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

Dated: 25.04.2023

Date of Zero Draft MoM sent to EAC: 24.04.2023 Approval by Chairman: 25.04.2023 Uploading on PARIVESH:25.04.2023

MINUTES OF THE 26TH EXPERT APPRAISAL COMMITTEE (INDUSTRY-1 SECTOR) MEETING HELD ON 12TH, 13TH AND 17TH APRIL, 2023

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

DAY-1: APRIL 12, 2023 [WEDNESDAY]

(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 'F' & Member Secretary, EAC (Industry-1 Sector) appraised to the Committee about the details of Agenda items to be discussed during this EAC meeting. It was apprised that the earlier 26th Meeting of the EAC was scheduled to be held on 12-14 April, 2023. Further due to the Holiday declared by the Central Government on April 14, 2023, the agenda for the projects of 14th April were deliberated by the EAC on 17 April 2023 and the same was informed to the Project Proponents accordingly.

(iii) Confirmation of the Minutes of the 25th Meeting of the EAC (Industry-1 Sector) held during 21st-23rd March, 2023 at MoEF&CC through VC.

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 25^{th} Meeting of the EAC (Industry-1 Sector) held during $21^{\text{st}} - 23^{\text{rd}}$ March, 2023 conducted through Video Conferencing, and noted that there is some modifications/factual correction, in the minutes of the 25^{th} EAC meeting for the project/activities which are incorporated in the minutes in Agenda No. 26.16 & 26.17.

Details of the proposals considered during the 26th meeting **conducted** through **Video Conferencing**, deliberations made and the recommendations of the Committee are explained in the respective agenda items as under:

Day 1: April 12, 2023 [Wednesday]

Consideration of Environmental Clearance Proposals

Agenda No. 26.1

26.1 Proposed expansion of Production Capacity of Sponge Iron From (2x100 TPD DRI) -60,000 TPA to Sponge Iron (6 X 100 TPD DRI) - 200,000 TPA along with new set up of MS Billet 300,000 TPA And/Or Rerolled Steel Products Through Hot Charging 150,000 TPA and through Rehearing Furnace 150,000 TPA; MS Black Pipe Mill 140,000 TPA, Galvanizing Plant 100,000 TPA, Captive Power Plant 20 MW (12 MW through WHRB and 8 MW through AFBC) and Fly Ash Brick 69,300 TPA by M/s. Kalindi Ispat Pvt. Ltd., located at Khasra No. 34/9, 34/10 & 34/11 (Part), Village - Belpan, Tehsil - Masturi, District- Bilaspur, State – Chhattisgarh - Consideration of EC Proposal.

[Proposal No. IA/CG/IND1/409701/2022; File No. IA-J-11011/126/2021-IA-II(IND-I)] [Consultant: ANACON LABORATORIES PVT. LTD.; Validity up to 28.06.2023]

- 26.1.1 M/s. Kalindi Ispat Pvt. Ltd. has made an online application vide proposal no. IA/CG/IND1/409701/2022 dated 18.03.2023 along with copy of EIA/EMP report, in prescribed format (CAF, Form I Part A, B &C) and certified compliance report 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. 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.
- 26.1.2 Name of the EIA consultant: M/s. Anacon Laboratories Pvt. Ltd. [List of ACOs with their Certificate / Extension Letter no. QCI/NABET/ENV/ACO/23/2719; Valid up to 28.06.2023, as on April 20, 2023].

Details submitted by Project proponent

	Date of pplication	Consideration	Details	Date of Accord	ToR Validity
27 ^{ti}	^h May 2021	38 th Meeting of EAC (Industry- I) on 15 th – 16 th June 2021	Terms of Reference	01.07.2021	30.06.2025

- 26.1.3 The details of the ToR are furnished as below:
- 26.1.4 The project of M/s. Kalindi Ispat Pvt. Ltd. located at Village Belpan, Tehsil Masturi, District-Bilaspur, Chhattisgarh is for expansion of production capacity of Sponge Iron from (2X100 TPD DRI) 60,000 TPA existing to Sponge Iron (6 X 100 TPD DRI) 200,000 TPA along with new set up of MS billet 300,000 TPA and/or Rerolled Steel products through hot charging 150,000 TPA and through Rehearing Furnace 150,000 TPA; MS Black Pipe Mill 140,000 TPA, Galvanizing Plant 100,000 TPA, Captive Power Plant 20 MW (12 MW through WHRB and 8 MW through AFBC) and Fly Ash Brick 69,300 TPA.

26.1.5 Environmental Site Settings:

Sl.	Particulars	e	Details		Remarks
SI. i.	Particulars Total land Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	The proposed expout within existing of extra land within stands satisfied.	sting Privat pansion wil ng land, no ill be requi	l be carried acquisition red. Thus,	The entire land is now diverted for industrial purposes and thus land diversion order available for 25.619 Ha. The company does not propose to take additional land. The proposed expansion will be carried out within existing land area
iii.	Existence of habitation &	<u>Project Site:</u> No Study Area	any		25.619 Ha R&R not applicable.
	involvement of R&R,		Dis.	Dir.	
	if any.	Belpan (Village)	0.6 km	ESE	
iv.	Latitude and	Sl. Latitude	Longit	ude	
	Longitude of the	1 21°47'21.20	"N 82°13'5	7.62"E]
	project site	2 21°47'10.88			
		3 21°47'27.84	"N 82°14'3	.36"E	

Sl.	Particulars	Details	Remarks
		4 21°47'22.12"N 82°14'20.76"E	
		5 21°47'21.19"N 82°14'8.18"E	
v.	Elevation of the	Project site located at 250 - 257m	
	project site	(above MSL). The topography of the	
		land is more or less flat without	
		undulations.	
vi.	Involvement of	Mohtara RF – 9.7 km – SSW	
	Forest land if any.		
vii.			
		Seonath River – 4.8 km – W	
	U	Khorsi Nala – 9.2 km - S	
	,	Jamuniya Nala – 4.8 km - WSW	
	1 0	Arna or Arpa River – 6.5 km - NW	
	as well as study area	Kurung Left Bank Canal – 0.2 km - N	
		Jalso Distributary – 7.1 km – NE	
viii.		Nil	
	ESZ/ESA / national		
	park/wildlife		
	sanctuary/ biosphere		
	reserve/tiger reserve/		
	elephant reserve etc.		
	if any within the study		
	area		

- 26.1.6 The existing plant has obtained Consent to Establish (CTE) vide letter no. 2438/TS/CECB/2005 Raipur dated 03.06.2005. Consent to Operate for the existing plant was accorded by Chhattisgarh Environment Conservation Board (CECB) vide letter dated 18.08.2006 for first kiln and for II kiln on 19.07.2007 and it has been most recently renewed by letter no . 3286/TS/CECB/2022 on dated 04/08/2022. The validity of CTO is up to 31.08.2024.
- 26.1.7 Implementation status of the existing CTE:

SI.	Facilities	Units	Implementation Status in TPA	Production as per CTO (Permitted capacity) in TPA
1.	Sponge Iron	TPA	60,000	60,000

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

Sl.	Name	Existing	Units	Proposed Add	itional Units	Total (Existing + Proposed) (in	
		(in TP	A)	(in TPA)		TPA)	
		Configuration	Production	Configuration	Production	Configuration	Production
1	Sponge	DRI Kilns,	60,000	DRI Kilns,	140,000	DRI Kilns, (6x100	200,000
	Iron	(2 x 100 TPD)		(4x100 TPD)		TPD)	
2	Mild Steel	-	-	Induction	300,000	Induction Furnace,	300,000
	Billet			Furnace,		15 MT X 6 Nos.	
				15 MT X 6		along with LRF and	
				Nos. along		CCM	
				with LRF and			
				CCM			

Sl.	Name	Existing	Units	Proposed Addi	itional Units	Total (Existing + P	Proposed) (in	
		(in TP	A)	(in TF	PA)	TPA)	TPA)	
		Configuration	Production	Configuration	Production	Configuration	Production	
3	Re Rolled	-	-	Rerolling Mill	300,000	Rerolling Mill of	300,000	
	Steel			of 455 TPD	(through	455 TPD BRF and	(through	
	Products			BRF and 455	Hot	455 TPD hot	Hot	
				TPD hot	charging	charging	charging	
	like;			charging	150,000		150,000	
	Structural				and		and	
	Steel				through		through	
					BRF		BRF	
					150,000)		150,000	
4	MS	-	-	ERW pipe	140,000	ERW pipe mill	140,000	
	Black Pipe			mill will be		will be		
	or			about 425 TPD		about 425 TPD		
	pipes							
5	Galvanized	-	-	Galvanizing	100,000	Galvanizing unit	100,000	
	Steel			unit will be		will be about 304		
	products			about 304 TPD		TPD		
6	WHRB	-	-	WHRB from	12 MW	WHRB from	12 MW	
	Power			Sponge Iron		Sponge Iron		
	Plant							
7	AFBC	-	-	AFBC boiler	8 MW	AFBC boiler power	8 MW	
	Power					generation from		
	plant					Char/ Dolochar &		
						Coal		
8	Fly Ash	-	-	Fly Ash brick	69300	Fly Ash brick	69300	
	brick			manufacturing		manufacturing		
				facility		facility		

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

SI.	Raw Material	Quantity (TPA)	Source	Distance from site (Kms)	Mode of transportation	
FOR	SPONGE IRON PLANT		·			
			Odisha Iron Ore	600		
1.	Iron Ore	320000.00	Mine and		By Rail to the nearest	
			NMDC		Nipania railway	
			SECL Coal	200	siding and then by Road through	
2.	Coal	260000.00 mi	mines / Open		covered vehicles	
			Market			
3.	Limestone/ Dolomite	10000.00	Open Market	100	By Road through	
4.	Refractory Material	300.00	Open Market	100	covered vehicles	
	Total	590300.00				
FOR	INDUCTION FURNACE (STEEL MELTING	G SHOP)			
1.	Sponge Iron	300,000.00	Captive	0/100	Internally	
		p			available/By Road	
			Local market			

SI.	Raw Material	Quantity (TPA)	Source	Distance from site (Kms)	Mode of transportation
					through covered vehicles
2.	Pig Iron / CI/ Scrap	37,113.00	Local Market whereas generated scrap internally used	100	By Road through covered vehicles
3.	Melting Scrap	6,200.00	Captive production	0	Internally available
4.	Ferro Alloys	3,000.00	Local market	100	By Road through covered vehicles
5.	Aluminum	300	Open Market/BALCO	100	By Road throug covered vehicles
6.	Ramming Mass	750.00	Open Market	100	By Road through covered vehicles
7.	Steel Sheet Former	75.00	Open Market	100	By Road through covered vehicles
8.	LDO for Ladle Preheating	582.00	Open Market	100	By Road throug Tankers
9.	Calcined Lime for Refining of Liquid Steel	15,000.00	Open Market	100	By Road throug covered vehicles
10.	Fluorspar and other additives for de phos	3,000.00	Open Market	100	By Road throug covered vehicles
11.	Electrode (Graphite Carbon) for Furnace*	600.00	Open Market	100	By Road throug covered vehicles
	Total	366,620.00			
of ho There	: * It is proposed to set up t t metal is refined in LRF the efore, highest qty was consi HOT CHARGING REROL Item	en 600 TPA is ex dered for the sal	pected Graphite Elect	rodes are estir	nated to get consumed
1.	Hot Billets	153,062.00	Captive Production in Steel Melting shop	0	Internal Transfer
	Total	153,062.00			
\overline{FOR}	REHEATING FURNACE I	BASED REROLI	LING MILL		
1.	Cold MS Billets (internally available)	146,938.00	Captive production as per requirement	0	Internal Transfer
2.	Cold MS Billets (from Outside)	6,062.00	Local market as per	100	By Road throug covered vehicles

requirement

SI.	Raw Material	Quantity (TPA)	Source	Distance from site (Kms)	Mode of transportation
3.	Coal	18,000.00	SECL Coal	200	By Rail to the nearest
			mines / Open		railway siding at
			Market		Nipania and then by
					Road through
		4 - 4 - 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			covered vehicles
EOD	Total	171,000.00			
	BLACK PIPE MILL AND	1		0	
1.	MS Strips	150,000.00	Captive	0	
			generation from Billet Reheating		Internally available.
			Furnace		
2.	Zinc	5,000.00	Open Market	100	By Road through
2.	Zinie	5,000.00	open market	100	covered vehicles
3.	Lead	50.00	Open Market	100	By Road through
					covered vehicles
4.	LDO	2,000.00	Open Market	100	By Road through
					covered vehicles
5.	Acid	4,500.00	Open Market	100	By Road through
	L'ma fan Traatmant	2 500 00	On an Manlast	100	covered vehicles
6.	Lime for Treatment	2,500.00	Open Market	100	By Road through covered vehicles
	Total	164,050.00			covered venicies
FOR	CAPTIVE POWER PLANT	,			
1.	Char Dolochar	60,000.00	Captive	0	
		,	generation in		Internally available.
			SID		2
2.	Coal	38,779.00	SECL Coal	200	By Rail to the nearest
			mines / Open		railway siding
			Market		Nipania and then by
					Road through
					covered vehicles
3.	Fluidizing Bed Media	150.00	Open Market	100	By Road through
					covered vehicles
	Total	98,929.00			
	FLY ASH BRICK PLANT	45.045.00	T	<u>^</u>	
1.	Fly Ash/ Coal Ash etc.	45,045.00	Internally	0	Internal Transfer
		C 020 00	available.	100	D D 1 (1 1
2.	Gypsum and Cement	6,930.00	Open Market	100	By Road through covered vehicles
3.	Granulated slag from	17,325.00	Internally	0	Internal Transfer
	Induction Furnace		available.		
	Total	69,300.00			

- 26.1.10 Existing water requirement is 86 m³/day, water is obtained from ground water and permission for the same to draw upto 100 KL/day has been obtained from CGWA vide Ltr. No. CGWA/NOC/IND/REN/1/2022/7230 dated 19.08.2022 valid up to 18/08/2025. The water requirement after proposed expansion project is estimated as 1442 m³/day (ToR 1680), out of which 1210 m³/day of fresh water requirement will be obtained from the surface water. The application to CG WRD for Sanction of surface water vide application no.WA00182 on dated 21.07.2021 (Present Status of application: The WRD application is forwarded from Chief engineer, Hasdeo Basin, WRD Bilaspur to Engineer in Chief WRD, Shivnath Bhavan, District Raipur).
- 26.1.11 Total power requirement is 37 MW, out of which 20 MW will be met through captive power plant and 17 MW will be sourced through State Grid (CSPDCL). In addition to these, total 2 X 3300 kVA DG sets are proposed for emergency backup.

Period	Post monsoon season (15 th October 2021 – 15 th January 2022)
AAQ parameters	• $PM_{10} = 41.0 - 80.3 \ \mu g/m^3$
at 8 Locations	• $PM_{2.5} = 15.1 - 38.5 \ \mu g/m^3$
(min and max)	• $SO_2 = 5.1 - 15.2 \ \mu g/m^3$
	• NO ₂ = 9.2 - 26.5 μ g/m ³
	• CO = $0.247 - 0.47 \text{ mg/m}^3$
Incremental GLC	• $PM_{10} = 0.75 \ \mu g/m^3$ (Level at 0.9 km in SSW, S & SW Direction)
level	• $PM_{2.5} = 0.45 \ \mu g/m^3$ (Level at 0.9 km in SSW, S & SW Direction)
	• $SO_2 = 5.8 \ \mu g/m^3$ (Level at 1.4 km in SSW, S & SW Direction)
	• NO _x = $3.8 \ \mu g/m^3$ (Level at 1.2 km in SSW, S & SW Direction)
	• CO due to DG Set (Standby) Operation - 11.5 Mg/M ³
	• Line Source (Traffic) CO is $60.4 \ \mu g/m^3$ occurring in between Belpan and
~ .	Khapri Villages
Groundwater	• pH: 7.27 – 7.63,
quality at 8	• Total Hardness: 81.32 – 185.17 mg/l,
locations	• Fluoride: $0.14 - 0.27 \text{ mg/l}$,
	• Nitrate: 5.08 – 15.68 mg/l,
	• Sulphate: 16.09 – 29.03 mg/l
	• Chloride: 45.28-93.21 mg/l
	• TDS: 272-442 mg/l
Surface water	pH: 6.84 - 7.16; TDS: 254 - 412 mg/l; total hardness:132 - 224.54 mg/l as
quality at 5	CaCO ₃ ; DO: 5.8 – 6.3 mg/l; BOD: 4.85 – 25.14 mg/l and COD ranges from 15.68
locations	mg/l to 90.16 mg/l
Noise levels	5
Leq. (Day and	Residential Area – 51.2 to 53.9 dBA for day time and 40.82 to 43.2 dBA for night
Night)	time.
	Commercial Area – 57.7 to 58.3 dBA for day time and 45.1 to 46.6 dBA for night
	time.
	Silence Zone – 46.2dBA to 47.5 dBA for day time and 37.8 dBA to 38.32 dBA
	for night time.
	Industrial area - 63.8 dBA for day time and 52.6 dBA for night time.

26.1.12 Baseline Environmental Studies:

Traffic	• Traffic study	has been conducted	d at Bhatapara to Ka	asdole approach r	oad which			
assessment study								
findings	Transportation	on of raw material, done 100% by road	fuel to the plant &	finished produc	t from the			
	-	•		andolo onneoch	mood and			
			on Bhatapara to K	asdole approach	road and			
	existing leve.	l of service (LOS) i	lS:					
	Road	V (Volume In PCU/DAY)	C (Capacity In PCU/DAY)	Existing V/C RATIO	LOS			
	Approach road	364	2000	0.182	А			
	11							
	PCU load after pr and level of servi		be 364(existing) +7	786.5 (additional)) PCU/day			
		, ,	Q (Q		LOC			
	Road	V (Volume In PCU/DAY)	C (Capacity In PCU/DAY)	Existing V/C RATIO	LOS			
	A mmmo o ole mo o d		,		С			
	Approach road	1150.5	2000	0.5752	L			
	- · ·	-	0 Guideline for cap	•				
			ill be 0.5752 (Good) after including	additional			
	traffic due to prop							
Flora and fauna	-	ion in Study Area						
	Total 131 floral species were observed in the study area. The details about the							
	floral composition are as follows.							
	a. Trees: Total 59 species were found in the study area							
	b. Shrubs (small trees): Total 24 species were enumerated from the study area.							
	c. Herbs: In the study area 12 species were observed.							
	d. Bamboo & Grasses: 21 species were enlisted from the study area							
	e. Climbers and Twiners: Total 13 species of climbers/ twiners were recorded							
	in the study area.							
	f. Parasite/epiphytic plant: Each 2 species enlisted in the area							
	RET (Rare, Endangered and Threatened species) STATUS							
	None of reported species in study area belongs to Rare, Endangered or Threatened							
	category. Fauna Details:							
	Fauna Details:							
	As per IUCN RED (2013) list							
	Among the reported animals, all are categorized under least concern category as							
	per IUCN list.							
	As per Indian Wild Life (Protection) Act, 1972 Among mammals; <i>Vulpes bengalensis</i> (Indian Fox), Common Langur, <i>Herpestes</i>							
	-			-	<u>^</u>			
		<u> </u>	e protected in sche		-			
	nigricollis (Black-naped hare), Funambulus pinnati (Palm squirrel) protected in							
	Schedule IV and Rats protected in Schedule V.							
			Cobra (<i>Naja naja</i>),					
	(<i>Ptyas mucosa</i>) were provided protection as per Schedule-II of Wild life protection							
	(1 iyus mucosu) v	vere provided prote	ction as per Schedul	le-II of Wild life	protection			
	act, (1972) and	Common Indian K	rait (Bungarus cae	rulus), Indian To	bad (Bufo			
	act, (1972) and	Common Indian K	rait (Bungarus cae	rulus), Indian To	bad (Bufo			
	act, (1972) and	Common Indian K	-	rulus), Indian To	bad (Bufo			
	act, (1972) and (parietalis) were j as amended.	Common Indian K provided as per Sch	rait (<i>Bungarus cae</i> edule – IV of Wildl	<i>rulus</i>), Indian Te ife protection act	bad (<i>Bufo</i> 1972 and			
	act, (1972) and (<i>parietalis</i>) were p as amended. Among the Avia	Common Indian K provided as per Sch	rait (<i>Bungarus cae</i> edule – IV of Wildl were observed in	<i>rulus</i>), Indian Te ife protection act	bad (<i>Bufo</i> 1972 and			

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

S. No	Type of Waste generated	Source	Qty. (TPA)	Mode of Treatment	Disposal
1.	Char Dolochar	Sponge Iron Production	60,000	To be used as Fuel in Power Plants-	Proposed to be Used in own captive power plant.
2.	Bottom Flue Dust Ash	Sponge Iron Production	40,000	To be used as raw material in Brick making-	Proposed to be Used in Brick making.
3.	Kiln Accretion and Refractory waste	Sponge Iron Production	1,800	To be used as raw material in Brick making and partially used as land fill-	Proposed to be Used in Brick making and low-lying areas.
4.	Mill Scale	Induction Furnace CCM and Rolling Mill	3,062	Sold to Ferro Alloys / Pellet Plants.	Sold to Ferro Alloys / Pellet Plants.
5.	Slag from Induction Furnace	Induction Furnace	54,375	Given/ Sold to metal recovery units. And also used in own plant to make Bricks.	Given/ Sold to metal recovery units. And also proposed to be used in own plant to make Bricks.
6.	Refractory and Ramming Mass waste	Induction Furnace	375	Given to refractory recycling units / used in Fly ash brick making unit / landfill.	Given to refractory recycling units / used in Fly ash brick making unit / landfill.
7.	Defective and Miss Roll	Hot Charging Rolling Mill	3,000	No treatment is required as it can be used as it is as raw material	Reused in own Induction furnace.
8.	Coal Ash	Rolling Mill reheating furnace	23,751	To be given to Cement Plants and part of it to Fly Ash Brick making unit.	
9.	Fly Ash from AFBC	AFBC	62,451	To be given to Cement Plants and Partially Used in own Fly Ash Brick making unit and remaining will be given to outside Fly Ash bricking units.	Cement Plants and Partially Used in own Fly Ash Brick making unit and
10.	Fluidized Bed Material	AFBC	150	No treatment is required as it can be used as it is as raw material in Brick making	
11.	MS Scrap Generated	Pipe Mill and Galvanizing	14,000	Reused in own Induction furnace.	Reused in own Induction furnace.

S. No	Type of Waste generated	Source	Qty. (TPA)	Mode of Treatment	Disposal
		unit			
12.	Mill Scale Generated in Pickling etc.	Pipe Mill and Galvanizing unit	1,000	Sold to Ferro Alloys / Pellet Plants.	Sold to Ferro Alloys / Pellet Plants.
13.	STP Sludge	STP	34	Used for Composting and then applied for Green Belt	
	Total		2,63,998		

HAZARDOUS WASTE GENERATION AND ITS DISPOSAL

S.No	Type of	Source	H. W.	Quantity	Mode of	Disposal
	Hazardous		Category		Treatment	
	Waste					
1.	Waste	Equipment's	Sch. I,	4 KL	Partly used for	Partly used for
	Oil/Used Oil	and	5.1		lubrication and	lubrication and
		Machineries			will be stored in	will be stored in
		in plant			covered HDPE	covered HDPE
		processes			Drums & will be	Drums & will be
					given to CECB	given to CECB
					approved	approved
					vendors/authorized	vendors/authorized
					recycler.	recycler.
2.	Zinc dross	Galvanizing	Sch. IV,	250.00	Sold to registered	Sold to registered
	Generated*	Process	Sl.11		recyclers.	recyclers.
3.	Acid	Acidic Waste	Sch. I,	7,000.00	Sold to registered	Sold to registered
	Neutralization	treatment	35.3		recyclers.	recyclers.
	Lime Sludge	Process for				
	Generated	Galvanizing				
		unit				
4.	Lead Dross	Galvanizing	Sch. I,	12.50	Sold to registered	Sold to registered
	generation*	Process	9.1		recyclers.	recyclers.
	Total			7262.5		

* Separate Effluent treatment plant (30 KLD) is proposed to be set up for neutralization of Acidic waste water from pickling and galvanizing unit.

26.1.14 Public Consultation:

Details of advertisement	Dainik Bhaskar - Dated 25.03.2022
given	• Business Standard - Dated 25.03.2022
Date of public consultation	27.04.2022
Venue	Village - Belpan, Tahsil - Masturi, District - Bilaspur, State
	Chhattisgarh.
Presiding Officer	Mr. Harish S CEO and I/c. Additional District Magistrate,
	Bilaspur

Materia in the second second		~ ~ ~
Major issues raised	•	Concern about impact on Crops and Human Health due to
		likely Air Pollution. Compensation to be given for farmers
		whose crop get damaged.
	•	Concern about water pollution and water withdrawal, Scarcity
		of drinking water and sanitation.
	•	Concern about availability of water for agriculture
	•	Rejuvenation of water resource
	•	Concern about priority to outsiders in employment.
	•	Concern about respiratory problem due to air pollution (Failed
		to control its existing pollution)
	•	Concern about the Road. Road is very bad in condition
	•	•
	•	Demand for Lift Irrigation
	•	Commitment of PP towards Compliance of demands, jointly
		demanded by villagers of the three Villages namely Belpan,
		Khapri and Kokadi
	•	CSR funds should be spent locally.

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

Sr. No.	Particulars	Physical Status	Target of I	Target of Implementation of Action Plan (Timeline)				
			1 ST YEAR (F.Y. 2023- 24)	2 ND YEAR (F.Y. 2024-25)	3 RD YEAR (F.Y. 2025- 26)			
1.	Lift Irrigation	Location : BelpanPhysicalwork:Implementationofintake well and pumpingfacilityofwaterfromShivnathrivertoexisting canals	Work will be started April 2023	be continued	It will completed by June 2025	50		
2.	Medical Facility (OPD and Pathology centre)	Location : Village- Belpan Physical Work : Construction of 2000 Sqft Building with OPD chamber, Pathology centre with X-ray, Sonography etc	Work will be started from February 2024	completion of building and	Completion of work by March 2026	125		
3.	Green Belt development at Community Land	Location : Village-	Plantation	Completion of work July 2024	-	15		
4.	Rain Water Harvesting at	Location : Village- Belpan and Khapari	-	Work will be started from April 2025	Completion of work by March 2026	15		

Sr. No.	Particulars	Physical Status	Target of I	mplementation ((Timeline)	of Action Plan	Rs. (in lakhs)
			1 ST YEAR (F.Y. 2023- 24)	2 ND YEAR (F.Y. 2024-25)	3 RD YEAR (F.Y. 2025- 26)	
	Community Area	Work: Rain Water Harvesting Structure implementation at Community i.e. School, Panchayat, etc. No of RWH : 15 Nos				
5.	Solar Street Lighting	Location : Village- Belpan and Khapari Work : Solar Streelight in village Road of Belpan and Khapar No. of Light: 30 Nos		Starting Implementation of Street light by August 2024 and completed by December March 2025	-	25
6.	Water Shed Management	Location- Village- Belpan, Khapari Work: Water Shed management to improve ground water recharge as well as augment the surface water storage tank. Along with deepening of village Tank	be started by April	Completed by June 2024	-	50
7.	Gobar Gas (bio gas) plant installation	Location : Village Belpan and Village Khapari Work : Implementation of community Gobar Gas (Bio Gas) Plant	-	Work will be started form April 2025	Completion of work by March 2026	25
8.	Village Road Drainage Improvement	Location : Village- Belpan and Khapri Work: 4 KM Internal road at Village. Work Proposed: Strengthening of village roads with drains	-	Work will be started form April 2025	Completion of work by March 2026	25
					Total Rs. =	330.00

26.1.15 The existing capital cost of project was 2892.72 Lakhs. The capital cost after proposed expansion project is Rs 23193.72 Lakhs and capital cost for environmental protection measures project is proposed as Rs 3300 Lakhs. The annual recurring cost towards the environmental protection measures is proposed as Rs.74.60 Lakhs. The employment generation from proposed project is 945 (130 existing + 815 additional). The details of cost for environment protection measures is as follows:

S. No.	Particulars	(Co	sting st in khs)	add (Co	posed ition st in khs)	Final estimated cost after expansion	Recurring cost
		Nos.	Cost	Nos.	Cost	Cost (Lakhs)
1	Dry ESP for DRI Kilns with Four Fields	2	350	4	1100	1450	29.0
2	Bag Houses (PTFE type) for the Sponge Iron Kilns	4	160	4	160	320	6.4
3	Cost of common Chimney for SID	1	35	1	75	110	2.2
4	Cost of Bag Houses (PTFE type) and Chimney for Induction Furnaces	0		2	80	80	1.6
5	Cost of common Chimney for IF	0		1	30	30	0.6
6	Cost of Rotary Vane Wet Scrubber for Rolling Mill for Reheating Furnaces	0		1	25	25	0.5
7	Cost of common Chimney for Reheating Furnace	0		1	30	30	0.6
8	Cost of APCD at Galvanization unit, Fume Extraction System, Wet Scrubber			1	40	40	0.8
9	Cost of common Chimney for Galvanizing	0		1	30	30	0.6
10	Cost of Dry ESP for FBC with 4 Fields			1	275	275	5.5
11	Cost of Bag Houses (PTFE type) for Boiler Furnaces for Power Plant Coal Handling and Ash Handling Area			2	50	50	1.0
12	Cost of common Chimney for Power Plant (FBC)	0		1	75	75	1.5
13	Cost of Industrial ETP/ Settling Tank (existing) etc.	1	20	1	50	70	1.8
14	Cost of STP for Domestic Waste	0		1	20	20	0.3
15	Oil Trap in the drains system				10	10	0.2
16	Silt Arrestation Pit in Storm Water Drains				10	10	0.2
17	Fugitive dust Control Spray system in Plant (water sprinklers, dry mist fog sprinklers, etc.)	3	10	5	15	25	0.5
18	Movable Vacuum cleaning system (mechanical dust sweepers)				20	20	0.3
19	Wheel Washing System in Security area				10	10	0.2
20	On Line stack Monitoring three sets in DRI with Power; Induction Furnace and in Rolling mill	1	5	5	25	30	0.5
21	On Line AAQ station				70	70	2.1
22	High Volume sampling and Stack Monitoring Kits	4	5			5	0.1
23	Weather Monitoring Station			1	5	5	0.1
24	Internal Road and other construction works		30		20	50	0.8
25	Drainage system		10		20	30	0.5
26	Green belt Development		15		50	65	6.0

S. No.	Particulars	(Co	sting st in xhs)	Proposed addition (Cost in Lakhs)		Final estimated cost after expansion	Recurring cost
		Nos.	Cost	Nos.	Cost	Cost (]	Lakhs)
27	Rain Water Harvesting and Recharge system with Roof Harvesting	4	2	4	8	10	0.3
28	Environmental Monitoring & Other Misc. cost		10		15	25	10.4
29	EMP for Socio Economic Development (Capex)				330	330	
	Total		652		2648	3300	74.6

- 26.1.16 After proposed expansion green belt will be developed in 8.96 ha this is about 35% of the total project area. Thus total of 8.96 ha area (35% of total project area) will be developed as greenbelt. A 30m 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 22400 saplings (Existing 4000 Nos. + Proposed 18400 Nos. Sapling) will be planted and nurtured in 8.96 hectares in 2 years.
- 26.1.17 It is reported that there is no violation of EIA Notification 1994 or EIA Notification 2006 or court case/show cause/direction against project.

Certified Compliance report from SPCB

26.1.18 The project proponent has reported that as per the Office Memorandum of MOEFCC vide F.No. IA3-22/10/2022-IA.III (E 177258) dated 08.06.2022 for expansion proposal which are currently operating under Consent to Operate under Air Act and Water Act; the self-certified compliance report for latest CTO is sufficient; if the CTO / Renewal is granted within one year at the time of application for EC. The company has got consent renewed on 04.08.2022 through CECB consent renewal letter No. 3286/TS/CECB/2022 Nava Raipur Atal Nagar.

Deliberations by the Committee

- 26.1.19 The Committee noted the following:
 - 1. The project proponent has not obtained certified compliance report (CCR) of the CTO based on which the existing project is operational. The EAC also recorded the statement of PP/Consultant wherein PP/Consultant has not obtained the CCR in view of clause 4(B)(iv) of the Ministry's OM vide F.No. IA3-22/10/2022-IA.III (E 177258) dated 08.06.2022 and further deliberated that PP/Consultant has misunderstood the provision and CCR is mandatory for appraisal of the expansion project. Self Certified Compliance report of the recent CTO is acceptable in case where PP has already obtained CCR for the previous CTO and the grant of recent CTO has not completed period of one year. Thus

EAC is of the view that in pursuance to the said OM dated 08.06.2022 and as per the TOR condition, PP has to obtain the CCR from SPCB, only after which the proposal cannot be considered for appraisal.

- 2. The PP shall submit all the details/documents [viz. CTE/CTO since inception of the project and all production details] w.r.t. applicability of prior EC under EIA Notification.
- 3. The EAC noted that PP/Consultant has not filled the application Form carefully. For instance, in Part B of the form, PP has mentioned the start date of construction activity of proposed project as 01.02.2023 whereas the application for the proposed project has been applied on 18.03.2023. Therefore, the EAC opined that PP/Consultant shall review its application for provide the correct information as desired in the application form.
- 4. The EAC deliberated on the existing greenbelt and noted that the greenbelt development is unsatisfactory in spite of the fact that the plant has been in operation since 2005. Therefore, EAC is of the view that PP shall prepare a robust greenbelt development plan as per the CPCB norms.
- 5. The PP/Consultant presented the drone survey video before the Committee and EAC observed that housekeeping of the plant is very poor. The EAC suggested to improve the housekeeping of the plant area. PP shall submit the housekeeping plan along with the photographs in this regard.
- 6. The EAC deliberated on the water requirement proposed for the project and is of the view that water requirement shall be revisited and revised water balance shall be presented before the EAC.
- 7. In view of above, the PP accepted that CCR is pre-requsite for expansion project and requested the Committee to allow to reappear with the revised information/ clarification to the points deliberated during appraisal.

Recommendations of the Committee

26.1.20 In view of the foregoing and after deliberations, the Committee recommended that proposal to be returned in its present form to address the technical shortcomings enumerated at para no.26.1.19 above and submit the revised application as per the provisions of EIA Notification, 2006.

Agenda No. 26.2

26.2 Expansion of Shakambhari Ispat & Power Limited plant for production of 0.7875 million tons per annum Crude Steel/Stainless Steel, 0.214272 million tons per annum Ferro-Alloys (maximum) along with allied facilities by M/s Shakambhari Ispat and Power Ltd., located at Village: Parvatpur, Madandih, Radhamadabpur, P.O.: Bortoria, Tehsil: Raghunathpur, District: Purulia, West Bengal- Consideration of EC Proposal.

[Proposal No. IA/WB/IND1/411013/2022; File No. IA-J-11011/282/2021-IA-II(1)] [Consultant: Vardan Environet; Valid upto 05.05.2023]

- 26.2.1 M/s Shakambhari Ispat & Power Limited has made online application vide proposal no. IA/WB/IND1/411013/2022 dated 24.03.2023 along with copy of EIA/EMP report, in prescribed format (CAF, Form – I Part A, B &C) and certified compliance report 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. 3(a) Metallurgical industries (ferrous & non-ferrous), 2(a) Coal Washeries, 2(b) Mineral Beneficiation and 1(d) Thermal Power Plants under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.
- 26.2.2 Name of the EIA consultant: M/s. Vardan Environet [List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2023/SA 0158; Valid up to 05.05.2023, as on April 20, 2023].

Details submitted by Project proponent

26.2.3 The details of the ToR are furnished as below:

Date of Application	Consideration	Details	Date of Accord	ToR Validity
12.07.2021	Standard Terms of Reference	Terms of	15.08.2021	14.08.2025
	granted	Reference		
23.11.2021	49th meeting of REAC (Industry-	Amendment	10.01.2022	
	1) held on 16-17 th December	to ToR		
	2021.			

26.2.4 The project of M/s Shakambhari Ispat & Power Limited (SIPL) located in the Villages: Parvatpur, Radhamadhabpur, Madandih, P.O.: Bortoria, Tehsil: Raghunathpur, District Purulia, West Bengal is for enhancement of Crude Steel Production from 0.5236 MTPA MS Billets to 0.7875 MTPA MS/ SS Billets, Long Steel Production from 0.3MTPA MS products to 0.66MTPA MS/ SS long products, Ferro Alloys production from 0.0632 MTPA to 0.2143 MTPA and Captive Power Generation from 99 MW to 126 MW, along with allied facilities.

26.2.5 Environmental Site Settings:

S. No.	Particulars]	Remarks		
1.	Total land	81.103Ha (200.41Ac	Landuse: Industrial		
2.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	A total land area of 8 under possession of will be setup in Exi land.			
3.	Existence of habitation & involvement of R&R, if any.	R&R is not applicabl Existence of Habita Project Site – Nil Study Area			
		Habitation Madandih	Distance 0.05Kms	Direction East	

S. No.	Particulars		Det	ails		Remarks
4.	Latitude and Longitude of	Point	Latitude	e 1	Longitude	
	all corners of the project	1	23°37'37.89	9"N 86°	47'29.202"E	
	site.	2	23°37'41.56	9"N 86°	47'29.031"E	
		3	23°37'42.82	9"N 86°	47'19.000"E	
		4	23°37'34.58	0"N 86°	47'15.498"E	
		5	23°37'29.04		47'20.148"E	
		6	23°37'22.36		47'20.284"E	
		7	23°37'9.251		47'21.786"E	_
		8	23°37'4.938		47'17.689"E	_
		9	23°36'57.87		47'14.693"E	_
		10	23°36'47.41		47'10.438"E	_
		11	23°36'43.39		47'17.694"E	_
		12	23°36'38.24		47'19.755"E	_
		13	23°36'20.08		47'24.490"E	_
		14	23°36'44.87		47'30.640"E	-
		15 16	23°36'51.66 23°36'57.04		47'30.704"E 47'32.690"E	_
		10	23°30'37.04 23°37'10.70		<u>47 32.690 E</u> 47'32.539"E	_
		17	23°37'10.70 23°37'18.89		47'32.569"E	_
		10	23°37'10.87		47'29.900"Е	-
		20	23°37'24.31		47'31.515"E	-
		20	23°37'35.18		47'29.311"E	_
		21	23°37'35.48		47'20.161"E	_
		23	23°37'38.60		47'20.161"E	_
		24	23°36'18.70		47'34.719"E	-
		25	23°36'11.93		47'31.451"E	-
		26	23°36'12.49	1"N 86°	47'38.815"E	-
		27	23°36'15.51	2"N 86°	47'43.456"E	_
		28	23°36'21.01	9"N 86°	47'38.540"E	_
		29	23°36'23.13	7"N 86°	47'32.735"E	-
5.	Elevation of the project site	183 m ab	ove mean sea	level		
6.	Involvement of Forest land, if any	No invol	vement of Fore	est Land		
	Water body (Rivers,	Project S	Site: No water	odies with	in the project	
	Lakes, Pond, Nala, Natural	site	•			
	Drainage, Canal etc.)	Study ar	ea			
	exists within the project	Wa	ter Body	Distance	Directio	
	site as well as study area				n	
7.		Uttala N		5.10km	West	
			Reservoir	5.8km	West	
			ndrapur	5.5km	SE	
		Reserve		6.01		
		Damoda		6.0km	North	
		Panchet	Dam	7.15km	NW	

S.	Particulars	Details	Remarks
No.			
8.	Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area		

- 26.2.6 The existing project was accorded environmental clearance vide lr no. J-11011/201/2013-IA.II(I) on 21st December, 2016 amendment to it was issued on 29th April, 2020. Consent to Operate has been issued by West Bengal Pollution Control Board Vide Consent Letter No. CO110135 dated 09.08.2018, CO107584 dated 06.12.2018, CO113782 dated 06.09.2019, CO128922 dated 13.02.2020, CO128973 dated 14.08.2020, CO128998 dated 13.11.2020, CO131924 dated 10.03.2021 and CO132113 dated 22.12.2021. The validity of CTOs are up to 31.07.2023.
- 26.2.7 Implementation status of the existing EC:

1		6	1	
Facilities	Units	As per EC dated	Implementation	Production
		21.12.2016 &	Status 31.03.2023	as per CTO
		amended on		-
		29.04.2020		
Coal Washery	740,000TP		Shall be Implemented	
-	А		-	
Iron Ore	630,000		Shall be implemented	
Beneficiation	TPA		under the proposed	
Plant			expansion with changed	
Dallat Dlant	1v1970TDA		configuration	
				544.000
1 0		As par EC dated	Implemented	544,000
Plant		1		
Sinter Plant	$1 \mathrm{x} 20 \mathrm{m}^2$		Shall be implemented	
Mini Blact	$1 \times 350 \text{m}^3$	29.04.2020		
	12330111		1 0	
Fullace			configuration	
Induction	9x25Ton IF		7x25 Ton IF	3,97,420
Furnace with	LRF 1x30T		& CCM 3x6/11m	
LRF/ VOD	& CCM		implemented and	
	3x6/11m		2x25T is under	
	FacilitiesFacilitiesFacilitiesCoal WasheryIron Ore Beneficiation PlantPellet PlantSponge Iron PlantSinter PlantSinter PlantMini Blast FurnaceInduction Furnace with	FacilitiesUnitsFacilitiesUnitsFacilitiesUnitsCoal Washery740,000TPAAIron Ore630,000BeneficiationTPAPlant1x1870TPAPellet Plant1x1870TPASponge Iron4x100TPDPlant1x350TPDIx600TPD1x600TPDSinter Plant1x350m ³ Furnace9x25Ton IFInduction9x25Ton IFFurnace withLRF 1x30TLRF/ VOD& CCM	FacilitiesUnitsAs per EC dated 21.12.2016 & amended on 29.04.2020Coal Washery740,000TP ACoal Washery740,000TP AIron Ore630,000 TPABeneficiationTPAPlant1x1870TPAPellet Plant1x1870TPASponge Iron4x100TPD 2x350TPD 1x600TPDPlant1x20m2Sinter Plant1x350m3Furnace1x350m3Furnace with LRF/VODLRF 1x30T & CCM	LineLineLineLineStatus 31.03.2023Coal Washery740,000TP AAShall be ImplementedIron Ore630,000 TPAShall be implementedBeneficiationTPAShall be implementedPlant1x1870TPA 2x350TPD 1x600TPDAs per EC dated 21.12.2016 & amended on 29.04.2020Shall be implementedSinter Plant1x20m2As per EC dated 21.12.2016 & amended on 29.04.2020Shall be implemented under the proposed expansion with changed configurationMini Blast Furnace1x350m3 Furnace1x350m3 COMShall be implemented under the proposed expansion with changed configurationInduction LRF/VOD9x25Ton IF & CCM7x25 Ton IF & CCM 3x6/11m implemented and

Sl. No	Facilities	Units	As per EC dated 21.12.2016 & amended on 29.04.2020	Implementation Status 31.03.2023	Production as per CTO
				LRF 1x30T shall be implemented	
8.	Rolling Mill	1,000TPD		Implemented	300,000
9.	Lime Plant	80,000TPA		Shall be Implemented	
10.	Oxygen Plant	225TPD		Shall be Implemented	
11.	Ferro Alloy Plant	4x9MVA		Implemented	FeMn/SiMn/ FeCr/FeSi/ Pig Iron- 63,150 TPA
12.	AFBC/ CFBC	62MW		AFBC - 8.5MW and CFBC – 25MW implemented and CFBC – 28.5MW will be implemented	33.5MW
13	WHRB	37MW		Implemented	37MW

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

			Exis	ting Facility as per	EC dated 21.1	2.2016 & amende	ed on 29.04.2	020		Propos	ed Unit		Remarks
		То	tal	Impleme	ented	Un impler	nented	As per	СТО				
Sl. No.	Plant Equipment/ Facility	Configuration	Capacity(TPA)	Configuration	Capacity(TPA)	Configuration	Capacity(TPA)	Configuration	Capacity(TPA)	Configuration	Capacity(TPA)	Final	
1.	Pellet Plant	1x1870TPD	582,000			1x1870TPD	582,000			Capacity enhancement	268,000	850,000	
2.	Producer Gas Plant									6x4000 Nm ³ /hr	24,000 Nm ³ /hr	24,000 Nm ³ /hr	
3.	Sponge Iron Plant	DRI Kiln 4x100TPD + 2x350TPD + 1x600TPD	544,000	DRI Kiln 4x100TPD + 2x350TPD + 1x600TPD	544,000			DRI Kiln 4x100TPD + 2x350TPD + 1x600TPD	544,000	Capacity enhancement of 4x100TPD+ 2x350TPD+ 1x600TPD 1x600TPD	30,400 (additional) 53,200 (additional) 45,600 (additional)	910,800	
						M. DL (IX600TPD		(additional DRI	237,600		
4.	Blast Furnace	Mini Blast Furnace: 1x350m3 Pig casting Machine: 1x1500TPD	249,900			Mini Blast Furnace: 1x350m3 Pig casting Machine: 1x1500TPD	249,900			Capacity enhancement of Mini Blast Furnace: 1x350m ³	166,600 (additional)	416,500	
5.	Sinter Plant	1x20m ³	198,000			1x20m ³	198,000			Sinter Plant of changed configuration 1x90m ² will be installed	597,600 (additional)	795,600	
6.	SMS	9x25T Induction Furnace LRF: 1x30T & CCM: 3x6/11	523,950	7x25 Ton IF & CCM 3x6/11m	400,720	2x25T and LRF 1x30T	123,230	7x25 Ton IF & CCM 3x6/11m	400,720	Capacity enhancement/ Product Modification+ 1x25 Ton AOD	263,550 MS/SS Billets (additional)	787,500	
7.	Rolling Mill along with wire drawing facility	1000TPD	300,000	1000TPD	300,000			1000TPD	300,000	1000TPD	360,000 MS/SS Long Products	660,000	
8.	Reheating Furnace									2x40TPH		2x40TPH	
9.	Oxygen Plant		225TPD				225TPD		225TPD			225TPD	-

			Exis	ting Facility as per	EC dated 21.1	2.2016 & amende	ed on 29.04.20	020		Propos	ed Unit		Remarks
		То	tal	Impleme	nted	Un impler	nented	As per	СТО				
Sl. No.	Plant Equipment/ Facility	Configuration	Capacity(TPA)	Configuration	Capacity(TPA)	Configuration	Capacity(TPA)	Configuration	Capacity(TPA)	Configuration	Capacity(TPA)	Final	
		AFBC - 36 TPH	8.5 MW	AFBC - 36 TPH	8.5 MW			AFBC - 36 TPH	8.5 MW			8.5MW	
		CFBC - 100 TPH	25 MW	CFBC - 100 TPH	25 MW			CFBC - 100 TPH	25 MW			25MW	
		CFBC - 120 TPH	28.5 MW			CFBC - 120 TPH	28.5 MW					28.5MW	
		WHRB @4x100TP D DRI - 40 TPH	8 MW	WHRB @4x100TPD DRI - 40 TPH	8 MW			WHRB @4x100TP D DRI - 40 TPH	8 MW			8MW	
10.	Captive Power Plant	WHRB @2x 350TPD DRI- 71 TPH	15 MW	WHRB @2x 350TPD DRI- 71 TPH	15 MW			WHRB @2x 350TPD DRI- 71 TPH	15 MW			15MW	
		WHRB @1x 600TPD DRI - 64TPH	14 MW	WHRB @1x 600TPD DRI - 64TPH	14 MW			WHRB @1x 600TPD DRI - 64TPH	14 MW		2MW	16MW	
										WHRB @1x 600TPD DRI - 64TPH	16 MW	16MW	
										BF Gas Based	9 MW	9MW	
												126MW	
11.	Iron Ore Beneficiation		0.63 MTPA				0.63 MTPA			Change in Configuration from 0.63MTPA to 1.0 MTPA	0.37 MTPA (additional)	1.0MTPA	
12.	Coal Washery		0.74 MTPA				0.74 MTPA					0.74MTPA	
13.	Lime Plant	250TPD	80,000			250TPD	80,000					80,000 TPA	

			Exist	ing Facility as per	EC dated 21.12	2.2016 & amende	ed on 29.04.20)20		Propos	ed Unit		Remarks
		To	otal	Implemented		Un implemented		As per CTO					
Sl. No.	Plant Equipment/ Facility	Configuration	Capacity(TPA)	Configuration	Capacity(TPA)	Configuration	Capacity(TPA)	Configuration	Capacity(TPA)	Configuration	Capacity(TPA)	Final	
			TPA				TPA						
14.	Ferro Alloy Plant with Metal recovery Plant	4x9MVA SAF with metal recovery Plant	63,150 TPA Fe-Mn or Si. Mn or Fe Si or High Carbon Ferro Chrome, or Pig Iron, or in combination of any	4x9MVA SAF with metal recovery Plant	63,150 TPA Fe-Mn or Si. Mn or Fe Si or High Carbon Ferro Chrome, or Pig Iron, or in combination of any			4x9MVA SAF with metal recovery Plant	63,150 TPA Fe-Mn or Si. Mn or Fe Si or High Carbon Ferro Chrome, or Pig Iron, or in combinati on of any	Capacity enhancement of 4x9MVA SAF + Additional installation of 4x9MVA SAF	Fe-Mn- 194,058 or Si. Mn- 142,848 or Fe Si -64,282 or High Carbon Ferro Chrome – 135,330, or Ferro Silico Chrome – 88,664, or Pig Iron-214,272, or in combination of any	Fe-Mn- 194,058, or Si. Mn- 142,848 or Fe Si – 64,282 or High Carbon Ferro Chrome – 135,330, or Ferro Silico Chrome – 88,664, or Pig Iron- 214,272, or in combination of any	
15.	Briquette Plant									1x 50 TPH	300,000	300,000	
16.	Sinter Plant									1x600 TPD	216,000	216,000	

SI.		(Quantity (TPA	.)	S.	Distance	Mode of
No.	Raw Material	Existing	Expansion	Total	Source	(km)	Transport
A			Steel N	Aaking Divis	ion		
A-01	Iron Ore	533,880	19,182	553,062	Odisha/ Jharkhand	500	Rail Will
A-02	Iron Ore fines	1,016,805	10,51,545	2,068,350	Odisha/ Jharkhand	500	brought by trucks into
A-03	PCI Coal	32,485	21,660	54,145	West Bengal	300	the plant from
A-04	Non-Coking Coal	1,609,683	3,77,010	1,986,693	West Bengal	300	Chaurasi
A-04	Limestone	135,928	85,012	220,940	Birmitrapur, Odisha	350	Railway siding at
A-05	Dolomite	45,694	79,158	124,852	Imported (Haldia Port)	300	distance of 0.15km plant
A-06	Quick Lime	9,010	27,190	36,200	Local Market	50	
A-07	Coke Breeze	18,018	50,495	68,513	Local Market	50	
A-08	Coke	112,455	74,970	187,425	Local Market	50	
A-09	Purchased + Return Scrap	54,500	27,400	81,900	Local Market	50	Road
A-10	Scrap for AOD		2,29,320	229,320	Local market/ Import	50	-
A-11	Bentonite	6,000	2,500	8,500	Kutch, Gujarat	2100	
A-12	Ferro-alloys	6,866	3,453	10,319	In-House		In-House
A-13	Ferro-alloys for AOD		2,07,207	207,207	Internal/ Local Market	50	In-House/ Road
A-14	Calcined Lime for AOD		40,950	40,950	Internal		In-House
A-15	Calcined Dolomite for AOD		40,950	40,950	Internal		
В			Ferro	Alloys Divisi	ion		
B-01	Mn Ore	137,262	3,28,477	465,739	Imported/ Domestic	300	Rail Will
B-02	Coke	25,737	61,589	87,326	Imported/ Domestic	300	brought by trucks into
B-03	Limestone	15,788	37,780	53,568	Birmitrapur, Odisha	350	the plant from
B-04	Chrome Ore (Friable)	13,162	31,497	44,659	Odisha	500	Chaurasi Railway

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

SI.	Deer Mederial	(Quantity (TPA)	C	Distance	Mode of
No.	Raw Material	Existing	Expansion	Total	Source	(km)	Transport
B-05	Ferro-chrome chips		49,652	49,652	Odisha	500	siding at distance of
B-06	Iron ore / Mn Ore Fines		282,839	282,839	Odisha/ Jharkhand	500	0.15km plant
B-07	Magnesite	1,994	4,773	6,767	Imported	300	
B-08	Dolomite	5,719	35,287	41,006	Imported	300	
B-09	Charcoal	18,945	45,337	64,282	Local Market	50	
B-10	Steam Coal	13,893	33,247	47,140	Local Market	50	
B-11	Quartz	33,343	79,793	113,136	Local Market	50	Road
B-12	Electrode Paste	972	3,461	4,433	Local Market		Road
B-13	Hydrated Lime		9,900	9,900	Local Market	50	
B-14	Molasses		15,840	15,840	Local Market	50	
B-15	Briquettes	75,780	1,81,347	257,127	Internal		
B-16	Sinter	83,358	1,99,481	282,839	Internal		
B-17	Fe-Mn Slag	25,260	60,449	85,709	Internal		In-House
B-18	Mill Scale	17,682	42,314	59,996	Internal		
B-19	Coke Breeze		17,280	17280	Internal		

- 26.2.10 Existing water requirement is 8,745m3/day, water requirement is obtained through surface water from Panchet Dam and permission for the1.69MGD has been obtained from DVC vide letter no. MRO/Tariff Cell/SIPL/246 dated 15.11.2022. The water requirement after the proposed expansion is estimated as 15,139m3/day, out of which 13,735m3/day of fresh water requirement will be obtained from the DVC and remaining will be recycled water. The permission of drawl of additional water requirement will be obtained from DVC with implementation of the project.
- 26.2.11 Existing power requirement of 128.9MW, out of which 99 MW is being obtained from CPP and 29.9 MW is obtained from DVC vide agreement dt. 09.11.2015. The power requirement after the proposed expansion is estimated as 209.5MW, out of which 126bMW will be sourced from CPP and 83.5MW will be obtained from DVC.

Period	December 2019 to February 2020	Additional study (if any)
	• PM _{2.5} : 20.4 μ g/m ³ to 43.3 μ g/m ³	
AAQ parameters	• PM ₁₀ : $47.4\mu g/m^3$ to $81.7\mu g/m^3$	
at 8 Locations	• SO ₂ : $10.0\mu g/m^3$ to $19.5\mu g/m^3$	
(min and max)	• NO ₂ : $16.2\mu g/m^3$ to $34.2\mu g/m^3$	
	• CO: 0.59 mg/m^3 to 1.00 mg/m^3	

26.2.12 Baseline Environmental Studies:

Period		December	2019 to Febr	uary 2020		Additional study (if any)
Incremental GLC level	• H • S • N • ((All m		$\beta \mu g/m^3$ $\mu g/m^3$ $\mu g/m^3$		Village	
Ground water quality at 8 locations	Total Di 62.44 to	9 to 7.84, Tota ssolved Solid 93.49 mg/l, 1 1.65 mg/l, Fe -	es -			
Surface water quality at 8 locations	BOD – 8		mg/l, $COD - 2$	n – 5.56 to 6.4 3.0 to 45.08 m	0	
Noise levels Leq (Day and Night)	48.7 to for night		or day time and	34.8 to 56.8 d	B(A)	
	700m • Transp produc • Existin	e study has b from the projection of ct will be done of pCU is 16 of service (LO				
	Road	V (Volume in PCU/hr.)	C (Capacity in PCU/hr)	Existing V/C Ratio	LOS	
Traffic	SH-5	161.81	625	0.26	В	Capacity of Roads
assessment study findings	(Existi	1 1	Addl. 45.96) f	ill be 207.77 P for SH-5 and 1		as per IRC 64 is 15000 PCU/day i.e 625PCU/hr
	Road					
	SH-5	207.77	625	0.33	В	
	<i>capacity</i> Level of	Capacity as pe y for roads in f Service wil g additional ti	r SH-5			
Flora and fauna		-	-	auna in the Stu		

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

Sl. No.	Type of Waste	Source	Quantity Generated	Mode of Treatment	Disposal
			(TPA)		
1.	Slag	Induction Furnace	114,250 (After metal recovery)	Will be Collected and conveyed to slag crushing unit for recovery of metals	Total Slag generation shall be 126945 TPA, however after recovery of 12695 TPA of metal, remaining slag of approx. 114251 TPA will be used as aggregates
2.	Bag Filter Dust	Induction Furnace	24,570		Will be reused in Sinter Plant/Pellet Plant
3.	Slag	AOD	23,760	Will be processed in the Jiggling Plant for metal recovery	recovery, the remaining slag, after TCLP test, shall be used in Cement making as a mixture of raw materials, replacing some
4.	Bag Filter Dust	AOD	3,960		Shall be recycled after briquetting in Briquetting Plant.
5.	Scale - CCM	SMS	9,830		MS Scale shall be used for production of Fe-Si or Fe- Si-Cr. Or will be used in Sinter Plant. SS scale will be recycled in the Induction furnace
6.	Mill Scale	Rolling Mill	9,900		MS scale will be reused in Sinter Plant SS scale will be recycled in the Induction Furnace.
7.	Dolochar	Sponge Iron Plant	182,160		Will be used in AFBC/CFBC Boiler for power generation
8.	Wet Scrapper Sludge	Sponge Iron Plant	23,354		Will be used in CPP for power generation
9.	ESP Dust	Sponge Iron Plant	107,428		Will be given to Cement manufacturing and Brick making Units. Excess dust will be given to ECL for mine stowing of abandoned mines.
10.	Rejects	Coal Washery	50,000		Will be used in CPP along with Coal
11.	Tailings	Beneficiation Plant	375,000		Will be sold to tile manufacturing company

Sl. No.	Type of Waste	Source	Quantity Generated (TPA)	Mode of Treatment	Disposal
12.	Dust	Pellet Plant	43,350		Will be Reused in Pellet Plant
13.	Tar	Producer Gas Plant	1,782		Will be given to nearby Coke Oven plant and/ or will be used as alternative fuel in Pellet Plant and/ or shall be used for road making and may also be sold to the authorized vendor.
14.	Ash (Cinder)	Producer Gas Plant	16,038		Will be given to the brick manufacturing plants
15.	Slag	Blast Furnace	162,435		Will be used in the nearby Cement Plant
16.	Flue Dust	Blast Furnace	6,250		Will be used in the Sinter Plant
17.	ESP Dust	Sinter Plant	43,758		Recycled in Sinter Plant
18.	Return Sinter	Sinter Plant	69,500		Recycled in Sinter plant
19.	Fly-ash from	CFBC & AFBC	272,450		Will be given to nearby Cement plant or Brick manufacturing Unit
20.	Bottom ash	CFBC & AFBC	68,110		Will be given to the nearby brick plants, to be used as fuel in the brick kilns due to presence of unburnt carbon
21.	Fe-Mn Slag	Submerged Arc Furnace	174,662		Will be used for production of Si-Mn
22.	Fe-Mn Bag Filter Dust	Submerged Arc Furnace	4,463		Will be used in Ferro-alloys Sinter Plant Will be recycled back to the process.
23.	Si-Mn Slag	Submerged Arc Furnace	121,421		Slag is non-hazardous and will be used for construction of roads or filling of low- lying area
24.	Si-Mn Bag Filter Dust	Submerged Arc Furnace	1,143		Will be used in Ferro-alloys Sinter Plant Will be recycled back to the process
25.	Fe-Cr Slag	Submerged Arc Furnace	121,797		Slag shall be further processed in grinding and Metal Recovery Plant and shall be used for construction purpose after TCLP test
26.	Fe-Cr. Dust	Submerged Arc Furnace	2,710		Will be used in Briquette Plant
27.	Fe-Si. Slag	Submerged Arc Furnace	3,214		Ferro Silicon Slag will be used for cement manufacturing/ industries as a raw material & Used for medium carbon silico manganese production purpose

Sl. No.	Type of Waste	Source	Quantity Generated	Mode of Treatment	Disposal
			(TPA)		
28.	Fe-Si-Cr Slag	Submerged Arc Furnace	4,433		Slag is non-hazardous and will be used in cement manufacturing industries as a raw material as well as for construction and Road filling material after undergoing TCLP Test.
29.	Pig Iron Slag	Submerged Arc Furnace	107,136		Pig Iron Slag will be used for cement manufacturing as a raw material
30.	Briquette Plant Dust	Briquette Plant	15,300		Recycled in the plant

26.2.14 Public Consultation:

Details of advertisement given	18.06.2022
Date of public consultation	22.07.2022
Venue	Sampriti Sadan, Sarbari, Neturia, Dist: Purulia, West Bengal
Presiding Officer	Additional District Magistrate, Purulia, West Bengal
Major issues raised	 Employment for the local and physically challenged people, Prevention of Pollution, Development of Schools & Roads, Development of Surrounding Villages and Sports development

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

Sl. No.	Activities	Activities	Year of Implementation (Budget in INR)			Total Expenditure
			1 st Year	2 nd Year	3 rd Year	(Rs. In Crores)
1.	Development of Schools	Infrastructuredevelopment:Constructionof classrooms, developmentof playground, providingsportsmaterials, studymaterials, furnitureforclassrooms,Construction/renovationof separate toilets for boys& girlsNo. of Schools:SchoolsCovered:PrimarySchoolsofGopalganj(Madandih),	20,00,000 (Gopalganj (Madandih) , Radhamada bpur, Erakusum village)	10,00,000 (Bartoria village)	10,00,000 (Rampur village)	0.40

Sl. No.	Activities	Activities	Year of Implementation (Budget in INR)			Total Expenditure
			1 st Year	2 nd Year	3 rd Year	(Rs. In Crores)
		Radhamadabpur, Erakusum village and Junior High Schools of Bartoria & Rampur village				
2.		All Round Development of Students: Educational tours for 5th standard students & for 8th standard students No. of Schools: 5 Schools Covered: Primary Schools of Gopalganj (Madandih), Radhamadabpur, Erakusum village and Junior High Schools of Bartoria & Rampur village	1,00,000 (Gopalganj (Madandih) , Radhamada bpur, Erakusum village)	1,00,000 (Bartoria village)	1,00,000 (Rampur village)	0.03
3		ScholarshipDistribution: Scholarshipto Two (2) meritoriousstudents, one each, from5th standard & for 8thstandard each fromNo. of Recipients: Totalof 4 students from eachschoolSchoolsCovered:PrimaryPrimarySchools ofGopalganj (Madandih),Radhamadabpur,Erakusum village andJunior High Schools ofBartoria & Rampur village	4,00,000 (Gopalganj (Madandih) , Radhamada bpur, Erakusum village)	1,25,000 (Bartoria village)	1,25,000 (Rampur village)	0.065
4.		Financial Support for Girl Education: Free education for Higher Secondary and Graduation (B.A./B.Sc./B. Com.) level (which includes School/College fee, study materials and 02 pairs of school/college uniform up to three years)No. of Recipients: Five (5) meritorious girl students from under privileged families & from	3,00,000 (2 girls)	3,00,000 (2 girls)	1,50,000 (1 girl)	0.075

Sl. No.	Activities	Activities	Year of Implementation (Budget in INR)			Total Expenditure
			1 st Year	2 nd Year	3 rd Year	(Rs. In Crores)
		nearby Higher Secondary schools				
5.		Drinking Water Facility: Water purifier along with cooler No. of Water Purifier and Water Cooler: 1 in each school Schools Covered: Govt. schools at Gopalganj (Madandih), Radhamadabpur, Erakusum, Parvatpur, Bartoria and Rampur villages	3,00,000 (Gopalganj (Madandih) , Radhamada bpur, Erakusum village)	2,00,000 (Parvatpu r & Bartoria village)	1,00,000 (Rampur village)	0.06
6.		Renovation of Ponds:Cleaning of pond & itsSurrounding, Levelling thebase and stabilizing theside slopes by lining,Construction of platform& stairs and Slant/Wharfconstruction at fourth sideof pond for domestic usageand for animals.No. of Ponds: 3Location of Ponds:VillageMadandih,Bansbani,andRadhamadabpur	5,00,000 (Madandih village)	5,00,000 (Bansbani village)	5,00,000 (Radhamad abpur village)	0.15
7.	- Development of Surrounding Villages	Development/Maintenance of Roads:ExistingroadsExistingroadsKacha/PuccawillberepairedLocation:VillageMadandihandRadhamadabpur		20,00,000 (Radhama dabpur village)	25,00,000 (Madandih village)	0.45
8.		Street Lights: Installation of solar street lights in the villagesNo. of Lights: 20 lights in each villageVillagesCovered: Madandih, Radhamadabpur, Parvatpur,Covered:	2,50,000 (Madandih & Bansbani Village)	2,50,000 (Radhama dabpur & Rampur Village)	5,00,000 (Parvatpur, Erakusum and Harmadih villages)	0.10

Sl. No.	Activities	Activities	Activities Year of Implementation (Budget in INR)			Total Expenditure
			1 st Year	2 nd Year	3 rd Year	(Rs. In Crores)
		Rampur, Bansbani and Harmadih villages				
9.	Sports Development	Sports activities will be conducted and sports equipment will be provided to local youths to promote the Sports culture	20,00,000	10,00,000	10,00,000	0.40
	Total Cost to address the issues raised during the Public Hearing		58,50,000	54,75,000	59,75,0000	1.73

26.2.15 Existing capital cost of the project was Rs. 1001Crs. The capital cost of the proposed project is Rs. 320 Crs. and the capital cost for the environmental protection measures is proposed as Rs.27.4356 Crs (including the cost to address the issues raised in Public Hearing). The annual recurring cost towards the environment protection measures is proposed as Rs. 0.7128Crs. The employment generation form the proposed expansion is 1250. The detail of the cost of the environmental protection measures is as follows:

Sl.	Environmental Protection	Exist	ing Cost	Proposed Cost	
No.	Measures	Capital Cost Rs. In lakhs	Recurring Cost Rs. In lakhs/year	Capital Cost Rs. In lakhs	Recurring Cost Rs. In lakhs/ year
1.	Air Pollution Measures	3600	36	2336.0	26.0
2.	Water Pollution Control Measures and Rainwater Harvesting	500	20	15.0	4.0
3.	Noise Pollution Control Measures	75	3	50.0	2.0
4.	Storage and Solid Waste Management	80	4	30.0	1.5
5.	Environmental Monitoring Program	55	11	95.0	18.58
6.	Greenbelt Development	48	32	31.06	2.2
7.	Occupational Health and Safety	28	8	13.5	17.0
	Sub Total	4,386	114	2,570.56	71.28
	al cost to address the issues raised ing the Public Hearing			173.0	
	Total EMP Budget	4,386	114	2743.56	71.28

26.2.16 Existing greenbelt has been developed in 23.66Ha which is about 29.17% of the total project area of 81.103Ha with total plantation of 36,000 trees. Proposed greenbelt will be developed in 3.106Ha which is about 3.83% of the total project area. Thus total of 26.766Ha area (33% of total project area) will be developed as greenbelt. Local and Native species will be planted with a tree density of 2500 trees per hectare in proposed project area. Total of 7,765 numbers of trees will be planted and nurtured in 3.106 ha. area in 3 years. Budget of Rs, 31.06 Lakhs and Yearly budget for maintenance of Rs 2.2 Lakhs has been allocated for greenbelt development.

26.2.17 It is reported that there is no violation of EIA Notification 1994 or EIA Notification 2006 or court case/show cause/direction against project.

Certified Compliance report from IRO

26.2.18 The Status of compliance of earlier EC was obtained from Regional Office, Kolkata file no. 102-463/14/EPE/387c dt. 12.09.2022 in the name of M/s Shakambhari Ispat & Power Limited. There were no Non-Compliance detected and no further action is required.

Deliberations by the Committee

- 26.2.19 The Committee noted the following:
 - 1. The EAC noted that existing greenbelt has been developed in 23.66 Ha which is about 29.17% of the total project area of 81.103 Ha with total plantation of 36,000 trees. The EAC observed that existing project dates back to 2016 and PP has still not completed the greenbelt in 33% of the project area. Also, the green belt density is very less and not as per 2500 trees/ha. PP has failed to comply with the ToR condition and therefore shall provide justification in this regard and prepare a plan for effective implementation of greenbelt development and gap filling in the existing plantation.
 - 2. The Committee deliberated on the baseline data and incremental GLC due to the proposed project and suggested to re-verify the incremental GLC values. PP shall also submit the mitigation measures that will be undertaken to minimise the PM₁₀ values.
 - 3. The EAC deliberated on the project cost and EMP cost of the existing and proposed project. The EAC is of the view that EMP cost do not commensurate with the project cost and PP shall revise the EMP cost. PP shall provide the EMP expenditure made with respect to the existing project.
 - 4. 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 advised PP to revise the action plan as per Ministry's O.M. dated 30.09.2020. Also, the EAC advised to quantify the written and oral representation received during the public hearing. EAC is of the view that the PP has made a vague plan.
 - 5. The 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.
 - 6. The EAC deliberated on the PH issues raised during the earlier EC and is of the view that PP shall submit the status of implementation of the action plan of the commitment made by the PP during the existing ECs in tabular form.
 - 7. PP reported that there is no Schedule-1 Species of Fauna in the Study area. The EAC is of the view that PP shall obtain certificate from the State Forest Department certifying the same.

- 8. The EAC noted that there is Madandih Village at a distance of 0.05 km from the project site. Also there are other ESA's like school and hospital within the study area. PP shall submit the specific mitigation measures that will be undertaken to minimise the impact of project activities on these ESA's.
- 9. There is no proper Engineering drawing of a layout. It missing area statement, index etc. The PP shall prepare 3 separate drawings as a layout details. In Drg 1 PP shall cover Road networking, Plan Layout, Parking along with area statement showing % of all ingredients i.e. roads, Buildings, Parking, with indexing, scale of drawing etc. In no case road shall be abruptly terminated at any point. It shall have proper looping. PP also to show traffic flow in the drawing along road with entry and exit. In drg 2 PP shall show a layout indicating road networking, Existing Green belt and proposed Green Belt with its % against plot area including no of species WRT 2500 density per ha. In drg3 PP shall show contour map with Bench mark, Road network and drainage network along road side with drainage flow, disposal of drainage flow at lowest point with invert level etc. Further PP to show RWH details in the same drawing with calculations.
- 10. The proposed project area is observed to be in multiple patches. The EAC is of the opinion that PP/Consultant shall submit the coordinates of project area patch wise.
- 11. Total land area is 81.103 ha which is under the possession of the company. PP shall submit the status of conversion of land for industrial purpose along with the requisite documents.
- The EAC noted that the existing project was accorded environmental clearance vide lr no. J-11011/201/2013-IA.II(I) on 21st December, 2016 and the complete project is still not implemented. PP shall submit the justification for the same.
- 13. 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

26.2.20 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. 26.2.19 above. The proposal shall be considered after submission of requisite information and updating the Report on Parivesh Portal.

Agenda No. 26.3

26.3 5.00 MTPA Iron Ore Processing Plant & 3.0 MTPA Pellet Plant by M/s MSPL Limited, located at Village Somalapura, Sandur Taluk, Bellary District, Karnataka– Reconsideration of Environmental Clearance.

[Proposal No.: IA/KA/IND1/413204/2023; 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.]

- 26.3.1 MSPL Limited online application M/s. has made an vide proposal no. IA/KA/IND1/413204/2023 Dated 12.01.2023 along with copy of EIA/EMP report, Forms (Part A, B and C) seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposal was considered during 22nd meeting of the EAC for Industry-I sector held on 30-31st January, 2023 and after detailed deliberations, the committee recommended the proposal for grant of Environment Clearance under the provisions of EIA Notification, 2006 subject to stipulation of specific conditions, inter-alia, also including that the Environmental Clearance is subject to grant of Forest Clearance of 13.98 ha under the provisions of the FC Act, 1980 for Downhill pipe conveyor from mine to the Unit.
- 26.3.2 Subsequently, the Ministry received a representation vide MSPL letter dated 20.02.2023 requesting for considering the following amendment in the specific conditions:

S. No. of	Specific conditions as mentioned in	Request for revised/ amended specific
Specific	the MoM of 22nd EAC meeting	condition
Condition		
(i)	The environmental clearance is	The proponent will undertake the
	subject to grant of Forest clearance of	activity of DHPC in 13.98 Ha of forest
	13.98 ha under provisions of the FC	land only after obtaining the FC for the
	act 1980 for Downhill pipe conveyor	same. Rest of non-forest area they can
	from mine to the unit.	undertake the construction activity
(ii)	The total project Land is 124.73 ha	The proponent can undertake the project
	which also include 13.98 ha of forest	activity only on the land which is in its
	land. PP shall commence project	possession and proponent will not
	activity only after acquisition of	undertake any activity on the land which
	complete land and other necessary	is not under its possession.
	permission from the competent	
	authority	

- 26.3.3 Accordingly, the Ministry vide letter dated 09.03.2023 advised M/s. MSPL Limited that since, MSPL has submitted EIA/EMP report for whole land area and now wish to execute construction work by excluding the Forest land and procurement of iron ore by road only, PP is required to submit a revised application with revised EIA/EMP report, accordingly. Further, a complaint was received in the Ministry by M/s RPCL, Bellari, Karnataka vide letter dated 01.03.2023 against MSPL's claim on the Land Survey No. 136, 137, 118 & 188, 194, 198, 199, 200. which have already been granted to M/s RPCL for setting up a project (EC identification No. EC23A008KA 163015) over the aforesaid Survey nos. Please submit the requisite clarification for the same. In view of the same, the Ministry directed MSPL to submit a revised application with revised EIA/EMP report along with clarification on above said complaint to the Ministry at earliestfor consideration of proposal before EAC.
- 26.3.4 Accordingly, the project proponent vide letter dated 17.03.2023 revised application with revised EIA/EMP Report excluding the Forest land along with the clarification against the complaint for reconsideration of the proposal before the EAC. The proposal was considered during the 26th meeting of the EAC for Industry-I sector held on 12th, 13th and 17th April, 2023 wherein the

PP/Consultant were unable to present the full proposal due to unpreparedness of the PP/Consultant. PP further vide letter dated 18.04.2023 has accepted the mistake and requested for one more opportunity for presenting the proposal before the EAC meeting.

Recommendations of the Committee

26.3.5 In view of the foregoing and after detailed deliberations, the committee recommended to **defer the proposal** and is of the view that the proposal shall be considered once the PP/Consultant are fully prepared and only after receiving the formal request of the project proponent, the proposal shall be placed before the EAC.

Agenda No. 26.4

26.4 Expansion of Integrated Steel Plant by M/s Shri Bajrang Power & Ispat Limited, located at Village-Borjhara, Urla – Guma Road, Urla Growth Center, Raipur District, Chhattisgarh- Reconsideration of EC proposal under SOP 07.07.2021

[Proposal No. IA/CG/IND/260531/2007; MoEF&CC File No. J-11011/531/2007-IA.II(I)] [Consultant: Pollution and Ecology Control Services, validity upto 09.05.2023]

- 26.4.1 M/s. Shri Bajrang Power & Ispat Limited has made an online application vide proposal no. IA/CG/IND/260531/2007 dated 31st March 2023 along with EIA/EMP report, prescribed format (CAF, Form I Part A, B &C) and certified compliance report seeking Environment Clearance (EC) under the provisions of EIA Notification, 2006. The proposed project activity is listed at schedule no. 3(a) Metallurgical Industries (Ferrous and Non-ferrous), 2 (a) Coal washeries and 1(d) Thermal Power Plant under Category "A" of the schedule of the EIA Notification, 2006 and attracts general condition as the project is located within 10 kms from the Critically Polluted Area and being appraised at Central Level.
- 26.4.2 Name of the EIA consultant: M/s. Pollution and Ecology Control Services [List of ACOs with their Certificate / Extension Letter no. QCI/NABET/ENV/ACO/23/2732; valid upto 09.05.2023, as on April 20, 2023].

Details submitted by the project proponent

Date of	Consideration	Details	Date of accord	ToR
application				Validity
31 st August	23 rd Meeting of EAC	Terms of Reference	20 th October 2017	19.10.2020
2017	(Industry-1) held on 9 th			
	-10 th October 2017			

26.4.3 The detail of the ToR is furnished as below:

Date of	Consideration	Details	Date of accord	ToR
application				Validity
10 th	16 th Meeting of the	Amendment in Terms of	9 th April 2020	19.10.2021
February	Re-constituted EAC	Reference		
2020	(Industry-I) held			
	during 24-25 th			
	February, 2020			

Chronology of Proposal:

- M/s Shri Bajrang Power and Ispat Ltd. had earlier applied for grant of ToR vide proposal no. IA/CG/IND/67789/2017 dated 31.08.2017 for expansion of Integrated Steel Plant (Sponge Iron 0.21 to 0.264 MTPA; Steel Melting 0.129 to 0.211 MTPA; Ferro Alloy- 0.0144 to 0.0198 MTPA; Rolling Mill- 0.15 to 0.21 MTPA; New Pellet plant 0.6 MTPA with coal gasifier from alternative fuel) located at village Borjhara, in Urla Industrial Complex, Raipur, Chhattisgarh. Accordingly, Terms of Reference was issued vide letter no. J-11011/531/2007-IA.II (I) dated 20.10.2017.
- M/s. Shri Bajrang Power & Ispat Limited vide online proposal no. IA/CG/IND/142035/2020 dated 10/02/2020 applied for amendment in ToR dated 20/10/2017 w.r.t. change in configuration and the production capacities and other amendments alongwith validity extension of ToR for another one year. Accordingly, letter was issued by the Ministry vide letter no. J-11011/531/2007-IA.II (I) dated 09.04.2020 with validity of ToR extended upto 19.10.2021 with changes in configuration / production capacities involving expansion of Integrated Steel Plant (Sponge Iron 0.21 to 0.264 MTPA; Steel Melting 0.129 to 0.211 MTPA; Ferro Alloy- 0.0144 to 0.0198 MTPA; Rolling Mill-0.15 to 0.21 MTPA; New Pellet plant 0.6 MTPA with coal gasifier from alternative fuel), 26 MW Captive Power Plant (WHRB 18 MW; Biomass 8 MW, Iron washery plant of 4,00,000 TPA, Titanium slag plant of 36,000 TPA and pig iron plant of 20,000 TPA.
- Thereafter, M/s Shri Bajrang Power and Ispat Ltd. applied for Environment Clearance vide proposal no. IA/CG/IND/193265/2007 dated 09/04/2021 and the proposal was considered during 35th meeting of the Re-constituted EAC (Industry-I) held on 30th April, 2021 wherein the Committee recommended the proposal to be returned in its present form to address the technical shortcomings.
- The project proponent applied vide Proposal No. IA/CG/IND/291775/2022 dated 15.09.2022 for seeking modification in ToR dated 20.10.2017 and subsequent amendment dated 09.04.2020 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 the company has installed Iron Ore Washery Plant and had run the plant for 1 month. The raw materials arrived at site and its quality was degrading day by day, so PP run the plan on trial basis for one month just to utilize that material. The PP has now stopped the operation activity. PP is ready to comply all the points of TOR for Violation Project and follow SOP dated 07.07.2021 for identification & handling of Violation cases under EIA notification 2006. The proposal was considered during 14th Meeting of the EAC (Industry-I) held during 29th-30th September, 2022 and after deliberations, the Committee recommended for modification in ToR dated 20.10.2017 and subsequent amendment dated 09.04.2020 w.r.t. appraisal of proposal under violation category as per the provisions contained in the MoEF&CC Standard Operating Procedures

Date of	Consideration	Details	Date of accord	ToR					
application				Validity					
dated 07/0	dated 07/07/2021 pertaining to consideration of violation cases with stipulation of the additional								
specific co	specific conditions.								

- 26.4.4 The project of M/s. Shri Bajrang Power & Ispat Limited located in Village-Borjhara, Urla Guma Road, Urla Growth Center, Raipur District, Chhattisgarh is for expansion of Integrated Steel Plant.
- 26.4.5 Environmental site settings

S. No.	Particulars		Deta	ails		Remarks		
i.	Total land	31.8 ha [12	Land use: industrial					
		Chhattisgarh	0					
		Corporation (
			area is Private Purchased diverted for Industrial					
		use.]						
ii.	Land acquisition	100% land is	in possessio	n of the com	ipany			
	details as per							
	MoEF&CC O.M.							
iii.	dated 7/10/2014	Ducient sites	NT:1			No R&R		
111.	Existence of habitation &	Project site: Study Area:	INII			involved.		
	involvement of R&R,	Habitation	Distance	Direction		mvorveu.		
	if any.	Urla	1.0 km	East				
iv.	Latitude and				- 4 -			
1V.	Longitude of <u>all</u>		L atitude 21°18'45.30'	Longitu 'N 81°35'3		-		
	<u>corners</u> of the project		21°18'45.30 21°18'46.33'					
	site.		21°18'25.73'					
	Site.		21°18'23.00'					
			21°18'23.00 21°18'37.57'					
			21°18'38.41'					
v.	Elevation of the	277 m above		11 01 55 2	0.01 L			
	project site	277 11 40070	11101					
vi.	Involvement of Forest	No involveme	ent of Forest	Land				
	land if any.							
vii.	Water body exists	Project site:	None			-		
	within the project site	Study area						
	as well as study area	Water	Distance	Directio	n			
		body						
		Kharun	2.5 km	NNW				
		River						
		Distributary	Adjacent	W				
		Nallah						
viii.	Existence of	Nil.						
	ESZ/ESA/national							
	park/wildlife	Movement of	-	is observe	d within 15			
	sanctuary/biosphere	Kms. radius c	of the plant.					
	reserve/tiger							

reserve/elephant
reserve etc. if any
5
within the study area

26.4.6 The existing project was accorded environmental clearance vide lr.no. J-11011/531/2007-IA.II (I) dated 17-01-2008 & J-11015/159/2009-IA.II (M) dated 28.1.2010 & J-11015/159/2009-IA.II (M) dated 26.8.2013. Latest Renewal to Consent to Operate for the existing unit was accorded by Chhattisgarh Environment Conservation Board vide lr. No. 4657/TS/CECB/2022 dated 7/10/2022 for Steel Melting Shop 1.2960 MTPA. The validity of CTO is up to 31.08.2023. Latest Renewal of Consent to Operate (for Both Air & Water) is granted vide letter no. 8545/TS/CECB/2023 dated 07.03.2023 for SID (0.21 MTPA) and WHRB based Power Plant (18 MW) valid up to 31.03.2024. Latest Renewal of Consent to operate (for both air & water) is granted vide letter No. 1041/TS/CECB/2022 dated 04.06.2021 for Ferro alloys 14,400 MTPA and Biomass based Power Plant 8 MW valid from 31.05.2022 to 30.05.2023. Latest Renewal of Consent to Operate (for air and water) is granted vide letter No. 6991/TS/CECB/2023 dated 03.01.2023 for Coal washery 0.6 MTPA and Hot Re-rolling Mill Plant 0.12 MTPA valid from 01.01.2022 to 31.12.2023.

Unit	Establishment	Statutory	Remarks
	Year	Clearances obtained	
2x350 TPD Sponge Iron	2005	Consent for Establishment from	-
Plants with 18 MW		Chhattisgarh State pollution	
WHRB Power Plant		Control Board	
6 x 8 MT Induction Furnace	2006	Establishment done in year 2006	-
with Co Casting machine		From Chhattisgarh State pollution	
Note: CTE for change in		Control Board	
configuration from 6x 8 T	2018	Amendment in CTE was obtained	-
to 3x 15 T has been granted		for change in configuration to 3 X	
by CECB		15 MT from Chhattisgarh State	
		pollution	
		Control Board	
2x 4 MVA Ferro Alloys	2008	Environmental Clearance from	-
plant		MoEF&CC vide letter no.	
Captive Power Plant (8 MW	2008	J-11011/531/2007-IA.II (I) dated	
biomass based)		17-01-2008	
0.6 MTPA Coal	2012	J-11015/159/2009-IA.II (M)	EC granted for
Washery		dated 28.1.2010	0.6 MTPA
0.15 MTPA Rolling Mill	2012	J-11015/159/2009- IA.II (M)	EC granted for
		dated 26.8.2013	0.15 MTPA
RENEWAL OF CONSEN	Г TO OPERAT	Έ	
Ferro alloys and Biomass	2021	No. 1041/TS/CECB/2022 dated	valid up to
based Power Plant		04.06.2021	30.05.2023
Steel Melting Shop	2022	letter No. 4657/TS/CECB/2022	valid upto
		dated 7/10/2022	31/08/2023
Coal washery 0.6 MTPA	2023	No. 6991/TS/CECB/2023 dated	valid up to
and Hot Re-rolling Mill		03.01.2023	31.12.2023
Plant 0.12 MTPA			

Chronology of Statutory Clearances

Unit		Establishment	Statutory	Remarks
		Year	Clearances obtained	
Sponge Iron and	Waste	2023	letter No. 8545/TS/CECB/2023	valid upto
Heat Recovery	Based		dated 07.03.2023	31/03/2024
Power Plant				
Fly ash bricks		2015	Letter No. /TS/CECB/2015 of Air	Valid up to
			and /TS/CECB/2015 of water dated	30/09/2019
			28/04/2015	СТО
				was not
				renewed; this
				is categorized
				as
				"
				white
				category".
				Hence CTO
				is not
				applicable
				after 2019

26.4.7 Implementation status as per existing EC:

Sr. No.	Facilities	Units	As per EC dated 17.01.2008, 28.1.2010 & 26.8.2013	Implementation status	Production as per CTO
	As per l	EC dated 1	7.01.2008, 28.1.2	010 & 26.8.2013	
1.	Biomass Based Captive Power Plant, MW	MW	8	Installed & in operation	8
2.	Ferro Alloy Plant	TPA	14,400	Installed & in operation	14,400
3.	Rolling Mill	TPA	1,50,000	Installed & in operation	1,20,000
4.	Coal Washery	TPA	12,00,000	Installed & in operation	6,00,000
	As	per CTO	dated 1.03.2007	& 1.04.2005	
1.	SMS	TPA	1,29,600	Installed & in operation	1,29,600
2.	Sponge Iron Plant	TPA	2,10,000	Installed & in operation	2,10,000

26.4.8 The unit configuration and capacity of existing and proposed unit are given as below:

S.	Plant		Existing fa	acilities as p	er EC dated	17.01.20	08, 28.1.201	0 & 26.8.201	3	Propos	sed Units		inal	Remarks
No.	Equipment/ Facility	Total ((A + B)	Impleme	ented (A)		plemented (B)	As per	СТО			(Existing -	+ Proposed)	
		Configu ration	Capaci ty	Configur ation	Capacity	Confi gurati on	Capacity	Configura tion	Capacity	Config uration	Capacity	Configura tion	Capacity	
1.	Sponge Iron Pant	-	-	-	-	-		2x350 TPD	2,10,000 TPA	-	NIL	2x350 TPD	2,10,000 TPA	Expansion of capacity of SID has been dropped as per the orders dated 16.03.2007, 12.12.2007 and 15.05.2012 of Industry & Commerce Dept. Government of Chhattisgarh
2.	Captive Power Plant, MW	8 MW Biomass & Dolachar based CPP	8MW	8 MW Biomass & Dolachar based CPP	8MW	None	-	18 WHRB + 8 MW Biomass & Dolachar based CPP	26 MW	-	-	18 WHRB + 8 MW Biomass & Dolachar based CPP	26 MW 18 WHRB + 8 MW Biomass & Dolachar based CPP	Increase in coal quantity is dropped in SID unit as per above mentioned orders.
3.	Steel Melting Shop(SMS)					-	-	6 x 8T	1,29,600 TPA	2 x 15T	81,600 TPA	5 x 15T	2,11,200 TPA	Replacement of 6x8T to 3x15T CTE granted
4.	Ferro Alloy Plant	2 x 4MVA	14,400 TPA	2 x 4MVA	14,400 TPA	-	-	2 x 4MVA	14,400 TPA	1 x 5MVA & 1 x 6 MVA)	5400 TPA	1 x 5MVA & 1 x 6 MVA)	19,800 TPA	Replacement of old
5.	Rolling Mill	-	1,50,00 0 TPA	-	1,20,000 TPA	-	3,00,000 TPA	-	1,20,000 TPA	-	60,000 TPA	-	2,10,000 TPA	-
6.	Coal Washery	-	12,00,0 00 TPA	-	6,00,000 TPA	-	6,00,000 TPA	-	6,00,000 TPA		NIL	-	6,00,000 TPA	-
7.	Pellet plant with coal gasifier	-	-	-	-	-	-	-	-	-	6,00,000 TPA	-	6,00,000 TPA	-
8.	Iron Ore Washery Plant	-	-	-	-	-	-	-	-	-	4,00,000 TPA	-	4,00,000 TPA	-
9.	Titanium Slag Plant & Pig Iron Plant	-	-	-	-	-	-	-	-	-	36,000 TPA 20,000 TPA	-	36,000 TPA 20,000 TPA	-

26.4.9 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. N.	Raw Material	Existing Quantity (TPA)	Quantity (TPA) As per TOR Dated 20 th October 2017	Quantity (TPA) after Dropping of some units & Requested Amendme	Storage Quantity	Type of storage	Source	Distance km	Mode of Transpo rtation
1.	Iron Ore	315000	396000	<u>nt</u> 315000	24,000	Open Yard	Mines- Hahaladdi , NMDC, Bailadila	190 420	Road
2.	Coal	260440	302880+ 12600	260440	24000	Open Yard & closed Shed	SECL, Imported	250	
3.	Dolomite	9840	12540	10380	1000	Open Yard	Mines- Mandla, Katni		
4.	Rice Husk	125004	28200	125004	2350	Open Yard	Local Rice Mill	50	
5.	Dolochar	66000	26100	66000	1500	Open Yard	Own plant	-	
6.	Sponge Iron	132170	215388	215388		Closed shed	Own Plant		
7.	Pig Iron	5388	8784	8784	800	closed Shed	External procurem ent will not be there 20,000 TPA will be produced of which 8784 TPA will be consumed and balance will be disposed as product	-	
8.	Scrap	13608	22176	22176		Covered Shed			
9.	Ferro & Non Ferro Alloys	1357	2112	2112		Covered Shed			
10.	Manganese Ore	25920	35640	35640	2700	Open Yard	Mines- Garividi, MOIL- Balaghat	512 218	

S. N.	Raw Material	Existing Quantity (TPA)	Quantity (TPA) As per TOR Dated 20 th October 2017	Quantity (TPA) after Dropping of some units & Requested Amendme nt	Storage Quantity	Type of storage	Source	Distance km	Mode of Transpo rtation
	(Difference from tor due to FeMn)								
11.	Ferro Manganese Slag	14400	19800	19800	1500	Open yard	Own Plant		
12.	Coke Ferro	2880	3960	3960		Open Yard			
13.	Coke Pellet	-	21000	21000	2000	In covered Shed	Nagpur & Jharkhand	290 644	
14.	Iron OreFine/ Concentrate	0	612000	612000	37090	Open Yard	Mines- Hahaladdi , Orissa Own Plant at Tilda	190 600 30	
15	Limestone	0	9000	9000	300	Open yard	Katni	450	-
16	Bentonite	0	4800	4800	0.5	Open Yard	Bhuj and local market	1450	
17	Coal for Gasifier	-	27000	27000	2000	Open Yard & closed Shed	SECL, Imported	250	
18	Ilmenite	-	72,900	72,900	3500	Open yard	IREL & Other Suppliers	600	
19	Graphite	-	900	900	225	closed Shed	Imported / Indigenou s	500	
20.	Coke Titanium Slag	-	12600	12600	3000	In covered Shed	Nagpur & Jharkhand	290 644	

26.4.10 The existing Water requirement is 2442 m^3/day , water requirement is obtained from Kharun River and permission for the same has been obtained from water resource department Chhattisgarh vide letter no. 302 dated 6.10.2004. The water requirement for the proposed project is estimated as 1065 m³/day, will be met from Kharun River.

26.4.11 The total power requirement after expansion will be 55.7 MW. Power will be obtained from captive power plant & the additional power requirement after expansion shall be met by wheeling of power from other unit and/or from state electricity board.

Particulars			Parameters				
AAQ parameters at 8 Locations (min and max) Incremental GLC level	 PM_{2.5} SO₂. NO_x PM₁₀ = 	• $PM_{2.5}$: 17.9 to 38.5 µg/m ³ • $SO_{2.}$: 10.5 to 16.3 µg/m ³ • NO_x : 11.3 to 30.8 µg/m ³					
Ground water quality at 7 locations	• NOx = pH: 7.14 to 7.2	$= 2.49 mu g/m^3$ (Lever 33, Total Hardness 9 to 56.9 mg/l, Flu	l at 850 m in NE I :: 146.0 to 196.0 m	Direction)	etals: BDL		
Surface water quality at 8 locations Noise levels Leq (Day and	to 34 mg/l	pH: 6.55 to 7.51; DO: 3.8 to 5.2 mg/l and BOD: <3 to 4.2 mg/l. COD from 8 to 34 mg/l 30 to 72 dBA for the day time and 30 to 68 dBA for the Night time.					
Night) Traffic assessment study findings	approxim • Transpor • Existing	tudy has been co ately 1.0 km from tation of raw mate PCU is 1794.5 H evel of service (LC	the plant site. rial, fuel & finishe CU/day on Bend	ed product will b	e by road.		
	Road	V (Volume in PCU/day.)	C (Capacity in PCU/day.)	Proposed V/C Ratio	LOS		
	Bendri-1794.5100000.17A-VeryBirgaonGood						
	* Note: Capacity as per IRC-73:1980 Guide line for capacity for roads. Conclusion : The level of service will Very Good after including additional traffic due to proposed project						
Flora and fauna		animals are found	in the study area.				

26.4.12 Baseline Environmental Studies

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

Source and type of solid waste	Qty. T/Year Existing	Qty.T/Year (Total Capacity after expansion)	Utilization /disposal method
Fly ash (Power	58680	No change	Bricks manufacturing unit & Cement
Plant)			Plant
Fly ash (SID)	69300	No change	
Slag from SMS	17000	25344	Slag from SMS is being/will be sold to
unit			brick manufacturers in open
			market/Used in making man made sand

Source an of solid		Qty. T/Year Existing	Qty.T/Year (Total Capacity after expansion)	Utilization /disposal method
Slag from Ferro Alloys unit		17280	23760	Backfilling of low-lying area/land leveling
Dolochar fr	rom SID	66000	No Change	Used in our AFBC based power plant (Gondwara unit) as a Raw material.
Rejects Fro Washery		2,40,000	No Change	Used in our AFBC based power plant (Gondwara unit) as a Raw material
Coal Gasifier	Coal ash	-	7920	Will be send to bricks manufacturing unit.
Iron Ore W Plant - Reject (Fin	·	-	1320 40,000	Will be Used in pellet plant No tailing pond for handling of slimes is proposed. The slimes will be dewatered in the thickener and thickened tailings sludge will be dewatered in proposed filter press. The overflow from the thickener will be collected into a process water tank and will be reused as fresh water.
Titanium S Plant capac &Pig Iron I	city	Zero Solid	Waste Generation Plant.	Slimes will be given to cement plants,Note:The detail of sources from where solidwaste and Hazardous Waste is beinggenerated / anticipated are described ashere under:The major Solid wastes generated fromSmelting Furnace in the plant will be fluedust (@ 25 kg/ t of Titanium Slag). Theflue dust will be recycled back to thefurnace after being collected from DustCollector Bag Filter house and fullyreutilized.The maximum generation of flue dust forthe proposed project will be 1000 TPA.Similarly the maximum production ofTitanium Slag will be 36000 TPA, andPig Iron will be 20000TPA.The Titanium Slag though produced inthe form of slag is a marketable product.Hence, both Pig Iron and Titanium Slagwould be sold out. The flue dust which isanother solid waste generated in theprocess will be fully reutilized.Hence, no solid waste disposal isenvisaged.

26.4.14 Public Consultation:

Details of advertisement given 20.11.2020

Date of public consultation	21.12.2020
Venue	Saamudayik Building, Gram Panchayat Naya Bendri
Presiding Officer	Additional Collector Raipur
Major issues raised	Employment to locals, To develop local school as Smart
	School, To provide Vocational Training Institute and To
	Develop a public garden.

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

(A) SOCIO-ECONOMIC DEVELOPMENT TO ADDRESS PH ISSUES

S.No		O-ECONOMIC DEVELOPMENT TO Physical Activity	Year 2022-23	Year 2023-24	Year 2024-25	Year 2025-26
				apital Cost		
1	Developme	Providing Computers – 4 nos	-	0.5	0.5	0.5
	nt of local	Computer Table/Chairs – 8 nos	-	0.5	0.5	0.5
	Primary	Rooms Renovation -5 rooms	-	1.5	1.0	0.5
	school as Smart	Furniture for the school – 80 sets of table and chairs	-	1.5	1.0	0.5
	School in	Stationary, White Boards etc.	_	0.5	0.3	0.2
	village Bendri	Rain Water Harvesting System2Nos.	-	0.5	-	-
		Toilets with running water facility	-	0.5	-	-
		Sports Equipment's	-	0.5	-	-
		Drinking water facility (RO system)	-	0.5	-	-
	Total (A)		-	6.5	3.3	2.2
2	Vocational Training	Construction of building – 8 rooms & Other Infrastructure	-	20.0	20.0	20.0
	Institute (two	Providing the furniture – 100 sets of Tables and Chairs	-	2.0	2.0	1.0
	batches (20/batch)	Other training equipment – Tool Kits for mechanical, electrical and automobile	-	5.0	5.0	5.0
	in a year in three fields to benefit	Heavy machineries – Simulators for mechanical, electrical and automobile training	-	6.0	5.0	3.0
	120 persons in a year	Maintenance & Recurring Expenses (Teachers & Supporting Staff Salary)		5.0	5.0	5.0
	Total (B)		-	38.0	37.0	34.0
3	Developme	Land escaping of the place	8.0	-	-	-
	nt	Tree plantation & Gardner Expenses	8.0	1.0	1.0	1.0
	of Garden in	Providing Lighting around	1.5	-	-	-
	Dharsinwa	Fountain	0.5	-	-	-
	area	Pathway Construction	2.5	-	-	-
	(Approx usage of	Fencing	3.0	-	-	-
	Garden by	Borewell with Pipe Line & Overhead tank	2.0	-	-	-
		Electricity & water facilities	1.0	0.5	0.5	0.5

S.No		Physical Activity	Year	Year	Year	Year	
			2022-23	2023-24	2024-25	2025-26	
			С	Capital Cost in Rs Lakhs			
	300	Security Service	1.0	1.0	1.0	1.0	
	persons)						
	Total (C)		27.5	2.5	2.5	2.5	
	Sub Total (A+B+C)			15	6		

(B) BUDGET ALLOCATION AS PER THE NEED BASED ASSESSMENT

S. No	o Activities Identified		2021-22	2022-23
		Capital C	Cost (Rs. I	n lakhs)
1	Building Material Construction Work at Samudahik Bhawan & School	25.5	_	-
2	Borewell at Bendri Middle School	1.0	-	_
3	Kopal Vani School Civil Work-Development of Government school to Model School at Nardha	2.25	-	-
4	Construction contractor charges for Vihan Cafeteria	9.8	-	-
5	Ambulance Purchase For Villages Borjhara, Bendri, Guma, Tendua & Urla	25	-	-
6	Fire Brigade for Villages -Borjhara/Bendri/Guma/Tendua/Urla	50	-	_
7	Water Purifier for Bendri Middle School	0.5	-	-
8	Borewells Csr Work for Drilling, Gi Casing Work Gram Panchayat Bendri	0.83	-	-
9	Computer system donation at village Bendri Panchay Bhavan	-	0.35	-
10	Proposed Rennovation & Beautification of Muktidham at Village - Bendri (Pathway Construction, Drinking Water facality, Sitting Arrangements, Toilet with running water, Boundary wall reparing, Plantation and Painting).	-	3.5	-
11	Proposed Rennovation & Beautification of Muktidham at Birgao - Raipur (Pathway Construction, Drinking Water facality, Sitting Arrangements, Toilet with running water, Boundary wall reparing, Plantation and Painting).	-	3.5	-
12	Proposed Construction of Jyoti Bhavan for Mahamaya Mandir at village - Bendri -	-	8.00	-
13	Augmentation of facilities at Vihan Cafeteria	-	3.00	-
14	Plantation at Birgao Muktidham	-	-	0.4
15	Plantation at Kabrisatan Birgao	-	-	0.5
16	Drinking water facilities in nearby villages (Nal Jal Yojna)	-	2.00	-
17	Nala Cleaning and deepening work at village Borjhara for water conservation	3.0	-	-
18	Plantation work (harihar Chhattisgarh Scheme)	2.0	2.0	2.0
19	Distribution of furniture to "Shahid nand Kumar Patel (Naveen Govt. College) Birgaon, Raipur (C.G.)	-	-	20.0
20	Development and beautification Govt. Primary School, Vill. Pacheda	-	-	16.5
21	Development and beautification Govt. Primary School, Vill. Rasout	-	-	16.5
22	Borwell at Narmedswar Mandir at village Bendri Urla Raipur	-	-	0.5
23	Dharamshala Developmnent at Danteswari Mata Temple- Jagdalpur	-	-	8.0

S. No	Activities Identified	2020-21	2021-22	2022-23
		Capital C	ost (Rs. I	n lakhs)
24	Solar Street Light In Bendri Village	-	-	3.0
25	Development and beautification Govt. Primary & Middle School, at Kawardha	-	-	20.0
	Total	119.88	22.35	84.4
	Sub Total (D)		226.63	
	Grand Total (A+B+C+D)		382.63	

26.4.15 The existing capital cost of project was 350 Crore. The capital cost of the proposed project is Rs. 186 Crores and the capital cost for environmental protection measures is proposed as Rs. 12.92 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs. 61.75 Lakhs. The total employment generation from the project is 200 nos. of people. The details of cost for environmental protection measures is as follows:

S. NO.	ACTIVITIES	Rs. In lacs	Rs. In Lacs
		Capital Cost	Recurring Cost
1	Air Pollution Control measures ESPs, Bag	500	10
	Filters, dust extraction systems, stack etc.		
2	Fugitive dust control measures - Vacuum	64	2
	Cleaner and dust suppression system in the		
	form of water sprinklers, Sufficient no. of		
	movable as well as fixed water sprinklers		
3	Wastewater Management and Effluent	190	8
	Treatment Plant		
4	Sewage Treatment Plant	50	2
5	Environmental Monitoring Program and	200	23.75
	Occupational Health Survey		
6	Solid Waste Management	200	5
7	Noise Control Measures	10	1
8	Greenbelt Development in Plant	28	7
9	Greenbelt development at Urla-Bendri-Guma		
	Road in 2.5 ha		
10	Rain Water Harvesting	50	3
	TOTAL	1292	61.75

- 26.4.16 Existing green belt has been developed in 10.49 ha. area which is about 33% of the total project area of 31.8 ha., 29000 nos. of trees are planted 27000nos. survived till date. Proposed greenbelt will be developed in 2.5 ha which is about 7.8% of the total project area. Thus total of 12.99 ha. area (40.8% of total project area) will be developed as greenbelt. A 10 m wide greenbelt, consisting of 2-3 tiers around plant boundary has been developed as greenbelt as per CPCB/MoEF&CC, New Delhi guidelines. Local and native species are planted with a density of 2500 trees per hectare.
- 26.4.17 It is submitted that there was a Show Cause from Chhattisgarh Environment Conservation Board dated 1st February 2023 which was revoked on 23rd February 2023.

The company had installed the unit of Iron Ore Washery Plant without EC/CTE/CTO and had run the plant for 1 month, so the proposal was applied for Amendment in ToR under violation.

The PP has now stopped the operation activity. SBPIL is ready to comply all the points of TOR for Violation Project and follow SOP dated 07.07.2021 for identification & handling of Violation cases under EIA notification 2006. The proposal was considered in 14th meeting of the EAC for Industry-I sector held on 29-30th September, 2022 and recommended for amendment in ToR dated 20.10.2017 and subsequent amendment dated 09.04.2020 w.r.t. 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. The damage analysis report comprising of remediation plan and natural and community resource augmentation plan corresponding to the ecological damage assessed and economic benefits derived due to violation. is as follows:

Sr.	Environmental	Total Damage Cost (Rs.)	Total Remediation Plan
No.	Component		Cost (Rs.)
1	Air Environment	PP has installed and utilized 30 No. of water sprinklers covering working area for construction of Iron Ore Washing Plant. In addition to this one mobile water tanker is also used for dust suppression during construction period. Hence no damage on air environment is considered. Damage Cost During Operation Phase=23.88Lakh	Rs. 1,06,000/- for sprinklers and baricates Rs. 28,00,000/ for Green Belt in and around the plant
2	Noise	Non-availability of PPEs	Rs. 50,000/-
	Environment	Damage cost = Rs. $50,000/-$	
3	Water Environment	Rs. 1088718/- for water consumed during construction and operation phase	Rs. 290 lakhs, provisions made in EMP (240 lakhs) for STP/ETP and rainwater harvesting (50 lakhs +Rs.15000/-
4	Land Environment	Rs. 2520/-	Rs. 30,000/-
5	Solid & Hazardous waste	Rs. 17800/-	Rs. 70,000/-
6	Biological Environment	Deficiate plantation and greenbelt in and around the plant (800 trees) Rs. 4,00,000/-	Rs. 28,00,000 (28.0 lakhs) for plantation and green belt in and around the plant (provision in EMP)
7	Socio-economic Environment (occupational health)	25,000/-	Rs. 35,000/-
8	Energy Consumption	Rs. 1,53,000/-	Rs. 2,50,000/- solar system
	Total	Rs. 41.25 lakhs.	Rs. 556000 +318 lakhs (provision for STP, ETP,

Total Damage and Remediation Cost for Construction Activities and Trial Run Carried Out Under Violation

Sr. No.	Environmental Component	Total Damage Cost (Rs.)	Total Remediation Plan Cost (Rs.)
			RWH and plantation and
			greenbelt in and around plant
			site (290+28=318 lakhs)

Summary of Remediation Plan, Natural Resource and Community Augmentation Plan

Sr.	Activity Proposed	Total (Rs.)
No.		
1.	Cost of damage /	5,56,000 (excluding provisions of EMP cost of Rs. 318 lakhs)
	Remediation plan	for STP, ETP, RWH and deficiate plantation in and around
		plant site
2.	Natural Resource	Rs. 19,25,000/-
	Augmentation Plan	
3.	Community	Rs. 37,00,000/-
	Augmentation Plan	
	Sub Total (A)	Rs. 61,81,000/-

Details of Penalty to be paid as per SOP of Office Memorandum No. F.No. 22-21/2020-IA-III dated July 7, 2021 regarding the subject matter of "Standard Operating Procedure (SOP) per identification and handling of violation cases under EIA Notification 2006 in compliance to order of Hon'ble National Green Tribunal in O.A. No. 34/2020 WZ-Regarding, Penalty Provisions for violation cases

S.N.	Description	Amount
1.	1% of total amount invested in construction of Iron Ore Washing Plant. Total amount invested: Rs. 2,64,16,273 1 % of 2,64,16,273	Rs. 2,64,162.73
2	0.25% of total turn over The plant was operated on trial bases for 1 month only. Total Iron ore washed for 5000 T. Cost of washed Iron Ore: Rs. 6000/T. Total Turn over: Rs. 3,00,00,000 0.25% of Rs. 3,00,00,000	Rs. 75,000
	Sub Total (B)	Rs. 3,39,162.73
	Grand Total (A+B)	Rs. 65,20,163

Certified Compliance Report from Regional Office

26.4.18 The Status of compliance of earlier EC was re-obtained from Regional Office vide letter no. EC-635/RON/2017-NGP/-1056 & 5-23/2008(ENV)/-1057, dated 23.11.2022 in the name of M/s. Shri Bajrang Power & Ispat Limited.

Latest status for certified compliance Report to letter No. EC-635/RON/2017-NGP/1056 dated 23.11.2022

(A) ATR Coal Was	shery &	Rolling Mill
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	(A) ATR Coal Washery & Rolling Mill						
Sr.	Conditions	Observation	Compliance status	Updated compliance	Status as on April, 2023		
No.		reported on 26-08-	as on	based on ATR submitted			
		2022		by the PP and visit dated			
•	All internel needs	Deathaller Courselled	Desculture	14-11-2022.			
i.	All internal roads shall be black	Partially Complied with Respect to site	Regarding accumulation of coal	On the day of monitoring it was observed that all	All the internal roads		
	topped. The roads	visit.	dust on some	the internal roads were	are being . regularly cleaned by dust		
	shall be regularly	It was observed that	internal roads and	cleaned and dust	sweeping machine.		
	cleaned with	all the internal roads	garland drains, we	sweeping machine was	Good housekeeping		
	mechanical	are RCC and	would like to inform	deployed or the same.	practices are being		
	sweepers. A 3-tier	mechanical sweeping	you, that apart from	1 0	adopted. Garland drains		
	avenue plantation	machine are deployed	road cleaning by		are cleaned on regular		
	using native	for cleaning the	Mechanical sweeping		interval by housekeeping		
	species shall be	roads. In addition to	machine, we are doing		team.		
	developed along	that water sprinkling	manual cleaning of		Strength of house		
	the roads.	system also provided.	roads. In this process,		keeping staff will be		
	Facilities for	However, on the day	after manually roads		increased by appointing at least 15 workers, out of		
	parking of trucks carrying raw coal	of monitoring it has been observed that	cleaning, collected road dust is being		which 90% will be		
	from the linked	coal dust	stored on corner of the		women from local area.		
	coalmines shall be	accumulated on the	roads, and then it is		All efforts will be taken		
	created Within the	some of the internal	being collected in		to improve the House		
	Unit.	roads and the same	manually operated		keeping further.		
		was observed on the	hand trolley for safe		1 0		
		garland drains also.	disposed off. On your				
		PA has been asked	visit day also this				
		to properly	process was				
		maintain the	operational. Now to				
		internal roads and	avoid this condition,				
		garland drains on	we are increasing no. of hand trollies and				
		regular time intervals for good	instructed to cleaning				
		housekeeping	team for its				
		practices. (Specific	simultaneous				
		condition – v).	collection also and not				
		,	to leave on road				
			corner. This system is				
			started and we are				
			maintaining it.				
			Photographs of same				
			are enclosed as				
ii.	Ash and Heavy	No information has	annexure 1. Regarding	PP has submitted the coal	Regarding submission		
п.	Ash and Heavy metal content in	been provided.	submission of	analysis report to this	of analysis report of Ash		
	raw coal, and	On the day of visit	analysis report of	office.	and Heavy metal		
	washed coal shall	coal washery was not	Ash and Heavy metal		content in raw Coal and		
	be analysed twice	found operational and	content in raw Coal		washed coal, we are		
	In a year and	it was informed that	and washed coal, we		submitting the analysis		
	records	coal washery was not	are submitting the		report of Ash and Heavy		
	maintained	operational since	analysis report of Ash		metal content in raw Coal		
	thereof.	01.04.2019. PA has	and Heavy metal		and washed coal,		
		been asked to submit	content in raw Coal		analyzed by outside		
		Ash and Heavy metal	and washed coal,		authorized agency.		
		content in raw Coal,	analyzed by outside				
		and washed coal	authorized agency.				
<u> </u>		und wushed coal	1	1			

Sr. No.	Conditions	Observation reported on 26-08- 2022	Compliance status as on	Updated compliance based on ATR submitted by the PP and visit dated 14-11-2022.	Status as on April, 2023
		reports prior to the 01.04.2019 to this office. (Specific condition- xvi).	Copy of the report is enclosed. Annexure 2.		
iii .	Proper housekeeping shall be ensures and all the raw materials including sludge and oily waste shall be stored separately in designated place only. Scrap shall be recycled into the subsequent batches of melting. All the other solid wastes including mill scale shall be properly utilized or disposed off In an environmentally friendly manner. Waste oil and oil sludge shall be dispose doff to registered recyclers / reprocesses only.	Partially Complied with respect to site visit. It was observed that most of the Raw materials and generated waste materials are being stored are kept separately in their designated places. It was informed that Scrap is being recycled. Other generated solid wastes are being properly utilized or disposed of in an environment friendly manner. Mill scale is being used in Ferro Alloys as raw material. Waste Oil is being used for lubrication and Oil sludge is disposed off to registered recyclers/ re- processor. However, on the day of monitoring it has been observed that coal dust was accumulated on the some of the internal roads and the same was observed on the garland drains also. PA has been asked to properly maintain the internal roads and garland drains on regular time intervals for good housekeeping practices. It was also observed that Char dust was stored inside at back side of the plant	Regarding accumulation of coal dust on some internal roads and garland drains, we would like to inform you, that apart from road cleaning by Mechanical sweeping machine, we are doing manual cleaning of roads. In this process, after manually roads cleaning, collected road dust is being stored on corner of the roads, and then it is being collected in manually operated hand trolley for safe disposed off. On your visit day also this process was operational. Now to avoid this condition, we are increasing no. of hand trollies and instructed to cleaning team for its simultaneous collection and not to leave on road corner. This system is started and we are maintaining it. Photographs of same are enclosed as annexure 1. Regarding Char accumulation observed at back side of the plant area, we would like to inform you, our char generation is about 200T/Day, which is being stored at covered shed area at RM Yard and being used in our 8 MW Bio Mass based power	On the day of monitoring it was observed that all the internal roads were cleaned and dust sweeping machine was deployed or the same. It was also observed that most of char dust was removed from back side of the plant and it was informed that the same is being used as raw material in their power plant. PP has also submitted the copy of letter and copy of e- mail communication intimating to RO, CECB regarding shut down of 16 MW in the month of July & August, 2022.	All the internal roads are regularly cleaned by dust sweeping machine. Good housekeeping practices are being adopted. Garland drains are cleaned on regular interval by housekeeping team. Dolochar is being consumed on regular basis in captive 8 MW bio-mass power plant and 16 MW coal-based power plant of sister concern. No stock of dolochar is accumulated in site plant premises.

Sr. No.	Conditions	Observation reported on 26-08- 2022	Compliance status as on	Updated compliance based on ATR submitted by the PP and visit dated 14-11-2022.	Status as on April, 2023
		premises. PA has been asked to submit the reasons for dumping the char inside the plant premises and ATR shall be submitted for its utilization and its proper disposal to this office. (Specific condition - xix)	plant at Borjhara unit and 16 MW AFBC power plant in Gondwara unit as a raw material. During the month of July- August'22, there was 25 day shutdown in our both 16 MW AFBC power plant and 8 MW Biomass based power plant. Intimation of the same is given to respected state pollution control board.(Copies Enclosed as annexure 3).Hence, resulting accumulation of huge amount of char. However these accumulated char is our raw material for both plant and we are using that by blending it with our fresh generated char and being consumed now.		
iv.	No Change in Technology and scope of working shall be made without prior approval of the Ministry of Environment and Forests.	On the day of visit it was observed that an iron ore crushing and wet screening unit was found in operational (Fig. 4, 5 and 6). (General condition – i.)	Regarding operation of Iron Ore crushing & wet screening unit, we would like to inform you that in view of conservation of natural resources i.e. Iron Ore, under our R&D procedures, through a temporary installed wet screen, However it could not be successful trial, Now we have applied for amendment in TOR under EC violation as per MOEF&CC notification SOP dated 07.07.2021 for identification & handling of violation cases under EIA notification 2006 for installation of Iron Ore washery unit.	PP has applied for amendment in TOR (in violation category of integrated steel plant at Borjhara village, Urla- Guma Road, Urla Growth Centre, Raipur, Chhattisgarh vide letter No.SBPIL/ENV/2022- 23/1020 dated 13.09.2022(Annexure-I). PP submitted the approved minutes of the 14 th EAC (Industry Sector-I) meeting held on September 29-30, 2022 wherein it was observed that the committee recommended for modification in TOR dated 20.10.2017 and subsequent amendment dated 09.04.2020 wrt appraisal of proposal under violation category as per the provisions contained in the MoEF&CC SOP dated 07.07.2021 pertaining to consideration of violation cases (Annexure-2).	Amendment in TOR is applied and appraised by EAC in 14 th EAC meeting held on 29-30 Sept. 2022 and minutes of the same is uploaded in Parivesh Portal on 07.10.2022. Credible action by CECB Chhattisgarh has been taken.

Sr.	Conditions	Observation	Compliance status	Updated compliance	Status as on April, 2023
No.		reported on 26-08- 2022	as on	based on ATR submitted by the PP and visit dated	
				14-11-2022. PP also submitted a letter to	
				Member Secretary, CECB	
				regarding information on	
				installation of Iron Ore	
				Washery at SBPIL,	
				Borjhara Division, Raipur (C.G.) vide letter	
				No.SBPIL/BORJHARA/E	
				NV/2022-23/1142 dated	
				31-10-2022 (Annexure-3).	
v.	Fugitive dust	Partially Complied	Regarding fugitive	On the day of monitoring it was observed that all the	All the internal roads are
	emissions (PM10 and PM 2.5 and	with respect to site visit.	emission observed near the DRI Kiln -1,	internal roads were cleaned	regularly cleaned by dust sweeping machine. Good
	heavy materials is	It was observed that	we would like to	and dust sweeping machine	housekeeping practices
	such as Hg, Pb,	mist water spray	inform you, after your	was deployed or the same.	are being adopted.
	As, Cr, etc.) from	system, permanent	visit, we our self-	It was also observed that	Garland drains are
	all the sources shall be controlled	and removable water sprinklers are	inspected that area and came to know that	garland drains were also cleaned and PP assured to	cleaned on regular interval by housekeeping
	regularly	installed at different	kiln-1 iron fines	maintenance of the garland	team. Fugitive emissions
	monitored and	locations and same	transfer duct (from	drains regularly. No	are being maintained in
	data recorded	are being operated	Cooler discharge to	fugitive emissions were	prescribed limits. In
	properly. Water	and properly	Kiln feed area) got	observed near the Kiln-I	addition to that we have
	spraying arrangement on	maintained. It was also observed that	puncture that time and material was falling	area on the day of visit.	ordered advance technology to control
	haul roads, wagon	wheel wash system	from there. It was		fugitive emissions from
	loading, dump	also found installed	immediately		Sponge Iron Units and
	trucks (loading	near main gate for	rectified, by welding		same is being installed
	and unloading)	controlling of	of that puncture area.		within one month. Details
	points shall be provided and	Fugitive dust, generated from	Regarding fugitive emission near SMS		of technology is enclosed herewith.
	properly	vehicles movement.	area: - We would like		All the parameters as
	maintained.	PP has submitted the	to inform you that to		desired are being
		Fugitive Emission	control fugitive		monitored by NABL
		report for the month	emission due to		Accredited Laboratory
		of April, 2022 and it was observed that the	vehicle movements, we have installed		and data is being maintained.
		values are within the	moveable water		
		limits. However, on	sprinkler in each unit,		
		the day of visit huge	apart from water		
		fugitive emission was observed near	sprinkling by water tanker. On the day, in		
		DRI kiln-1 and Near	our SMS unit area,		
		SMS plant.	Due to vehicle		
		Té mon clas al la	movement water		
		It was also observed that Coal dust was	supply pipe line of sprinkler got disrupted		
		accumulated on the	which was rectified		
		some of the internal	immediately.		
		roads and the same	Regarding		
		was observed on the garland drains also.	accumulation of coal dust on some		
		PA has been asked	internal roads and		
		to properly	garland drains, we		
		maintain the	would like to inform		
		internal roads and	you, that apart from		
		garland drains on regular time	road cleaning by Mechanical sweeping		
		i unit	weeping	l	l

Sr. No.	Conditions	Observation reported on 26-08- 2022	Compliance status as on	Updated compliance based on ATR submitted by the PP and visit dated 14-11-2022.	Status as on April, 2023
		intervals for good housekeeping practices. (General Condition No. iv)	machine, we are doing manual cleaning of roads. In this process, after manually roads cleaning, collected road dust is being stored on corner of the roads, than it is being collected in manually operated hand trolley for safe disposed off. On your visit day also this process was operational. Now to avoid this condition, we are increasing no. of hand trollies and instructed cleaning team for its simultaneous collection also and not to leave on road corners. This system is started and we are maintaining it. Photographs of same are enclosed.		
vi.	Adequate measures shall be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in blasting and drilling operations, operation of HEM etc. shall be provided with ear plugs/muffs.	Partially complied with respect to site visit. It was observed that personal safety equipment like ear plug/muffs are also being provided for employees who are working in noise prone area. PA has been asked to submit the noise level monitoring report to the office. (General condition No. vi).	Regarding Noise level monitoring report:- We would like to inform you, that Noise level in plant area is being monitored by outside authorized agency and our Env. Lab's officers, on regular basis. Copy of report is enclosed as Annexure 4.	PP has submitted the noise level monitoring report for the month of April, 2022. The same was analyzed and found within the limits.	Noise levels are being maintained within the prescribed norms.
vii.	The Project Authorities shall advertise in newspapers – one national and two local widely circulated around the project, one of which shall be in the vernacular language of the locality concerned within seven days	Not complied with respect to site visit. PA has been asked to submit the newspaper advertisement copies in which EC was published to this office. (General condition no. xv).	Submit the copies of advertisement, published in Newspaper :-We would like to inform you, that after grant of EC, we had advertised the information of grant of EC to us, in 03 nos. newspaper, as directed. Compliance status is being	It was informed by the PP that the copies of newspaper are not traceable in their records owing to more than 12 year old record.	

Sr. No.	Conditions	Observation reported on 26-08- 2022	Compliance status as on	Updated compliance based on ATR submitted by the PP and visit dated	Status as on April, 2023
				14-11-2022.	
	of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the SPCB and may also be seen at the website of the ministry of Environment & Forest at http:envfor.nic.in The Compliance status shall also be uploaded by the project authorities in their website and regularly (at six monthly) updated so as to bring the same in the public domain. The data shall also be displayed at the entrance of the project premises and mines office and in corporate		uploaded in our website and data's are being displayed at the entrance of the plant premises. However the copies of newspaper are not traceable in our records owing to more than 12 years old records.	14-11-2022.	not traceable in our records owing to more than 12 years old records.
	office.				

(B) Ferro & Biomass Project

G	C 11/1				
Sr.	Conditions	Observation reported	Compliance status as on	Updated	Status as in April,
No.		on 26-08-2022		compliance based	2023
				on ATR submitted	
				by the PP and IRO	
				visit dated 14-11-	
				2022.	
i.	In-plant control	Partially Complied with	Regarding accumulation	On the day of	All the internal
	measures for	respect to site visit.	of coal dust on some	monitoring it was	roads are being
	checking fugitive	It was observed that mist	internal roads and	observed that all the	regularly cleaned
	emissions from all the	water spray system,	garland drains: - we	internal roads were	by dust sweeping
	vulnerable sources	installed at closed	would like to inform you,	cleaned and dust	machine. Good
	shall be provided.	conveyer belt circuit other	that apart from road	sweeping machine	housekeeping
	Fume and dust	areas, permanent and	cleaning by Mechanical	was deployed for the	practices are being
	extraction system	movable water sprinklers	sweeping machine, we are	same.	adopted.
	with bag filters shall	are also installed at	doing manual cleaning of		Strength of house
	be provided at the	required locations.	roads. In this process, after		keeping staff will
	alternate transfer and	Covered conveyer belt	manually roads cleaning,		be increased by
	discharge points to	circuit of material transfer	collected road dust is being		appointing at least
	control fugitive	& discharged points,	stored on corner of the		15 workers, out of
	emissions Further.	connected with dust	roads, and then it is being		which 90% will be

Sr. No.	Conditions	Observation reported on 26-08-2022	Compliance status as on	Updated compliance based on ATR submitted by the PP and IRO visit dated 14-11- 2022.	Status as in April, 2023
	specific measures like water sprinkling around the coal stock piles and asphalting or concreting of the roads shall be done to control to reduce the dust generation and fugitive emissions during handling	extraction system and bag filter. It was observed that all the internal roads are RCC and Mechanical Sweeping machine are deployed for cleaning the roads. In Addition to that water sprinkling system also provided. However on the day of monitoring it has been observed that coal dust was accumulated on the some of the internal roads and the same was observed on the garland drains also. PA has been asked to properly maintain the internal roads and garland drains on regular time intervals for good housekeeping practices. (Specific condition No II).	collected in manually operated hand trolley for safe disposed off. On your visit day also this process was operational. Now to avoid this condition, we are increasing no. of hand trollies and instructed cleaning team for its simultaneous collection also and not to leave on road corners. This system is started and we are maintaining it. Photographs of same are enclosed as annexure 1.		women from local area. All efforts will be taken to improve the House keeping further.
ii.	Secondary fugitive emissions from all the sources including existing sponge iron plant and captive power plant shall be controlled within the latest permissible limits, issued by the Ministry and regularly monitored. Guidelines/Code of Practice issued by the CPCB shall be followed.	Partially Complied with respect to site visit. It was observed that ESP, Bag filters, Mist Water Spray systems, Water Sprinklers etc. have been installed at DRI plant and at Power plant. PP has submitted the fugitive Emission Report and the same were found within the limit. However, on the day of visit huge fugitive emissions were observed near DRI kiln – I and near SMS plant. It was also observed that Coad dust was Accumulated on the some of the internal roads and the same was observed on the garland drains also. PA has been asked to properly maintain the internal roads and garland drains on regular time intervals for good housekeeping practices.	Regarding fugitive emission observed near the DRI Kiln -1, we would like to inform you, after your visit, we our self-inspected that area and came to know that kiln-1 iron fines transfer duct(from Cooler discharge to Kiln feed area) got puncture that time and material was falling from it. It was immediately rectified, by welding of that puncture area. Regarding fugitive emission near SMS area: - We would like to inform you that to control fugitive emission due to vehicle movements, we have installed moveable water sprinkler in each unit, apart from water sprinkling by water tanker. On the day, in our SMS unit area, Due to vehicle movement water supply pipe line of sprinkler got disrupted	On the day of monitoring it was observed that all the internal roads were cleaned and dust sweeping machine was deployed for the same. It was also observed that garland drains were also cleaned and PP assured to maintenance of the garland drains regularly. No fugitive emissions were observed near the Kiln-I area on the day of visit.	All the internal roads are being regularly cleaned by dust sweeping machine. Good housekeeping practices are being adopted. Garland drains are being cleaned on regular interval by housekeeping team. Fugitive emissions are being maintained in prescribed limits. In addition to that we have ordered advance technology to control fugitive emissions from Sponge Iron Units and same is being installed within one month.Details of technology is enclosed herewith. Strength of house keeping staff will

Sr. No.	Conditions	Observation reported on 26-08-2022	Compliance status as on	Updated compliance based on ATR submitted by the PP and IRO visit dated 14-11- 2022.	Status as in April, 2023
		(Specific condition No.iii).	which was rectified immediately.		be increased by appointing at least 15 workers, out of which 90% will be women from local area. All efforts will be taken to improve the House keeping further.
111.	All the granulated slag shall be provided to cement /brick manufacturers for manufacturing Pozzolona Slag Cement (PSC) or making bricks. No granulated slag shall be used for road construction and filling low-lying areas. All the char /Dolochar shall be used in the AFBC boiler. Hexavalent Chromium present in the slag shall be converted to trivalent Chromium; Ferro chrome shall be stored in secured landfill as per the CPCB guidelines. Bottom ash shall be disposed off in a suitably designed landfill as per CPCB guidelines to prevent leaching to the sub- soil and underground aquifer ETP sludge after drying shall be used as fertilizer for green belt development Used oil shall be sold to recyclers and pre- processors.	Partially Complied with respect to site visit. It was informed that generated slag from Ferro alloys unit disposed off in a safe and scientific manner for leveling of low laying areas inside and outside plant. Bottom ash generated 08 MW Biomass based power plant is being used in our fly ash bricks plant as a Raw material. Generated used oil is being used for lubrication in roller conveyer as well as belt conveyer of the plat and balance if any is being sold to recyclers/Authorized Agencies. Generated Char/ Dolochar is being used in our AFBC boiler of Borjhara and Gondwara unit (Coal based Power Plant). On the day of monitoring it has been observed that 2 no. DRI kilns of 350 TPD found installed and operational. It was also observed that char dust was stored inside at backside of the plant premises. PA has been asked to submit the reasons for dumping the Char inside the plant premises and ATR shall be submitted for its utilization and its proper disposal to this office. (Specific condition No. vi).	Regarding operation of 2 nos. DRI Kilns of 350 TPD each, we would like to inform you, that our Both 350 TPD capacity DRI Kilns has been installed in 2005 and we have already granted CTE and CTO from Head office, Chhattisgarh Environment Conservation Board, Raipur (C.G.) and regularly granting their Renewals, latest renewal is valid up to May, 2023. Regarding Char accumulation observed at back side of the plant area, we would like to inform you that, our char generation is about 200 T/Day, which is being stored at covered shed area at RM Yard and being used in our 8 MW Bio Mass based power plant at Borjhara unit and 16 MW AFBC power plant in Gondwara unit as a raw material. During the month of July-August'22, there was 25 day shutdown in our both 16 MW AFBC power plant and 8 MW Biomass base power plant. Intimation of the same was given to respected state pollution control board (copied enclosed as annexure 2). Hence, resulting accumulation of huge amount of char. However these accumulated char is our raw material for both plant	On the day of monitoring it was observed that all the internal roads were cleaned and dust sweeping machine was deployed or the same. It was also observed that most of char dust was removed from back side of the plant and it was informed that the same is being used as raw material in their power plant. PP has also submitted the copy of letter and copy of e-mail communication intimating to RO, CECB regarding shut down of 16 MW in the month of July & August, 2022.	All the internal roads are regularly being cleaned by dust sweeping machine. Good housekeeping practices are being adopted. Garland drains are cleaned on regular interval by housekeeping team. Dolochar is being consumed on regular basis in captive 8 MW bio- mass power plant and 16 MW coal based power plant of sister concern. No stock of dolochar is accumulated in site plant premises.

Sr. No.	Conditions	Observation reported on 26-08-2022	Compliance status as on	Updated compliance based on ATR submitted by the PP and IRO visit dated 14-11- 2022.	Status as in April, 2023
			and we are using that by blending it with our fresh generated char and being consumed now.		
iv.	The overall noise levels In and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (night time).	Partially Complied with respect to site visit. It was observed that personal safety Equipment like ear plug/ Muffs are also being provided employees who are working in Noise prone area. PA has been asked to submit the noise level monitoring report to this office. (General condition – vii).	Regarding Noise level monitoring report:- We would like to inform you, that Noise level in plant area is being monitored by outside authorized agency and our Env. Lab's officers, on regular basis. Copy of report is enclosed as annexure 3.	PP has submitted the noise level monitoring report for the month of April, 2022. The same was analyzed and found within the limits.	Noise levels are being maintained within the prescribed norms.
v.	The Project Authorities shall inform the Regional office as well as ministry, the date of Financial closure and Final approval of the project by the concerned authorities and the date of commencing the land development work.	Partially Complied with respect to site visit. PP has submitted the date off commencing date to this office. Details pertains to the financial closures were not provided. (General condition No. xiv).	We would like to inform you that we had submitted document related to financial closures. However the copies are not traceable in our records owing to more than 14 years old records.	It was informed by PP that the copies are not traceable in their records owing to more than 14 year old records.	We would like to inform you that we had submitted document related to financial closures. However the copies are not traceable in our records owing to more than 14 years old records.

Written representations:

- 26.4.19 During the meeting, based on the deliberations made by the EAC, the project proponent vide letter dated 12.04.2023 through email dated 13.04.2023 submitted the following information:
 - An undertaking dated 12.04.2023 by the project proponent seeking apology for violation and undertaking that in future they will not make any further violation.
 - Regarding 40% of Plantation inside the Plant area, PP hereby confirm that at present there are about 27,000 well grown trees on 10.49 ha. of land inside the Plant premises. Total Plant area is 31.8 ha out of which PP has developed 33% i.e. 10.49 ha. Green belt. As per CPCB guidelines total 31,800 number of trees required on 12.72 ha. i.e. 40% of total Plant area. PP hereby confirm that they shall plant additional 5,000 trees (5 to 6 feet each) in existing green belt area i.e. 10.49 ha. PP also confirms that in addition to this they shall develop and

maintain plantation on 2.5 ha. land in Village - Bendri, Distt: Raipur (C.G.) as committed. Total number of trees in additional land will be 6,250 Nos. Total Plantation area will be inside (10.49 ha) & outside (2.5 ha) with total number of 38,250 trees.

- Revised Damage and Remediation Cost as updated in para 26.4.17 above.
- Configuration as per the proposal discussed in REAC Industry 1, 35th Meeting dated 30th April 2021 and Project under consideration in 26th meeting of REAC Industry I held on 12th April 2023 as updated in para 26.4.8 above.
- Details of court case as per the SOP of OM No. 22-21/2020-IA-Til dated 7 July 2021 as updated at para 26.4.17 above.
- Present status of the compliance of the condition after IRO's Raipur visit on 14.11.2022 and visit report dated 23.11.2022 as updated at para 26.4.18 above.

Deliberations by the Committee

- 26.4.20 The Committee noted the following:
 - 1. The instant proposal is for expansion of Integrated Steel Plant as detailed in para 26.4.8 above.
 - 2. The existing project was accorded environmental clearance vide lr.no. J-11011/531/2007-IA.II (I) dated 17.01.2008 & J-11015/159/2009-IA.II (M) dated 28.1.2010 & J-11015/159/2009-IA.II (M) dated 26.8.2013. Latest Renewal to Consent to Operate for the existing unit was accorded by Chhattisgarh Environment Conservation Board vide lr. No. 4657/TS/CECB/2022 dated 07.10.2022 for Steel Melting Shop 1.2960 MTPA. The validity of CTO is up to 31.08.2023. Latest Renewal of Consent to Operate (for Both Air & Water) is granted vide letter no. 8545/TS/CECB/2023 dated 07.03.2023 for SID (0.21 MTPA) and WHRB based Power Plant (18 MW) valid up to 31.03.2024. Latest Renewal of Consent to operate (for both air & water) is granted vide letter No. 1041/TS/CECB/2022 dated 04.06.2021 for Ferro alloys 14,400 MTPA and Biomass based Power Plant 8 MW valid from 31.05.2022 to 30.05.2023. Latest Renewal of Consent to Operate (for air and water) is granted vide letter No. 6991/TS/CECB/2023 dated 03.01.2023 for Coal washery 0.6 MTPA and Hot Re-rolling Mill Plant 0.12 MTPA valid from 01.01.2022 to 31.12.2023.
 - 3. 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.
 - 4. 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.
 - 5. 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.

- 6. Total land required for the project is 31.8 ha [12.465 ha allotment is done by Chhattisgarh State Industrial Development Corporation (CSIDCL) and the balance 19.335 ha area is Private Purchased diverted for Industrial use.] and is completely under the possession of the company and is industrial land. Proposed expansion will be done within the existing plant premises.
- 7. Chronology of Expansion Proposal:
 - M/s Shri Bajrang Power and Ispat Ltd. had earlier applied for grant of ToR vide proposal no. IA/CG/IND/67789/2017 dated 31.08.2017 for expansion of Integrated Steel Plant (Sponge Iron 0.21 to 0.264 MTPA; Steel Melting 0.129 to 0.211 MTPA; Ferro Alloy- 0.0144 to 0.0198 MTPA; Rolling Mill- 0.15 to 0.21 MTPA; New Pellet plant 0.6 MTPA with coal gasifier from alternative fuel) located at village Borjhara, in Urla Industrial Complex, Raipur, Chhattisgarh. Accordingly, Terms of Reference was issued vide letter no. J-11011/531/2007-IA.II (I) dated 20.10.2017.
 - M/s. Shri Bajrang Power & Ispat Limited vide online proposal no. IA/CG/IND/142035/2020 dated 10/02/2020 applied for amendment in ToR dated 20/10/2017 w.r.t. change in configuration and the production capacities and other amendments alongwith validity extension of ToR for another one year. Accordingly, letter was issued by the Ministry vide letter no. J-11011/531/2007-IA.II (I) dated 09.04.2020 with validity of ToR extended upto 19.10.2021 with changes in configuration / production capacities involving expansion of Integrated Steel Plant (Sponge Iron 0.21 to 0.264 MTPA; Steel Melting 0.129 to 0.211 MTPA; Ferro Alloy- 0.0144 to 0.0198 MTPA; Rolling Mill- 0.15 to 0.21 MTPA; New Pellet plant 0.6 MTPA with coal gasifier from alternative fuel), 26 MW Captive Power Plant (WHRB 18 MW; Biomass 8 MW, Iron washery plant of 4,00,000 TPA, Titanium slag plant of 36,000 TPA and pig iron plant plant of 20,000 TPA.
 - Thereafter, M/s Shri Bajrang Power and Ispat Ltd. applied for Environment Clearance vide proposal no. IA/CG/IND/193265/2007 dated 09/04/2021 and the proposal was considered during 35th meeting of the Re-constituted EAC (Industry-I) held on 30th April, 2021 wherein the Committee recommended the proposal to be returned in its present form to address the technical shortcomings.
 - The project proponent applied vide Proposal No. IA/CG/IND/291775/2022 dated 15.09.2022 for seeking modification in ToR dated 20.10.2017 and subsequent amendment dated 09.04.2020 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 the company has installed Iron Ore Washery Plant and had run the plant for 1 month. The raw materials arrived at site and its quality was degrading day by day, so PP run the plan on trial basis for one month just to utilize that material. The PP has now stopped the operation activity. PP is ready to comply all the points of TOR for Violation Project and follow SOP dated 07.07.2021 for identification & handling of

Violation cases under EIA notification 2006. The proposal was considered during 14th Meeting of the EAC (Industry-I) held during 29th-30th September 2022 and after deliberations, the Committee recommended for modification in ToR dated 20.10.2017 and subsequent amendment dated 09.04.2020 w.r.t. 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 with stipulation of the additional specific conditions.

• Accordingly, the damage analysis report comprising of remediation plan and natural and community resource augmentation plan corresponding to the ecological damage assessed and economic benefits derived due to violation. is as follows:

	Carried Out Under Violation							
Sr.	Environmental	Total Damage Cost (Rs.)	Total Remediation Plan					
No.	Component		Cost (Rs.)					
1	Air Environment	PP has installed and utilized 30 No. of water sprinklers covering working area for construction of Iron Ore Washing Plant. In addition to this one mobile water tanker is also used for dust suppression during construction period. Hence no damage on air environment is considered. Damage Cost During Operation Phase=23.88Lakh	Rs. 1,06,000/- for sprinklers and baricates Rs. 28,00,000/ for Green Belt in and around the plant					
2	Noise	Non-availability of PPEs	Rs. 50,000/-					
	Environment	Damage cost = Rs. $50,000/-$						
3	Water Environment	Rs. 1088718/- for water consumed during construction and operation phase	Rs. 290 lakhs, provisions made in EMP (240 lakhs) for STP/ETP and rainwater harvesting (50 lakhs +Rs.15000/-					
4	Land Environment	Rs. 2520/-	Rs. 30,000/-					
5	Solid & Hazardous waste	Rs. 17800/-	Rs. 70,000/-					
6	Biological Environment	Deficiate plantation and greenbelt in and around the plant (800 trees) Rs. 4,00,000/-	Rs. 28,00,000 (28.0 lakhs) for plantation and green belt in and around the plant (provision in EMP)					
7	Socio-economic Environment (occupational health)	25,000/-	Rs. 35,000/-					
8	Energy Consumption	Rs. 1,53,000/-	Rs. 2,50,000/- solar system					

Total Damage and Remediation Cost For Construction Activities and Trial Run Carried Out Under Violation

Sr.	Environmental	Total Damage Cost (Rs.)	Total Remediation Plan
No.	Component		Cost (Rs.)
	Total	Rs. 41.25 lakhs.	Rs. 556000 +318 lakhs (provision for STP, ETP, RWH and plantation and greenbelt in and around plant site (290+28=318 lakhs)

Summary of Remediation Plan, Natural Resource and Community Augmentation Plan

Sr.	Activity Proposed	Total (Rs.)
No.		
1.	Cost of damage /	5,56,000 (excluding provisions of EMP cost of Rs. 318 lakhs)
	Remediation plan	for STP, ETP, RWH and deficiate plantation in and around
		plant site
2.	Natural Resource	Rs. 19,25,000/-
	Augmentation Plan	
3.	Community	Rs. 37,00,000/-
	Augmentation Plan	
	Sub Total (A)	Rs. 61,81,000/-

Details of Penalty to be paid as per SOP of Office Memorandum No. F.No. 22-21/2020-IA-III dated July 7, 2021 regarding the subject matter of "Standard Operating Procedure (SOP) per identification and handling of violation cases under EIA Notification 2006 in compliance to order of Hon'ble National Green Tribunal in O.A. No. 34/2020 WZ-Regarding, Penalty Provisions for violation cases

S.N.	Description	Amount
1.	1% of total amount invested in construction of Iron Ore Washing Plant. Total amount invested: Rs. 2,64,16,273 1 % of 2,64,16,273	Rs. 2,64,162.73
2	0.25% of total turn over The plant was operated on trial bases for 1 month only. Total Iron ore washed for 5000 T. Cost of washed Iron Ore: Rs. 6000/T. Total Turn over: Rs. 3,00,00,000 0.25% of Rs. 3,00,00,000	Rs. 75,000
	Sub Total (B)	Rs. 3,39,162.73
	Grand Total (A+B)	Rs. 65,20,163

The Committee deliberated on the damage assessment report comprising of remediation plan and natural and community resource augmentation plan and found it satisfactory.

8. The project falls under Critically Polluted area of Raipur District of Chhattisgarh. PP shall comply to the CEPI Guidelines as per CPCB recommendations.

- 9. The nearest habitation to plant is Urla at a distance of 1 km in the East direction of the project site. The EAC is of the opinion that PP shall strictly implement the environmental safeguard measures proposed to minimise the impact on the habitation of the locals.
- 10. Distributary Nallah is adjacent to the project site in the West direction and Kharun River at a distance of 2.5 km in the NNW direction within 10 Km. radius of the plant site. The EAC is of the opinion that as submitted 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.
- 11. The existing Water requirement of 2442 m^3/day is obtained from Kharun River and permission for the same has been obtained from water resource department Chhattisgarh vide letter no. 302 dated 6.10.2004. The water requirement for the proposed project is estimated as 1065 m^3/day , which is proposed to be met from Kharun River.
- 12. Presently, there are about 27,000 well grown trees on 10.49 ha. of land inside the Plant premises. Total Plant area is 31.8 ha out of which PP has developed 33% i.e. 10.49 ha. Green belt. As per CPCB guidelines total 31,800 number of trees required on 12.72 ha. i.e. 40% of total Plant area. PP commits that they will plant additional 5,000 trees (5 to 6 feet each) in existing green belt area i.e. 10.49 ha. PP also commits that in addition to this they will develop and maintain plantation on 2.5 ha. land in Village Bendri, Distt: Raipur (C.G.) as committed. Total number of trees in additional land will be 6,250 Nos. Total Plantation area will be inside (10.49 ha) & outside (2.5 ha) with total number of 38,250 trees. The committee deliberated on the revised greenbelt development plan found it satisfactory.
- 13. The Committee has found that the baseline data and incremental GLC due to the proposed project within NAAQ standards.
- 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 along with the village adoption programme and found it satisfactory.
- 16. The Committee deliberated on the certified compliance report of IRO along with the ATR and updated status as submitted by the project proponent and is of the opinion that PP shall strict continue to comply with the observation made by IRO.
- 17. The EAC deliberated on the written submission of project proponent and found it satisfactory.
- 18. 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.
- 19. 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

26.4.21 In view of the foregoing and after detailed deliberations, the committee **recommended** the instant proposal for grant of Environment Clearance under the provisions of EIA Notification, 2006 subject to 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 conditions:

- (i) The State Government/SPCB to take action against the project proponent under the provision of section 19 of the Environment (Protection) Act, 1986. PP shall also strictly comply with other ToR conditions related to violation.
- (ii) The PP 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.
- (iii) 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.
- (iv) 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.
- (v) The total amount of Rs. 61.81 Lakhs shall be spent on Remediation plan and Natural Resource Augmentation Plan and Community Resource Augmentation Plan which shall be implemented as per the action plan details given in EIA Report and summarized below:

	Carried Out Under Violation			
Sr.	Environmental	Total Damage Cost (Rs.)	Total Remediation Plan	
No.	Component		Cost (Rs.)	
1	Air Environment	PP has installed and utilized 30 No. of water sprinklers covering working area for construction of Iron Ore Washing Plant. In addition to this one mobile	and baricates	
		water tanker is also used for dust suppression during construction period. Hence no damage on air environment is considered.		

Total Damage and Remediation Cost For Construction Activities and Trial Run Carried Out Under Violation

Sr.	Environmental	Total Damage Cost (Rs.)	Total Remediation Plan
No.	Component		Cost (Rs.)
		Damage Cost During Operation Phase=23.88 Lakhs	
2	Noise Environment	Non-availability of PPEs Damage cost = Rs. 50,000/-	Rs. 50,000/-
3	Water Environment	Rs. 1088718/- for water consumed during construction and operation phase	Rs. 290 lakhs, provisions made in EMP (240 lakhs) for STP/ETP and rainwater harvesting (50 lakhs +Rs.15000/-
4	Land Environment	Rs. 2520/-	Rs. 30,000/-
5	Solid & Hazardous waste	Rs. 17800/-	Rs. 70,000/-
6	Biological Environment	Deficiate plantation and greenbelt in and around the plant (800 trees) Rs. 4,00,000/-	Rs. 28,00,000 (28.0 lakhs) for plantation and green belt in and around the plant (provision in EMP)
7	Socio-economic Environment (occupational health)	25,000/-	Rs. 35,000/-
8	Energy Consumption	Rs. 1,53,000/-	Rs. 2,50,000/- solar system
	Total	Rs. 41.25 lakhs.	Rs. 556000 +318 lakhs (provision for STP, ETP, RWH and plantation and greenbelt in and around plant site (290+28=318 lakhs)

Summary of Remediation Plan, Natural Resource and Community Augmentation Plan

Sr.	Activity Proposed	Total (Rs.)
No.		
1.	Cost of damage /	5,56,000 (excluding provisions of EMP cost of Rs. 318
	Remediation plan	lakhs) for STP, ETP, RWH and
		plantation in and around plant site
2.	Natural Resource	Rs. 19,25,000/-
	Augmentation Plan	
3.	Community Augmentation	Rs. 37,00,000/-
	Plan	
	Sub Total (A)	Rs. 61,81,000/-

Details of Penalty to be paid as per SOP of Office Memorandum No. F.No. 22-21/2020-IA-III dated July 7, 2021 regarding the subject matter of "Standard Operating Procedure (SOP) per identification and handling of violation cases under EIA Notification 2006 in compliance to order of Hon'ble National Green Tribunal in O.A. No. 34/2020 WZ-Regarding, Penalty Provisions for violation cases

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2	 0.25% of total turn over The plant was operated on trial bases for 1 month only. Total Iron ore washed for 5000 T. Cost of washed Iron Ore: Rs. 6000/T. Total Turn over: Rs. 3,00,00,000 0.25% of Rs. 3,00,00,000 	Rs. 75,000
	Sub Total (B)	Rs. 3,39,162.73
	Grand Total (A+B)	Rs. 65,20,163

- (vi) The project proponent shall submit a bank guarantee of an amount of Rs. 81.61 lakhs towards Remediation plan and Natural and Community Resource Augmentation plan with the SPCB prior to the grant of environmental clearance (EC) as per Notification dated 14.03.2017.
- (vii) Project proponent shall ensure that the plan shall be completed in three years whereas the bank guarantee shall be for five years. The bank guarantee shall be released by the SPCB after successful implementation of Remediation plan, Natural Resource Augmentation Plan and Community Resource Augmentation plan.
- (viii) The nearest habitation to plant is Urla at a distance of 1 km in the East direction of the project site. Project Proponent shall prepare and implement 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.
- (ix) 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 included in the EIA/EMP report. Greenbelt shall be planned in 40% of the project area. Allocation for socio economic development of nearby villages shall be 1.5 times of the normal calculated amount.
- (x) Distributary Nallah is adjacent to the project site in the West direction and Kharun River at a distance of 2.5 km in the NNW direction 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 existing water requirement of 2442 m³/day and for proposed project of 1065 m³ /day shall be met from Kharun River after obtaining necessary permission from the Competent Authority.

- (xii) The PP shall undertake village adoption and formulate Village Adoption program consisting of need-based community development activities, shall be prepared to develop them into model villages.
- (xiii) All the observations stated in the certified compliance report of IRO dated 14.11.2022 shall be complied with as committed. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.
- (xiv) Three tier Green Belt shall be developed in a atleast 40% of total project area as per the plan 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. PP shall develop greenbelt in the form of shelter belt comprising of total of 6 rows of 2x2 m plantation with tall trees & broad leaves with thick canopy alongwith windshield inside the plant premises to act as green barrier for air pollution & noise levels towards Urla village. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.
- (xv) Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface.
- (xvi) Rejects from coal washery shall only be used either in the captive power plant (or) in the Thermal Power Plants meeting emission standards.
- (xvii) Solid waste utilization
 - PP shall install a slag crusher to convert steel slag into aggregate for use in construction industry, fine sand for use as flux in steel plant, sand in brick making and as lime in cement making.
 - PP shall recycle/reuse solid waste generated in the plant as far as possible.
 - Used refractories shall be recycled as far as possible.
- (xviii) Sinter Plant shall be equipped with Sinter cooler waste recovery system and suitable technology for control of dioxins and furans emissions from the plant.
- (xix) Following additional arrangements to control fugitive dust shall be provided:
 - a. Fog / Mist Sprinklers at all 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 with complete recirculation system.
- (xx) Secondary fume extraction system shall be installed on converters of Steel Melting Shop.
- (xxi) Electric Arc Furnace shall be closed type with 4th hole extraction system.
- (xxii) 85-90 % of billets shall be rolled directly in hot stage. RHF shall operate using only Light Diesel Oil or Mixed BF/CO gas/Producer gas.
- (xxiii) Dust emission from all the stacks shall be less than 30 mg/Nm³.
- (xxiv) Carbon-monoxide sensors with alarm for criticality should be installed at strategic locations in the Plants and monitored.
- (xxv) Air Cooled condensers shall be used in the captive power plant.
- (xxvi) During operational phase at Captive Power Plant, PP shall measure coal dust exposures and to maintain coal dust exposures within stipulated standards at coal handling areas. PP shall identify extreme hot areas through heat stress survey as well as noise monitoring within

process plants to ensure that workers not exposed above 90 dBA levels as per Factories Act, 1948.

- (xxvii) Action Plan for fire fighting system including provision for flame detectors, temperature actuated heat detectors with alarms, automatic sprinkler system, fixing the location of fire water tanks, separate power system for fire fighting, involvement of qualified and trained fire personnel, nearest fire station & time required to reach the proposed site shall be prepared and implemented.
- (xxviii) Rain water harvesting shall be implemented to recharge/harvest water as per the action plan submitted in the EIA/EMP report.
- (xxix) The proposed project shall be designed as "Zero Liquid Discharge" Plant. ETP shall be installed and there shall be no discharge of effluent from the plant. Domestic effluent shall be treated in Sewage Treatment Plant. MSW waste shall be treated in digester and recovered gas shall be used in the canteen.
- (xxx) A proper action plan must be implemented to dispose of the electronic waste generated in the industry.
- (xxxi) 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.
- (xxxii) 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.
- (xxxiii) 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 04 Nos. Continuous Ambient Air Quality Station (CAAQS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- iii. Sampling facility at process stacks and at quenching towers shall be provided as per CPCB guidelines for manual monitoring of emissions.
- iv. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- v. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.
- vi. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
- vii. Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration.
- viii. The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.
- ix. Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.
- x. 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.

- The project proponent shall monitor regularly ground water quality at least twice a year (pre- and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.
- iii. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
- iv. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.
- v. Tyre washing facilities shall be provided at the entrance of the plant gates.
- vi. Water meters shall be provided at the inlet to all unit processes in the steel plants.

IV. Noise monitoring and prevention

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

V. Energy Conservation measures

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

VI. Waste management

- i. Oil Collection pits shall be provided in oil cellars to collect and reuse/recycle spilled oil. Oil collection trays shall be provided under coils on saddles in cold rolled coil storage area.
- ii. Kitchen waste shall be composted or converted to biogas for further use.

VII. Green Belt

- i. Green belt shall be developed in an area equal to 33% of the plant area with native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant
- ii. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the program for reduction of the same including carbon sequestration by trees in the plant premises.
- 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.

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.
- 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.
- 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.
- 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. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- x. 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 to public/public domain.
- 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.

Agenda No. 26.5

26.5 Amendment in EC of Integrated Steel Plant 6 MTPA and Captive Power Plant 810 MW by M/s Jindal Steel and Power Ltd. at Angul, State Odisha-Consideration of Amendments in EC proposal.

[Proposal No. IA/OR/IND/298472/2023; File No. J-11011/365/2006-IA.II(I)]

26.5.1 M/s Jindal Steel & Power Limited has made an online application vide proposal no. IA/OR/IND/296415/2023 dated 23.03.2023 along with Form-4 and addendum EIA Report and sought for amendment in Environment Clearance accorded by the Ministry vide letter no. J-11011/365/2006-IA.II (I) dated 14.03.2022 w.r.t. change in land requirement from 2213 acres to 2010.27 acres.

Details submitted by Project proponent

- 26.5.2 M/s. Jindal Steel and Power Limited was originally accorded environmental clearance vide letter no. J-11011/365/2006 dated 22/02/2007 and amended on 14/11/2008, 08/02/2017, 26/06/2018, 22/01/2019 and 18/01/2021 for 6 MTPA Integrated Steel plant at Angul Odisha. M/s Jindal Steel & Power Limited then applied for splitting of the original EC dated 2007 and subsequent amendments and partially transferring the Pellet Plant and Hot Strip Mill from JSPL to M/s Jindal Steel Odisha Ltd. (JSOL), a wholly owned subsidiary of JSPL. Accordingly, part transfer of the said facilities was granted to M/s. JSOL and subsequently the EC of M/s. Jindal Steel and Power Limited was amended with exclusion of said facilities vide letter dated 14.03.2022 which also included inter-alia, transfer of project land of 86.68 acres to M/s. JSOL out of total land of 2300 acres. Thus M/s. Jindal Steel and Power Limited were left with 2213 acres of land as per EC amendment letter dated 14.03.2022.
- 26.5.3 The instant proposal is for seeking amendment in EC dated 22/02/2007 and subsequent amendments dated 14/11/2008, 08/02/2017, 26/06/2018, 22/01/2019, 18/01/2021 and 14.03.2022 w.r.t. change in land requirement from 2213 acres to 2010.27 acres for existing 6 MTPA Integrated Steel plant of JSPL located at Angul, Odisha. The balance land of 202.73 acres is proposed to be utilized by M/s Jindal Steel Odisha Ltd. (JSOL) for its expansion project involving expansion of its Pellet Plant and Hot Strip Mill to an Integrated Steel Plant of 19.2 MTPA and a Cement Plant of 12.5 MTPA at Angul. The expansion project of M/s JSOL has been deliberated and recommended by the Expert Appraisal Committee (Industry-1) during its meeting held on 22.03.2023. The distribution of land among M/s. JSPL and M/s. JSOL after proposed expansion proposal is as follows:

	Land details as per EC Amendment	of JSOL and	l after expansion amendment in L EC	Remarks
	dated 14.03.2022	JSPL	JSOL	
JSPL (6 MTPA Steel Plant)	2213	2010.27	202.73	• 202.73 acres of land from existing 6 MTPA Steel
JSOL (Pellet Plant & HSM)	86.68	0	86.68	 plant of JSPL will be subleased to JSOL for the proposed expansion project. Govt. of Odisha vide its letter dated 21.06.2022 allowed JSPL to sub-lease the land measuring 2120.325 acres to JSO
Total	2300	2010.27	289.41	

- 26.5.4 Due to the proposed changes in the land area, the green belt area will reduce from 702 acres to 672 acres as around 30 acres of greenbelt are will be transferred to M/s. JSOL. The project proponent has also submitted an undertaking dated 22.03.2023 to maintain 33% greenbelt area in the total plant areae of 2010.27 acres.
- 26.5.5 There is no change in configuration & capacity of units in granted EC.
- 26.5.6 It has been reported by PP that, directions vide letter no. 22424 dated 01.12.2022 were issued by Odisha State Pollution Control Board and subsequently OSPCB through its latest directions vide letter no. 3804 dated 17.03.2023 has issued time frame for implementation of the directions. In this regard, JSPL has submitted the undertaking to the SPCB to comply with the same in bound manner.

Deliberation by the Committee

- 26.5.7 The Committee noted the following:
 - M/s. Jindal Steel and Power Limited was originally accorded environmental clearance vide letter no. J-11011/365/2006 dated 22/02/2007 and amended on 14/11/2008, 08/02/2017, 26/06/2018, 22/01/2019 and 18/01/2021 for 6 MTPA Integrated Steel plant at Angul Odisha. M/s Jindal Steel & Power Limited then applied for splitting of the original EC dated 2007 and subsequent amendments and partially transferring the Pellet Plant and Hot Strip Mill from JSPL to M/s Jindal Steel Odisha Ltd. (JSOL), a wholly owned subsidiary of JSPL. Accordingly, part transfer of the said facilities was granted to M/s. JSOL and subsequently the EC of M/s. Jindal Steel and Power Limited was amended with exclusion of said facilities vide letter dated 14.03.2022 which also included interalia, transfer of project land of 86.68 acres to M/s. JSOL out of total land of 2300 acres. Thus M/s. Jindal Steel and Power Limited were left with 2213 acres of land as per EC amendment letter dated 14.03.2022.

- ii. The instant proposal is for seeking amendment in EC dated 22/02/2007 and subsequent amendments dated 14/11/2008, 08/02/2017, 26/06/2018, 22/01/2019, 18/01/2021 and 14.03.2022 w.r.t. change in land requirement from 2213 acres to 2010.27 acres for existing 6 MTPA Integrated Steel plant of JSPL located at Angul, Odisha. The balance land of 202.73 acres is proposed to be utilized by M/s Jindal Steel Odisha Ltd. (JSOL) for its expansion project involving expansion of its Pellet Plant and Hot Strip Mill to an Integrated Steel Plant of 19.2 MTPA and a Cement Plant of 12.5 MTPA at Angul. The distribution of land among M/s. JSPL and M/s. JSOL after proposed expansion proposal is as detailed in para 26.5.3 and 26.5.4 above.
- iii. The EAC noted that the expansion project of M/s JSOL has been deliberated and recommended by the Expert Appraisal Committee (Industry-1) during its meeting held on 22.03.2023. The EAC also noted that the EAC (Industry-1) sub-committee has visited the project site of M/s Jindal Steel Odisha Limited (JSOL), on 21-22nd February 2023, located at Villages Basudevpur, Panpur, Kaliakata Jungle, Badakerjang, Badakerjang Jungle, Jamunda, Jamunda Jungle, Paripara and Jarada, Tehsil: Chhendipada& Banarpal, District Angul, Odisha. The PP shall implement all the recommendations of the visit report of sub committee of EAC.
- iv. Due to the proposed changes in the land area, the green belt area will reduce from 702 acres to 672 acres as around 30 acres of greenbelt are will be transferred to M/s. JSOL. The project proponent has also submitted an undertaking dated 22.03.2023 to maintain 33% greenbelt area in the total plant area of 2010.27 acres.
- v. The EAC also recorded that there is no further change in configuration & capacity of units in granted EC to M/s. JSPL.
- vi. The EAC noted that directions vide letter no. 22424 dated 01.12.2022 were issued by Odisha State Pollution Control Board and subsequently OSPCB through its latest directions vide letter no. 3804 dated 17.03.2023 has issued time frame for implementation of the directions. In this regard, JSPL has submitted the undertaking to the SPCB to comply with the same in bound manner.

Recommendations of the Committee

26.5.8 After deliberations, the Committee **recommended** the proposal for amendment in EC granted vide letter no. J-11011/365/2006 dated 22/02/2007 and subsequent amendments dated 14/11/2008, 08/02/2017, 26/06/2018, 22/01/2019, 18/01/2021 and 14.03.2022 w.r.t. change in land requirement from 2213 acres to 2010.27 acres for existing 6 MTPA Integrated Steel plant of JSPL located at Angul, Odisha as detailed in para 26.5.3 and 26.5.4 above. The PP shall implement all the recommendations of the visit report of sub committee of EAC.

Consideration of Modification in ToR Proposal

Agenda No. 26.6

26.6 Greenfield Project for Installation of Production Facilities for Pelletization Plant (0.60 MTPA), DRI Plant (0.42 MTPA), SMS with Caster (0.25 MTPA), Captive Power Plant of 85 MW (WHRB#32 MW & Coal & Dolochar based#53 MW), Rolling Mill (0.20 MTPA), Mini Blast Furnace (0.26 MTPA), Sinter Plant (0.40 MTPA), DIP Plant (0.24 MTPA), PGP (3x8000 Nm3/hr) & Coal Washery Unit (0.98 MTPA)" by M/s Swadesh Metallics Pvt Ltd., located at Village-Kesda, Tehsil-Simga, District-Balodabazar-Bhatapara, Chhattisgarh-Consideration of Modification in TOR proposal.

[Proposal No. IA/CG/IND/298639/2023; File No. F. No. IA-J-11011/46/2021-IA-II(I)]

26.6.1 M/s Swadesh Metallics Private Limited., has made an application online vide proposal No:-IA/CG/IND/298639/2023, dated 31.03.2023 along with Form-3 and revised PFR and sought for amendment in Terms of Reference accorded by the Ministry vide no. IA-J-11011/ 46/2021-IA-II(I) dated 13.10.2021 w.r.t. changes in the configuration / capacity of proposed project pertaining to surrender of RHF unit, change in capacity of billets production & Power Plant and reduction of project land area from 84.98 ha to 58.68 ha.

Details submitted by Project proponent

- M/s. Indoves Industrial Pvt. Ltd. had earlier applied for Terms of Reference vide proposal no. IA/CG/IND/227899/2023, dated 06.09.2021 for Greenfield project for Installation of Iron Ore Pellet Plant (0.6 MTPA), DRI Plant (0.42 MTPA), SMS with Caster (0.6 MTPA), Rolling Mill (0.20 MTPA), RHF unit (0.36 MTPA), Blast Furnace (0.26 MTPA), Sinter Plant (0.40 MTPA), DIP Plant (0.24 MTPA), Coal Washery Unit (0.98 MTPA) with Captive Power Plant (97 MW)" for producing TMT bar, wire rods, steel bar coils and de-coiled bars and Ductile Iron Pipes located at Village Kesda, Tehsil-Simga, District-Balodabazar-Bhatapara, Chhattisgarh. Accordingly, ToR was granted by the Ministry vide no. IA-J-11011/ 46/2021-IA-II(I) dated 13.10.2021.
- 26.6.3 The instant proposal is for seeking amendment in ToR dated 13.10.2021 w.r.t. changes in the configuration / capacity of proposed project pertaining to dropping of RHF unit, change in capacity of billets production & Power Plant and reduction of project land area from 84.98 ha to 58.68 ha as detailed below.

S. No.	Description	Confiiguration as per ToR dated 13.10.2021	Amendment Details	Final capapcity after proposed modification
1.	Iron Ore	1 x 0.6 MTPA	No change	1 x 0.6 MTPA
	Pelletization Plant		0	
	(With Grinding	(Capacity- 0.6 MPTA)		(Capacity- 0.6 MPTA)
	Unit)			
2.	DRI Plant (Sponge	4 x 350 TPD Kiln	No change	4 x 350 TPD Kiln
	Iron)	(Capacity- 0.42 MPTA)		(Capacity- 0.42 MPTA)

S. No.	Description	Confiiguration as per ToR dated 13.10.2021	Amendment Details	Final capapcity after proposed modification
3.	SMS with Caster (With Caster 6x11,	IF -12x15 tonnes	IF – 6x15 tonnes = 0.25 MTPA	IF – 6x15 tonnes
	3 strands)	(Capacity- 0.6 MPTA)	(Reducing Capacity)	(Capacity- 0.25 MPTA)
4.	Rolling Mill	600 TPD	No change	600 TPD
		(Capacity- 0.20 MPTA)		(Capacity- 0.20 MPTA)
5.	RHF unit	2x600 TPD	Dropping	-
		(Capacity- 0.36 MPTA)		
6.	Blast Furnace	250 m^3	No change	250 m^3
		(Capacity- 0.26 MPTA)		(Capacity- 0.26 MPTA)
7.	Sinter Plant	45 m^2	No change	45 m^2
		(Capacity- 0.40 MPTA)		(Capacity- 0.40 MPTA)
8.	DIP Plant	2 x 400 TPD	No change	2 x 400 TPD
		(Capacity- 0.24 MPTA)		(Capacity- 0.24 MPTA)
9.	Coal Washery	(Capacity- 0.98 MPTA)	No change	(Capacity- 0.98 MPTA)
10.	Captive Power	52 MW-WHRB	32 MW (WHRB	32 MW (WHRB
	Plant	3 x 15 MW- CFBC	Boiler)	Boiler)
			53 MW based on	53 MW based on
		(Capacity- 97 MW)	dolochar and coal	dolochar and coal
			(AFBC Boiler) –	(AFBC Boiler)
			Reducing	
			Capacity	(Capacity- 85 MW)
11.	Producer Gas	8000 Nm ³ /hr	No change	8000 Nm ³ /hr

26.6.4 Other changes:

S. No.	Description	As per ToR dated 13.10.2021	Final after proposed modification
1.	Land Area	84.98 ha	58.68 ha
2.	Greenbelt	29.13 ha	21.12 ha
3.	Water Requirememt	5648 KLD	3642 KLD
4.	Power Requirement	97 MW	85 MW
5.	Project Cost	Rs. 1480.50 Crores	Rs. 1221 Crores
6.	EMP Cost	Rs. 30 Crores	Rs. 24 Crores

26.6.5 **Reason for Amendment:**

PP has planned to surrender the RHF unit due to non- availability of technology in India and not economically feasible. As suggested by technical experts, PP has also proposed change in capacity of billets production & Power Plant. Land area is also reducing from 84.98 ha to 58.68 ha as some land owners are not willing to sell their land and PP has to reduce the site area according to the land already purchased from willing land owners.

26.6.6 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:

- 26.6.7 During the meeting, based on the deliberations made by the EAC, the project proponent vide letter dated 13.04.2023 through email dated 13.04.2023 submitted the following information:
 - Final Configuration after proposed modification as updated at paa 26.6.3 above.
 - Revised Plant layount with details of green belt area
 - An undertaking dated 13.04.2023 by the project proponent stating that they will start the plantation work within the project site prior to grant of environment clearance.

Deliberation by the Committee

- 26.6.8 The Committee noted the following:
 - M/s. Indoves Industrial Pvt. Ltd. had earlier applied for Terms of Reference vide proposal no. IA/CG/IND/227899/2023, dated 06.09.2021 for Greenfield project for Installation of Iron Ore Pellet Plant (0.6 MTPA), DRI Plant (0.42 MTPA), SMS with Caster (0.6 MTPA), Rolling Mill (0.20 MTPA), RHF unit (0.36 MTPA), Blast Furnace (0.26 MTPA), Sinter Plant (0.40 MTPA), DIP Plant (0.24 MTPA), Coal Washery Unit (0.98 MTPA) with Captive Power Plant (97 MW)" for producing TMT bar, wire rods, steel bar coils and decoiled bars and Ductile Iron Pipes located at Village Kesda, Tehsil-Simga, District-Balodabazar-Bhatapara, Chhattisgarh. Accordingly, ToR was granted by the Ministry vide no. IA-J-11011/46/2021-IA-II(I) dated 13.10.2021.
 - ii. The instant proposal is for seeking amendment in ToR dated 13.10.2021 w.r.t. changes in the configuration / capacity of proposed project pertaining to dropping of RHF unit, change in capacity of billets production & Power Plant and reduction of project land area from 84.98 ha to 58.68 ha as detailed in para 26.6.3 and 26.6.4 above.
 - iii. PP has reported that they planned to surrender the RHF unit due to non- availability of technology in India and being non feasible economically. As suggested by technical experts, PP proposed for change in capacity of billets production & Power Plant. Land area is reduced from 84.98 ha to 58.68 ha as some land owners are not willing to sell their land and PP has to reduce the site area according to the land already purchased from willing land owners.

Recommendations of the Committee

26.6.9 After deliberations, the Committee **recommended** the proposal for amendment in ToR granted vide no. IA-J-11011/ 46/2021-IA-II(I) dated 13.10.2021 w.r.t. changes in the configuration / capacity of proposed project pertaining to dropping of RHF unit, change in capacity of billets production & Power Plant and reduction of project land area from 84.98 ha to 58.68 ha as detailed in para 26.6.3 and 26.6.4 above. The other terms and conditions of ToR dated 13.10.2021 shall remain the same.

DAY-2: APRIL 13, 2023 [FRIDAY]

Consideration in Environmental Clearance Proposals

Agenda No. 26.7

26.7 Expansion of existing Sponge Iron & Power Plant by installation of additional 1x350 TPD DRI kiln to increase the production of Sponge iron from 90,000 TPA to 1,95,000 TPA with 6.0 MW to 14 MW WHRB facility, 6.0 MW to 8.0 MW AFBC Power Plant, New Induction Furnaces of 4x30 T to produce 4,18,630 TPA of Billets & New Narrow Hot Strip Mill to produce H.R. Coils/Strips of 4,00,000 TPA by M/s. Agarwal Sponge and Energy Pvt. Ltd., located at Kudathini Village, Bellary Taluk & District, Karnataka-Consideration of EC proposal.

[Proposal No. IA/KA/IND1/414303/2023; File No. IA-J-11011/908/2007-IA-II(IND-I)] [Consultant: Pioneer Enviro Laboratories & Consultants Pvt. Ltd., valid up to April 20, 2023]

- 26.7.1 M/s. Agarwal Sponge and Energy Pvt. Ltd. has made an online application vide proposal no. IA/KA/IND1/414303/2023 dated 29th March, 2023 along with EIA/EMP report, prescribed format (CAF, Form I Part A, B &C) and certified compliance report seeking Environment Clearance (EC) under the provisions of EIA Notification, 2006. The proposed project activity is listed at schedule no. 3(a) Metallurgical Industries (Ferrous and Non-ferrous) and 1(d) Thermal Power Plant under Category "A" of the schedule of the EIA Notification, 2006 and being appraised at Central Level.
- 26.7.2 Name of the EIA consultant: M/s. Pioneer Enviro Laboratories & Consultants Pvt. Ltd. [List of ACOs with their Certificate / Extension Letter no. QCI/NABET/ENV/ACO/23/2699; valid upto 06.06.2023, as on April 20, 2023].

Details submitted by the project proponent

- Date of Consideration Date of accord **Details** ToR application Validity 14th September 12th meeting of 11th February Terms of 10.02.2024 2019 EAC held on 21st Reference 2020 October, 2019
- 26.7.3 The detail of the ToR is furnished as below:

26.7.4 The project of M/s. Agarwal Sponge and Energy Pvt. Ltd. located in Sy. No. 899/A, 899/B, 900, 902/B, 907/A, 907/B of Kudatini Village in Bellary Taluk & District of Karnataka is for expansion of existing Sponge Iron & Power Plant by installation of additional 1x350 TPD DRI kiln to increase the production of Sponge iron from 90,000 TPA to 1,95,000 TPA with increase in WHRB power from 6.0 MW to 14 MW, Increase of AFBC power generation from 6.0 MW to 8.0 MW, New Induction Furnaces of 4x30 T to produce 4,18,630 TPA of Billets & New

Narrow Hot Strip Mill to produce H.R. Coils/Strips of 4,00,000 TPA (85% Hot charging & remaining through reheating furnace with LDO/LSHS as fuel).

6.7.	5 En	vironmental site se	ttings				
	S.No.	Particulars		Details			Remarks
	1.	Total land		Existing plant a adjoining Add			Land use: Existing Plant (Industrial land) & additional land proposed is Dry agricultural land and land diversion is
	2.	Land acquisition details as per MoEF&CC, O.M. dated 7/10/2014.	 APSM All for NA) APSM Al diversion Murarilal 	e Land is in the r loys Pvt Ltd - 15 loys Pvt Ltd – under process) Agarwal Agricu diversion under	5.00 Ac (diver 9.75 Acres (la lture Land 19	ind	under process. Agreements have been entered between the land owners (who are the directors of both the companies) and Agarwal Sponge & Energy Pvt Ltd and will be registered will be registered in 3 months time
	3.	Existence of habitation & involvement of R&R, if any.	Project site: site. Study Area Habitation	No habitation e	xists in the pl	ant	
		K&K, II ally.	Venivirapur	2.8 kms.	NE		
			Kudatini	2.8 kms.	NW		
	4.	Latitude and Longitude of all	The following site	are the Coordin	nates of the Pl	ant	
		corners of the project site	Point # 1 Point # 2	Coor 15°10'18.35"N 76°47'16.58"E 15°10'22.16"N			
			Point # 3	76°47'18.30"E 15°10'23.29"N 76°47'16.80"E			
			Point # 4 Point # 5	15°10'27.58"N 76°47'16.48"E 15°10'28.74"N	·		
			Point # 6	76°47'13.19"E 15°10'28.23"N 76°47'10.23"E	•		
			Point # 7	15°10'30.22"N 76°47'03.80"E	• ?		
			Point # 8 Point # 9	15°10'31.48"N 76°47'04.18"E 15°10'33.16"N	,		
			Point # 10	76°46'57.72"E 15°10'37.29"N	,		
				76°46'58.82"E			

26.7.5 Environmental site settings

S.No.	Particulars		Det	ails		Remarks
		Point # 11	15°10'39	.31"N;		
			76°46'52	2.60"E		
		Point # 12	15°10'31	.63"N;		
			76°46'50).49"E		
		Point # 13	15°10'29	.54"N;		
			76°46'54	,		
		Point # 14	15°10'26	5.65"N;		
			76°47'02	,		
		Point # 15	15°10'25	5.29"N;		
			76°47'02	2.54"E		
		Point # 16	15°10'21	.35"N;		
			76°47'08			
5.	Elevation of the	97.485 m to 1	02.906 m			
	project site					
6.	Involvement of	Nil				
	Forest Land, if					
	any					
7.	Water body	Project Site:	Nil.			
	(Rivers, Lakes,					
	Pond, Nala,	Study area:				
	Natural	Water body		Distance	Directio	
	Drainage, Canal	·		(kms.)	n	
	etc.,) exists	Urumundra	Halla	0.12	Е	
	within the	(other side of	the road)			
	project site as	Bankan Halla		0.45	Е	
	well as study	Tungabhadra	High	5.8	N	
	area	level Canal	_			
		Allipur	Kere	6.1	SE	
		Reservoir				
		Kanigana Hal	la	7.8	SW	
8.	Existence of	Nil.				
	ESZ / ESA /					
	National Park /	List of RF:				
	Wildlife	Chikkantapur	RF (SW)	- 6.0 km		
	Sanctuary /	Toranagallu F	RF (NWW) -7.5 Km		
	Biosphere	Bellary RF (S) – 7.5 Kn	n		
	Reserve / Tiger					
	Reserve /					
	Elephant					
	Reserve etc. if					
	any within the					
	study area					

26.7.6 The existing project was accorded environmental clearance vide letter no. J-11011/908/2007-1AII (I) vide dated 11th December 2008 for expansion of Sponge Iron Plant (60,000 TPA to 90,000 TPA) and installation of Captive Power Plant (12 MW; 6 MW AFBC and 6 MW WHRB) and accordingly all units as per EC accorded are in operation. CTO has issued by KSPCB vide Consent No. AW-331642 dated 09-06-2022 which is valid upto 30.06.2027.

S.No.	Facilities	Units	Total Capacity as per the EC issued vide dated 11.12.2008	Current status of operation as per CTO AW-331642 dated 09-06-2022 which is valid upto 30.06.2027
1	DRI Plant	Sponge Iron	90,000 TPA (3x100TPD)	90,000 TPA (3x100TPD)
2	WHRB Power Plant	Electricity	6MW	6MW
3	AFBC Power Plant	Electricity	6 MW	6 MW

26.7.7 Implementation status as per existing EC:

26.7.8 The unit configuration and capacity of existing and proposed unit are given as below:

S. No.	Units (Products)	Existing	Expansion	Production
		Capacity	capacity	capacities After
		(in Operation)		expansion Proposal
1.	DRI Kiln for	3 x 100 TPD	1,05,000 TPA	1,95,000 TPA
	(Sponge Iron)	(90,000 TPA)	(1x350 TPD)	(3x100 TPD &
				1x350 TPD)
2.	Induction furnace with		4,18,630 TPA	4,18,630 TPA
	CCM & LRF (Billets /		(4x30 T)	(4x30 T)
	Hot Billets)			
3.	Rolling Mill to produce		4,00,000 TPA	4,00,000 TPA
	Hot Strips / Coils			
	(85% hot charging +			
	15% through RHF with			
	LDO/LSHS as fuel)			
4.	Power generation	6MW	8 MW	14 MW
	through WHRB			
5.	Power Plant	6 MW	2 MW*	8 MW*
	throughFBC Boiler			
Note: *	As per the Specific ToR	# 2 AFBC power	plant of additional 2	MW is proposed to
consum	e entire dolochar generate	d from proposed DI	RI kilns.	

^{26.7.9} 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.No.	Ra	aw Material	Quantity	Source	Distance	
					from site	Transport
					(Kms)	
For ma	anufac	cturing Sponge	Iron of 1,05,000 TPA			
1	Iron (Ore	2,31,000	Bellary	~15	By road
			TPA			(through
	(OR)		(OR)			covered trucks)
	Iron (Ore Pellets	1,57,000			
			TPA			
2	Coal	Indian Coal	1,36,500	Open Market	~50	By road
			TPA			(through
						covered trucks)
			(0	DR)		

S.No.	Raw Material	Quantity	Source	Distance from site (Kms)	Mode of Transport
	Imported Coal	87,360 TPA	Indonesia / South Africa / Australia	~200	Through sea route, Rail & Road
3	Dolomite	10,500 TPA	Local Area	~50	By road (through covered trucks)
For m	anufacturing MS Bille	<u>ts – 4,18,630 TPA</u>			
1	Sponge Iron	1,95,000 TPA	Own generation		
2	Sponge Iron	1,71,000 TPA	External purchase from nearby plants in Bellary	~15	By road (through covered trucks)
3	Scrap	90,000 TPA	(Purchase d from Local Area + in- house)	~50	By road (through covered trucks)
4	Pig Iron	44,000 TPA	Local Area		By road (through covered trucks)
For m	anufacturing HR coils	& Strips – 4,00,000 TPA			
1	MS Billets	4,18,630 TPA	Own generation		By Conveyor
2	LDO /LSHS	8320 KL	Local Market	~50	By road (through covered trucks)
For Po		W) through AFBC Boiler			
1	Imported coal	2,240 TPA	Indonesia / South Africa / Australia	~200	Through sea route, Rail & Road
2	Dolochar	7,700 TPA	Own generation		By Conveyor

26.7.10 Existing Water requirement is 300 m³/day and water drawl permission (NOC) for the same has been obtained from Karnataka Ground Water Authority (KGWA) vide letter no. KGWA/GW/NOC/14/2020-21/2439 dated 07-12-2020 and is valid till 06.12.2023. Water requirement for the proposed expansion project is estimated as 1565 m³/day. Total water requirement after expansion will be 1865 m³/day, which will be sourced from STP of

BALLARI MUNCIPAL CORPORATION (for supply of treated Sewage from Sewage Treatment Plant), Ballari. The permission for supply 4.0 MLD of Treated Sewage water has been obtained from Ballari City Muncipal Corporation Vide lr. dated 07.12.2022.

26.7.11 Power required for the Existing Plant & CTO permitted units is 2.1 MW and is being sourced from the State Grid. Power required for the proposed expansion project will be 57.1 MW and will be sourced Captive Power Plant and the state grid. Total Power Requirement after proposed expansion will be 59.2 MW and part of it will be sourced from 22 MW Captive Power Plant and Balance Power requirement of 37.2 MW will be sourced from the state grid.

Period	1 st Oct 2019 to	31 st Dec 2	019				
	Subsequently the	he Baselin	e data	a has been revalida	ted by	collecting additional one	
	season baseline	data i.e. f	rom	1 st Oct 2022 to 31 st	t Dec	2022	
AAQ							
parameters at 8	Parameter	: Conce				centration	
locations			ct 20	19 to 31 st Dec	(1 st (Oct 2022 to 31 st Dec 2022)	
		2019)					
	PM _{2.5}			$p 37.5 \ \mu g/m^3$		23.3 to 40.2 μ g/m ³	
	PM10	: 3	5.2 to	ο 66.5 μg/m ³		36.9 to 70.1 μ g/m ³	
	SOx	: (6.1 to 17.4 μ g/m ³			6.9 to 18.9 μ g/m ³	
	NOx	: (6.3 to 18.8 μ g/m ³			7.0 to 19.7 μ g/m ³	
	CO	: 3	06 to	1215 μg/m ³		335 to 1322 μ g/m ³	
AAQ			3 (1300 m in NE) PM ₁₀ (vehicular) = 0.7 µg/m ³				
modelling		$D_2 = 12.5 \ \mu g/m^3 (1380 \ m \ in \ NE)$					
				n NE) NO _X (vehicu	lar) = 4	4.8 $\mu g/m^3$	
	CO (vehicular)	$= 2.8 \mu g/$	m ³	1			
Ground water	Parameter		:	Concentratio		Concentration	
quality at 8 locations				(1 st Oct 2019 1		(1 st Oct 2022 to 31 st Dec	
locations	TT			31 st Dec 2019)	2022)	
	pH		:	7.2 to 8.2		6.95 to 8.1	
	TSS (in mg/l)		:	0.32 to 0.70		0.28 to 0.80	
	TDS (in mg/		:	604 to 1060		566 to 988	
	Total Hardne	· · · · · · · · · · · · · · · · · · ·) :	234 to 532		252 to 454	
	Chlorides(in	U		311 to 557		294 to 433	
	Fluoride(in r	U		0.44 to 1.2 0.014 to 0.26		0.41 to 1.1 0.016 to 0.28	
	Heavy metals I(n mg/l))	0.014 to 0.20)	0.010 10 0.28	
	Heavy metals	are within	n the	limits.			
Surface water	Parameters			Results		Results	
quality at 3				(1st Oct to 31st D) ec	(1st Oct to 31st Dec	
locations				2019)		2022)	
	pН		:	7.4 to 8.0		7.1 to 8.2	
	DO (in mg/l)	:	4.1 to 5.6		4.4 to 5.9	
	TDS (in mg		:	188 to 608		171 to 774	
	Chlorides (in	n mg/l)	:	66 to 315		74 to 346	

26.7.12 Baseline Environmental Studies

	Sulphates (in	mg/l) :	47 to 202		58 to	255	
Noise levels			s in the study zon				
			levels in the stud				
	0	e	9 & further Noise			0	
			2 and the equival	•			•
	00		54.5 dBA & equiv	valent Nigh	nt noise lev	els in th	e study
T CC	zone are ranging			(TT 11° 4 1			
Traffic assessment study	the plant site.	as been condu	cted at NH # 63	(HUDII to J	Ballari) wi	iich is C	lose to
findings	Transportation o	f raw material	, fuel& finished p	product wil	l be done 6	50% by 1	road.
	Existing PCU is	1388 PCU/hr	on NH # 63 and e	existing Le	vel of Serv	vice(LOS	5) is :
	Road	V(Volum				LOS	
		in PCU/h	r) in PCU/hr)	V/C I	Ratio		
	NH # 63	1388	2900	0.4	18	С	
	(Additional) and	Level of Serv	xpansion project ice (LOS) will be		1388 (Ex	isting)	+ 133
	NITE # CO	T • 4 • • •	D		0	NUC	IO
	NH # 63;	Existing		Total	Capacit	V/C	LO
	Hubli to	Baseline	the	(PCU/h	y of	rati	LO S
		Baseline Scenario	the Expansio		y of Road		
	Hubli to	Baseline Scenario (V)	the Expansio n Project	(PCU/h	y of Road (C)	rati	
	Hubli to	Baseline Scenario	the Expansio n Project (V)	(PCU/h	y of Road (C) (PCU/h	rati	
	Hubli to Ballari	Baseline Scenario (V) (PCU/hr)	the Expansio n Project (V) (PCU/hr)	(PCU/h r)	y of Road (C) (PCU/h r)	rati 0	S
	Hubli to Ballari PCU/Hour	Baseline Scenario (V) (PCU/hr)	the Expansio n Project (V) (PCU/hr) 133	(PCU/h r) 1521	y of Road (C) (PCU/h r) 2900	rati o 0.52	
	Hubli to Ballari PCU/Hour Le	Baseline Scenario (V) (PCU/hr) 1388 vel of Service	the Expansio n Project (V) (PCU/hr)	(PCU/h r) 1521	y of Road (C) (PCU/h r) 2900 IRC 106-1	rati o 0.52	S
	Hubli to Ballari PCU/Hour	Baseline Scenario (V) (PCU/hr)	the Expansio n Project (V) (PCU/hr) 133	(PCU/h r) 1521 pad as per	y of Road (C) (PCU/h r) 2900 IRC 106-1 ance	rati o 0.52	S
	Hubli to Ballari PCU/Hour Le V/C	Baseline Scenario (V) (PCU/hr) 1388 vel of Service LOS	the Expansio n Project (V) (PCU/hr) 133	(PCU/h r) 1521 ad as per Perform	y of Road (C) (PCU/h r) 2900 IRC 106-1 ance ent	rati o 0.52	S
	Hubli to Ballari PCU/Hour Le V/C 0.0 - 0.2	Baseline Scenario (V) (PCU/hr) 1388 vel of Service LOS A	the Expansio n Project (V) (PCU/hr) 133	(PCU/h r) 1521 ad as per Perform Excell	y of Road (C) (PCU/h r) 2900 IRC 106-1 ance ent ood	rati o 0.52	S
	Hubli to Ballari PCU/Hour Le V/C 0.0 - 0.2 0.2 - 0.4	Baseline Scenario (V) (PCU/hr) 1388 vel of Service LOS A B	the Expansio n Project (V) (PCU/hr) 133	(PCU/h r) 1521 ad as per Perform Excell Very G	y of Road (C) (PCU/h r) 2900 IRC 106-1 ance ent ood d	rati o 0.52	S
	Hubli to Ballari PCU/Hour Le V/C 0.0 - 0.2 0.2 - 0.4 0.4 - 0.6	Baseline Scenario (V) (PCU/hr) 1388 vel of Service LOS A B C	the Expansio n Project (V) (PCU/hr) 133	(PCU/h r) 1521 ad as per Perform Excell Very G Good	y of Road (C) (PCU/h r) 2900 IRC 106-1 ance ent ood d erage	rati o 0.52	S
	Hubli to Ballari PCU/Hour Le <u>V/C</u> 0.0 - 0.2 0.2 - 0.4 0.4 - 0.6 0.6 - 0.8	Baseline Scenario (V) (PCU/hr) 1388 vel of Service LOS A B C D E	the Expansio n Project (V) (PCU/hr) 133	(PCU/h r) 1521 ad as per Perform Excell Very G Good Fair/ Ave	y of Road (C) (PCU/h r) 2900 IRC 106-1 ance ent ood d erage	rati o 0.52	S
	Hubli to Ballari PCU/Hour Le V/C 0.0 - 0.2 0.2 - 0.4 0.4 - 0.6 0.8 - 1.0 1.0 & Above	Baseline Scenario (V) (PCU/hr) 1388 vel of Service LOS A B C D E F	the Expansio n Project (V) (PCU/hr) 133	(PCU/h r) 1521 ad as per Perform Excell Very G Goo Fair/ Avo Poor	y of Road (C) (PCU/h r) 2900 IRC 106-1 ance ent ood d erage r oor	rati 0 0.52 1990	S
	Hubli to Ballari PCU/Hour Le V/C 0.0 - 0.2 0.2 - 0.4 0.4 - 0.6 0.8 - 1.0 1.0 & Above	Baseline Scenario (V) (PCU/hr) 1388 vel of Service LOS A B C D E F	the Expansio n Project (V) (PCU/hr) 133 (LOS) of the Ro	(PCU/h r) 1521 ad as per Perform Excell Very G Goo Fair/ Avo Poor	y of Road (C) (PCU/h r) 2900 IRC 106-1 ance ent ood d erage r oor	rati 0 0.52 1990	S
	Hubli to Ballari PCU/Hour Le V/C $0.0 - 0.2$ $0.2 - 0.4$ $0.4 - 0.6$ $0.6 - 0.8$ $0.8 - 1.0$ $1.0 & \text{Above}$ $V = \text{Volum}$ Service • As per th $As per th$	Baseline Scenario (V) (PCU/hr) 1388 vel of Service LOS A B C D E E F ne in PCU's /h	the Expansio n Project (V) (PCU/hr) 133 (LOS) of the Ro	(PCU/h r) 1521 ad as per Perform Excell Very G Goo Fair/ Ave Poor Very P CU's /hr, I	y of Road (C) (PCU/h r) 2900 IRC 106-1 ance ent ood d erage r oor LOS = Lev	rati o 0.52 1990 el of	S C
	Hubli to Ballari PCU/Hour Le V/C $0.0 - 0.2$ $0.2 - 0.4$ $0.4 - 0.6$ $0.6 - 0.8$ $0.8 - 1.0$ $1.0 & Above$ $V = Volum$ Service • As per the implies "	Baseline Scenario (V) (PCU/hr) 1388 vel of Service LOS A B C D E E F me in PCU's /h	the Expansio n Project (V) (PCU/hr) 133 (LOS) of the Ro	(PCU/h r) 1521 ad as per Perform Excell Very G Good Fair/ Avo Poot Very P CU's /hr, I	y of Road (C) (PCU/h r) 2900 IRC 106-1 ance ent ood d erage r oor LOS = Lev gorised un	rati o 0.52 990 el of der 'C',	S C which
	Hubli to Ballari PCU/Hour Le V/C $0.0 - 0.2$ $0.2 - 0.4$ $0.4 - 0.6$ $0.6 - 0.8$ $0.8 - 1.0$ $1.0 & Above$ $V = Volum$ Service • As per th implies " • Hence th	Baseline Scenario (V) (PCU/hr) 1388 vel of Service LOS A B C D E E F ne in PCU's /h he above the GOOD". e existing road	the Expansio n Project (V) (PCU/hr) 133 (LOS) of the Rotetr, C= Capacity PLOS of the ROted is capable of ta	(PCU/h r) 1521 ad as per Perform Excell Very G Good Fair/ Avo Poot Very P CU's /hr, I	y of Road (C) (PCU/h r) 2900 IRC 106-1 ance ent ood d erage r oor LOS = Lev gorised un	rati o 0.52 990 el of der 'C',	S C which
	Hubli to Ballari PCU/Hour Le V/C $0.0 - 0.2$ $0.2 - 0.4$ $0.4 - 0.6$ $0.6 - 0.8$ $0.8 - 1.0$ 1.0 & Above $V = Volum$ Service • As per the implies " • Hence the due to	Baseline Scenario (V) (PCU/hr) 1388 vel of Service LOS A B C D E F ne in PCU's /h he above the GOOD". ie existing road e proposed ex	the Expansio n Project (V) (PCU/hr) 133 (LOS) of the Ro LOS of the ROA d is capable of ta pansion project.	(PCU/h r) 1521 ad as per Perform Excell Very G Good Fair/ Avd Pood Very P CU's /hr, I AD is cate king the a	y of Road (C) (PCU/h r) 2900 IRC 106-1 ance ent ood d erage r oor LOS = Lev gorised un dditional v	rati o 0.52 990 el of der 'C', rehicular	S C which
Flora and fauna	Hubli to Ballari PCU/Hour Le V/C $0.0 - 0.2$ $0.2 - 0.4$ $0.4 - 0.6$ $0.6 - 0.8$ $0.8 - 1.0$ 1.0 & Above $V = Volum$ Service • As per the implies " • Hence the due to the due	Baseline Scenario (V) (PCU/hr) 1388 vel of Service LOS A B C D E F ne in PCU's /h he above the GOOD". ie existing road e proposed ex	the Expansio n Project (V) (PCU/hr) 133 (LOS) of the Ro LOS of the ROA d is capable of ta pansion project.	(PCU/h r) 1521 ad as per Perform Excell Very G Good Fair/ Avd Pood Very P CU's /hr, I AD is cate king the a	y of Road (C) (PCU/h r) 2900 IRC 106-1 ance ent ood d erage r oor LOS = Lev gorised un dditional v	rati o 0.52 990 el of der 'C', rehicular	S C which

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

S.No.	Waste		Quantity (TPA	Method of disposal	
		Existing	Proposed	After Expansion	
1	Ash from DRI	16,200	18,900	35,100	Is being / will be given to Brick manufacturers.
2	Dolochar	18,000	21,000	39,000	Will be utilized in captiv AFBC boiler base power plant.
3	Kiln Accretion Slag	900	1,050	1,950	Will be given to brick manufacturers.
4	Wet Scraper Sludge	4,140	4,830	8,970	Will be given to brick manufacturers.
5	SMS Slag		41,863	41,863	Slag from SMS will be crushed and iron will be recovered & remaining non –magnetic iner material will be used in road construction /will be given to Road contractors.
6	Mill scales from Rolling Mill		8,000	8,000	Mill scales from Rolling Mill will be given to nearby Sinter Plants Ferro Alloy units.
7	Ash from CPP using Imported Coal	54		54	Is being given to brick manufacturers
8	STP sludge		4.5 Kg/day	4.5 Kg/day	Will be used as manur for Greenbel development

NOTE: Solid wastes such as dolochar, accretion slag, SMS slag will be stored in designated storage yard. Ash generated will be stored in silos only. There will not be any open storage of fly ash. All other storage yards will be on top of stable liner to avoid leaching of material to ground water.

However, upon commencement of production, TCLP will be conducted and disposal of slag will be in accordance with the MoEF&CC/CPCB/SPCB norms

Hazardous waste generation, storage & disposal:

1. Waste oil: 3.0 KL / Annum

This will be stored in covered HDPE drums in a designated area and will be given to SPCB approved vendors.

2. Used Batteries

Used batteries will be given back to the supplier under buy back agreement with supplier.

26.7.14 Public Consultation:

Date of advertisement	12-07-2022 & 13-07-2022
Name of newspapers	1) Hosadigantha - Kannada (Advt. on 12-07-2022)
	2) Times of India (Advt. on 12-07-2022)

	2) E Nommo Konnodo Nadu – Konnodo (Adut on 12.07					
	3) E Namma Kannada Nadu – Kannada (Advt. on 13-07-					
	2022)					
Date on which Public Hearing	12.08.2022 at 11:00 AM					
conducted						
Venue	Public Hearing was conducted at proposed expansion project					
	site of M/s. Agarwal Sponge & Energy Pvt.Ltd., Sy. No.					
	899/A, 899/B, 900, 902/B, 907/A, 907/B. Kudathini village,					
	Bellary taluk & district, Karnataka.					
Chaired by	Additional District Magistrate					
Major issues raised	Environmental protection measures					
	• Employment to Locals.					
	Dust Pollution					
	• Health Impacts.					
	• Utilization of CSR funds for the development of the					
	surrounding villages.					
	Plantation in nearby villages.					
	Provide Rainwater Harvesting system					
	Hospital facility					
	• Maintain 33% of the area with Greenbelt.					
	• Bus facility for School Children.					
	• Drinking water Facility in Veniveerapura village.					

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

The budget is allocated for the Social & Infrastructure development activities based on SIA study & based on Public Consultation. The following 4 nos. of Villages to be adopted namely Kudathini, Haraginadone, Vaniveerapura and Allipur.

S.NO.	MAJOR A	CTIVITY	YEAR O	F IMPLEMEN'	TATION	TOTAL
	HEADS		1st Year	2nd Year	3rd Year	EXPENDITURE
			(Rs. in	(Rs. in	(Rs. in	(Rs. in Lakhs)
			Lakhs)	Lakhs)	Lakhs)	
A) Nee	d Based & SIA					
1	Community &	Z				
	Infrastructure	e				
	Development	Programmes				
	i)	Physical	3 nos. in	3 nos. in	2 nos. in	36
	Construction	Nos. &	Veniveerapura	Haraginadone	Kudathini (v)	
	of public	village	(v) & 3 nos.	(v) &	&	
	toilets		in Allipur (v)	3 Nos. in	4 Nos. in	
				Thumati (v)	Janikunte (v)	
		Budget in	12.0	12.0	12.0	
		Lakhs				
	ii) LED	Physical	10 nos. in	15 nos. in	10 nos. in	18
	lights with	Nos. &	Veniveerapura	Haraginadone	Janikunte (v)	
	solar panels	village	(v) & 20 nos.	(v) &	& 20 Nos. in	
			in Kudathini	15 Nos. in	Thimlapur (v)	
			(v)	Allipur (v)		

S.NO.	MAJOR ACTIVITY		YEAR O	TOTAL			
	HEA		1st Year (Rs. in Lakhs)	2nd Year (Rs. in Lakhs)	3rd Year (Rs. in Lakhs)	EXPENDITURE (Rs. in Lakhs)	
		Budget in Lakhs	6	6	6		
					Total	54	
2	Education i) Providing Sport kits for schools	Physical Nos. & village	15 nos. in Allipur (v) & 15 Nos. in Kudathini (v)	10 nos. in Veniveerapura (v) & 10 Nos. in Thumati (v)	15 nos. in Thimlapur (v) & 15 Nos. in Haraginadone (v)	8	
		Budget in Lakhs	3	2	3		
	ii) Construction of class rooms in schools of	Physical Nos. & village	5 rooms in Kudathini (v) & Haraginadone (v)	4 rooms. in Veniveerapura (V) & Thumati (v)	5 rooms in Allipur (V) & Thimlapur (v)	140	
	size 10m x 8m x 4 m	Budget Rs in Lakhs	50	40	50		
					Total	148	
3	RWH pits in the surrounding villages & De-siltation of ponds	Physical Nos. & village	RWH pits in 4 nos. each in Kudathini (v) Veniveerapura (V)	Allipur (v) pond desiltation 1.0 m depth	RWH pits in Kudathini school (3 nos)& Panchayat office (4 nos), Haraginadone school (3 nos)	28	
		Budget in Lakhs	8	10	10		
			79	70	81	230	
	1	14 /	I	I	Sub Total (A)	230	
B) Bas	ed on Public Co Impart training to the local	Physical Nos. & village	One DISHA	A centre in Kudat	hini Village		
	villagers for skill development. a)DISHA Centre" along with necessary infrastructure for various	Budget in Lakhs	70	70	70	210	

S.NO.	MAJOR ACTIVITY HEADS		YEAR O	TOTAL		
			1st Year (Rs. in Lakhs)	2nd Year (Rs. in Lakhs)	3rd Year (Rs. in Lakhs)	EXPENDITURE (Rs. in Lakhs)
	vocational training program for employment generation in association with National Skill Development Mission (Automobile Repair, Welding, Electrical, Computer Hardware, Soft skills like		Lakhs)	Lakhs)	Lakhs)	
2	computer programs etc.) Development of plantation	Physical Nos.&village	Kudathini (2000 nos),	Haraginadone (2000 nos),	Veniveerapura (2000 nos).	30
	in villages (inclusive of medicinal plants in villages	Budget in Lakhs	10	10	10	
3	Mineral water plants	Physical Nos. & village Budget in	2s no. in Veniveerapura (v) & 2 nos. in Thumati (v) 10	2 nos. in Allipur (v) & 2 Nos. in Kudathini (v) 10	2 nos. in Janikunte (v) & 2 Nos. in Haraginadone (v) 10	30
A	Durantiti	Lakhs	-			=0
4	Providing bus facility for school,	Physical Nos. & village		Kudathini (v)		50
	children	Budget in Lakhs		50		
5	Providing PHC & Ambulance	Physical Nos. & village	Kudathini			50
	facility	Budget in Lakhs	50			
	1		140	140	90	370
					Sub Total (B)	370

S.NO.	MAJOR A	CTIVITY	YEAR (TOTAL		
	HEADS		1st Year	2nd Year	3rd Year	EXPENDITURE
			(Rs. in	(Rs. in	(Rs. in	(Rs. in Lakhs)
			Lakhs)	Lakhs)	Lakhs)	
		TOTAL	219	210	171	
	Grand Total(A+B)				600	

Recurring expenditures under CSR as per companies Act 2014

- Health checkup will be carried out periodically in surrounding villages i.e. Kudathini, Allipur, Veniveerapura, Haraginadone villages @ Rs 5.0 Lakhs every year.
- 26.7.15 The capital cost of the expansion project is Rs.400 Crores and the capital cost for environmental protection measures is proposed as Rs. 30 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs.3.90 Crores. The employment generation from the proposed expansion project is 250 direct & 300 Indirect. The details of cost for environmental protection measures is as follows:

S.No	Particulars	Capital Cost (Rs.in Crores)	Recurring Cost / Annum (Rs.in Lakhs)
1	Air Emission Management		
	· Electro Static Precipitators (ESP)	8.00	80
	• Fume Extraction system with bag filters	7.00	80
	• other APCS & Conveyor systems	2.00	20
	· Stacks	3.00	9.0
	· Mechanical Dust sweepers	0.15	1.5
	· Water Sprinklers	0.10	0.5
	Wastewater Management		
2	ETP	0.50	10
	STP	0.40	10
	Garland drains & Settling ponds	0.25	3
	Solid waste Management		
3	Fly Ash Handling & disposal	1.50	45
	Slag Handling & Disposal	0.30	5
	Hazardous waste storage & disposal	0.10	5
	Municipal solid waste storage & disposal	0.05	2.5
4	Greenbelt development	0.55	5.8
5	Storm water drainage system	0.70	0.2
6	Noise Management	0.20	10
7	RWH in Plant	0.15	1.5
8	Fire Safety Systems	2.20	30
9.	Environmental Monitoring		
	· CEMS	0.50	5
	· CAAQMS	1.60	16
	Environment Monitoring	0.00	9
	· Performance monitoring of APCS	0.00	1
10.	Occupational Health & Safety		
	· Occupational Health centre with Ambulance	0.50	15
	· Personal Protective Equipment's (PPEs)	0.25	25
		30.0	390

S.No	Particulars	Capital Cost (Rs.in Crores)	Recurring Cost / Annum (Rs.in Lakhs)
11.	Social & Infrastructural Development (SID)	4.0	
		34.0	390

- 26.7.16 Existing green belt has been developed in 2.67 Ha. area which is about 33 % of the Existing plant area of 8.09 Ha. with total plants of 6857 nos. Trees. Proposed greenbelt will be developed in 3.4 Ha. which is about 34.9% of the additional land area of 9.74 Ha. Thus total of 6.07 Ha. area (34 % of total project area i.e. 17.83 Ha.) will be developed as greenbelt. 10 m to 55 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 plants will be 16457 . 9,600 nos. of plants s will be planted and nurtured in 6.07 Ha. in 2 years on receipt of EC (1st year 5000 nos & 2nd Year 4600 nos.).
- 26.7.17 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.

<u>Certified Compliance Report from Regional Office</u>

26.7.18 The Status of compliance of earlier EC was obtained from Integrated Regional Office, Bangalore vide letter no. 5-12.1/601/143/Kar/855 dated 31st October 2022 in the name of M/s. Agarwal Sponge And Energy Pvt. Ltd. The Action taken report regarding the partially/non-complied condition was submitted to Integrated Regional Office, Bangalore vide letter dated 08.02.2023. Integrated Regional Office, MoEF&CC, Bangalore evaluated the same and has issued letter dated 21.02.2023. Further submitted ATR for Non Compliances/partial Compliance to IRO, MoEF&CC on 09.03.2023. The details of the observations made by IRO in the report dated 27.03.2023 along with its re-assessment / present status as furnished by the PP is given as below:

S.No.	Non- compliances	Observation	Condition	n no.		Re-assessment
	details	of IRO	EC date	Specific	General	by IRO
		(abridged)				
1	E.C. General Condition no.	Irregularity in	11-12-		(x) &	PP submitted
	(x)	submission of	2008		(xi)	the latest
	An implementation schedule	Half yearly				compliance
	for all the conditions stipulated	report				report to this
	herein shall be submitted to the					office vide
	Regional Office of this					email dated
	Ministry at Bangalore.					07.03.2023 PP
	E.C. General Condition no.					assured that
	(xi)					the reports will
	A six monthly compliance					be
	report and the monitored data					submitted
	along with statistical					regularly
	interpretation shall be					henceforth.
	submitted to them regularly.					

S.No.	Non- compliances details	Observation	Condition	n no.	Re-assessment	
		of IRO	EC date	Specific	General	by IRO
		(abridged)		-		•
	(J-11011 / 908 / 2007- IA					
	II(I), dated 11th Dec, 2008)					
2	E.C. General Condition no.	Need based	11-12-		(ix)	As per the
	(ix)	Assessment of	2008			information
	The company must undertake	near by				provided, it is
	socio-economic development	villages				observed that PP
	activities in the surrounding	0				carried out need
	villages like community					based
	development programs,					assessment
	educational programs,					studies as part of
	drinking water supply and					EIA study for
	health care etc.					expansion
						project and
	(J-11011 / 908 / 2007- IA					identified
	II(I), dated 11 th Dec, 2008)					works to be
	II(1), uated II Dec, 2000)					carried out in
						the fields of
						Education,
						drinking water,
						health,
						plantation, skill
						development
						and
						infrastructure in
						nearby villages
						such as
						Kudathini,
						Veniveerapura,
						Thumati,
						Haraginadone
						and Allipur
						villages. PP will
						allocate an
						amount of Rs.
						400 lakhs for
2			11.10		(.) 0	above works.
3	E.C. General Condition no.	PM ₁₀ and	11-12-		(iv) &	As per the
	(iv)	Noise	2008		(vi)	monitoring
	Data on ambient air quality	Levels are too				reports of
	and stack emission shall be	high				February
	regularly submitted to this					2023, PM ₁₀
	Ministry including its					level in the
	Regional Office at					plant area
	Bangalore/KPCB and CPCB					found to be
	once in six months.					69.7 $\mu g/m^3$.
	E.C. General Condition no.					Also, day and
	(vi)	1		1	1	i interiore, aug and

S.No.	Non- compliances	Observation	Condition	1 no.	Re-assessment	
	details	of IRO (abridged)	EC date	Specific	General	by IRO
	The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) (J-11011 / 908 / 2007- IA II(I), dated 11 th Dec, 2008)					noise levels found to be 70.6 dB(A) and 63.5 dB(A). The ambient air and noise levels found to be confirming prescribed standards
4	E.C. Specific Condition no. (xiii) As committed, a hospital in collaboration with other shall be established for the general benefit of the public. A note on the MOU signed with others, their share for the establishment of hospital, facilities to be provided, staff and time required for the establishment of the same etc. shall be submitted to the Ministry and its Regional Office at Bangalore (J-11011 / 908 / 2007- IA II(I), dated 11 th Dec, 2008)	No MoU for establishment Of Hospital In Collaboration with other Industries etc.	11-12- 2008	(xiii)		PP submitted that the Board Resolution of the company allocated Rs.1.0 Crore for the construction of hospital in collaboration with other industries

Written representations:

- 26.7.19 During the meeting, based on the deliberations made by the EAC, the project proponent vide letter dated 17.04.2023 through email dated 17.04.2023 and 18.04.2023 submitted the following information:
 - 1. A letter dated 15.04.2023 by the project proponent conforming that they have not taken any construction activity at site pertaining to the expansion project hence, they have not made any violation.
 - Revised Action Plan as per MoEF&CC O.M. dated 30/09/2020 Revised Action plan as per MoEF&CC O.M. dated 30/09/2020 with a budget of 1.5% of Project cost (Rs. 400 Crores) = Rs. 6.0 Crores. The same is updated at para 26.7.14 above
 - 3. Details regarding Iron Ore Screening facility / Magnetic Separator exist in the additional land shown for expansion project PP submitted that the Iron Ore Screening facility has been established by the previous management in the year 2010 in the additional land shown for expansion project now and the unit subsequently became NPA. The new management has taken over the plant in the year 2018 and this facility has not been utilized

by the present company at any point of time. PP is not using Iron ore in its existing sponge iron plant. PP also submitted that they are using only Iron ore pellets in its existing sponge iron plant. Hence, they do not require I/O screening facility. PP further assures that they will be dismantling the screening facility in its project site with immediate effect.

4. Lease agreement with the Land on Individual Director name i.e. Shri. Murarilal Agarwal over an extent of 19.34 Acres - Shri. Murarilal Agarwal have entered Lease agreement with Agarwal Sponge & Energy Pvt. Ltd. for the land of 19.34 Acres. A copy of the Lease agreement dated 13.04.2023 is submitted.

Deliberations by the Committee

- 26.7.20 The Committee noted the following:
 - 1. The instant proposal is for expansion of existing Sponge Iron & Power Plant by installation of additional 1x350 TPD DRI kiln to increase the production of Sponge iron from 90,000 TPA to 1,95,000 TPA with increase in WHRB power from 6.0 MW to 14 MW, Increase of AFBC power generation from 6.0 MW to 8.0 MW, New Induction Furnaces of 4x30 T to produce 4,18,630 TPA of Billets & New Narrow Hot Strip Mill to produce H.R. Coils/Strips of 4,00,000 TPA (85% Hot charging & remaining through reheating furnace with LDO/LSHS as fuel).
 - 2. The existing project was accorded environmental clearance vide letter no. J-11011/908/2007-1AII (I) vide dated 11th December 2008 for expansion of Sponge Iron Plant (60,000 TPA to 90,000 TPA) and installation of Captive Power Plant (12 MW; 6 MW AFBC and 6 MW WHRB) and accordingly all units as per EC accorded are in operation. CTO has issued by KSPCB vide Consent No. AW-331642 dated 09-06-2022 which is valid upto 30.06.2027.
 - 3. 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.
 - 4. 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.
 - 5. 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.

- Total land required for the project is 44.09Acres (17.83 Ha.) [i.e. partly in Existing plant area of 20 Acres (8.09 Ha.) & adjoining Additional Land of 24.09 Acres (9.74 Ha.]. Currently the Land is in the name of
 - APSM Alloys Pvt Ltd 15.00 Ac (diverted for NA)
 - APSM Alloys Pvt Ltd 9.75 Acres (land diversion under process)
 - Murarilal Agarwal Agriculture Land 19.34 Ac Shri. Murarilal Agarwal have entered Lease agreement with Agarwal Sponge & Energy Pvt. Ltd. for the land of 19.34 Acres. A copy of the Lease agreement dated 13.04.2023 is submitted.

Agreements have been entered between the land owners (who are the directors of both the companies) and AgarwalSponge & Energy Pvt Ltd and will be registered will be registered in 3 months time

- 7. The nearest habitation to plant are Venivirapur (2.8 Km, NE) and Kudatini (2.9 Km, NW) of the project site. The EAC is of the opinion that PP shall strictly implement the environmental safeguard measures proposed to minimise the impact on the habitation of the locals.
- 8. Urumundra Halla is at a distance of 0.12 km and Bankan Halla at 0.45 km in East Direction of the project site within 10 Km. radius of the plant site. The EAC is of the opinion that as submitted 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.
- 9. The total water requirement after expansion will be 1865 m³/day, which will be sourced from STP of Ballari Muncipal Corporation (for supply of treated Sewage from Sewage Treatment Plant), Ballari.
- 10. 4 nos. of Villages namely Kudathini, Haraginadone, Vaniveerapura and Allipur are proposed to be adopted by the project proponent for socio-economic development.
- 11. Existing green belt has been developed in 2.67 Ha. area which is about 33 % of the Existing plant area of 8.09 Ha. with total plants of 6857 nos. Trees. Proposed greenbelt will be developed in 3.4 Ha. which is about 34.9% of the additional land area of 9.74 Ha. Thus total of 6.07 Ha. area (34 % of total project area i.e. 17.83 Ha.) will be developed as greenbelt. Total no. of plants will be 16457 out of which 9,600 nos. of plants will be planted and nurtured in 6.07 Ha. in 2 years on receipt of E.C. (1st year 5000 nos & 2nd Year 4600 nos.). The committee deliberated on the greenbelt development plan found it satisfactory.
- 12. The Committee has found that the baseline data and incremental GLC due to the proposed project within NAAQ standards.
- 13. The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found them to be satisfactory
- 14. The Committee also deliberated on the public hearing issues along with revised action plan submitted by the proponent to address the issues raised during the public hearing along with the village adoption programme and found it satisfactory.
- 15. The Committee deliberated on the certified compliance report of IRO along with the ATRs and updated status as submitted by the project proponent and is of the opinion that PP shall strictly continue to comply with the observation made by IRO.
- 16. The EAC deliberated on the written submission of project proponent and found it satisfactory.

- 17. 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.
- 18. 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

26.7.21 In view of the foregoing and after detailed deliberations, the committee **recommended** the instant proposal for grant of Environment Clearance under the provisions of EIA Notification, 2006 subject to 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 conditions:

- (i) The PP 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 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.
- (iii) 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.
- (iv) PP shall complete acquisition of complete proposed land and conversion for industrial purpose prior to commencement of project.
- (v) The nearest habitation to plant i are Venivirapur (2.8 Km, NE) and Kudatini (2.9 Km, NW) of the project site. Project Proponent shall prepare and implement 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.
- (vi) Urumundra Halla is at a distance of 0.12 km and Bankan Halla at 0.45 km in East Direction of the project site 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.

- (vii) The total water requirement after expansion of 1865 m³/day shall be sourced from STP of Ballari Muncipal Corporation (for supply of treated Sewage from Sewage Treatment Plant), Ballari after obtaining necessary permission from the Competent Authority.
- (viii) The PP shall undertake village adoption as committed in 4 nos. of Villages namely Kudathini, Haraginadone, Vaniveerapura and Allipur and formulate Village Adoption program consisting of need-based community development activities to develop them into model villages.
 - (ix) All the observations stated in the certified compliance report of IRO dated 31.10.2022 and 21.02.2023 shall be complied with as committed. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.
 - (x) Three tier Green Belt shall be developed in a atleast 33% of total project area as per the plan 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. PP shall develop greenbelt in the form of shelter belt comprising of total of 6 rows of 2x2 m plantation with tall trees & broad leaves with thick canopy alongwith windshield inside the plant premises to act as green barrier for air pollution & noise levels towards Venivirapur and Kudatini villages. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.
 - (xi) Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface.
- (xii) Solid waste utilization
 - a. PP shall install a slag crusher to convert steel slag into aggregate for use in construction industry, fine sand for use as flux in steel plant, sand in brick making and as lime in cement making.
 - b. PP shall recycle/reuse solid waste generated in the plant as far as possible.
 - c. Used refractories shall be recycled as far as possible.
- (xiii) Following additional arrangements to control fugitive dust shall be provided:
 - a. Fog / Mist Sprinklers at all 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 with complete recirculation system.
- (xiv) Secondary fume extraction system shall be installed on converters of Steel Melting Shop.
- (xv) 85-90 % of billets shall be rolled directly in hot stage. RHF shall operate using only Light Diesel Oil or Mixed BF/CO gas/Producer gas.
- (xvi) Dust emission from all the stacks shall be less than 30 mg/Nm³.
- (xvii) Carbon-monoxide sensors with alarm for criticality should be installed at strategic locations in the Plants and monitored.
- (xviii) Air Cooled condensers shall be used in the captive power plant.
- (xix) During operational phase at Captive Power Plant, PP shall measure coal dust exposures and to maintain coal dust exposures within stipulated standards at coal handling areas. PP shall identify extreme hot areas through heat stress survey as well as noise monitoring within

process plants to ensure that workers not exposed above 90 dBA levels as per Factories Act, 1948.

- (xx) Action Plan for fire fighting system including provision for flame detectors, temperature actuated heat detectors with alarms, automatic sprinkler system, fixing the location of fire water tanks, separate power system for fire fighting, involvement of qualified and trained fire personnel, nearest fire station & time required to reach the proposed site shall be prepared and implemented.
- (xxi) Rain water harvesting shall be implemented to recharge/harvest water as per the action plan submitted in the EIA/EMP report.
- (xxii) The proposed project shall be designed as "Zero Liquid Discharge" Plant. ETP shall be installed and there shall be no discharge of effluent from the plant. Domestic effluent shall be treated in Sewage Treatment Plant. MSW waste shall be treated in digester and recovered gas shall be used in the canteen.
- (xxiii) A proper action plan must be implemented to dispose of the electronic waste generated in the industry.
- (xxiv) 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.
- (xxv) 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.
- (xxvi) 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 04 Nos. Continuous Ambient Air Quality Station (CAAQS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- iii. Sampling facility at process stacks and at quenching towers shall be provided as per CPCB guidelines for manual monitoring of emissions.
- iv. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- v. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.
- vi. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
- vii. Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration.
- viii. The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.
- ix. Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.
- x. 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

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.

- The project proponent shall monitor regularly ground water quality at least twice a year (pre- and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.
- iii. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
- iv. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.
- v. Tyre washing facilities shall be provided at the entrance of the plant gates.
- vi. Water meters shall be provided at the inlet to all unit processes in the steel plants.

IV. Noise monitoring and prevention

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

V. Energy Conservation measures

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

VI. Waste management

- i. Oil Collection pits shall be provided in oil cellars to collect and reuse/recycle spilled oil. Oil collection trays shall be provided under coils on saddles in cold rolled coil storage area.
- ii. Kitchen waste shall be composted or converted to biogas for further use.

VII. Green Belt

- i. Green belt shall be developed in an area equal to 33% of the plant area with native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant
- ii. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the program for reduction of the same including carbon sequestration by trees in the plant premises.
- 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.

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.
- 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.
- 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 / 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. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
 - x. 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 to public/public domain.
 - 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.

Agenda No. 26.8

26.8 Expansion of Integrated Cement Project - Clinker (1.48 to 4.38 MTPA), Cement (2.28 to 6.14 MTPA), CPP (25 to 60 MW) and WHRB (4.7 to 15 MW) by M/s. Nirma Limited [Now M/s Nuvoco Vistas Corp. Ltd.] located at Villages - Nimbol and Sinla, Tehsil - Jaitaran, District Pali, Rajasthan-Reconsideration of EC proposal.

[Proposal No. IA/RJ/IND/56521/2011; MoEF&CC File No. J-11011/01/2010-IA.II(I)] [Consultant: J.M. EnviroNet Pvt. Ltd. ; Valid upto : 07.08.2023]

- 26.8.1 M/s. Nirma Limited (Now M/s. Nuvoco Vistas Corporation Limited) has made an online application vide Proposal No. IA/RJ/IND/56521/2011 dated 05.02.2020 along with copy of EIA/EMP report, in prescribed Form 2 and certified compliance report 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. 3(b) Cement Plants and 1(d) Thermal Power Plants under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.
- 26.8.2 Name of the EIA consultant: M/s. J.M. EnviroNet Pvt. Ltd. [List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2023/SA 0172; Valid up to 07.08.2023, as on April 20, 2023].

Details submitted by Project proponent

26.8.3 The details of the ToR are furnished as below:

Date of Application	Consideration	Details	Date of Accord
11.11.2016	12 th Meeting of EAC held on 23 rd	Terms of	04.08.2017
	Nov., 2016	Reference	

- 26.8.4 The project of M/s. Nirma Limited (Now M/s. Nuvoco Vistas Corporation Limited) is located in Nimbol and Sinla Villages, Jaitaran Tehsil, Pali District, Rajasthan state is proposing Expansion of Integrated Cement Project (Clinker - 1.48 to 4.38 Million TPA), Cement (2.28 to 6.14 Million TPA), CPP (25 to 60 MW) and WHRB (4.7 to 15 MW).
- 26.8.5 The proposal was initially considered in the 16th meeting of the previous Reconstituted EAC (Industry-I) sector held during 24-25th February, 2020 wherein the Committee deferred the proposal for want of permission required for abstraction of ground water from CGWA.
- 26.8.6 Subsequently, the proponent submitted the ADS reply vide Letter dated 24th March, 2023 uploaded on PARIVESH on 24th March, 2023. Point-wise reply of ADS is given below:

S. No.	ADS Point	Reply / Response of PP
1.	ADS dated 30 th March, 2020	• Existing total water requirement for the plant is 1123 KLD which is being/ will be sourced from Ground Water and

S. No.	ADS Point	Reply / Response of PP
	The project was appraised for grant of Environmental Clearance in the 16 th meeting of the Re-constituted EAC (Industry - I) held on 25 th February, 2020 and the committee deferred the proposal for "want of permission required for abstraction of groundwater from CGWA."	 additional water requirement for the expansion project will be 1377 KLD. Thus, the total water requirement after expansion will be 2500 KLD. The permission for drawl of 1123 KLD groundwater (Existing requirement) has been obtained from CGWA <i>vide</i> Letter No. 21-4(493)/WR/CGWA/2011-4952 dated 10th December, 2012 in the name of M/s. Nirma Ltd. The company has obtained CGWA NOC renewal for the existing water requirement i.e., 1123 KLD <i>vide</i> NOC No. CGWA/NOC/IND/REN/1/2022/7105 dated 10th Dec., 2022, valid up to 09th Dec., 2024. The name change from M/s. Nirma Ltd. to M/s. Nuvoco Vistas Corporation Ltd. in the existing CGWA NOC has been applied on 20th Jan., 2023, which is under process. The additional water requirement for the expansion project is 1377 KLD for which application has been submitted to CGWB and the same has been forwarded to CGWA, New Delhi on 12th Jan., 2023.
2.	ADS dated 02 nd Feb., 2023 Dear Sir, the name of project is M/s. Siddhi Vinayak Cement Pvt. Ltd.; however, the name of PP is M/s Nirma Ltd. Please confirm which is correct and revise your application on portal as the whole process is online on parivesh and EC is also being generated digitally from the System.	 Initially, Environment Clearance for the above project was obtained from MoEFCC, New Delhi <i>vide</i> Letter No. J-11011/01/2010-IA-II(I) dated 29th March, 2011 in the name of M/s. Siddhi Vinayak Cement Ltd. M/s. Nirma Ltd. has acquired M/s. Siddhi Vinayak Cement Ltd. and subsequently, transfer of existing EC Letter in the name of M/s. Nirma Limited from M/s. Siddhi Vinayak Cement Ltd. under clause 11 of EIA Notification, 2006, as amended from time to time has also been obtained from MoEFCC, New Delhi vide letter no. J-11011/01/2010-IA-II(I) dated 31st July, 2017. Thereafter, the cement division of M/s. Nirma Ltd. demerged and merged in Nuvoco Vistas Corporation Ltd. by the way of scheme of arrangement approved by Hon'ble National Company Law Tribunal at Mumbai Bench. Name change in Existing Environmental Clearance has also been obtained from MoEFCC from Nirma Ltd. to M/s. Nuvoco Vistas Corporation Ltd. on dated 10th Aug., 2020.
3.	ADS dated 06 th Feb., 2023 Dear Sir, On perusal it is noted that PP has still not revised the name of PP and Project. Since the whole	• In compliance of the ADS raised, we have mailed Director, NIC on 11 th Feb., 2023 and 06 th March, 2023 <i>to correct the name of PP and Project.</i>

S. No.	ADS Point	Reply / Response of PP
	process is online on portal, the digital EC is being granted through portal so PP is requested to correct the name of PP and Project as we asked question earlier on portal. However, PP has not revised the project name and again submitted the application without change of the name of PP and project	

26.8.7 Based on the above submission of PP, the proposal was reconsidered during 26th meeting of the EAC for Industry-I sector held on 12th, 13th and 17th April, 2023. The deliberations and recommendations of EAC are as follows:

Deliberations by the Committee

- 26.8.8 The Committee noted the following:
 - 1. The EAC noted that the total water requirement after expansion will be 2500 KLD; which is being/ will be sourced from Ground Water. Permission for withdrawal of 1123 KLD (Existing requirement) of ground water has already been obtained from CGWA vide NOC No. CGWA/NOC/IND/REN/1/2022/7105 dated 10th December, 2022, valid up to 9th December, 2024. The name change from M/s. Nirma Ltd. to M/s. Nuvoco Vistas Corporation Ltd. in the existing CGWA NOC has been applied on 20th January, 2023; which is under process. The additional water requirement for the expansion project is 1377 KLD for which application has been submitted to CGWB and the same has been forwarded to CGWA, New Delhi on 12th January, 2023. The EAC deliberated that previous Committee had deferred the instant proposal for want of permission required for abstraction of ground water from CGWA. PP has still not obtained the required permission for the additional water required for the expansion project. In view of the same, the EAC advised PP to submit the desired water permission from the Competent Authority for further consideration of the project.
 - 2. PP shall further explore the possibility of meeting its requirement from treated municipal water so that dependence on the ground water is reduced in a phased manner.
 - 3. PP needs to submit an undertaking by way of affidavit that they have not made any violation pertaining to expansion or production after obtaining Environment Clearance.
 - 4. The EAC noted that as reported existing greenbelt has been developed in 24.4 ha area which is about 35% of the total existing Plant area i.e. 70 ha with total saplings of 52000 trees and gap fill will also be done with 9000 trees to maintain the density 2500 trees/ha. Proposed greenbelt will be developed in 8.5 ha which is about 33% of the total additional area i.e. 25.764 ha. Thus, a total of 32.9 ha (34.35 % of total project area i.e. 95.764 ha) will be developed as greenbelt with total saplings of 21500 trees. Total no. of 61000

saplings will be planted and nurtured in 32.9 ha in next 03 years. The EAC opined that gap filling shall be undertaken and maximum plantation shall be completed within 1st year in consultation with institutes like Arid Forest Research Institute, Jodhpur. PP shall submit a revised greenbelt development plan along with an undertaking in this regard.

- 5. The PP shall prepare 3 different drawings. Drawing No 1 should include a layout with Road Networking, Traffic channelization, All Plant structures, Parking with a detailed area statement for each element, Indexing with proper color code and Naming at Bottom right corner. Drawing No 2 include a layout with road networking, Existing and proposed Green belt with calculations and indexing with proper color code along with nos of trees in existence and proposed trees. Drawing No 3 includes a layout with road networking, contour drawing and drainage disposal system and rain water harvesting system with calculations, Further the disposal of storm drain point with invert level. Drawing include indexing with color code for drainage pipe lines.
- 6. 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 advised PP to revise the action plan as per Ministry's O.M. dated 30.09.2020.
- 7. The baseline data has been collected during December 2016 to February 2017 which is more than 3 years old. PP shall submit the comparison of the baseline data with the monitoring data as submitted in the latest six monthly compliance report for revalidation.
- 8. The EAC deliberated on the certified compliance report of IRO dated 09.04.2019 which is more than 3 years old. In pursuance to the Ministry's OM dated 08.06.2022, the EAC is of the opinion that PP shall obtain fresh certified compliance report of IRO along with closure report for any non-compliances, if any.
- 9. The EAC deliberated on the raw material requirement of the plant and is of the view that source of gypsum for cement plant shall be elaborated in detail.
- 10. The project proponent shall also provide details of carbon foot prints and carbon sequestration study w.r.t. proposed project and also propose the mitigation measures.
- 11. The 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.
- 12. The EAC noted that there is Sinla Village at a distance of 0.5 km from the project site. Also there are other ESA's like school and hospital within the study area. PP shall submit the specific mitigation measures that will be undertaken to minimise the impact of project activities on these ESA's.
- 13. Dukliya Nadi is at a distance of 1.2 km (N) and Hathi Bala at 1.5 km (W) of the project site within 10 Km. radius of the plant site. The EAC is of the opinion that 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 provided.

- 14. There is no proper Engineering drawing of a layout. It missing area statement, index etc. The PP shall prepare 3 separate drawings as a layout details. In Drg 1 PP shall cover Road networking, Plan Layout, Parking along with area statement showing % of all ingredients i.e. roads, Buildings, Parking, with indexing, scale of drawing etc. In no case road shall be abruptly terminated at any point. It shall have proper looping. PP also to show traffic flow in the drawing along road with entry and exit. In drg 2 PP shall show a layout indicating road networking, Existing Green belt and proposed Green Belt with its % against plot area including no of species WRT 2500 density per ha. In drg3 PP shall show contour map with Bench mark, Road network and drainage network along road side with drainage flow, disposal of drainage flow at lowest point with invert level etc. Further PP to show RWH details in the same drawing with calculations.
- 15. 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

26.8.9 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. 26.8.8 above. The proposal shall be considered after submission of requisite information and updating the Report on Parivesh Portal.

Consideration in Terms of Reference Proposal

Agenda No. 26.9

26.9 Proposed 72,000 TPA Asbestos & Non-Asbestos Flat Cement Sheets (Asbestos Cement Sheets-57,600 TPA & Non-Asbestos Cement Sheets- 14,400 TPA) manufacturing unit by M/s Kamya Industries Private Limited, located at survey No. 25/1B, 25/2, 26/2, Vedadri Village, Jaggaipet Mandal, NTR district, Andhra Pradesh- Consideration of TOR.

[Proposal No. IA/AP/IND1/413783/2023; File No. IA-J-11011/14/2023-IA-II(IND-I)] [Consultant: Ecomen Laboratories Pvt. Ltd; Valid upto: 21.09.2023]

26.9.1 M/s. Kamya Industries Private Limited has made an application online vide proposal no. IA/AP/IND1/413783/2023 dated 27.03.2023 along with the application in prescribed format (CAF, Form – I Part A & B), 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. 4(c) Asbestos Milling and Asbestos based Products under Category "A" of the schedule of the EIA Notification, 2006 and being appraised at Central Level.

26.9.2 Name of the EIA consultant: M/s. Ecomen Laboratories Pvt. Ltd [List of ACOs with their Certificate / Extension Letter No: NABET/EIA/2023/RA0203 valid till 21.09.2023, as on April 20, 2023].

Details submitted by Project proponent

26.9.3 The project of M/s Kamya Industries Private Limited located in Vedadri Village, Jaggayyapeta Mandal, NTR District, Andhra Pradesh is for setting up of a new Asbestos & Non-Asbestos Flat Cement (AC & NAC) Sheets manufacturing Unit for production of Total 72,000 TPA Sheets (AC Sheets - 57,600 TPA & NAC Sheets - 14,400 TPA).

SN.	Particulars		D	etails		Remarks
i)	Total Land	6.7 acres	or 2.712 ha (P	rivate Land)		Land use: Agricultural Land converted for non- agricultural use, vide Competent Authority & Revenue Divisional Officer letter no. Rc. No. Lc. Rc.A.324 / JPT / 2022 Dt. 10.12.2022
ii)	Land Acquisition Details	100% lan 2022.	100% land acquired vide Sale Deed dated 21 st Sept. 2022.			
iii)	Existence of habitation & involvement of R&R, if any.	Study Ar Habitat Vedadri Jaggayy Town	ion village	tion at project s Distance (km 1.0 ~9.5	_	
iv)	Latitude &	Pillar		Minutes & Se	conds	
	Longitude of all corners of the project site.	s <u>1.</u> <u>2.</u> <u>3.</u> <u>4.</u> <u>5.</u> <u>6.</u> <u>7.</u> <u>8.</u>	Latitude 16° 49' 30.99 16° 49' 29.34 16° 49' 27.94 16° 49' 26.97 16° 49' 26.73 16° 49' 29.37 16° 49' 29.43 16° 49' 30.99	Longi " 80° 07' " 80° 07' " 80° 07' " 80°.07' " 80°.07' " 80°.07' " 80°.07'	tude 40.87" 41.55" 42.00" 42.07" 48.53" 49.12" 48.91"	
v)	Elevation of the project site		(Above Mean S		T0.01	

26.9.4 Environmental site settings:

SN.	Particulars		Details			Remarks
vi)	Involvement of forest Land, if any	No forest land involved within the project site.				The project land is not a forest land, NOC vide Forest Department letter no. Rc. No. 417 / 2023 / TO Dt. 15.03.2023.
vii)	Water body (Rivers, Lakes, Pond, Nala,	Project Site : Not p Study area :	The project site is in hilly area & above HFL & do			
	Natural Drainage,	Water body	Distance	(km)	Directio n	not falls under flood affected
	Canal etc.) exists within the project site as well as study area	Krishna River0.9(SW)Paleru River2.7WNW(Krishna River			area of Krishna River – NOC from Irrigation Department, Water Resources Department Vide Lr. No. EE / SPL	
						/ VIA / DB /ITO / 225 dtd. 14.03.2023.
viii)	Existence of ESZ / ESA / National	Nil. Reserved Forest as a	follows :			NOC from State Forest Department vide
	Park / Wildlife	Name of Forest Distance Direction		Forest		
	Sanctuary /	Jaggayyapeta - Blo	ock II RF	265 m	-	Department
	Biosphere	Kuntimaddi RF		2.7 km		letter no. Rc. No.
	Reserve / Tiger	Ginjupalli R.F.		3.0 km		417 / 2023 / TO
	Reserve /	Venkatayapalem RF		3.9 km		Dt. 15.03.2023.
	Elephant Reserve etc. if any within the study area	Budavada RF		4.6 km	NW	

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

SN.	Name of the Facility	Uni	its
		Configuration	Capacity
1.	Asbestos Fiber Blending / Milling / Slurry - Assembly :	1	72,000 TPA
	Godown - BOD - ERM - Bag Shredder - Milling Unit -		(AC Sheets -
	DE System & Wet Washer - Fiber Cone Tank		57,600 TPA
2.	Fly Ash & Cement (Slurry Preparation) - Assembly:	-	& NAC
a)	Fly-ash - Silo - DE System - Slurry Tank – Storage Silos	1	Sheets -
	– DE System		14,400 TPA)
b)	Cement Silo – DE System - Cement Weigh Hopper -	1	
	Screw Conveyor - Rotary Sieve		

SN.	Name of the Facility	Units	
		Configuration	Capacity
c)	Cement & Fly-ash Mixing Tank - Storage Tank - Dilution Tank.	1	
3.	Sheet Formation Assembly: Assembly: Sheet Forming Machine & Drum - Pulper – Heating Chamber - Destacker	1	

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

SN.	Raw Material	Quantity (TPA)	Source	Distance (km)	Transportation Mode
1.	Cement (OPC)	28107	Krishna District & Nearby Areas	10 to 50	Road: Closed Containerized Trucks
2.	Fly ash	16381	Nearby Thermal Power Station (TPP)	70 to 300	-do-
3.	Asbestos fiber	5718	Imported from Russia, Brazil & China to Chennai Port	410	Sea / Road: Closed Containerized Trucks
4.	Pulp	2169	Telangana, Karnataka & Rajasthan	100 to 400	Road : Covered Trucks
8.	Silica	1805	A.P. & Rajasthan	100 to 1400	-do-
9.	Ceramic Powder	319	Telangana, A.P.	100 to 500	-do-
10.	Bentonite	106	Karnataka & Rajasthan	300 to 1400	-do-
Gra	nd Total	54605			

- 26.9.7 The makeup water requirement for the proposed project is estimated as 96 m³/day, The permission for drawl of groundwater water is obtained from Ground Water & Water Audit Department, Vijayawada vide Letter. No.2/IND/2022-23 dated 16.02.2023.
- 26.9.8 The power requirement for the proposed project is estimated as 1.4 MW, which will be obtained from the local grid of Andhra Pradesh Central Power Distribution Corporation Limited (APCPDCL).
- 26.9.9 The capital cost of the project is Rs. 30 Crores and the capital cost for environmental protection measures is proposed as Rs. 30 Lakhs. The employment generation from the proposed project is 135 persons.
- 26.9.10 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.
- 26.9.11 Proposed Terms of Reference: [Baseline data collection period: October to December 2022]

Environmental	Parameters		Sampling
Attributes		No.	Frequency
	com Project Site Boundary nuous 3 months covering 1	season (e	xcept monsoon) : Oct. 2022 – Dec.
A. Air			
a) Meteorological parameters	Wind speed & direction, temperature, Relative humidity, rainfall (Automatic Met. Stn)	1	Hourly recording 24hrly
b) AAQ parameters	PM ₁₀ , PM _{2.5} , SO ₂ , NO ₂ Other parameters such as O ₃ , CO, NH ₃ , C ₆ H ₆ , As, Ni, BaP & Pb	8	 24 hourly, twice a week, 4 weeks / month for 3 months. Locations : Considering pre-dominant winds, sensitive receptors. Other Parameters: Once / month, for 3 months.
B. Noise	Noise levels in dBA Leq day & Night time	8	Once during study period
C. Water: Surface water (SW) / Ground Water (GW)	Physico-Chemical & Bacteriological parameters GW : IS: 10500 standards & SW: CPCB Surface Water Quality Parameters	11 5-SW & 6-GW	Once in study period. SW: Nearby river / stream (U/S) & (D/S) & GW : U/G & D/G of project site (hydro-geological features)
D. Land: a. Soil Quality	pH, conductivity, texture, NPK, organic matter, moisture content, grain size distribution.	6	Once in study period
D. Land: b. Land Use	Land use / land cover using IRS satellite data (LISS-IV) and ArcGIS / Erdas imagine software.	Study Area	Once in study period
E. Socio-Economic	Socio-economic Characteristics	Study Area	Census 2011 & Primary Survey

Deliberation by the Committee

- 26.9.12 The Committee noted the following:
 - The instant proposal is for setting up of a new Asbestos & Non-Asbestos Flat Cement (AC & NAC) Sheets manufacturing Unit for production of Total 72,000 TPA Sheets (AC Sheets 57,600 TPA & NAC Sheets 14,400 TPA).
 - The total area of the proposed plant is 6.7 acres or 2.712 ha (Private Land), which is under the possession of the company. As reported agricultural Land is converted for nonagricultural use, vide Competent Authority & Revenue Divisional Officer letter no. Rc. No. Lc. Rc.A.324 / JPT / 2022 Dt. 10.12.2022.

- iii. The project land is not a forest land as per NOC of Forest Department vide letter no. Rc. No. 417 / 2023 / TO Dt. 15.03.2023.
- iv. Vedadri Village is at a distance of 1 km in the SSE direction of the project site.
- v. Krishna River is at a distance of 0.9 km in SW and Paleru River (Krishna River Tributary) at a distance of 2.7 km in WNW from the project site area. PP has reported that the project site is in hilly area & above HFL & do not falls under flood affected area of Krishna River as per the NOC obtained from Irrigation Department, Water Resources Department Vide Lr. No. EE / SPL / VIA / DB /ITO / 225 dtd. 14.03.2023.
- vi. The makeup water requirement for the proposed project is estimated as 96 m³/day. The permission for drawl of groundwater water is obtained from Ground Water & Water Audit Department, Vijayawada vide Letter. No.2/IND/2022-23 dated 16.02.2023.

Recommendations of the Committee

- 26.9.13 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) Vedadri Village is at a distance of 1 km in the SSE direction of the project site. 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 this location in its environmental monitoring programme.
 - (ii) Krishna River is at a distance of 0.9 km in SW and Paleru River (Krishna River Tributary) at a distance of 2.7 km in WNW from the project site area. The PP shall include in the EIA/EMP report 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.
 - (iii) Water requirement of 96 m^3 /day is proposed be met from ground water. PP shall explore the possibility for withdrawing water from the river based on cost benefit analysis to reduce dependency on ground water in a phased manner.
 - (iv) Detailed description of micro flora and fauna (terrestrial and aquatic) existing in the study area with special reference to rare, endemic and endangered species.
 - (v) Explore possibilities for recycling and reusing of treated water in the unit to reduce the fresh water demand and waste disposal.
 - (vi) 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.
 - (vii) PP shall submit action plan for rainwater harvesting system.
 - (viii) Action plan for 100 % solid waste utilization shall be submitted.
 - (ix) 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. In this context, The PP shall prepare 3 different drawings. Drawing No 1 should include a layout with Road Networking, Traffic channelization, All Plant structures, Parking with a detailed area statement for each element, Indexing with proper color code and Naming at Bottom right corner. Drawing No 2 include a layout with road networking, Existing and proposed Green belt with calculations and indexing with proper color code along with nos of trees in existence and proposed trees. Drawing No 3 includes a layout with road networking, contour drawing and drainage disposal system and rain water harvesting system with calculations, Further the disposal of storm drain point with invert level. Drawing include indexing with color code for drainage pipe lines.

- (x) 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.
- (xi) 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.
- (xii) 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.
- (xiii) 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.
- (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.
- (xvii) Action Plan for fire fighting system including provision for flame detectors, temperature actuated heat detectors with alarms, automatic sprinkler system, location of fire water tanks & capacity, separate power system for fire fighting, details of qualified and trained fire personnel & their job specifications, nearest fire station & time required to reach the proposed site shall be submitted.

Agenda No. 26.10

26.10 Expansion for production of 150,000 TPA of Crude Steel by M/s Satyam Smelters Private Limited (SSPL), located at Plot No. 111-143; 152-160; 354/2054; 153/2068 Ikrah, Jamuria Industrial Area, Dist-Paschim Bardhaman, West Bengal – Consideration of TOR proposal.

[Proposal No. IA/WB/IND1/410587/2022; File No. IA-J-11011/405/2021-IA-II(IND-I)]

26.10.1 M/s Satyam Smelters Private Limited (SSPL) vide its letter dated 07.04.2023 sent through email dated 07.04.2023 informed that the project mentioned above was submitted in the forms of Part A&B and Part C in the Parivesh Portal 2.0. The proposal has already received TOR earlier on 2nd October 2021 so they have mistakenly submitted the application, although they wanted to apply for EC. In view of the same, PP has requested for withdrawal of the application. Considering the same, the EAC agreed to the request of PP for withdrawing the said proposal.

Consideration of Modification in ToR Proposal

Agenda No. 26.11

26.11 Modification of Terms of Reference titled "2 x 1000 TPD Iron ore Pellet Plant alongwith coal Gasifier of 26000 M³/hr, 2 x 500 TPD Sponge Iron plant and 50 MW CPP (25 MW WHRB + 25 MW AFBC at Plot No.B1/4, C-2& C -4 Deoli Growth Centre MIDC Area, Taluka Deoli, District Wardha, Maharashtra by M/s SMW Ispat Private Limited-Consideration of TOR under SOP dated 07.07.2021 [Violation category].

[Proposal No. IA/MH/IND/298219/2023; File No. IA-J-11011/664/2009-IA-II(IND-I)]

- 26.11.1 M/s SMW Ispat Private Limited has made an application online vide proposal No:-IA/MH/IND/298219/2023, dated 31.03.2023 along with Form-3 and revised PFR and sought for amendment in Terms of Reference accorded by the Ministry vide no. J-11011/664/2009-IA.II (I) dated 16.07.2020 and subsequent transfer letter dated 26.12.2022 w.r.t. change in project land area from 22.84 ha to 33.4934 and for appraisal of proposal under violation category as per the provisions contained in the MoEF&CC Standard Operating Procedure dated 07.07.2021 as PP has completed the excavation and foundation work of 2X500 TPD Rotary Kiln without obtaining Environment Clearance.
- 26.11.2 Name of the EIA consultant: M/s. Pollution and Ecology Control Services [List of ACOs with their Certificate / Extension Letter no. QCI/NABET/ENV/ACO/23/2732; valid upto 09.05.2023, as on April 20, 2023].

Details submitted by Project proponent

26.11.3 M/s. Mahalaxmi TMT Pvt. Ltd. had initally applied for Terms of Reference vide proposal no. IA/MH/IND/158248/2020, dated 20.06.2020 for 2x1000 TPD Iron Ore Pellet Plant along with

Coal Gasifier of 26000 m³/hr, 2x 500 TPD Sponge Iron Plant and 50 MW CPP (25 MW WHRB + 25 MW AFBC). Accordingly, Standard ToR was granted by the Ministry vide no. J-11011/664/2009-IA.II (I) dated 16.07.2020. Thereafter, M/s. SMW Ispat Private Limited applied for transfer of ToR dated 16.07.2020 vide Proposal No. IA/MH/IND/289129/2022 dated 18.08.2022 and accordingly the ToR was transferred by the Ministry from M/s. Mahalaxmi TMT Pvt. Ltd. to M/s. SMW Ispat Private Limited vide letter No. J-11011/664/2009-IA.II (I) dated 26.12.2022.

26.11.4 The instant proposal is for seeking amendment in ToR dated 16.07.2020 and 26.12.2022 w.r.t. . change in project land area from 22.84 ha to 33.4934 and for appraisal of proposal under violation category as per the provisions contained in the MoEF&CC Standard Operating Procedure dated 07.07.2021 as PP has completed the excavation and foundation work of 2X500 TPD Rotary Kiln without obtaining Environment Clearance. The changes are as follows.

Parameter	As per TOR letter no J	Final after proposed	Remarks
	11011/664/2009- IA.II(I)	Amendment	
	dated 16.07.2020 and		
	26.12.2022		
Land Details	22.84 Ha (Plot no.s B1/4,	33.4934 ha. (Plot no.s	SMW Ispat Pvt. Ltd.
	B1/2, SR- 46/2 and Survey	B1/4,B1/3, B1/2, SR-	acquired one additional
	no.:- 562, 564, 565, MIDC	46/2 and Survey no .:-	adjacent plot no. B1/3 in
	Deoli, District – Wardha,	562, 564, 565, Plot no.	between B1/2 & B1/4 to
	Maharashtra)	R2&R3 MIDC Deoli,	avoid road transportation of
		District – Wardha,	pellet from B1/4 to B1/2.
		Maharashtra)	other plots no. R2 and R3
			are also leased by MIDC for
			construction of bachelor
			hostel and plantation.
Greenbelt	7.54 ha	11.05 ha	Increased due to additional
Development			land area

26.11.5 It is reported that there is no change in plant configuration and Production capacity after amendment.

26.11.6 **Reason for Amendment:**

- As per TOR, the Pellet Plant is proposed on plot no B1/4 and SR-46, 562, 564, 565 whereas DRI plant and CPP are proposed on plot no. B1/2. Pellets from pellet plant proposed to be transported by Tarpaulin Covered Trucks to Plot no. B1/2 for DRI plant by covering 200 mt. distance.
- Plot no. B1/3 which is in between plot no. B1/2 & B1/4 is vacant plot and was under NCLT Act and in possession of SBI, Mumbai.
- To avoid the proposed Road Transportation (for transportation of Pellet) and to minimize the fugitive emission due to transportation we were trying to purchase in between plot i.e. plot no. B1/3 and finally PP purchased the plot from State Bank of India on 18.01.2023.
- In addition to this MIDC has leased out plot no. R2 & R3 (Total area 18000 sq. mt.) for construction of bachelor hostel on 500 sq.mt. Balance 1300 sq.mt area will be used for additional plantation.

26.11.7 Violation Details:

- As per the terms in lease agreement with MIDC, "Time Limit for commencement and completion of construction work" shall be within 02 years from the date of possession or Agreement to lease whichever is earlier. In case of non commencement of work, MIDC would cancel the leasing of the plot.
- Hence PP started and completed the excavation and foundation work only at Plot No. B/1-2. This foundation is for 2x500 TPD Rotary Kiln.
- Total cost involved for this activity is Rs. 1,75,00,000/-.

Deliberation by the Committee

- 26.11.8 The Committee noted the following:
 - M/s. Mahalaxmi TMT Pvt. Ltd. had initially applied for Terms of Reference vide proposal no. IA/MH/IND/158248/2020, dated 20.06.2020 for 2x1000 TPD Iron Ore Pellet Plant along with Coal Gasifier of 26000 m³/hr, 2x 500 TPD Sponge Iron Plant and 50 MW CPP (25 MW WHRB + 25 MW AFBC). Accordingly, Standard ToR was granted by the Ministry vide no. J-11011/664/2009-IA.II (I) dated 16.07.2020. Thereafter, M/s. SMW Ispat Private Limited applied for transfer of ToR dated 16.07.2020 vide Proposal No. IA/MH/IND/289129/2022 dated 18.08.2022 and accordingly the ToR was transferred by the Ministry from M/s. Mahalaxmi TMT Pvt. Ltd. to M/s. SMW Ispat Private Limited vide letter No. J-11011/664/2009-IA.II (I) dated 26.12.2022.
 - ii. The instant proposal is for seeking amendment in ToR dated 16.07.2020 and 26.12.2022 w.r.t. change in project land area from 22.84 ha to 33.4934 ha as detailed in para 26.11.4 above and for appraisal of proposal under violation category as per the provisions contained in the MoEF&CC Standard Operating Procedure dated 07.07.2021 as PP has completed the excavation and foundation work of 2X500 TPD Rotary Kiln without obtaining Environment Clearance.
 - iii. PP has reported that in compliance of lease agreement with MIDC and to prevent cancelling of leasing of the plot, they started and completed the excavation and foundation work of 2X500 TPD Rotary Kiln without obtaining Environment Clearance at Plot No. B/1-2. The PP is ready to comply with All conditions mentioned in SOP dated 07.07.2021 for projects under violation category.
 - iv. The EAC deliberated on the proposal and is of the view that there is increase in the land area from 22.84 ha to 33.4934 ha and as reported by the PP, the Public Hearing has already been conducted for the 22.84 ha land area. In such a case Project Proponent shall have to conduct fresh public hearing for the new proposed project land area of 33.4934 ha.
 - v. The EAC also deliberated on the Violation reported by the project proponent and is agreed that project proponent has committed a violation by undertaking excavation and foundation work of 2X500 TPD Rotary Kiln without obtaining Environment Clearance. Therefore, the proposal shall be appraised under violation category as per the provisions contained in the MoEF&CC Standard Operating Procedure dated 07.07.2021.

Recommendations of the Committee

- 26.11.9 After deliberations, the Committee **recommended** the proposal for amendment in ToR granted vide no. -11011/664/2009-IA.II (I) dated 16.07.2020 and transfer of TOR dated 26.12.2022 w.r.t. change in project land area from 22.84 ha to 33.4934 ha as detailed in para 26.11.4 above subject to stipulation of following additional conditions. The other terms and conditions of ToR dated 16.07.2020 and 26.12.2022 shall remain the same.
 - i. Project Proponent shall have to conduct fresh public hearing for the new proposed project land area of 33.4934 ha.
 - ii. 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.
 - iii. 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.
 - iv. 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).
 - v. 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.
 - vi. 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.
 - vii. 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.
 - viii. 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 CPCB prior to the grant of EC as per SOP dated 07.07.2021. 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.
 - ix. 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.

Agenda No. 26.12

26.12 Modification in TOR under violation category of proposed Expansion of an Integrated Steel Plant by M/s Amalgam Steel & Power Limited, located at Plot No. – 1165, 1148,1223,27,28,11 4, Khata No. – 114,34,9 Kandra Chowka Road, Kandra, District Saraikela, Kharsawan, West Bengal-Consideration of TOR under SOP dated 07.07.2021 [Violation category].

[Proposal No. IA/JH/IND/296887/2023; File No : IA-J-11011/899/2007-IA-II(I)]

- 26.12.1 M/s Amalgam Steel & Power Limited has made an application online vide proposal No:-IA/JH/IND/296887/2023, dated 19.03.2023 along with Form-3 and revised PFR and sought for amendment in Terms of Reference accorded by the Ministry vide no. J-11011/899/2007-IA.II
 (I) dated 08.06.2021 for appraisal of proposal under violation category as per the provisions contained in the MoEF&CC Standard Operating Procedure dated 07.07.2021 as PP has exceeded the production quantity as mention in earlier environment clearance and consent to operate.
- 26.12.2 Name of the EIA consultant: M/s. Pollution and Ecology Control Services [List of ACOs with their Certificate / Extension Letter no. QCI/NABET/ENV/ACO/23/2732; valid upto 09.05.2023, as on April 20, 2023].

Details submitted by Project proponent

- 26.12.3 M/s Amalgam Steel & Power Limited had initially applied for Terms of Reference vide proposal no. IA/JH/IND/191410/2021, dated 06.06.2021 for expansion in existing Integrated Mini Steel Plant. Accordingly, Standard ToR was granted by the Ministry vide no. J-11011/899/2007-IA.II (I) dated 08.06.2021.
- 26.12.4 The instant proposal is for seeking amendment in ToR dated 08.06.2021 for appraisal of proposal under violation category as per the provisions contained in the MoEF&CC Standard Operating Procedure dated 07.07.2021 as PP has exceeded the production quantity as mention in earlier environment clearance and consent to operate.

Violation Details:

- 26.12.5 PP has further reported that as per the certificate issued by Chartered Accountant, the total exceeded quantity is 11,67,095 T in last 3 years. As per OM, penalty is to be paid as 0.25 % of the total turnover of exceed quantity which comes to 92.71 lakhs. In addition to this penalty, Company is ready to prepare damage assessment, Remedial plan and community augmentation plan and will follow all guideline mentioned in OM dated 07.07.2021.
- 26.12.6 It is reported that there is no change in plant configuration and Production capacity.

26.12.7 Reason for Amendment:

M/s. Amalgam Steel & Power Limited exceeded the production quantity as mentioned in earlier environment clearance and consent to operate upto 11,67,095 Tonnes in last 3 years as per the certificate issued by Chartered Accountant. Thus the proposal falls under violation and needs to

be appraised as per the provisions contained in the MoEF&CC Standard Operating Procedure dated 07.07.2021.

- 26.12.8 Details of litigations pending against company are as under:
 - 1. Forest department filled a case a case for forest land encroachment under section 33 of forest conservation Act
 - 2. In the same land one more case had been filled for Bihar public Land Encroachment Act.

Deliberation by the Committee

- 26.12.9 The Committee noted the following:
 - M/s Amalgam Steel & Power Limited had initally applied for Terms of Reference vide proposal no. IA/JH/IND/191410/2021, dated 06.06.2021 for expansion in existing Integrated Mini Steel Plant. Accordingly, Standard ToR was granted by the Ministry vide no. J-11011/899/2007-IA.II (I) dated 08.06.2021.
 - ii. The instant proposal is for seeking amendment in ToR dated 08.06.2021 for appraisal of proposal under violation category as per the provisions contained in the MoEF&CC Standard Operating Procedure dated 07.07.2021 as PP has exceeded the production quantity as mention in earlier environment clearance and consent to operate.
 - iii. M/s. Amalgam Steel & Power Limited exceeded the production quantity as mentioned in earlier environment clearance and consent to operate upto 11,67,095 Tonnes in last 3 years as per the certificate issued by Chartered Accountant. Thus the proposal falls under violation and needs to be appraised as per the provisions contained in the MoEF&CC Standard Operating Procedure dated 07.07.2021.
 - iv. As per OM, penalty is to be paid as 0.25 % of the total turnover of exceed quantity which comes to 92.71 lakhs. In addition to this penalty, Company is ready to prepare damage assessment, Remedial plan and community augmentation plan and will follow all guideline mentioned in OM dated 07.07.2021
 - v. The EAC also deliberated on the Violation reported by the project proponent and is agreed that project proponent has committed a violation by exceeding the production quantity as mentioned in earlier environment clearance and consent to operate. Therfore, the proposal shall be appraised under violation category as per the provisions contained in the MoEF&CC Standard Operating Procedure dated 07.07.2021.
 - vi. The EAC also noted that following litigations are pending against company:
 - 1. Forest department filled a case a case for forest land encroachment under section 33 of forest conservation Act
 - 2. In the same land one more case had been filled for Bihar public Land Encroachment Act.

Recommendations of the Committee

- 26.12.10 After deliberations, the Committee **recommended** the proposal for amendment in ToR granted vide no. -11011/899/2007-IA.II (I) dated 08.06.2021 for appraisal of proposal under violation category as per the provisions contained in the MoEF&CC Standard Operating Procedure dated 07.07.2021 subject to stipulation of following additional conditions. The other terms and conditions of ToR dated 08.06.2021 shall remain the same.
 - i. The instant ToR is subject to outcome of the litigations pending against the company. PP shall abide by the outcomes of the cases.
 - ii. 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.
 - iii. 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.
 - iv. 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).
 - v. 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.
 - vi. 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.
 - vii. 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.
 - viii. 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 CPCB prior to the grant of EC as per SOP dated 07.07.2021. 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.
 - ix. 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.

DAY-3: APRIL 17, 2023 [MONDAY]

Consideration in Environmental Clearance Proposals

Agenda No. 26.13

26.13 Expansion in Existing Sponge Iron Plant (2 x 100 TPD) by addition of 350 TPD DRI Kiln, SMS Unit (1,35,000 TPA), Rolling Mill (1,20,000 TPA), Sinter Plant (90,000 TPA), Ferro Alloy Plant (2 x 9 MVA SAF and 2 x 12 MVA SAF) and Captive Power Plant (WHRB#13MW and AFBC#9 MW) by M/s M B Sponge and Power Limited, located at Village + P.S-Hijalgora, Post Office- Jamuria, District-West Bardhman, West Bengal-Consideration of Environmental Clearance.

[Proposal No. IA/WB/IND1/420182/2023; File No. IA-J-11011/310/2019-IA-II(IND-I)] [Consultant: Grass Roots Research & Creations India (P) Ltd.; Valid upto 15.02.2024]

- 26.13.1 M/s. M.B. Sponge and Power Limited has made an online application vide proposal No-IA/WB/IND1/420182/2023, dated 04.04.2023 along with copy of EIA/EMP report, in prescribed format (CAF, Form I Part A, B &C) and certified compliance report 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. 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.
- 26.13.2 Name of the EIA consultant: M/s. Grass Roots Research & Creations India (P) Ltd. [List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2124/RA 0213; Valid up to 15.02.2024, as on April 20, 2023].

Date of Application	Consideration	Details	Date of Accord	ToR Validity
01.10.2019	13 th meeting of the EAC	Terms of	02.01.2020	01.01.2024
	(Industry-I) held on 23-24 th	Reference		
	November 2019.			
18.06.2022	10 th meeting of the EAC	Amendment	30.08.2022	
	(Industry-I) held on 1-3 rd	in TOR		
	August 2022.			

Details submitted by Project proponent

26.13.3 The details of the ToR are furnished as below:

26.13.4 The project of M/s M B Sponge and Power Limited located in Village+PO- Hijalgora, District-West Bardhman, West Bengal is for expansion in Existing Sponge Iron Plant (2x100 TPD DRI Kiln) by addition of 350 TPD DRI Kiln for production of Sponge Iron (Existing (60000 TPA) + Expansion (1,05,000 TPA)), MS Billets Production of 1,35,000 TPA with installation of 3 x 15 Ton IF, Rolling Mill of 1,20,000 TPA, Sinter Plant of 90,000 TPA, Ferro Alloy Plant for production of Fe-Mn (89,481 TPA) or Si-Mn (38,989 TPA)or Fe-Si (71,820 TPA)with 2x9

MVA and 2 x 12 MVA submerged Arc furnace and 22 MW Captive Power Plant {WHRB#13MW (2 x 10 TPH and 1 x 40 TPH) and AFBC#9 MW (1 X 40 TPH).

26.13.5 The proposal was reconsidered during 26th meeting of the EAC for Industry-I sector held on 12th, 13th and 17th April, 2023. The deliberations and recommendations of EAC are as follows:

Deliberations by the Committee

- 26.13.6 The Committee noted the following:
 - 1. The PP/Consultant presented the drone survey video before the Committee and EAC observed that housekeeping of the existing plant is very poor. The EAC suggested to improve the housekeeping of the plant area. PP shall submit the housekeeping plan along with the photographs in this regard. PP shall also prepare and present a fresh drone survey after the improved housekeeping.
 - 2. The EAC noted that the existing project is operational based on the Consent to establish obtained from SPCB vide letter no. NO-28813 dated 06.01.2006. The EAC is of the opinion that PP/Consultant shall submit credible documents along with CA certificate certifying that the existing project cost was less to be covered under EIA Notification, 1994 and did not require EC under the provisions of EIA Notification, 1994.
 - 3. PP needs to submit an undertaking by way of affidavit that they have not made any violation pertaining to expansion or production after obtaining CTE.
 - 4. The EAC noted that as reported existing greenbelt is developed in 1.12 ha which is about 33 percent of total existing project area i.e. 3.36 ha with total 2800 No's trees. Proposed greenbelt will be developed in 4.8 ha which is about 39.05% of the expansion project area i.e. 12.29 ha. Thus total of 5.92 ha area (37.82% of total project area) will be developed as greenbelt after expansion. Total no. of 12000 trees will be planted for expansion project. The EAC opined that PP shall submit a revised greenbelt development plan along with the undertaking by way of affidavit that they will complete the remaining greenbelt in the coming monsoon.
 - 5. The EAC noted that the water requirement for the proposed expansion project is estimated 1447 m³/day, which will be sourced from Asansol Municipal Corporation. Application for additional water supply has been submitted to Asansol Municipal corporation dated 03.08.2022. In view of the same, the EAC advised PP to submit the desired water permission from the Competent Authority for further consideration of the project.
 - 6. 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 advised PP to revise the action plan as per Ministry's O.M. dated 30.09.2020.
 - 7. The Committee deliberated on the baseline data and observed that the PM_{10} , $PM_{2.5}$ and noise levels recorded are way too high. PP shall submit the justification along with the mitigation measures that will be undertaken to minimise the same.

- 8. The 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.
- 9. 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 provided.
- 10. There is no proper Engineering drawing of a layout. It missing area statement, index etc. The PP shall prepare 3 separate drawings as a layout details. In Drg 1 PP shall cover Road networking, Plan Layout, Parking along with area statement showing % of all ingredients i.e. roads, Buildings, Parking, with indexing, scale of drawing etc. In no case road shall be abruptly terminated at any point. It shall have proper looping. PP also to show traffic flow in the drawing along road with entry and exit. In drg 2 PP shall show a layout indicating road networking, Existing Green belt and proposed Green Belt with its % against plot area including no of species WRT 2500 density per ha. In drg3 PP shall show contour map with Bench mark, Road network and drainage network along road side with drainage flow, disposal of drainage flow at lowest point with invert level etc. Further PP to show RWH details in the same drawing with calculations.
- 11. 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

26.13.7 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. 26.13.6 above. The proposal shall be considered after submission of requisite information and updating the Report on Parivesh Portal.

Agenda No. 26.14

26.14 Expansion of Integrated Steel Plant from 0.96 MTPA to 2.1 MTPA by M/s. BMM Ispat Limited, located at Villages- Danapura, Danayakanakere, Nagalapura, Byalakundi and Garga, Tehsil - Hosapete, District–Vijayanagara (Earlier Ballari), Karnataka -Consideration of Environmental Clearance.

[Proposal No. IA/KA/IND1/417501/2023; File No. F.No.J-11011/236/2008-IA.II (I)] [Consultant: Pragathi Labs & Consultants Pvt. Ltd., Valid upto 29.10.2024]

26.14.1 M/s. BMM Ispat Limited has made an online application vide proposal no. IA/KA/IND1/417501/2023 dated 05.04.2023 along with copy of EIA/EMP report, in prescribed format (CAF, Form – I Part A, B &C) and certified compliance report 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. 3(a) Metallurgical industries (ferrous & non-ferrous), 2(b) Cement Plants and 1(d) Thermal Power Plants under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.

26.14.2 Name of the EIA consultant: M/s. Pragathi Labs & Consultants Pvt. Ltd. [List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2124/RA 0237; Valid up to 29.10.2024, as on April 20, 2023].

Details submitted by Project proponent

26.14.3 The details of the ToR are furnished as below:

Date of Application	Consideration		Date of Accord	ToR Validity
02.11.2021	Standard Terms of Reference issued	Terms of Reference	05.11.2021	04.11.2025

- 26.14.4 The project of M/s. BMM Ispat Limited located in Danapura, Danayakanakere, Nagalapura, Byalakundi and Garaga villages, Hosapete taluk, Vijayanagara (Ballari) district, Karnataka is for expansion of Integrated Steel Plant from 0.96 MTPA to 2.1 MTPA and captive power plant from 235 MW to 345 MW and 1.4 MTPA cement plant.
- 26.14.5 The proposal was reconsidered during 26th meeting of the EAC for Industry-I sector held on 12th, 13th and 17th April, 2023. The deliberations and recommendations of EAC are as follows:

Deliberations by the Committee

- 26.14.6 The Committee noted the following:
 - 1. 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 advised PP to revise the action plan as per Ministry's O.M. dated 30.09.2020.
 - 2. The EAC also deliberated on the PH issues raised during the earlier EC and is of the view that PP shall submit the status of implementation of the action plan of the commitment made by the PP during the existing ECs in tabular form.
 - 3. The Committee deliberated on the baseline data and observed that incremental GLC of CO has not been provided. The EAC if the view that the GLC values for all the parameters shall be revalidated and shall be submitted.
 - 4. The EAC deliberated on the greenbelt development plan and is of the view that maximum greenbelt shall be achieved in the coming monsson. In this regard, PP shall submit a revised greenbelt development plan along with the undertaking by way of affidavit that they will achieve maximum plantation in the coming monsoon.

- 5. The EAC noted that there are number of litigations against the project. PP shall submit an updated status of each of the cases and shall submit an undertaking by way of affidavit that they will abide by the outcome of the cases.
- 6. Danayanakankere Lake is adjacent to project site whereas there are number of ponds nearby the project site. The EAC is of the opinion that 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 provided.
- 7. The 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.
- 8. There is no proper Engineering drawing of a layout. It missing area statement, index etc. The PP shall prepare 3 separate drawings as a layout details. In Drg 1 PP shall cover Road networking, Plan Layout, Parking along with area statement showing % of all ingredients i.e. roads, Buildings, Parking, with indexing, scale of drawing etc. In no case road shall be abruptly terminated at any point. It shall have proper looping. PP also to show traffic flow in the drawing along road with entry and exit. In drg 2 PP shall show a layout indicating road networking, Existing Green belt and proposed Green Belt with its % against plot area including no of species WRT 2500 density per ha. In drg3 PP shall show contour map with Bench mark, Road network and drainage network along road side with drainage flow, disposal of drainage flow at lowest point with invert level etc. Further PP to show RWH details in the same drawing with calculations.
- 9. 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

26.14.7 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. 26.14.6 above. The proposal shall be considered after submission of requisite information and updating the Report on Parivesh Portal.

<u>Consideration of Proposal before the EAC as per the Order of Hon'ble NGT dated 20.03.2023</u> in the matter of Appeal No. 21 of 2022/EZ [I.A. No. 167/2022/EZ] and Others titled Prafulla Samantray Vs. Union of India & Ors. regarding

Agenda No. 26.15

26.15 Setting up of a Greenfield Integrated Steel Plant of capacity 13.2 MTPA Crude Steel with 10 MTPA Cement grinding unit & 900 MW Captive Power Plant by M/s. JSW Utkal Steel Limited, located at Polanga, BayanalaKandha, Gobindapur, Dhinkia, Nuagaon and Jatadhara villages, Ersama Tehsil, Jagatsinghpur District, Odisha.

<u>Proposal is placed before the EAC as per the Order of Hon'ble NGT dated 20.03.2023 in</u> the matter of Appeal No. 21 of 2022/EZ [I.A. No. 167/2022/EZ] and Others titled Prafulla Samantray Vs. Union of India & Ors. regarding

[Proposal No. IA/OR/IND/74396/2018; File No. J-11011/524/2017-IA.II (I)]

- 26.15.1 M/s. JSW Utkal Steel Limited [JSW USL] had made online application along with copy of common EIA report and Form 2 seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposal was initially considered by the EAC in its meeting held during 18-19 May 2021, 13-14 September 2021. Further, the EC application was considered by the EAC held during 52nd EAC (Industry-1) held on 27th, 28th and 31st January, 2022 and reconsidered during 53rd meeting of the Re-constituted EAC (Industry-I) held on 10 -11th February, 2022 wherein the following experts from EAC Infra 1 sector were co-opted by the Industry 1 sector for appraising the common EIA report: (i) Dr. Manoranjan Hota, Member, EAC (Infra 1 Sector); and (ii) Dr. Sukumaran Jeyakrishanan, Member, (EAC Infra 1 Sector).
- 26.15.2 Based on the deliberations held, the EAC recommended the proposal for grant of Environment Clearance under provision of EIA Notification, 2006 subject to the stipulation of 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. Accordingly, the Environment Clearance was granted by the Ministry vide letter No. J-11011/524/2017-IA.II (I) dated 11.04.2022 for setting up of a Greenfield Integrated Steel Plant of capacity 13.2 MTPA crude steel with 10 MTPA Cement grinding unit & 900 MW Captive Plant Near Paradeep Jagatsinghpur district, Odisha by M/s. JSW Utkal Steel Limited.
- 26.15.3 The project being interlinked with the setting up of an "All- weather, Multi cargo Greenfield Captive Jetty (ies) of handling capacity of 52 MTPA at Jatadhari Muhan River, district Jagatsinghtpur, Orissa", for which the Environment Clearance was granted by the Ministry of Environment, Forest and Climate Change vide letter dated 12.04.2022 to the Project Proponent (M/s. JSW Utkal Steel Limited).

- 26.15.4 Appeals vide 21-22 of 2022 titled Prafulla Samantray Vs. Union of India & Ors. was filed before the Hon'ble National Green Tribunal (Eastern Zone), challenging the EC granted dated 11.04.2022 by the Ministry. The Environment Clearance for setting up of the ISP and Cement grinding unit was challenged in Appeal No. 21/2022 and the Environment Clearance dated 12.04.2022 for setting up the Captive jetty was challenged in Appeal No. 22/2022 before the same Bench.
- 26.15.5 Both the appeals were connected and were heard together at length during the proceedings. However, the Hon'ble NGT, vide its final order and judgment dated 20.03.2023 has allowed the Appeals and suspended the Environment Clearance granted for both the projects. Accordingly, Hon'ble NGT has remitted the matter to the MoEF&CC for fresh appraisal and decision by MoEF&CC in the light of observations made in the judgement. The issues highlighted by the Hon'ble NGT are as follows:
 - a. Cumulative EIA saw the light of the day for the first time after the public hearing
 - b. Permissibility of sourcing water from Mahanadi when drinking water is scarce has not been duly evaluated. The observation with regard to scarcity of water can be seen in the minutes of the meeting dated 18.05.2021. The recommendation accepting the contra stand of the PP is not based on independent evaluation.
 - c. Jetty is located within 500 meters of the Paradeep Port which is unnecessary as opined in the report submitted by Ms. Meena Gupta earlier.
 - d. Paradeep is polluted industrial area.
 - e. The SIA has been conducted later and was not part of public hearing.
 - f. The project by Posco was abandoned and was adversely commented upon by this Tribunal vide order dated 30.03.2012 in Appeal No. 08/2011 which aspect has not been examined.
 - g. Conditions stipulated in the EC granted to POSCO will have to be considered, in case ECs are to be granted.
- 26.15.6 In compliance to the order of the Hon'ble NGT dated 20.03.2023, the aforesaid project along with the observations and directions of the Hon'ble NGT, was placed before the Expert Appraisal Committee (EAC) of Industry- 1 sector during its 26th meeting held on 17th April 2023. Also, following experts from EAC (Infra 1 sector) were co-opted by the Industry 1 sector for appraisal of the project:
 - i. Dr. Manoranjan Hota, Member, EAC Infra 1
 - ii. Dr. Sukumaran Jeyakrishanan, Member, EAC Infra 1

Deliberations by the Committee

26.15.7 The Project proponent has attended the EAC meeting and informed the EAC that after the judgement of Hon'ble NGT, the activities are stopped and there are no activities at the project site.

- 26.15.8 The Committee deliberated on the directions issued by the Hon'ble NGT along with its concerned issues and accordingly, the opinions of the member present during the meeting were deliberated along with the representation of the Project Proponent on the said points.
- 26.15.9 The Committee is of the view that the concerns raised by Hon'ble NGT needs to be addressed more intensely and systematically and Environment Clearance dated 11.04.2022 needs to be revisited. For the same, it is imperative to constitute a Working Group under EAC (Industry-1 Sector).

Recommendations of the Committee:

- 26.15.10 In view of the foregoing and after detailed deliberations, the EAC decided to constitute a Working Group under EAC (Industry-1 Sector) to look into the aspects of the observations made by the Hon'ble NGT comprising of following members:
 - i. Dr. Jai Krishna Pandey, EAC Member (Industry 1 Sector)
 - ii. Dr. S. Ranganathan, EAC Member (Industry 1 Sector)
 - iii. Dr. E V R Raju, EAC Member (Industry 1 Sector)
 - iv. Dr. Hemant Sahasrabuddhe, EAC Member (Industry 1 Sector)
 - v. Representative of MoEF&CC-For assisting the Working Group

The EAC is of the view that the Working Group shall:

- 1. Examine all the necessary documents pertaining to the project in the light of the observation of Hon'ble NGT order dated 20.03.2023.
- 2. The Working Group shall also look into the reports and issues deliberated during the previous appraisal of the project based on which the instant proposal was recommended for grant of EC.
- 3. The Working Group shall also take into consideration the representations made by the Project Proponent and shall be called upon for any clarification required in the matter.
- 4. The report of the Working Group shall be submitted at the earliest for further consideration of the EAC (Industry -1 Sector).

Consideration of proposal w.r.t. Correction in 25th Minutes of EAC meeting

Agenda No. 26.16

26.16 Expansion of Iron Ore Pelletization from 7.0 MTPA to 11.0 MTPA in existing plant area of 110 acre located at Survey No. 15A, Kancharapalem, Near Flyover, Scindia Road, Vishakhapatnam Urban, Vishakhapatnam district, Andhra Pradesh by M/s Arcelor Mittal Nippon Steel India Limited (Formerly Essar Steel India Limited)– Consideration of Consideration (correction in Minutes).

[Proposal No. IA/AP/IND1/417707/2023; File No. IA-J-11011/131/2022-IA-II(IND-I)] [Consultant: Team Labs and Consultants; Valid upto: 24.09.2024]

26.16.1 M/s Arcelor Mittal Nippon Steel India Limited (Formerly Essar Steel India Limited) vide its letter dated 17.04.2023 sent through email dated 17.04.2023 has requested for withdrawal of their application dated 03.04.2023 w.r.t. the minor corrections in 25th EAC MoM. Considering the same, the EAC agreed to the request of PP for withdrawing the said application for correction in MoM of 25th EAC meeting held on 21st - 23rd March, 2023.

Any Other item with permission of Chair

Consideration of proposal w.r.t. Correction in 25th Minutes of EAC meeting

Agenda No. 26.17

26.17 Setting of Integrated Steel Plant for production of 7.0 MTPA Liquid Steel by M/s ArcelorMittal Nippon Steel India – located at Paradeep Facility at, Jagatsinghpur District, Odisha – Consideration of TOR (correction in Minutes).

[Proposal No. IA/OR/IND1/416399/2023; File No. IA-J-11011/43/2023-IA-II(IND-I)] [Consultant: MECON LIMITED; Valid upto: 02.09.2024]

26.17.1 The aforementioned proposal was considered and recommended by EAC in its 25th meeting of the EAC for Industry-I sector held on 21st - 23rd March, 2023. The PP vide email dated 17.04.2023 requested for correction in the Minutes of Meeting of 25th EAC, detailed as below:

MoM ref point no.	Details given in MoM of 25 th EAC Meeting dated 21 st - 23 rd March, 2023	Changes Requested/Suggested	Remarks/ Justification
Page No. 66 Para 25.2.15	(Agenda No. 25.2) As reported to elevate the project site to +4.5m above MSL to avoid flooding, PP shall include the	site to +4.5m above MSL to avoid	

MoM ref	Details given in MoM of 25 th EAC	Changes Requested/Suggested	Remarks/ Justification
point no.	Meeting dated 21st - 23rd March,		
	2023		
Specific	(Agenda No. 25.2)	complete estion plan with techno	Dopt of Water Pasourage Cout of
Specific Condition (Point iv)	complete action plan with techno- economics along with all the necessary permissions required in the EIA/EMP report. The PP should avoid using river sand for this purpose. PP may explore the use of other material for raising the height.	complete action plan with techno- economics along with all the necessary permissions required in the EIA/EMP report. The PP should try to avoid using of river sand for this purpose.	 Odisha (DoWR, GoO) has assigned National Institute of Ocean Technology (NIOT), Chennai for survey & behavioural study of River Mahanadi as part of their flood control action plan. Based on the study, GoO will arrange the necessary desilting /dredging in the estuary area. To avoid the transportation risk & vehicular pollution issues, GoO is proposed to dispose of this dredged soil in the nearby area for suitable usage and accordingly, they are asking us to use it. This will reduce the environmental impact due to transportation as well as we require good quality soil/filling material for 33%
Page No. 67 Para 25.2.15 Specific Condition (Point x)	In pursuance to MoEF&CC OMs dated 31 st October 2019 & 30 th December 2019 issued in compliance of the order of Hon'ble NGT in OA No. 1038/2018 dated 19 th August, 2019, the compliance of all the conditions applicable to CEPI shall be included in the EIA/EMP report. Greenbelt shall be planned in 40% of the project area. As committed, 33% shall be completed in the upcoming Monsoon Season of 2023. Allocation for socio economic development of nearby villages shall be 1.5 times of the normal calculated amount.	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 included in the EIA/EMP report. Greenbelt shall be planned in 40% of the project area. The PP shall prepare and present the action plan for the greenbelt development in the EIA report. Also, the maximum greenbelt shall be covered within one year from the date of issuance of Environment Clearance. Allocation for socio-economic development of nearby villages shall be 1.5 times of the normal calculated amount.	greenbelt area in the proposed ISP area. Hence, PP has requested to revise the condition. Simultaneously, PP is engaging reputed academic institutes (NIT/IIT) to carry out a comprehensive study on the types of material suitable for landfilling along with the consideration of environmental aspects. This is the TOR specific recommendation. Hence, PP has requested to revise the condition. PP will prepare and present the Greenbelt action plan in the EIA report. Also, PP commits to complete the maximum greenbelt development within one year from the date of issuance of Environment Clearance.

Deliberations by the EAC:

26.17.2 The Committee deliberated on the request of PP w.r.t. modifications in the MoM of 25th EAC for Industry-I sector held during 21st – 23rd March, 2023 pertaining to proposal agenda no. 25.2 as referred above.

Recommendation of EAC:

26.17.3 The EAC deliberated and noted that the request of the PP may be accepted and recommended for the incorporation of the above-mentioned corrections/modifications in the minutes of the meeting. Accordingly, aforementioned para 25.2.15 (Point iv) and 25.2.15 (Point x) stands modified in the minutes of 25th EAC (Industry-1) meeting as detailed in table above.

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
 - 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 ecosensitive 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.
- xii. Project proponent shall prepare Engineering layout plan showing all internal roads 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.

Attrib	ites	Sampl	ing	Remarks	
		Network	Frequency		
A. Air Enviro	nment				
 Micro-Meteor Wind spee Wind direct Dry bulb to Wet bulb to Relative how Rainfall 	d (Hourly) etion emperature emperature	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 	
 Solar radia Cloud cove Environme Rate 	er			• CPCB guidelines to be considered.	
Pollutants • PM _{2.5} • PM ₁₀ • SO ₂ • NOx • CO • HC		At least 8-12 locations	As per National Ambient Air Quality Standards, CPCB Notification.	 Sampling as per CPCB guidelines Collection of AAQ data (except in monsoon season) Locations of various stations for different 	

NetworkFrequency• Other parameters relevant to the project and topography of the areaImage: Station Stall be parameters and 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 predominant wind direction, population zone and sensitive receptors including reserved forests,• Raw data of all AAQ measurement for 12 weeks of all stations as per frequency given in the NAAQM Notification of 16/11/2009 along with min., max., average and 98% values for each of the NAAQ parameters from data of all AAQ parameters from data of all AAQ <br< th=""><th>Attributes</th><th colspan="2">Sampling</th><th colspan="2">Remarks</th></br<>	Attributes	Sampling		Remarks	
relevant to the project and topography of the area rea be related to the characteristic 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 predominant wind direction, population zone and sensitive receptors including reserved forests. Raw data of all AAQ measurement for 12 weeks of all stations as per frequency given in the NAAQM 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 noise levels At least 8-12 As per CPCB norms				•	
 Hourly equivalent noise levels At least 8-12 As per - CPCB norms CPCB norms 	relevant to the project and topography of the area			 be related to the characteristic 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 predominant wind direction, population zone and sensitive receptors including reserved forests, Raw data of all AAQ measurement for 12 weeks of all stations 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 	
noise levels locations CPCB norms		At least Q 12	As nor	_	
	• •		СРСВ		
() Motor	C. Water		norms		

Attributes	Sampl	ing	Remarks
	Network	Frequency	
 Parameters for water quality pH, temp, turbidity, magnesium hardness, total alkalinity, 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 	Samples for water analyzed as per: • IS: 2488 (Part of Industrial e • Standard mer wastewater at Health Associ	r quality should t 1-5) methods effluents thods for exa nalysis publish iation.	I be collected and for sampling and testing mination of water and led 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 downstream) and other surface water bodies	measuredStandard	of surface water (BIS
For Ground Water	minimum of	8 locations (fr	ta should be collected at rom existing wells /tube s) from the study area and
D. Traffic Study			
 Type of vehicles Frequency of vehicles for transportation of materials 	-		

	Attributes	Sampling		Remarks
		Network	Frequency	
•	Additional traffic due			
	to proposed project			
•	Parking arrangement			
E.	Land Environment			
So	il	Soil samples be	collected as per E	BIS specifications
•	Particle size			
	distribution			
•	Texture			
•	pН			
•	Electrical conductivity			
•	Cation exchange			
	capacity			
•	Alkali metals			
•	Sodium Absorption			
	Ratio (SAR)			
•	Permeability			
•	Water holding capacity			
•	Porosity			
La	and use/Landscape	-		
•	Location code			
•	Total project area			
•	Topography			
•	Drainage (natural)			
•	Cultivated, forest,			
	plantations, water			
	bodies, roads and			
	settlements			
E.	Biological Environment	t		
Aq	quatic	• Detailed des	scription of flora a	and fauna (terrestrial and
•	Primary productivity	-		area shall be given with
•	Aquatic weeds	-		demic and endangered
•	Enumeration of phyto	-	-	nich indicate ecological
	plankton, zoo plankton		-	should be identified and
	and benthos		-	her the proposed project
•	Fisheries		•	e effect on any species.
•	Diversity indices	_	_	eam and downstream of
•	Trophic levels	• -	-	aries at downstream, and
•	Rare and endangered		ig wells close to a	-
	species		,	n of wind should be
•	Marine Parks/	considered v	while selecting for	cests.
	Sanctuaries/ closed			

Attributes	Samp	oling	Remarks
	Network	Frequency	
areas /coastal regulation zone (CRZ)	• Secondary data to collect from Government offices, NGOs, published literature.		om Government offices,
Terrestrial			
 Vegetation-species list, economic importance, forest produce, medicinal value Importance value index (IVI) of trees Fauna Avi fauna Rare and endangered species Sanctuaries / National park / Biosphere 			
 Migratory routes			
F. Socio-economic			
 Demographic structure Infrastructure resource base Economic resource base Health status: Morbidity pattern Cultural and aesthetic attributes Education 	 stratified and Primary data Secondary d books, topo a 	d random samplin a collection through ata from census	gh questionnaire records, statistical hard ords and relevant official

- 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
Construct	ion phase				
Operation	n phase				

7. Additional Studies

- 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.
- 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	U U I		Year of implementation (Budget in INR)			Total Expenditure
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 (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 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 PM₁₀ 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	12.04.2023	13.04.2023	17.04.2023
No.					
1.	Shri Rajive Kumar	Chairman	Present	Present	Present
2.	Dr. Dipankar Shome	Vice	Present	Present	Present
		Chairman			
3.	Dr. S. Ranganathan	Member	Present	Present	Present
4.	Dr. Ranjit Prasad	Member	Present	Present	Present
5.	Dr. S. K. Singh	Member	Present	Present	Present
6.	Dr. Tejaswini Ananthkumar	Member	Absent	Absent	Absent
7.	Dr. Hemant Sahasrabuddhe	Member	Present	Present	Present
8.	Dr. Jai Krishna Pandey	Member	Present	Present	Present
9.	Dr. E V R Raju	Member	Present	Present	Present
10.	Dr. S K Chaturvedi, (Actg. DG),	Member	Present	Present	Present
	(Representatives of NCCBM)				
11.	Shri Nazimuddin, Scientist 'F'	Member	Present	Present	Present
	(Representative of CPCB)				
12.	Dr. S. Raghavan, Scientist 'D'	Member	Absent	Absent	Absent
	(Representative of National				
	Institute of Occupational Health				
	(NIOH)				
13.	Dr. Sanjay Bist, Scientist 'E'	Member	Present	Present	Present
	(Representative of Indian				
	Meteorological Department)				
14.	Dr. R.B. Lal,	Member	Present	Present	Present
	Scientist F, MoEFCC	Secretary			
	MoE	FCC			
15.	Dr R P Rastogi	Scientist C	Present	Present	Present
16.	Dr Sandeepan BS	Scientist B	Present	Present	Present

ANNEXURE-4

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	Approval of EAC C	<u>nairman</u>	
Email		Additional Directo	r MoEFCC Dr R B LAL
From	 chairman eac ind 1 <chairman.eac.ind.1@gmail.com></chairman.eac.ind.1@gmail.com> Re: Draft minutes of the 26th EAC Me [Part Minutes] held on April 17, 2023 Setting up of a Greenfield Integrated Plant of capacity 13.2 MTPA Crude Sta 10 MTPA Cement grinding unit & 900 Captive Power Plant by M/s. JSW Ut Steel Limited, located at Polanga BayanalaKandha, Gobindapur, Dr Nuagaon and Jatadhara villages, Ersama Tehsil, Jagatsinghpur Dis Odisha. This instant Proposal is place 	Additional Directo Mon, eting w.r.t. Steel eel with MW kal iinkia,	r MoEFCC Dr R B LAL Apr 17, 2023 09:23 PM
То	before the EAC as per the Order of He NGT dated 20.03.2023 in the matter of Appeal No. 21 of 2022/EZ [I.A. No. 167/2022/EZ] and Others titled Praful Samantray Vs. Union of India & Ors. Additional Director MoEFCC Dr R B LA <rb.lal@nic.in></rb.lal@nic.in>	on'ble of la	
Сс	<pre>rajivekumar1983@gmail.com, rangan metals <ranganathan.metals@gmail.com ranjitnitj@gmail.com, rajuevr60@gmail.com, dshome61@gmail.com, tejaswini acf <tejaswini.acf@gmail.com>, sshemar <sshemant_801@rediffmail.com>, dg@ncbindia.com, Nazimuddin <nazim.cpcb@nic.in>, Raghavan S <raghuharihar@gov.in>, raghuharihar@gov.in>, raghuharihar@yahoo.co.in, Sanjay Bis <sanjay.bist@imd.gov.in>, drjkpande industry1 <drjkpandey.eac.industry1@gmail.com sandeepan <sandeepan.bs@gov.in>, RAJESH PRASAD RASTOGI <rp.rastogi@gov.in></rp.rastogi@gov.in></sandeepan.bs@gov.in></drjkpandey.eac.industry1@gmail.com </sanjay.bist@imd.gov.in></raghuharihar@gov.in></nazim.cpcb@nic.in></sshemant_801@rediffmail.com></tejaswini.acf@gmail.com></ranganathan.metals@gmail.com </pre>	om>, il.com, nt 801 t y eac	
Dear Dr. Lal, The draft min Best wishes Rajive Kumar	utes(part) are approved.		

Approval of EAC Chairman

Email

Additional Director MoEFCC Dr R B LAL

Re: Compiled Draft minutes of the 26th EAC Meeting held on April 12, 13, 17, 2023 for approval of the Chairman-Regarding

From : rajivekumar1983@gmail.com	Tue, Apr 25, 2023 05:42
Subject : Re: Compiled Draft minutes of the 26th EAC Meeting held on April 12, 13, 17, 2023 for approval of the Chairman- Regarding To : Additional Director MoEFCC Dr R B LAL <rb.lal@nic.in></rb.lal@nic.in>	PM
Cc : chairman eac ind 1 <chairman.eac.ind.1@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>, dg@ncbindia.com, Nazimuddin <nazim.cpcb@nic.in>, Raghavan S <raghuharihar@gov.in>, raghuharihar@gov.in>, raghuharihar@yahoo.co.in, Sanjay Bist <sanjay.bist@imd.gov.in>, drjkpandey eac industry1 <drjkpandey.eac.industry1@gmail.com >, RAJESH PRASAD RASTOGI <rp.rastogi@gov.in>, sandeepan <sandeepan.bs@gov.in></sandeepan.bs@gov.in></rp.rastogi@gov.in></drjkpandey.eac.industry1@gmail.com </sanjay.bist@imd.gov.in></raghuharihar@gov.in></nazim.cpcb@nic.in></sshemant_801@rediffmail.com></tejaswini.acf@gmail.com></ranganathan.metals@gmail.com></chairman.eac.ind.1@gmail.com>	

Dear Dr. Lal, The minutes are approved. Kindly do the needful.

Best wishes **Rajive Kumar, Retd. IFS**

Chairman- EAC-Industry-1
