : SSV	No involvement of R&R. Nearest Village: Konsari 0.5 Km : SSW			
iv.	Latitude and	Point Latit	tude	Longitude	-	
	Longitude of all	A 19°46'5	5.59"N	79°48'50.60"E		
	corners of the	B 19°46'	7.76"N	79°48'45.57"E		
	project site.	C 19°46'5	5.09"N	79°48'43.87"E		
		D 19°46'1	2.26"N	79°48'29.62''E		
		E 19°46'1	0.51"N	79°48'24.18"'E		
		F 19°46'1	F 19°46'14.04"N 79°48'19.21"E			
		G 19°46'3	G 19°46'30.49"N 79°48'24.16"E			
		H 19°46'1	8.75"N	79°48'57.13"E		
v.	Elevation of the project site	179 m above mean se	a level		-	
vi.	Involvement of Forest land if any.	No involvement of Fo	prest Land.		-	
vii.	Water body (Rivers, Lakes, Pond, Nala,	Project site: Nil Study area			-	
	Natural Drainage,	Water body	Distance	Direction		
	Canal etc.)	Konsari Lake	0.7 km	SW		
	exists within the	Varti Wagu stream	3.0 Km	SW		
	project site as	Uksa Wagu Stream	4.5 Km	SE		
	well as study area	Andhori Divor	0.0 Kill 7 5 Km	VV SW/		
		Deotri Nala	1.0 Km	S VV		
viii	Existence of	Study area	T.U IXIII	0		
, 111.	ESZ/ESA/	<u>Stady urea</u>				
	national park/	Name of the E	SZ/ESA:	Chaprala Wildlife		
	wildlife	Sanctuary Status of	Notification	n: ESZ was notified		
	sanctuary/	by the MoEFCC on 2	7 th October	2020		
	biosphere reserve/	Distance of project f	rom ESZ: 1	2.80 Km		

18.9.4 Environmental site settings:

S.	Particulars	Details	Remarks
No.			
	tiger reserve/	Authenticated map of ESZ projecting distance	
	elephant reserve	of ESZ from project site : Map is given with the	
	etc. if any within	PFR along with the coordinates.	
	the study area		
		List of Reserved and protected forests:	
		Markhanda Reserved Forest Patches at	
		0.3Km East direction	
		0.7km North direction	
		2.0Km West direction	
		1.5 km South direction	

- 18.9.5 The existing project was accorded Environmental Clearance vide letter no. SIA/MH/IND/70624/2018 dated 29.08.2022 by the SEIAA, Maharashtra. The construction work of the existing project is under progress with valid Environmental Clearance and Consent to Establish issued by Maharashtra Pollution Control Board. No CTO is granted.
- 18.9.6 Implementation status of the existing EC:

S.N.	Facilities	Units	As per EC dated 29.08.2022	Implementation Status	Production as per CTO
1.	Iron Ore Beneficiation plant	TPA	90,000	The unit is under No CTO is granted	construction stage.
2.	Sponge Iron Plant	TPA	62,700		
3.	Captive Power Plant	MW	4 (WHRB)		

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

Sl.	Facilities	Existing	Proposed	Total after
No.			expansion	expansion as per
				project under
				consideration
1.	Iron Ore Beneficiation	90000 TPA	-	90000 TPA
2.	Sponge Iron Plant	2x95TPD	-	2x95TPD (62,700
		(62,700 TPA)		TPA)
3.	Captive Power Plant	4MW (WHRB)	-	4MW (WHRB)
4.	Iron Ore Grinding Plant	-	2 X 4,500,000	2 X 4,500,000 TPA
			TPA	
5.	Thickening & Filtration	-	10,000,000 TPA	10,000,000 TPA
	unit			
6.	Iron Ore Pellet Plant	-	8,000,000 TPA	8,000,000 TPA
	2x4 MTPA			

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

RawQuantityMaterial(TPA)		Source & Distance from site (Kms)	Mode of Transportation	
Iron Ore Fines	 9.12 MTPA Captive IOG unit of 2 X 4.5 MTPA at 10 MTPA Thickening and Filtratio unit at same location in Konsari. 		By Tarpaulin covered Trucks till the Slurry pipe line system is commissioned.	
Lime Stone	0.16 MTPA	Mines in Chandrapur and Yavatmal District 150-200 Km.	By tarpaulin covered trucks.	
Coke	0.144 MTPA	Wardha and or Raipur 250 – 500 Km	By tarpaulin covered trucks.	
Bentonite	0.056 MTPA	Gujarat, 1200-1400 Km	By Road.	
Coal for PGP	Coalfor0.68 MTPAWCLminesinChandrapurandPGPYavatmal District, 150-200 Km.		By tarpaulin covered trucks.	
Iron Ore Fines in slurry form or as such.	10.0 MTPA	Own Iron Ore Mines in Surjagadh, Gadhchiroli, about 95 Km/127 km	By underground pipe line / by tarpaulin covered trucks	

- 18.9.9 Existing Water requirement is 257m³/day & water requirement for the proposed project will be 6600 m³/day which will be met from Wainganga River. Water shall be conveyed to the plant site through pipeline and will be stored in an earthen reservoir of capacity 56000 m³ approx.
- 18.9.10 The power requirement for the existing project is 4 MW and proposed project is estimated at 55 MW, which will be obtained from the State Electricity Board.
- 18.9.11 The capital cost of the proposed expansion is Rs 1600 Crores and the capital cost for environmental protection measures is proposed as Rs 100 Crores. The employment generation from the proposed expansion is 2800.
- 18.9.12 It has been reported by PP that, there is no violation under EIA Notification, 2006/court case/show cause/direction related to the project under consideration.
- 18.9.13 Proposed Terms of Reference: [Baseline data collection period: 1st March 2022 to 31st May, 2022]

Attributes	Sampling		
	No. of Stations	Frequency	
1) Air			
i) Meteorological	1	Continuously 24 hrs once for 13 weeks	
parameters		during study period.	
ii) AAQ parameters	8	Continuously 24 hrs once for 13 weeks	
		during study period.	
2) Noise	8	Continuously 24 hrs once for 13 weeks	

Attributes		Sampling
	No. of Stations	Frequency
		during study period.
3) Water		
i) Ground Water	8	Once during study period.
ii) Surface Water	8	Once during study period.
4) Land		
i) Soil quality	3	Once during study period.
ii) Land use	Study Area	Once during study period.
5) Biological		
i) Aquatic	Random sampling/ Quadrate Method	Once during study period.
ii) Terrestrial	Random sampling/ Quadrate Method	Once during study period.
6) Socio economic parameters	Field survey through questionnaire, group discussion and random Sampling in the study area.	Once during study period.

Deliberation by the Committee

- 18.9.14 The Committee noted the following:
 - i. The instant proposal is for expansion of Project by Installation of 2 x 4.5 MTPA Iron Ore Grinding Unit, 10 MTPA Thickening & Filtration Unit and 2 X 4 MTPA Iron Ore Pellet Plant.
 - ii. The existing project was accorded Environmental Clearance from SEIAA, Maharashtra vide letter no. SIA/MH/IND/70624/2018 dated 29.08.2022. The construction work of the existing project is under progress with valid Environmental Clearance and Consent to Establish (Consent No. Format1.0/CC/UAN No.0000129554/CE/2207000292 Dated 06/07/2022) issued by Maharashtra Pollution Control Board. No CTO is granted.
 - iii. The EAC deliberated on the proposal. On perusal of the KML file presented by the PP, it appears that there is a part of forest land within the project site in the Northern direction. The PP/ consultant submitted that the forest land is adjacent to the project site and shares the project site boundary. In this context, the EAC advised that the PP shall submit a letter form State Forest Department about the involvement of forest land, if any.
 - iv. The EAC noted that PP presented the Joint Survey Report of the Forest Department which certifies the coordinates of the common boundary shared by the project site with the Forest land.
 - v. The Committee noted that the ESZ of the Chaprala Wildlife Sanctuary is at a distance of 2.80 km from the project site boundary. The Chaprala Wildlife Sanctuary has been notified by MoEF&CC on 27th October, 2020. PP has submitted the authenticated map certifying the same from the forest department. The EAC further deliberated that there is no mentioning of the Chaprala Wildlife Sanctuary in the EC obtained from SEIAA, Maharashtra vide letter no. SIA/MH/IND/70624/2018 dated 29.08.2022 and also not

reported in the EIA/EMP report of the aforesaid EC. The PP explained during presentation that, application as well as EIA/EMP report submitted to the SEIAA Maharashtra are before the date of ESZ notification. In this regard, PP/Consultant, vide letter dated 29.11.2022, submitted that at the time of submission of application [Submission of TOR application-2nd February 2018, Submission of EIA/EMP Report via MPCB portal-2nd July 2020, Recommendation of SEAC-11.08.2021, Resubmission of EIA/EMP Report on Parivesh-3rd January 2022 & Grant of EC-29th August 2022]. PP also mentioned that they are not aware of the location of the Sanctuary. The boundary of Chaprala Wildlife Sanctuary was located at 6.7 km and now the ESZ is at 2.8 km from the proposed project i.e. the instant project is located outside of the ESZ. PP also requested to pardon the mistake which happened inadvertently. The EAC deliberated the request of PP.

- vi. Total project land is 50.18 ha which is in possession of Lloyds Metals and Energy Limited.
- vii. The nearest habitation to plant is Konsari village at distance of 0.5 Km in SSW Direction.
- viii. The Konsari Lake (0.7 km SW), Varti Wagu stream (3.0 Km, SW), Uksa Wagu Stream (4.5 Km, SE), Wainganga River (6.0 Km, W), Andhari River (7.5 Km, SW) and Deotri Nala (4.0 Km, S) are flowing within the study area of the project site. The EAC is of the opinion that the water bodies shall not be disturbed.
 - ix. Existing Water requirement is $257m^3/day$ & water requirement for the proposed project will be 6600 m³/day which will be met from Wainganga River.

Recommendations of the Committee

- 18.9.15 After deliberations, the Committee **recommended** the project proposal for prescribing following specific ToRs subject to uploading the Joint Survey Report and a letter from State Forest Department about the involvement of forest land in the project area, if any, for undertaking detailed EIA and EMP study along with conduction of Public Hearing in addition to the generic ToRs enclosed at Annexure-1 read with additional ToRs at Annexure-2:
 - (i) The nearest habitation to plant is Konsari village at distance of 0.5 Km in SSW Direction. Project Proponent shall submit action plan for environmental safeguard measures to minimise the impact on the habitation of the locals. The PP shall also include some of these locations in its environmental monitoring programme.
 - (ii) Konsari Lake (0.7 km, SW), Varti Wagu stream (3.0 Km, SW), Uksa Wagu Stream (4.5 Km, SE), Wainganga River (6.0 Km, W), Andhari River (7.5 Km, SW) and Deotri Nala (4.0 Km, S) are flowing within the study area of the project site. A robust and full proof Micro-Drainage Conservation scheme to protect the natural drainage/water bodies and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be provided.
 - (iii) Chaprala Wildlife Sanctuary is at a distance of 2.80 km from the project site boundary. A conservation plan shall be prepared & approval from Competent Authority shall be obtained.
 - (iv) PP shall submit a letter form State Forest Department about the involvement of forest land, if any.

- (v) Tailing management plan shall be included in EIA.
- (vi) Air cooled condensors shall be used in the power plant.
- (vii) Detailed description of micro flora and fauna (terrestrial and aquatic) existing in the study area with special reference to rare, endemic and endangered species.
- (viii) Explore possibilities for recycling and reusing of treated water in the unit to reduce the fresh water demand and waste disposal.
 - (ix) The PP should submit the photograph of monitoring stations & sampling locations. The photograph should bear the date, time, latitude & longitude of the monitoring station/sampling location. In addition to this PP should submit the original test reports and certificates of the labs which will analyze the samples.
 - (x) PP shall submit action plan for rainwater harvesting system.
 - (xi) Action plan for 100 % solid waste utilization shall be submitted.
- (xii) PP shall explore the possibility of plastic waste utilization in the Plant/Unit process.
- (xiii) Project proponent shall prepare layout plan showing all internal roads minimum 6m width and 9m turning radius with proper looping for smooth traffic flow, including fire tender as per NBC. Road network shall connect all service areas in layout. This drawing shall include area statement showing plot area, area under roads, parking, green belt with calculations and % with respect to plot area of project site and proper indexing.
- (xiv) Project proponent shall submit contour map of project site along with drainage disposal system with calculations and drawings supported with proper indexing including rain water harvesting details with calculations mentioning about GW recharge along with relevant drawing.
- (xv) Project proponent shall submit a study report on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitorable with defined time frames", when PP comes for EC proposal. This study shall be formulated keeping in view of India's Net-zero commitment at the COP-26 Climate Summit.
- (xvi) As part of Corporate Environment Responsibility (CER) activity, company shall adopt nearby villages based on the socio-economic survey (10 Kms radial coverage from the project site) and undertake community developmental activities in consultation with the village Panchayat and the District Administration. In this regard, time bound action plan as per the MoEF&CC Office Memorandum dated 30/09/2020 shall be submitted.
- (xvii) Traffic study shall be carried out inter-alia including existing road details with traffic load, proposed quantum of material to be transported by sea/rail/road with anticipated vessels/rakes/vehicles details, line source modelling and infrastructure strengthening details etc., These details shall be included in the EIA report.
- (xviii) Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.
- (xix) Action plan to limit the dust emission from all the stacks below 30 mg/Nm³ shall be furnished.

- (xx) The coal dust should be monitored at coal unloading, crushing, furnace areas and should be within 2 mg/m³, respirable dust fraction containing less than 5% quartz as per Indian Factories Act, 1948.
- (xxi) Monitoring and control of NOx, SO₂ and CO gases from the furnace must be included in the pollution control scheme.
- (xxii) A Plan of Action for disposal of e-waste must be drawn up and implemented.

Agenda No. 18.10

18.10 High Carbon Ferrochrome Manufacturing Unit of Capacity 96,000 TPA with 10 MW power Generation by M/s Indian Metals and Ferro Alloys Limited, located at Kalinga Nagar Industrial Complex, Dist.-Jajpur, Odisha– Consideration of TOR.

[Proposal No. IA/OR/IND1/405941/2022; File No. IA-J-11011/273/2022-IA-II(IND-I)] [Consultant: M/s GLOBALTECH Enviro Experts Pvt. Ltd. valid till 06.11.2023]

- 18.10.1 M/s. Indian Metals & Ferro Alloys Limited has made an application online vide proposal No. IA/OR/IND1/405941/2022 dated 11.11.2022 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 and Non/ferrous) under Category "A" of the schedule of the EIA Notification, 2006 and appraised at central level.
- 18.10.2 Name of the EIA consultant: M/s GLOBALTECH Enviro Experts Pvt. Ltd. [S. No. 104, List of ACOs with their Certificate / Extension Letter No: NABET/EIA/2023/IA0066 valid till 06.11.2023; Rev. 25, Sept 05, 2022].

Details submitted by Project proponent

18.10.3 The project of M/s. Indian Metals & Ferro Alloys Limited located in Kacherigaon Village, Danagadi Tehsil, Jajpur District, Odisha is for setting up of a green field project for production of 96000 Tons Per Annum (TPA) High Carbon Ferrochrome & 10 MW Power generation from furnace off gas.

S. No.	Particulars	Details
i.	Total land	50.29 ha [Private: 7.46 ha; Govt:42.83 ha]
ii.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	This land is acquired by IDCO which is govt. entity & allotted to IMFA as per the letter No. HO/P& A/LA-E-7807/19 6037 dated 25.03.2022.
iii.	Existence of habitation & involvement of	There is unauthorized encroachment inside allotted 50.29ha of land and IDCO has already initiated the process of evacuation. R&R will not arise.

18.10.4 Environmental site settings:

S. No.	Particulars	Details							
	R&R, if any.								
		Nearby sur	roundi	ng villages:					
		1. Jakhap	oura						
		2. Kache	2. Kacherigaon						
		3. Gadapur							
		4. Manga	4. Mangalpur						
		5. Balunga Bandi							
		6. Laban	ga						
		7. Raban	a						
		8. Biratik	ar						
		9. Golaga	an io						
		10. Chanu	la						
		Points		Latitude		Longitude			
		1	20)°56' 14.3532'	'N	86°3' 17.2468"E			
		2	20)°55' 57 3691'	'N	86°2' 50 4219"E			
		3	20)°55' 57 3485'	'N	86°2' 45 4216"E			
		4	20)°55' 56 9139'	'N	86°2' 45 3758"E			
		5	20)°55' 56 7739'	'N	86°2' 45 0406"E			
		6	20)°55' 55 8428'	'N	86°2' 44 5645"E			
	Latitude and Longitude of all the corners of project site.	7	20)°55' 55 9031'	'N	86°2' 43 0567"E			
		/	20 33 33.9031 N		'N	86°2' 41.6008"E			
		8	20 35 35.7052 N		IN 'N	86°2' 40.840"E			
		10	20°55'55.0975'IV		IN 'N	86°2' 40.849 E			
ix		10	20°55'55 5481"N		IN 'N	86°2' 40.3403 E			
1.		11	20°55' 55 3801"N		IN 'N	86°2' 40.1745 E			
		12	20°55' 54 8598"N		IN 'NI	80 2 40.3735 E			
		13	20 33 34.8398 IN 20°55' 53 4876''N		IN 'NI	00 2 39.707 E			
		14	20 33 33.4670 IN		IN 'NI	86°2' 27 2020"E			
		15	20°55 55.8518 N		IN N	00 2 37.3939 E			
		10	20°56 2.7762 N		IN NI	86°2' 27 2100"E			
		17	20°56 5.2905 N		IN NI	00 2 37.3199 E			
		10	2	0.50.5.0630	IN NI	00 2 37.3304 E			
		19	2	0.30.3.9178	IN NI	80 2 37.3438 E			
		20	2	0.20 0.1288	IN N	80°2 37.0331 E			
		21	2	0.20 0.0002	IN	80°2 38.403 E			
	Elevation of the	22	20	J° 56° 25.6203°	N	86°3 10.1408 E			
v.	Project site	36.25 to 51.	25 m ab	ove mean sea	level.				
	Involvement of								
V1.	Forest land, if any.	no forest la	na invo	ivea					
	Water body	Project site	:						
	(Rivers,Lakes,	No water bo	dy exist	ts within the p	lant site.				
	Pond, Nala,								
vii.	Natural Drainage,	Study area			1				
	Canal etc.) exists	Water	body	Distance		Direction			
	within the project	Desta	D:	551		Court			
	site as well as	Brahmani	Kiver	5.5 km		South			
	studyarea								

S. No.	Particulars	Details			
viii.	Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/tiger reserve/ alaphant record	Nil Details of Forests ar Forest Barhashuli open Mixed Jungle Sunajhara P.F	e as follows: Distance (km) 1.2 8.5	Direction West West	
	elephant leserve	Scrub Forest	7.8	West	

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

Sl. No.	Facility	Configuration	Capacity
1	High Carbon Fe-Cr plant	2x33 MVA	96,000 TPA High carbon Ferro Chrome
	(Smelting Furnaces)		
2	Briquetting Plant	-	2,05,440 TPA
3	CPP from furnace off gas	-	10 MW

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

Sl. No.	Raw Material	Quantity Required Per Annum	Source	Distance From Site (Kms)	Mode of Transport
1	Chrome ore	2,31,072 MT	Captive mines /OMC/TSML	30-40	Road
2	Anthracite	15,072 MT	Import	120	Road
3	Lam Coke	33,600 MT	Import	120	Road
4	Bauxite	960 MT	Chhattisgarh	450	Rail
5	Hydrated Lime	5,472 MT	Rajasthan	1380	Rail
6	Molasses	9,600 MT	Local Traders	Variable	Road
7	Quartzite	11,136 MT	Odisha/ Andhra Pradesh/Jharkha nd	Variable	Road
8	HSD/LDO	1597 KL	IOCL/ HPCL	20-30	Road
9	Electrode Paste	1500 MT	Import	120	Road

- 18.10.7 The water requirement for the proposed project is estimated as 2250 m³ /day & it will be obtained from the Brahmani River through IDCO Pipeline. Govt. of Odisha, Industries Dept. vide Lr. No. 5596/I dated 22.06.2022 have entrusted IDCO to provide water connection to IMFA at the earliest. IMFA has already submitted application for the connection.
- 18.10.8 Total power requirement for the Proposed project is estimated as 56 MW. Out of which 10 MW will be from own generation and balance power will be drawn from IMFA's Group Captive Generating Plant installed at Choudwar by availing intra state open access.

- 18.10.9 The capital cost of the project is Rs. 547.19 Crores and the capital cost for environmental protection measures is proposed as Rs. 65.00 Crores. The employment generation from the proposed project is 1550 (Construction Phase-650, Operation Phase-900).
- 18.10.10 It has been reported by PP that, there is no violation under EIA Notification, 2006/court case/show cause/direction related to the project under consideration.

Attributos	Davamatars	Samp	Remarks	
Attributes	I al ametel s	No. of stations	Frequency	Kellial KS
A. Air				
a. Meteorological parameters	Temperature,Pressure,Relative Humidity,WindSpeed,Winddirection,Rainfall,Cloud Cover.	01 (Project Site)	Hourly	-
b. AAQ parameters	PM ₁₀ , PM _{2.5} , SO ₂ , NO ₂ & CO	08	Twice a week (24 Hourly)	-
B. Noise	Equivalent Noise levels in Leq in dB (A)	08	Once in a season (Day & Night-time)	-
C. Water				
Surface water quality parameters	Parameters as per ISI-IS: 2296- 1982 (For Surface water)	Surface Water - 06	Grab Sample Once in Baseline Period	-
Ground water quality parameters	Parameters as per IS 10500 - 2012(For Drinking Water)	Ground water - 06	Grab Sample Once in Baseline study Period	-
D. Land				
a. Soil quality	Parameters as per IS 2720/USDA	6	Once during Study period	-
b. Land use	Agriculture, Habitation, Industry, Stony waste/ Quarries, Forest area, Plantation/ Vegetation, Open scrub, Water bodies etc.	10 km radius StudyArea	Once during Study period	-
E. Biological				
a. Aquaticb. Terrestrial	Biodiversity i.e. Flora and faunastudies within the entire study area depending on Ecological receptors in the study area.	10 km radius Study Area	Once in Baseline Period	-
F. Socio- economic parameters	Demographic study, Literacy rate, Occupational Health monitoring of employees, Employment pattern, Infrastructure and Awareness and opinion of the respondents.	10 km radius Study Area	Once in Baseline Period	_

18.10.11 Proposed Terms of Reference: [Baseline data collection period: 1st March 2022 to 31st May, 2022]

- 18.10.12 M/s. Indian Metals & Ferro Alloys Limited had earlier made an online application for TOR vide proposal No. IA/OR/IND/284053/2022 dated 30.09.2022 and the proposal was considered during 15th meeting of the EAC for Industry-I sector held on 17-18th October, 2022 wherein after deliberations, the Committee recommended that proposal to be returned in its present form to address the shortcomings.
- 18.10.13 M/s. Indian Metals & Ferro Alloys Limited has again earlier made an online application for TOR vide proposal No. IA/OR/IND1/405941/2022 dated 11.11.2022 after addressing the issues and and the proposal has been considered in the 18th meeting of the EAC for Industry-I sector held on 27-28th November, 2022. The deliberation and recommendations of the EAC are as follows:

Deliberation by the Committee

- 18.10.14 The Committee noted the following:
 - i. The instant proposal is for setting up of a green field project for production of 96000 Tons Per Annum (TPA) High Carbon Ferrochrome & 10 MW Power generation from furnace off gas.
 - ii. The EAC deliberated on the proposal. Based on the KML file presented by the PP, the proposed Unit is greenfield project.
 - iii. Total land area is 50.29 ha. The land is in industrial complex and has been allotted to M/s. IMFA for this green field project by IDCO Industries Department, Govt. of Odisha. The EAC noted that there is some unauthorized encroachment, which is to be cleared by IDCO Industries Department, Odisha. As reported by PP, the process of evacuation of encroachment has been initiated by IDCO.
 - iv. Brahmani River is at a distance of 5 km in the South direction from the project site. The EAC is of the opinion that the water bodies shall not be disturbed.
 - v. Barhashuli open Mixed Jungle is at a distance of 1.2 km in the West direction from the project site.
 - vi. Water requirement for the total project is estimated as 2250 m³/day which will be obtained from Brahmani river through IDCO Pipeline.

Recommendations of the Committee

18.10.15 After deliberations, the Committee **recommended** the project proposal for prescribing following specific ToRs for undertaking detailed EIA and EMP study along with conduction of Public Hearing in addition to the generic ToRs enclosed at Annexure-1 read with additional ToRs at Annexure-2:

- (i) Brahmani River is at a distance of 5 km in the South direction from the project site. The PP shall submit the suitable steps /conservation plan along with contouring (close intervals), Run -off calculations, disposal etc. A robust and full proof Micro-Drainage Conservation scheme to protect the natural drainage/water bodies and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be provided.
- (ii) Detailed description of micro flora and fauna (terrestrial and aquatic) existing in the study area with special reference to rare, endemic and endangered species.
- (iii) Explore possibilities for recycling and reusing of treated water in the unit to reduce the fresh water demand and waste disposal.
- (iv) The PP should submit the photograph of monitoring stations & sampling locations. The photograph should bear the date, time, latitude & longitude of the monitoring station/sampling location. In addition to this PP should submit the original test reports and certificates of the labs which will analyze the samples.
- (v) PP shall submit action plan for rainwater harvesting system.
- (vi) Action plan for 100 % solid waste utilization shall be submitted.
- (vii) PP shall explore the possibility of plastic waste utilization in the Plant/Unit process.
- (viii) Project proponent shall prepare layout plan showing all internal roads minimum 6m width and 9m turning radius with proper looping for smooth traffic flow, including fire tender as per NBC. Road network shall connect all service areas in layout. This drawing shall include area statement showing plot area, area under roads, parking, green belt with calculations and % with respect to plot area of project site and proper indexing.
- (ix) Project proponent shall submit contour map of project site along with drainage disposal system with calculations and drawings supported with proper indexing including rain water harvesting details with calculations mentioning about GW recharge along with relevant drawing.
- (x) Project proponent shall submit a study report on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitorable with defined time frames", when PP comes for EC proposal. This study shall be formulated keeping in view of India's Net-zero commitment at the COP-26 Climate Summit.
- (xi) As part of Corporate Environment Responsibility (CER) activity, company shall adopt nearby villages based on the socio-economic survey (10 Kms radial coverage from the project site) and undertake community developmental activities in consultation with the village Panchayat and the District Administration. In this regard, time bound action plan as per the MoEF&CC Office Memorandum dated 30/09/2020 shall be submitted.
- (xii) Traffic study shall be carried out inter-alia including existing road details with traffic load, proposed quantum of material to be transported by sea/rail/road with anticipated vessels/rakes/vehicles details, line source modelling and infrastructure strengthening details etc., These details shall be included in the EIA report.
- (xiii) Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.

- (xiv) Action plan to limit the dust emission from all the stacks below 30 mg/Nm^3 shall be furnished.
- (xv) Monitoring and control of NOx, SO₂ and CO gases from the furnace must be included in the pollution control scheme.
- (xvi) Briquetting and Jigging plant shall be installed in Ferro Alloys Plant.
- (xvii) A Plan of Action for disposal of e-waste must be drawn up and implemented.

Agenda No. 18.11

18.11 Proposed Expansion project for Production of MS Billets from 28,000 TPA to 72,600TPA and MS. Angle Channel, M.S. Flat, TMT Bars, M.S. Beam, T Angle, Pipe, Round Square, and Strips from 28,000 TPA to 70,000 TPA by M/s Gopal Ferrous Private Limited, located at located at plot No. 92 - 104 Amgaon Industrial Area, survey No. 114/2 L, 2 PT., Village – Amgaon, Tal – Talasari, District – Palghar, Maharashtra– Consideration of TOR.

[Proposal No. IA/MH/IND1/401734/2022; File No. IA-J-11011/401/2022-IA-II(IND-I)] [Consultant: M/s Pollution and Ecology Control Services, valid upto 14.01.2023]

- 18.11.1 M/s. Gopal Ferrous Private Limited has made an application online vide proposal no. IA/MH/IND1/401734/2022 dated 19th November 2022 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 and Non/ferrous) under Category "A" of the schedule of the EIA Notification, 2006 and attracts general condition due to the interstate boundary i.e. Maharashtra & Gujarat is within 5 km from project site and therefore appraised at central level.
- 18.11.2 Name of the EIA consultant: M/s Pollution and Ecology Control Services [Sl. No. 75, List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2023/SA 0165; valid upto 14.01.2023, Rev. 25, Sept 05, 2022].

Details submitted by Project proponent

18.11.3 The project of M/s. Gopal Ferrous Private Limited located in Amgaon Industrial Area, survey No. 114/2 L, 2 PT. Village – Amgaon Industrial Area, Tal – Talasari, District – Palghar, Maharashtra is for Proposed Expansion project for Production of MS Billets from 28,000 TPA (Underway) to 72,600TPA and MS. Angle Channel, M.S. Flat, TMT Bars, M.S. Beam, T Angle, Pipe, Round Square, and Strips from 28,000 TPA (Underway) to 70,000 TPA.

S.No.	Particulars	Details	Remarks
i.	Total land	1.20 ha [Private]	-
ii.	Land acquisition details as per	100% land is in possession. 1.20 ha. of land is purchased by Gopal Ferrous Private Limited	-
	MoEF&CC O.M. dated 7/10/2014		
iii.	Existence of habitation & involvement of R&R, if	No R&R is involved	-

18.11.4 Environmental site settings:

S.No.	Particulars	De		etails		Remarks
iv.	Latitude and	Point	Latitude		Longitude	-
	Longitude of	А.	20°11'37.80"1	N 72°	53'11.01"E	
	all corners of	B.	20°11'35.83"I	N 72°	53'12.19"E	
	the project	C.	20°11'33.07"1	N 72°	53'7.22"E	
	site.	D.	20°11'35.09"I	N 72°	53'6.04"E	
v.	Elevation of	42 m abo	ve mean sea le	vel		
	the project					
	site					
vi.	Involvement	No invol	vement of Fore	st Land		-
	of Forest land					
	if any.					
vii.	Water body	Project s	ite: Nil			-
	(Rivers,	Study ar	ea			,
	Lakes, Pond,	Wa	ter body	Distance	e Direction	
	Nala, Natural	Nala		800 m	SW	
	Drainage,	Tokar N	ladi	6.5 Km	WNW	
	Canal etc.)	Bekariy	a Nadi	7.0 Km	WSW	
	exists within	Jogani N	Nadi	7.0 Km	SW	
	the project	Kangan	Nadi	5.5 Km	SE	
	site as well as	Ojhar N	adi:	4.0 Km	ESE	
	study area	Kalu Or	Darota Nadi:	5.0 Km	ENE	
viii.	Existence of	Nil				
	ESZ/ ESA/					
	national park/					
	wildlife					
	sanctuary/					
	biosphere					
	reserve/ tiger					
	reserve/					
	elephant					
	reserve etc. if					
	any within the					
·	study area		a harmach (D) 5 V	
1X.	Interstate	Gujrat M	anarashtra Bou	indary at 2	2.5 KM	-
	Boundary					

- 18.11.5 The existing project was accorded Consent to Establish vide lr.no.Format1.0/APAESection/UANNo.0000119919/CE/2112001766 dated 29.12.2021. The Environmental Clearance is not applicable for existing project as the total production capacity is less than 30000 TPA from Induction Furnace. The unit is under construction stage. No CTO is granted.
- 18.11.6 Implementation status of the existing CTE:

S.N.	Facilities	As per Consent to Establish dated 29.12.2021	Implementation Status	Production as per CTO
1.	Induction	28000 TPA	The unit is unde	r construction

S.N.	Facilities	As per Consent to Establish dated 29.12.2021	Implementation Status	Production as per CTO
	Furnace	(10 TPH)	stage. No CTO is gra	inted
2	Hot Charged	28000 TPA		
	Rolling Mill			

18.11.7	The unit configuration	and capacity of	existing and	l proposed	project is	given as below:
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S. N.	Plant Equipment/ Facility	Existin CTE 29.12	ng as per dated 2.2021	Proposed Units		Final (Existing + Proposed)		Remarks
		Config.	Capacity	Config.	Capacity	Config.	Capacity	The unit is
1.	Induction Furnace	10 TPH	28000	20 TPH	44600 TPA	1 x 10	72600	under
	[MS Billets]		TPA			TPH	TPA	construction
						1 x 20		stage. No
						TPH		CTO is
								granted
2.	Hot Charged Rolling Mill	-	28000	-	42000 TPA	-	70000	
	[MS. Angle Channel, M.S.		TPA				TPA	
	Flat, TMT Bars, MS Beam,							
	T Angle, Pipe, Round							
	Square, and Strips]							

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

S. N.	Raw Material	Quantity (TPA)			Source	Mode Of
		Existing	Proposed	Total		Transport
1.	Sponge Iron	5880	9366	15246	Raipur &	By Road
					Ballari	
2.	Scrap	22540	35903	58443	Mumbai, Surat	By Road
					and imported	
3.	Silico	420	669	1089	Raipur &	By Road
	Manganese as				Balaghat	
	Additives				_	
4.	Molten metal	28000	44600	72600	Inhouse	-
	from Induction				Induction	
	Furnace				Furnace	

- 18.11.9 Existing Water requirement is $45m^3/day$ & water requirement for the proposed project will be $45m^3/day$ & will be met from Ground Water. The area falls under safe category as per CGWA.
- 18.11.10 The total power requirement for the project is 10 MW, which will be obtained from the Maharashtra State Electricity Distribution Company Limited.
- 18.11.11 The capital cost of the existing project is 17 Crores and for the proposed expansion project is Rs 18 Crores and the capital cost for environmental protection measures is proposed as Rs. 2 Crores. The employment generation from the proposed expansion is 150.
- 18.11.12 It has been reported by PP that, there is no violation under EIA Notification, 2006/court case/show cause/direction related to the project under consideration.

Attributes	Sampling		
	No. of stations	Frequency	
A. Air			
a. Meteorological	1	Continuously 24 hrs once for 13 weeks	
parameters		during study period.	
a. AAQ parameters	8	Continuously 24 hrs once for 13 weeks	
		during study period.	
B. Noise	8	Continuously 24 hrs once during study	
		period.	
C. Water	As per IS standards		
Surface water/	Surface Water 8	Once during study period.	
Ground water	Ground Water 8		
quality parameters			
D. Land			
a. Soil quality	8	Once during study period.	
b. Land use	Study Area		
E. Biological	Random sampling/	Once during study period.	
a. Aquatic	Quadrate Method		
b. Terrestrial			
F. Socio-economic	Field survey through	Once during study period.	
parameters	questionnaire, group		
	discussion and		
	random Sampling in		
	the study area.		

18.11.13 Proposed Terms of Reference: [Baseline data collection period: 1st October 2022 to 31st December 2022]

Deliberation by the Committee

- 18.11.14 The Committee noted the following:
 - The instant proposal is for expansion involving production of MS Billets from 28,000 TPA (Underway) to 72,600 TPA and MS. Angle Channel, M.S. Flat, TMT Bars, M.S. Beam, T Angle, Pipe, Round Square, and Strips from 28,000 TPA (Underway) to 70,000 TPA.
 - ii. The EAC deliberated on the proposal. Based on the KML file presented by the PP, the proposed Unit is brown field project.
 - iii. The existing project was accorded Consent to Establish vide lr.no.Format1.0/APAESection/UANNo.0000119919/CE/2112001766 dated 29.12.2021. The Environmental Clearance is not applicable for existing project as the total production capacity is less than 30000 TPA from Induction Furnace. The unit is under construction stage. No CTO is granted.
 - iv. Total project area is 1.20 ha. Total land is purchased by Gopal Ferrous Private Limited and is under the possession of the company.
 - v. Nala (800 m, SW), Tokar Nadi (6.5 Km, WNW), Bekariya Nadi (7.0 Km, WSW), Jogani Nadi (7.0 Km, SW), Kangan Nadi (5.5 Km, SE), Ojhar Nadi (4.0 Km, ESE) and

Kalu Or Darota Nadi (5.0 Km, ENE) exists within the study area of 10 km of the project site. The EAC is of the opinion that the water bodies shall not be disturbed. Action plan comprising of mitigation measures for conservation of the water bodies shall be prepared.

vi. Existing Water requirement is $45m^3/day$ & water requirement for the proposed project will be $45m^3/day$ & will be met from Ground Water.

Recommendations of the Committee

- 18.11.15 After deliberations, the Committee **recommended** the project proposal for prescribing following specific ToRs for undertaking detailed EIA and EMP study along with conduction of Public Hearing in addition to the generic ToRs enclosed at Annexure-1 read with additional ToRs at Annexure-2:
 - (i) Nala (800 m, SW), Tokar Nadi (6.5 Km, WNW), Bekariya Nadi (7.0 Km, WSW), Jogani Nadi (7.0 Km, SW), Kangan Nadi (5.5 Km, SE), Ojhar Nadi (4.0 Km, ESE) and Kalu Or Darota Nadi (5.0 Km, ENE) exists within the study area of 10 km of the project site. The PP shall submit the suitable steps /conservation plan along with contouring (close intervals), Run -off calculations, disposal etc. A robust and full proof Micro-Drainage Conservation scheme to protect the natural drainage/water bodies and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be provided.
 - (ii) PP shall explore the possibility to avoid ground water usage and propose alternative source of water for fulfilling its requirement.
 - (iii) Detailed description of micro flora and fauna (terrestrial and aquatic) existing in the study area with special reference to rare, endemic and endangered species.
 - (iv) Explore possibilities for recycling and reusing of treated water in the unit to reduce the fresh water demand and waste disposal.
 - (v) The PP should submit the photograph of monitoring stations & sampling locations. The photograph should bear the date, time, latitude & longitude of the monitoring station/sampling location. In addition to this PP should submit the original test reports and certificates of the labs which will analyze the samples.
 - (vi) PP shall submit action plan for rainwater harvesting system.
 - (vii) Action plan for 100 % solid waste utilization shall be submitted.
 - (viii) Project proponent shall prepare layout plan showing all internal roads minimum 6m width and 9m turning radius with proper looping for smooth traffic flow, including fire tender as per NBC. Road network shall connect all service areas in layout. This drawing shall include area statement showing plot area, area under roads, parking, green belt with calculations and % with respect to plot area of project site and proper indexing.
 - (ix) Project proponent shall submit contour map of project site along with drainage disposal system with calculations and drawings supported with proper indexing including rain water harvesting details with calculations mentioning about GW recharge along with relevant drawing.

- (x) Project proponent shall submit a study report on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitorable with defined time frames", when PP comes for EC proposal. This study shall be formulated keeping in view of India's Net-zero commitment at the COP-26 Climate Summit.
- (xi) As part of Corporate Environment Responsibility (CER) activity, company shall adopt nearby villages based on the socio-economic survey (10 Kms radial coverage from the project site) and undertake community developmental activities in consultation with the village Panchayat and the District Administration. In this regard, time bound action plan as per the MoEF&CC Office Memorandum dated 30/09/2020 shall be submitted.
- (xii) Traffic study shall be carried out inter-alia including existing road details with traffic load, proposed quantum of material to be transported by sea/rail/road with anticipated vessels/rakes/vehicles details, line source modelling and infrastructure strengthening details etc., These details shall be included in the EIA report.
- (xiii) Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.
- (xiv) Action plan to limit the dust emission from all the stacks below 30 mg/Nm³ shall be furnished.
- (xv) A Plan of Action for disposal of e-waste must be drawn up and implemented.
- (xvi) PP shall explore the possibility of plastic waste utilization in the Plant/Unit process.

The Meeting ended with thanks to the Chair.

Standard ToR in line with Appendix III of the EIA, 2006. applicable to Proposals Under Industry-1 Sector

Preliminary requirements:

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

Structure of EIA/EMP report

Executive Summary

- i. Table of Contents of the EIA report including list of tables/figures/annexures/abbreviations/symbols/notations.
- ii. Point wise compliance to the ToR issued by MoEF&CC.
- iii. Executive Summary
 - I. Introduction
 - i. Name of the project along with applicable schedule and category as per EIA, 2006.
 - ii. Location and accessibility
 - II. Project description
 - i. Resource requirements (Land; water; fuel; manpower)
 - ii. Operational activity
 - iii. Key pollution concerns
 - III. Baseline Environment Studies
 - i. Ambient air quality
 - ii. Ambient Noise quality
 - iii. Traffic study
 - iv. Surface water quality
 - v. Ground water quality
 - vi. Soil quality
 - vii. Biological Environment
 - viii. Land use
 - ix. Socio-economic environment
 - IV. Anticipated impacts

- i. Impact on ambient air quality
- ii. Impact on ambient noise quality
- iii. Impact on road and traffic
- iv. Impact on surface water resource and quality
- v. Impact on ground water resource and quality
- vi. Impact on terrestrial and aquatic habitat
- vii. Impact on socio-economic environment
- V. Alternative analysis
- VI. Environmental Monitoring program
 - i. Ambient air, noise, water and soil quality
 - ii. Emission and discharge from the plant
 - iii. Green belt
 - iv. Social parameters
- VII. Additional studies
 - i. Risk assessment
 - ii. Public consultation
 - iii. Action plan to address the issues raised during public consultation as per MoEF&CC O.M. dated 30/09/2020
- VIII. Project benefits
 - IX. Environment management plan
 - i. Air quality management plan
 - ii. Noise quality management plan
 - iii. Solid and hazardous waste management plan
 - iv. Effluent management plan
 - v. Storm water management plan
 - vi. Occupational health and safety management plan
 - vii. Green belt development plan
 - viii. Socio-economic management plan
 - ix. Project cost and EMP implementation budget.

EIA/EMP Report

1. Introduction

- i. Background about the project
- ii. Need of the project
- iii. Purpose of the EIA study
- iv. Scope of the EIA study

2. Project description

A. Site Details

- i. Location of the project site covering village, Taluka/Tehsil, District and State.
- ii. Site accessibility
- iii. A digital toposheet in pdf or shape file compatible to google earth of the study area of radius of 10km and site location preferably on 1:50,000 scale. (including all eco-sensitive areas and environmentally sensitive places).

- iv. Latest High-resolution satellite image data having 1 m 5 m spatial resolution like quickbird, Ikonos, IRS P-6 pan sharpened etc., along with delineation of plant boundary co-ordinates. Area must include at least 100 m all around the project location.
- v. Environment settings of the site and its surrounding along with map.
- vi. A list of major industries with name, products and distance from plant site within study area (10km radius) and the location of the industries shall be depicted in the study area map.
- vii. In case if the project site is in vicinity of the water body, 50 meters from the edge of the water body towards the site shall be treated as no development/construction zone. If it's near the wetland, Guidelines for implementing Wetlands (Conservation and Management) Rules, 2017 may be followed.
- viii. In case if the project site is in vicinity of the river, the industry shall not be located within the river flood plain corresponding to one in 25 years flood, as certified by concerned District Magistrate/Executive Engineer from State Water Resources Department (or) any other officer authorized by the State Government for this purpose as per the provisions contained in the MoEF&CC Office Memorandum dated 14/02/2022.
- ix. In case of canal/ nala/ seasonal drain and any other water body passing through project site, the PP shall submit the suitable steps /conservation plan/mitigation measures along with contouring, Run -off calculations, disposal etc. A robust and full proof Drainage Conservation scheme to protect the natural drainage/water bodies and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be provided in the report.
- x. Type of land, land use of the project site needs to be submitted.
- xi. Status of acquisition of land. If acquisition is not complete, stage of the acquisition process as per the MoEF&CC O.M. dated 7/10/2014 shall be furnished.
- Project proponent shall prepare Engineering layout plan showing all internal roads xii. minimum 6 m width and 9 m turning radius for smooth traffic flow inside including fire tender as per NBC. Road network shall connect all service areas in layout. This drawing shall include area statement showing plot area, area under roads, parking, green belt with calculations and % with respect to plot area of project site and proper indexing. If located within an Industrial area/Estate/Complex, layout of Industrial Area indicating location of unit within the Industrial area/Estate.
- xiii. Project proponent shall submit contour map of project site along with drainage disposal system with calculations and drawings supported with proper indexing including Rain Water Harvesting details with calculations mentioning about GW recharge along with relevant drawing.
- xiv. A detailed report covering all aspects of Fire Safety Management and Fire Emergency Plan shall be submitted.
- xv. Details of drone survey for the site, needs to be included in report and presented before the EAC during appraisal of the project.

B. Forest and wildlife related issues (if applicable):

- i. Status of Forest Clearance for the use of forest land shall be submitted.
- ii. Copy of application submitted for clearance under the Wildlife (Protection) Act, 1972, to the Standing Committee of the National Board for Wildlife if the project site located within notified Eco-Sensitive Zone, 10 km radius of national park/sanctuary wherein final ESZ notification is not in place as per MoEF&CC Office Memorandum dated 8/8/2019.
- iii. The projects to be located within 10 km of the National Parks, Sanctuaries, Biosphere Reserves, Migratory Corridors of Wild Animals, Eco-sensitive Zone and Eco-sensitive areas, the project proponent shall submit the map duly authenticated by Divisional Forest Officer showing the distance between the project site and the said areas.
- iv. Wildlife Conservation Plan duly authenticated by the Competent Authority of the State Government for conservation of Schedule I fauna along with budget and action plan, if any exists in the study area.

C. Salient features of the project

- i. Products with capacities in **Tons per Annum** for the proposed project.
- ii. If expansion project, status of implementation of existing project, details of existing/proposed products with production capacities in Tons per Annum.
- iii. Site preparatory activities.
- iv. List of raw materials required and their source along with mode of transportation.
- v. Other than raw materials, other chemicals and materials required with quantities and storage capacities.
- vi. Manufacturing process details along with process flow diagram of proposed units.
- vii. Consolidated materials and energy balance for the project.
- viii. Total requirement of surface/ ground water and power with their respective sources, status of approval.
- ix. Water balance diagram
- x. Details of Emission, effluents, hazardous waste generation and mode of disposal during construction as well as operation phase.
- xi. Man-power requirement.
- xii. Cost of project and scheduled time of completion.
- xiii. In case of expansion projects, project proponent shall submit structural stability certificate showing whether existing structure withstand for proposed expansion activity.
- xiv. Brief on present status of compliance (Expansion/modernization proposals)
 - a. Cumulative Environment Impact Assessment for the existing as well as the proposed expansion/modernization shall be carried out.
 - b. In case of ground water drawl for the existing unit, action plan for phasing out of ground water abstraction in next two years except for domestic purposes and shall switch over to 100 % use of surface water from nearby source.
 - c. Copy of <u>all</u> the Environment Clearance(s) including Amendments/validity of extension/transfer of EC, there to obtained for the project from MoEF&CC/SEIAA shall be attached as Annexures. A Certified Compliance

Report (CCR) of the Integrated Regional Office of the Ministry of Environment, Forest and Climate Change/ or concerned authority as per OM No. IA3-22/10/2022-IA.III [E 1772581], dated 8th June, 2022 on the status of compliance of conditions stipulated in <u>all</u> the existing environment clearances including amendments shall be provided. A Certified Compliance Report (CCR) issued by the concerned Authority shall be valid for a period of one year from the date of inspection.

d. In case the existing project has not obtained Environment Clearance, reasons for not taking EC under the provisions of the EIA Notification 1994 and/or EIA Notification 2006 shall be provided. A proper justification needs to be submitted along with documentary proof. Copies of Consent to Establish/No Objection Certificate and Consent to Operate (in case of units operating prior to EIA Notification 1994 or 2006, CTE and CTO of FY 2005-2006) obtained from the SPCB shall be submitted. Further, compliance report to the conditions of CTO from the Regional Office of the SPCB shall be submitted, as per OM No. IA3-22/10/2022-IA.III [E 1772581], dated 8th June, 2022. CCR on CTO conditions issued by the concerned SPCBs/PCCs shall be valid for a period of one year from the date of inspection of the project.

3. Description of the Environment

- i. Study period
- ii. Approach and methodology for data collection as furnished below.

Attributes	Sampling		Remarks
	Network	Frequency	-
A. Air Environment			
 Micro-Meteorological Wind speed (Hourly) Wind direction Dry bulb temperature Wet bulb temperature Relative humidity Rainfall Solar radiation Cloud cover Environmental Lapse Rate 	Minimum 1 site in the project impact area	1 hourly continuous	 IS 5182 Part 1-20 Site specific primary data is essential Secondary data from IMD, New Delhi CPCB guidelines to be considered.
Pollutants• $PM_{2.5}$ • PM_{10} • SO_2 • NOx • CO	At least 8-12 locations	As per National Ambient Air Quality Standards,	 Sampling as per CPCB guidelines Collection of AAQ data (except in monsoon season) Locations of various

Attributes	Sampling		Remarks		
	Network	Frequency			
• HC		CPCB	stations for different		
• Other parameters		Notification.	parameters should be		
relevant to the project			related to the		
and topography of the			characteristic		
area			properties of the		
			parameters.		
			• The monitoring		
			stations shall be based		
			on the NAAQM		
			standards as per GSR		
			826(E) dated		
			16/11/2009 and take		
			into account the		
			direction nonvolution		
			zono and sonsitivo		
			receptors including		
			reserved forests		
			• Raw data of all $\Delta \Delta O$		
			measurement for 12		
			weeks of all stations		
			as per frequency given		
			in the NAAOM		
			Notification of		
			16/11/2009 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.		
B. Noise					
Hourly equivalent	At least 8-12	As per	-		
noise levels	locations	CPCB norms			
C. Water					
Parameters for water	Samples for wat	ter quality shoul	d be collected and analyzed		
quality	as per:				
• pH, temp, turbidity,	• IS: 2488 (Pa	art 1-5) methods	for sampling and testing of		
magnesium hardness,	Industrial ef	fluents			
total alkalinity,	• Standard n	nethods for ex	xamination of water and		

Attributes	Samp	oling	Remarks
	Network	Frequency	
 chloride, sulphate, nitrate, fluoride, sodium, potassium, salinity Total nitrogen, total phosphorus, DO, BOD, COD, Phenol Heavy metals Total coliforms, faecal coliforms Phyto-plankton Zoo-plankton Microalgae/microalgal bloom 	wastewater Health Asso	analysis publis	shed by American Public
 For River Bodies Total Carbon pH Dissolved Oxygen Biological Oxygen Demand Free NH4 Boron Sodium Absorption Ratio Electrical Conductivity TDS 	 Surface water quality of the nearest River (60m upstream and downstrea m) and other surface water bodies 	 Yield of w during criti Standard r of surface v 	ater sources to be measured cal season nethodology for collection water (BIS standards)
For Ground Water	 Ground wat minimum c wells/existir shall be incl 	er monitoring of of 8 locations (ng current record uded.	lata should be collected at (from existing wells /tube ds) from the study area and
D. Traffic Study	Γ		
 Type of vehicles Frequency of vehicles for transportation of materials Additional traffic due to proposed project Parking arrangement 	-		
E. Land Environment	Soil camples bo	collected as par	BIS specifications
5011	Soll samples be	collected as per	BIS specifications

Attributes	Sampling		Remarks	
	Network	Frequency		
Particle size				
distribution				
• Texture				
• pH				
Electrical conductivity				
Cation exchange				
capacity				
Alkali metals				
Sodium Absorption				
Ratio (SAR)				
• Permeability				
• Water holding capacity				
Porosity				
Land use/Landscape	-			
Location code				
• Total project area				
Topography				
Drainage (natural)				
• Cultivated, forest,				
plantations, water				
bodies, roads and				
settlements				
E. Biological Environment	t			
Aquatic	• Detailed de	escription of flora	a and fauna (terrestrial and	
Primary productivity	aquatic) ex	isting in the stuc	ly area shall be given with	
• Aquatic weeds	special ref	erence to rare,	endemic and endangered	
• Enumeration of phyto	species. Inc	licator species wh	hich indicate ecological and	
plankton, zoo plankton	environmer	nt degradation	should be identified and	
and benthos	included to	clearly state wh	nether the proposed project	
• Fisheries	would result	t in to any advers	se effect on any species.	
• Diversity indices	• Samples to	collect from up	stream and downstream of	
Trophic levels	discharge p	oint, nearby trib	utaries at downstream, and	
• Rare and endangered	also from d	ug wells close to	activity site.	
species	• For forest	studies, direct	ion of wind should be	
Marine Parks/	considered	while selecting for	orests.	
Sanctuaries/ closed	Secondary	data to collect	from Government offices,	
areas /coastal	INGUS, pub	nsneu interature.		
regulation zone (CRZ)				
Terrestrial				
• Vegetation-species				
list, economic				

Attributes	Sam	pling	Remarks	
	Network	Frequency	-	
importance, forest				
produce, medicinal				
value				
• Importance value index				
(IVI) of trees				
• Fauna				
• Avi fauna				
• Rare and endangered				
species				
• Sanctuaries / National				
park / Biosphere				
reserve				
• Migratory routes				
F. Socio-economic				
• Demographic structure	Socio-econ	omic survey is	s based on proportionate,	
• Infrastructure resource	stratified ar	d random samp	ling method.	
base	Primary dat	a collection thro	ough questionnaire	
Economic resource	• Secondary	data from cens	sus records, statistical hard	
base	books, topo	sheets, health 1	records and relevant official	
• Health status:	records ava	ilable with Govt	. agencies	
Morbidity pattern				
• Cultural and aesthetic				
attributes				
• Education				

- iii. Interpretation of each environment attribute shall be enumerated and summarized as given below:
 - Ambient air quality
 - Ambient Noise quality
 - Surface water quality
 - Ground water quality
 - Soil quality
 - Biological Environment
 - Land use
 - Socio-economic environment
- 4. Anticipated Environment Impacts and mitigation measures (In case of expansion, cumulative impact assessment shall be carried out)
 - i. Identification of potential impacts in the form of a **matrix** for the construction and operation phase for all the environment components

Activity	Environment	Ecological	Socio-economic
· · · · · · · · · · · · · · · · · · ·			

Construction phase		
Operation phase		

- ii. Impact on ambient air quality (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
 - a. Construction phase
 - b. Operation phase
 - Details of stack emissions from the existing as well as proposed activity.
 - Assessment of ground level concentration of pollutants from the stack emission based on AQIP Modelling The air quality contours shall be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any along with wind rose map for respective period
 - Impact on ground level concentration, under normal, abnormal and emergency conditions. Measures to handle emergency situations in the event of uncontrolled release of emissions.
- iii. Impact on ambient noise quality (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
 - a. Construction phase
 - b. Operation phase
- iv. Impact on traffic (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
 - a. Construction phase
 - b. Operation phase
- v. Impact on soil quality (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
 - a. Construction phase
 - b. Operation phase
- vi. Impact on land use (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
 - a. Construction phase
 - b. Operation phase
- vii. Impact on surface water resource and quality (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
 - a. Construction phase
 - b. Operation phase
- viii.Impact on ground water resource and quality (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
 - a. Construction phase
 - b. Operation phase
- ix. Impact on terrestrial and aquatic habitat (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
 - a. Construction phase

- b. Operation phase
- x. Impact on socio-economic environment (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
 - a. Construction phase
 - b. Operation phase
- xi. Impact on occupational health and safety (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
 - a. Construction phase
 - b. Operation phase

5. Analysis of Alternatives (Technology & Site)

- i. No project scenario
- ii. Site alternative
- iii. Technical and social concerns
- iv. Conclusion

6. Environmental Monitoring Program

- i. Details of the Environment Management Cell
- ii. Performance monitoring schedule for all pollution control devices shall be furnished.
- iii. Corporate Environment Policy
 - a. 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.
 - b. Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environment or forest norms / conditions? If so, it may be detailed in the EIA.
 - c. What is the hierarchical system or Administrative order of the company to deal with the environment issues and for ensuring compliance with the environment clearance conditions? Details of this system may be given.
 - d. Does the company have system of reporting of non compliances / violations of environment 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
- iv. Action plan for **post-project environment monitoring matrix**:

Activity	Aspect	Monitoring Parameter	Location	Frequency	Responsibility		
Construction phase							
Operation phase							

7. Additional Studies

i. Project proponent shall submit a study report on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon capture, use and storage after

offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitorable with defined time frames.

- ii. Details of adoption/ implementation status/plan to achieve the goal of Glasgow COP26 Climate Submit with regard to enhance the non-fossil energy, use of renewable energy, minimization of net carbon emission and carbon intensity with long-term target of "net Zero" emission.
- iii. Implementation status/measures adopted for avoiding the generation of single used plastic waste.
- iv. In cases the project is located in Critically and Severely Polluted Areas, additional mitigation measures adopted and detailed action plan to be submitted in the EIA/EMP Report as per MoEF&CC O.M. No. 22-23/2028-IA.III dated 31/10/2019 and MoEF&CC O.M. No. 22-23/2028-IA.III dated 5/07/2022 has to be submitted.
- v. Public consultation details (Entire proceedings as separate annexure along with authenticated English Translation of Public Consultation proceedings).
- vi. As part of Corporate Environment Responsibility (CER) activity, company shall adopt nearby villages based on the socio-economic survey and undertake community developmental activities in consultation with the village Panchayat and the District Administration. In this regard, time bound action plan as per the MoEF&CC Office Memorandum dated 30/09/2020 shall be submitted.
- vii. Summary of issues raised during public consultation along with action plan to address the same as per MoEF&CC O.M. dated 30/09/2020

S N	Physical activity and action plan		Year of implementation (Budget in INR)			Total
0	Name of the Activity	Physical Targets	1^{st}	2 nd	3 rd	(Rs. in Crores)

viii.Risk assessment

- Methodology
- Hazard identification
- Frequency analysis
- Consequence analysis
- Risk assessment outcome

ix. Emergency response and preparedness plan

8. Project Benefits

- i. Environment benefits
- ii. Social infrastructure
- iii. Employment and business opportunity
- iv. Other tangible benefits

9. Environment Cost Benefit Analysis

- i. Net present value
- ii. Internal rate of return
- iii. Benefit cost ratio
- iv. Cost effectiveness analysis

10. Environment Management Plan (Construction and Operation phase)

- i. Air quality management plan
- ii. Noise quality management plan
- iii. Action plan for hazardous waste management
- iv. Action plan for solid waste management
- v. Action plan for e-waste management.
- vi. Action plan for plastic waste management.
- vii. Action plan for construction and demolition waste management.
- viii.Effluent management plan
- ix. Storm water management plan
- x. Rain water harvesting plan
- xi. Plan for maximum usage of waste water/treated water in the Unit
- xii. Occupational health and safety management plan
- xiii.Green belt development plan: An action plan for Green Belt development consisting of 3 tiers of plantations of native species all along the periphery of the project of adequate width shall be raised in 33% of total area with a tree density shall not less than 2500 per ha within a time frame of one year shall be submitted. Survival rate of green belt shall be monitored on periodic basis to ensure that survival rate not be less than 80 %.
- xiv. Socio-economic management plan
- xv. Wildlife conservation plan (In case of presence of schedule I species)
- xvi.Total capital cost and recurring cost/annum for environment pollution control measures shall be included.

11. Conclusion of the EIA study

12. In addition to the above, 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.

Standard ToRs FOR CEMENT INDUSTRY [3(b)]

- 1. Limestone and coal linkage documents along with the status of environment 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 Corporate Responsibility for Environmental Protection (CREP) guidelines shall 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. Provision of Alternate fuels.
- 10. Details of Implementation of Fly Ash Management Rules
- 11. Emission/Effluent norms as per GSR 496 (E) dated 9/5/2016 [EPA Rules 1986].
- 12. Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.
- 13. Action plan to limit the particulate matter emission from all the stacks below 30 mg/Nm3 shall be furnished.
- 14. PP shall explore the possibility of plastic waste utilization in the Plant/Unit process.
- 15. Action plan for 100 % solid waste utilization shall be submitted.
- 16. PM (PM_{10} and $P_{2.5}$) present in the ambient air must be analysed for source analysis natural dust/RSPM generated from plant operations (trace elements) of PM_{10} to be carried over.

Standard ToRs FOR INTEGRATED STEEL PLANT [3(a)]

- 1. Iron ore/coal linkage documents along with the status of environment 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 (PM₁₀ and PM_{2.5}) present in the ambient air must be analysed for source analysis natural dust/RSPM generated from plant operations (trace elements) of PM_{10} 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 specially in 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.
- 21. Fourth Hole fume extraction system shall be provided for submerged Arc Furnace (SAF). Waste heat recovery (WHR) system shall be installed to recover the sensible heat from flue gases of electric arc furnace (EAF).
- 22. Emission/effluent norms as per G.S.R 894 (E) dated 4/12/2019 [EPA Rules 1986].
- 23. Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.
- 24. Action plan to limit the particulate matter emission from all the stacks below 30 mg/Nm3 shall be furnished.
- 25. Action plan for 100 % solid waste utilization shall be submitted.
- 26. PP shall explore the possibility of plastic waste utilization in the Plant/Unit process.

Standard ToRs FOR METALLURGICAL INDUSTRY (Ferrous and Non-ferrous)[3(a)]

1. 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.

- 2. Plan for the implementation of the recommendations made for the proposed Unit in the Corporate Responsibility for Environmental Protection (CREP) guidelines.
- 3. Plan for solid wastes utilization.
- 4. Plan for utilization of energy in off gases (coke oven, blast furnace)
- 5. System of coke quenching adopted with full justification.
- 6. 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.
- 7. Details on toxic metal content in the waste material and its composition and end use (particularly of slag).
- 8. Details on toxic content using Toxicity Characteristic Leaching Procedure (TCLP), composition and end use of slag.
- 9. 100 % dolo char generated in the plant shall be used to generate power.
- 10. Fourth Hole fume extraction system shall be provided for SAF.WHR system shall be installed to recover sensible heat from flue gases of EAF. Provision for installation of jigging and briquetting plant to utilise the fines generated in the process.
- 11. No tailing pond is permitted for Iron ore slimes. Dewatering and filtration system shall be provided.
- 12. Emission/effluent norms as per G.S.R 894 (E) dated 4/12/2019 [EPA Rules 1986].
- 13. Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.
- 14. Action plan for developing connecting and internal road in terms of MSA as per IRC guidelines shall be submitted.
- 15. Action plan to limit the particulate matter emission from all the stacks below 30 mg/Nm3 shall be furnished.
- 16. Action plan for 100 % solid waste utilization shall be submitted.
- 17. PM (PM₁₀ and P_{2.5}) present in the ambient air must be analysed for source analysis natural dust/RSPM generated from plant operations (trace elements) of PM₁₀ to be carried over.

Standard ToRs FOR PULP AND PAPER INDUSTRY [5(i)]

- 1. A note on pulp washing system capable of handling wood pulp shall be included.
- 2. 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

- 3. 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.
- 4. 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.
- 5. 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.
- 6. Undertaking to comply with the norms stipulated in the S.O. 3187 (E) dated 7/10/2016 for the projects located in Ganga basin.
- 7. Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.
- 8. Action plan to limit the particulate matter emission from all the stacks below 30 mg/Nm3 shall be furnished.
- 9. Action plan for 100 % waste utilization shall be submitted.

Standard ToRs FOR LEATHER/SKIN/HIDE PROCESSING INDUSTRY [4(f)]

- 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.
- 5. Action plan to limit the particulate matter emission from all the stacks below 30 mg/Nm3 shall be furnished.
- 6. Action plan for 100 % waste utilization shall be submitted.

Standard ToRs FOR COKE OVEN PLANT [4(b)]

- 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.
- 6. Emission/effluent norms as per G.S.R 894 (E) dated 4/12/2019. Provision of CDQ in case of coke oven plant of 0.8 MTPA and above.
- 7. Action plan to limit the particulate matter emission from all the stacks below 30 mg/Nm3 shall be furnished.
- 8. Action plan for 100 % solid waste utilization shall be submitted.
- 9. Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.

Standard ToRs FOR ASBESTOS MILLING AND ASBESTOS BASED PRODUCTS[4(c)]

- 1. Type of fibres used (Asbestos and others) and preference of selection from technoenvironment angle should be furnished
- 2. 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
- 3. Technology adopted, flow chart, process description and layout marking areas of potential environment impacts
- 4. National standards and codes of practice in the use of asbestos particular to the industry should be furnished
- 5. In case of newly introduced technology, it should include the consequences of any failure of equipment/ technology and the product on environment status.
- 6. In case of expansion project asbestos fibre to be measured at stack emission and work zone area, besides base line air quality.
- 7. In case of green field project asbestos fibre to be measured in the ambient air.
- 8. Action plan to limit the particulate matter emission from all the stacks below 30 mg/Nm3 shall be furnished.
- 9. Action plan for 100 % solid waste utilization shall be submitted.
- 10. PM (PM10 and P2.5) present in the ambient air must be analysed for source analysis natural dust/RSPM generated from plant operations in case of expansion projects (trace elements /asbestos fibre) of PM10 to be carried over.
- 11. Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.

Standard ToRs FOR IRON ORE BENEFICIATION PLANT [2 (b)]

- 1. Details regarding pollution control measures to be adopted in the mineral handling area, loading and unloading areas including all transfer points shall be submitted.
- 2. The Project proponent shall submit action plan for conditioning of the ore with water to mitigate fugitive dust emission, without affecting flow of ore in the ore processing and handling areas.
- 3. Treatment details regarding effluent generated from the ore beneficiation plant and the mode of transportation of tailing slurry shall be submitted.
- 4. Separate chapter on slime management shall be submitted.
- 5. Action plan for regular monitoring of ground water level and quality in and around the project area of beneficiation plant and tailing/slime pond shall be submitted by establishing a network of existing wells and constructing new piezometers.
- 6. Details regarding lining of the tailing/slime pond to be provided shall be submitted in order to ensure that there is no leaching from the tailing/slime pond.
- 7. Details regarding establishment of garland drain around the tailing/slime pond and the quantity of decanted water to be re-circulated from the tailing/slime pond shall be submitted along with complete water balance.
- 8. Technology to be adopted for maximum recovery of ore in order to reduce slurry discharge and to increase the life of the tailing/slime pond shall be submitted.
- 9. Action plan for 100 % solid waste utilization shall be submitted.
- 10. Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.

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 is acquisition, nearby (in 2/3 km.) water body, population, with in 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

ANNEXURE-3

List of the Expert Appraisal Committee (Industry-1) members participated during VC meeting

S.	Name	Position	28/11/2022	29/11/2022	
No.					
1.	Shri Rajive Kumar	Chairman	Present	Present	
2.	Dr. Dipankar Shome	Vice Chairman	Present	Present	
3.	Dr. S. Ranganathan	Member	Present	Present	
4.	Dr. Ranjit Prasad	Member	Present	Present	
5.	Dr. S. K. Singh	Member	Present	Present	
6.	Dr. Tejaswini Ananthkumar	Member	Present	Present	
7.	Dr. Hemant Sahasrabuddhe	Member	Present	Present	
8.	Dr. Jai Krishna Pandey	Member	Present	Present	
9.	Dr. E V R Raju	Member	Present	Present	
10.	Dr. B. N. Mohapatra, DG,	Member	Absent	Absent	
	(Representatives of NCCBM)				
11.	Shri Nazimuddin, Scientist 'F'	Member	Absent	Present	
	(Representative of CPCB)				
12.	Dr. S. Raghavan, Scientist 'D'	Member	Present	Present	
	(Representative of National Institute of				
	Occupational Health (NIOH)				
13.	Dr. Sanjay Bist, Scientist 'E'	Member	Present	Present	
	(Representative of Indian Meteorological				
	Department)				
14.	Dr. R.B. Lal,	Member	Present	Present	
	Scientist E, MoEFCC	Secretary			
MoEFCC					
15.	Dr R P Rastogi	Scientist C	Present	Present	
16.	Dr Sandeepan BS	Scientist B	Present	Present	

Approval of EAC Chairman

Email

Additional Director MoEFCC Dr R B LAL

Re: Draft minutes of the 18th EAC Meeting held on November 28-29, 2022 for approval of the Chairman

From :	chairman eac ind 1 <chairman.eac.ind.1@gmail.com></chairman.eac.ind.1@gmail.com>	Tue, Dec 06, 2022 08:57 AM
Subject :	Re: Draft minutes of the 18th EAC Meeting held on November 28-29, 2022 for approval of the Chairman	
То:	Additional Director MoEFCC Dr R B LAL <rb.lal@nic.in></rb.lal@nic.in>	
Cc :	rajivekumar1983@gmail.com, ranganathan metals <ranganathan.metals@gmail.com>, ranjitnitj@gmail.com, rajuevr60@gmail.com, sksinghdce@gmail.com, dshome61@gmail.com, tejaswini acf <tejaswini.acf@gmail.com>, sshemant 801 <sshemant_801@rediffmail.com>, NCCBM DIRECTOR GENERAL <dg@ncbindia.com>, Nazimuddin <nazim.cpcb@nic.in>, Raghavan S <raghuharihar@gov.in>, raghuharihar@gov.in>, raghuharihar@gov.in>, drjkpandey eac industry1 <drjkpandey.eac.industry1@gmail.com< td=""><td></td></drjkpandey.eac.industry1@gmail.com<></raghuharihar@gov.in></nazim.cpcb@nic.in></dg@ncbindia.com></sshemant_801@rediffmail.com></tejaswini.acf@gmail.com></ranganathan.metals@gmail.com>	

Dear Dr. Lal,

The minutes are approved. Please do the needful.

Best Wishes Rajive Kumar Chairman- EAC-Industry-1
