

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

Dated: 05.05.2023

Date of Zero Draft MoM sent to EAC:02.05.2023

Approval by Chairman: 05.05.2023

Uploading on PARIVESH:05.05.2023

MINUTES OF THE 27TH EXPERT APPRAISAL COMMITTEE
(INDUSTRY-1 SECTOR) MEETING HELD ON 27TH 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: APRIL 27, 2023 [THURSDAY]

(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.

(iii) Confirmation of the Minutes of the 26th Meeting of the EAC (Industry-1 Sector) held during 12th, 13th and 17th April, 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 26th Meeting of the EAC (Industry-1 Sector) held during 12th, 13th and 17th April, 2023 conducted through Video Conferencing, and noted that there is a modifications/factual correction, in the minutes of the 26th

EAC meeting for the project/activities. The same has been incorporated in the Minutes of the 29th EAC meeting held on 1st May 2023.

Details of the proposals considered during the 27th meeting **conducted** through **Video Conferencing**, deliberations made and the recommendations of the Committee are explained in the respective agenda items as under:

Consideration of Environmental Clearance Proposals

Agenda No. 27.1

27.1 Proposed Expansion cum Modification of the existing Steel Plant by M/s Bengal Energy Limited, located at Village : Dauka, P.O- Tentulmuri, PS-Narayangarh, Dist.-Paschim Medinipur, West Bengal – Consideration of Environmental Clearance.

[Proposal No. IA/WB/IND1/413316/2023; File No. IA-J-11011/28/2008-IA-II(IND-I)]
[Consultant: Envirotech East Pvt. Limited; Valid upto 12.09.2025]

27.1.1 M/s Bengal Energy Ltd. has made an online application vide proposal No-IA/WB/IND1/413316/2023, dated 14.04.2023 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), 4(b) Coke Oven Plants and 1(d) Thermal Power Plants under Category “A” of the schedule of the EIA Notification, 2006 and appraised at Central Level.

27.1.2 Name of the EIA consultant: M/s. Envirotech East Pvt. Limited [List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2225/RA 0279; Valid up to 12.09.2025, as on April 29, 2023].

Details submitted by Project proponent

27.1.3 The details of the ToR are furnished as below:

Date of Application	Consideration	Details	Date of Accord	ToR Validity
01.10.2021	Standard Terms of Reference issued	Terms of Reference	03.12.2021	02.12.2025

27.1.4 The project of M/s Bengal Energy Ltd. located at Village : Dauka, P.O- Tentulmuri, PS-Narayangarh, Dist.-Paschim Medinipur, West Bengal is for Expansion cum Modification of the existing Steel Plant by addition/modification in some of the existing units along with installation of certain new units. The proposed changes are as follows:

- i. New installation of Pellet Plant of 2X0.85 MTPA capacity for the production of 17,00,000 TPA of iron ore Pellet.
- ii. Reduction in the production capacity of the 1x60 m² sinter plant from 10,00,000 TPA to 6,50,000 TPA without changing its configuration i.e. 1x60 m².
- iii. Capacity reduction of the 2X320 M³ of MBF (5,96,000 TPA of pig iron) by dropping 1X320 M³ of MBF to produce 4,25,000 TPA of pig iron.
- iv. Capacity expansion of the IFs of 3X20 T (for the production of 2,92,000 TPA of liquid steel) by installing new 9X20 T IFs for the overall production of 7,92,000 TPA of liquid steel. Total number of IF will be 12x20T.
- v. Size of the EAF will be changed from 2X80 T to 2X25T and production capacity to reduce from 8,32,000 TPA to 4,16,000 TPA (under construction stage)
- vi. Capacity expansion of the LRF of 1 X 25 T (2,08,000 TPA) capacity by installing another LRF of 1 X 25 T capacity for overall production of refined steel to the tune of 4,16,000 TPA
- vii. Capacity expansion of the 1X120 TPD ASU unit (for the production of 120 TPD of gas) by installing another 1X120 TPD capacity of ASU unit for the overall production of 240 TPD of gas.
- viii. New installation of Rolling Mill of 2X0.2 MTPA capacity for the production of 4,00,000 TPA of rolled products.
- ix. New installation of Ferro Alloy Plant of 4x9 MVA + 1 X18 MVA capacity for the production of 90,000 TPA of Ferro Alloy products (such as Fe-Mn & Fe-Si)
- x. Capacity reduction of the BF based CPP from 22 MW to 10 MW.
- xi. Modification in the configuration (without changing the ultimate electricity production capacity) of 1X68 MW of CPP-WHRB (DRI) by splitting the unit into 1X28 MW + 1X40 MW, thereby leading to no change in the overall electricity production capacity; i.e. 68 MW.
- xii. Modification in the configuration (without changing the ultimate electricity production capacity) of 1X35 MW of AFBC based boiler by splitting the unit into 1X20 MW + 1X15 MW, thereby leading to no change in the overall electricity production capacity; i.e. 35 MW.

27.1.5 The proposal was reconsidered during 27th meeting of the EAC for Industry-I sector held on 27th April, 2023. The deliberations and recommendations of EAC are as follows:

Deliberations by the Committee

27.1.6 The Committee noted the following:

1. The EAC noted that M/s BEL had been running 1X0.6 MTPA of non-recovery type Coke Oven Plant (to produce 6,00,000 TPA of LAM Coke along with 1X40 MW WHRB based CPP) as per EC obtained from the MoEF&CC vide ref. no. F.No. J-11011/28/2008-IA II (I) dated 2nd January, 2009. The company has further obtained another EC form the MoEF&CC vide ref. no. F. No. J-11011/28/2008-IA-II(I) dated 19th July, 2019, for installation of 1X60 m² sinter plant (to produce 10,00,000 TPA of iron ore sinter), 1x0.6

MTPA of coke oven to produce 6,00,000 TPA of LAM Coke along with 1X40 MW WHRB based CPP), 2X320 m³ of Blast Furnace (to produce 5,96,000 TPA of pig iron along with 22 MW WHRB based CPP), EAF of 2 X 80 T capacity to produce 8,32,000 TPA of liquid steel along with LRF (2,08,000 TPA) & CCM (8,15,000 TPA), IF of 3X20 T capacity to produce 2,92,000 TPA of liquid steel along with 2,80,000 TPA of CCM, 1X35 MW of AFBC boiler and 4X500 TPD + 4X350 TPD of DRI Kiln (To Produce 10,88,000 TPA of sponge iron along with 1X68 MW of WHRB) along with auxiliary units such as 1X120 TPD of ASU to produce 1200 M3/hr of gas. The EAC further noted that out of these units, Sinter Plant with 7,03,032 TPA capacity, MBF-1X320 M3 with 2,98,000 TPA capacity, Air Separation Unit of 1X120 TPD capacity and 8 MW BF gas based Captive Power Plant are under final trial run after obtaining necessary Consent to Establish and Consent to Operate from West Bengal Pollution Control Board. The EAC is of the view that PP shall submit the revised implementation status in a tabular form clearly mentioning the status of the facilities envisaged in the EC dated 19th July, 2019 along with proper justification for delay in implementation of the said facilities and the timelines for completion of the said project. PP shall also justify the reasons for applying for expansion / modernisation of the units when they have not been able to implement the facilities as per EC dated 19th July, 2019.

2. The EAC noted that the PP was asked the implementation status of Continuous Ambient Air Quality Monitoring Station (CAAQMS). In this regard, the PP has reported that IRO during inspection on 31.03.2023 has made an observation that that CAAQMS have been installed at two locations, which are functioning well and another two are under installation. PP/consultant shall submit the status of the implementation of remaining two CAAQMS with supporting documents. PP shall also submit the status of connecting the CAAMQS to CPCB server.
3. The EAC deliberated on the compliance to the ToR conditions and found them inadequate. The PP/Consultant is advised to revise the compliance of the TOR condition and submit the revised information.
4. The EAC noted that as reported M/s Bengal Energy Limited has earmarked total 62.76 hectares (155.1 acres) land (33% of 190.202 hectares (470 acres)) within its existing plant site for greenbelt, out of which only 31.15 hectares (76.97 acres) of greenbelt has been developed all around the plant boundary area within the plant premises where around 77,875 number of trees (@2500 trees per hectares) have been planted. Plantation for the remaining 79,025 number of trees (for 31.61 hectares (78.11 acres) considering @2500 trees per hectare) has also been started and it will be completed before the commissioning of the 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 maximum part of remaining greenbelt in the coming monsoon of 2023.
5. The Committee deliberated on the baseline data and observed that the PM₁₀ and PM_{2.5} recorded at higher side. PP shall submit the justification along with the mitigation measures that will be undertaken to minimise the same.

6. 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 submitted.
7. 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.
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. The EAC observed that PP has submitted the complete Public Hearing proceedings in the application form on PARIVESH portal. PP shall submit the entire PH proceedings inter-alia including advertisements given for PH, SPCB cover letter, actual proceedings, attendance sheet, written representations & the response submitted by PP, Authenticated English translation of the PH proceedings if any, shall be uploaded.
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. The EAC has advised that Consultant shall read all the documents properly before submitting the application on Parivesh portal, as the whole process is online on Portal.
12. 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

- 27.1.7 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. 27.1.6 above. The proposal shall be considered after submission of requisite information and updating the Report on Parivesh Portal.

Agenda No. 27.2

- 27.2 **Rolling Mill with capacity of MS Ingots/Billets of 27,000 TPA (90TPD), MS CTD/TMT Bars & MS Round of 1,50,000 TPA (500TPD), Heating Furnace - 21Ton/Hr, Induction Furnace 9 Ton/Heat by M/s Rathi Special Steels Limited, located at Plot no. SP-29, F-20-24, RIICO Industrial Area, Khushkhera, District-Alwar, Rajasthan – Consideration of Environmental Clearance.**

**[Proposal No. IA/RJ/IND1/419247/2023; File No. IA-J-11011/165/2022-IA-II(IND-I)]
[Consultant: Enkay Enviro Services Pvt. Ltd.; VALIDITY: - 12.12.2023]**

- 27.2.1 M/s. Rathi Special Steels Limited has made an application online vide proposal no. IA/RJ/IND1/419247/2023 dated 02.03.2023 along with copy of EIA/EMP report, in prescribed format (CAF, Form – I Part A, B & C) and certified CTO 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) under Category “A” of the schedule of the EIA Notification, 2006 and attracts general condition due to Inter-state boundary of Rajasthan & Haryana lies at a distance 3.77 Km, NNW and project lies in critically polluted area (CPA), and therefore being appraised at Central Level.
- 27.2.2 Name of the EIA consultant: M/s. Enkay Enviro Services Pvt. Ltd. [List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2023/RA 0183; Valid up to 12.12.2023, as on April 29, 2023].

Details submitted by Project proponent

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

Date of Application	Consideration	Details	Date of Accord	ToR Validity
10.05.2022	7 th meeting of EAC held on 13.06.2022	Terms of Reference	16.08.2022	15.08.2026

- 27.2.4 The project of M/s Rathi Special Steels Limited located in RIICO Industrial Area Khushkhera, Tehsil - Tijara, District- Alwar, Rajasthan is for "Regularization of the existing Rolling Mill for the production of MS Ingots/Billets of 27,000 TPA (90TPD), MS CTD/TMT Bars & MS Round of 1,50,000 TPA (500TPD), Heating Furnace - 21Ton/Hr, Induction Furnace - 9 Ton/Heat”.

- 27.2.5 Environmental Site Settings:

S. No.	Particulars	Details	Remarks			
i.	Total land	Total plot Area is 35,200Sq.m.(3.52Ha) There is no change is land use w.r.t. land allotted by RIICO.				
		<table border="1"><thead><tr><th>Land Use</th><th>Area (Sq.m)</th><th>Percentage</th></tr></thead></table>	Land Use	Area (Sq.m)	Percentage	
Land Use	Area (Sq.m)	Percentage				

S. No.	Particulars	Details					Remarks
		S. No.		Existing Area	Proposed Area	Total area	
		1.	Plant Area	11150.71	0.0	11150.71	31.68
		2.	Paved Area (Road, Corridor,)	15317.07	0.0	15317.07	43.51
		3.	Green Belt Area	8732.22	5347.78 (outside the plant premises)	8732.22	24.81
		4.	Open area	0.0	None	0.0	0.0
		Total		35,200	--	35,200	100
		Note*: The available Green area within the plant premises is 24.81%. About 15.19% green area will be developed by the proponent in consent with RIICO Office.					
ii.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	Existing project is already situated in Khushkhera RIICO Industrial Area which is under the possession of the company.					-
iii.	Existence of habitation & involvement of R&R, if any.	Land is already converted for industrial use. (RIICO Industrial Area) there is no habitation in the existing area, therefore rehabilitation & resettlement plan is not required/ applicable.					-
iv.	Latitude and Longitude of all corners of the project site.	Point	Latitude	Longitude		--	
		(1)	28° 6'43.78"N	76°47'40.24"E			
		(2)	28° 6'43.20"N	76°47'40.00"E			
		(3)	28° 6'42.73"N	76°47'39.81"E			
		(4)	28° 6'40.69"N	76°47'39.05"E			
		(5)	28° 6'41.05"N	76°47'37.01"E			
		(6)	28° 6'38.61"N	76°47'35.96"E			
		(7)	28° 6'40.74"N	76°47'29.63"E			
		(8)	28° 6'46.35"N	76°47'31.90"E			
		(9)	28° 6'45.29"N	76°47'35.15"E			
		(10)	28° 6'44.08"N	76°47'34.68"E			
		(11)	28° 6'43.14"N	76°47'37.76"E			
		(12)	28° 6'43.31"N	76°47'37.95"E			
		(13)	28° 6'43.79"N	76°47'38.14"E			
		(14)	28° 6'44.36"N	76°47'38.37"E			
v.	Elevation of the project site	The highest and lowest elevation of the project site is 264 AMSL and 260 AMSL					--
vi.	Involvement of	No forest land is involved.					-

S. No.	Particulars	Details	Remarks																																													
	Forest land if any.																																															
vii.	Water body (Rivers,Lakes, Pond,Nala,Natural Drainage,Canal etc.) exists within the project site as well as study area	<p>Project site: Nil.</p> <p>Study Area:</p> <table border="1"> <thead> <tr> <th>Water Bodies</th> <th>Distance</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Sahibi River (non-Perennial)</td> <td>4.21</td> <td>WSW</td> </tr> <tr> <td>Rattanpur Distributary</td> <td>9.20</td> <td>WNW</td> </tr> <tr> <td>Raliawas Distributary</td> <td>9.42</td> <td>NW</td> </tr> <tr> <td>Garhi Bolni Distributary</td> <td>9.73</td> <td>W</td> </tr> <tr> <td>Sare Khurd Canal</td> <td>10.80</td> <td>ENE</td> </tr> <tr> <td>Nikhari Distributary</td> <td>11.23</td> <td>NW</td> </tr> <tr> <td>Kheri Motla Distributary</td> <td>12.16</td> <td>WSW</td> </tr> <tr> <td>Water Pond N/V Sare Khurd</td> <td>13.61</td> <td>ENE</td> </tr> <tr> <td>Jitpur Distributary</td> <td>14.19</td> <td>NW</td> </tr> </tbody> </table>	Water Bodies	Distance	Direction	Sahibi River (non-Perennial)	4.21	WSW	Rattanpur Distributary	9.20	WNW	Raliawas Distributary	9.42	NW	Garhi Bolni Distributary	9.73	W	Sare Khurd Canal	10.80	ENE	Nikhari Distributary	11.23	NW	Kheri Motla Distributary	12.16	WSW	Water Pond N/V Sare Khurd	13.61	ENE	Jitpur Distributary	14.19	NW	--															
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viii.	Existence of ESZ/ ESA/ national park/wildlife sanctuary/biosphere reserve/tiger reserve/ elephant reserve etc. if any within the study area	<p>Nil</p> <p>List of Reserved and protected forests: Are given in the following table.</p> <table border="1"> <thead> <tr> <th>Forests</th> <th>Distance(km)</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Banvan P.F.</td> <td>5.39</td> <td>ENE</td> </tr> <tr> <td>Khori Kalan P.F.</td> <td>6.19</td> <td>E</td> </tr> <tr> <td>P.F. Near Village Banvan</td> <td>6.65</td> <td>NE</td> </tr> <tr> <td>Guwalda P.F.</td> <td>7.79</td> <td>E</td> </tr> <tr> <td>Banvan P.F. Near Village Joriah</td> <td>8.61</td> <td>NE</td> </tr> <tr> <td>Gondhan P.F.</td> <td>8.62</td> <td>NE</td> </tr> <tr> <td>Chaupanki P.F.</td> <td>10.18</td> <td>ENE</td> </tr> <tr> <td>Indaur R.F.</td> <td>11.12</td> <td>E</td> </tr> <tr> <td>Khidarpur P.F.</td> <td>11.18</td> <td>SE</td> </tr> <tr> <td>Sare Kalan P.F.</td> <td>11.83</td> <td>ENE</td> </tr> <tr> <td>Bhalki P.F.</td> <td>12.36</td> <td>SSE</td> </tr> <tr> <td>Milakpur Turk P.F.</td> <td>13.07</td> <td>ESE</td> </tr> <tr> <td>Rangala R.F.</td> <td>14.27</td> <td>NNE</td> </tr> <tr> <td>Gotoli P.F.</td> <td>14.52</td> <td>SE</td> </tr> </tbody> </table>	Forests	Distance(km)	Direction	Banvan P.F.	5.39	ENE	Khori Kalan P.F.	6.19	E	P.F. Near Village Banvan	6.65	NE	Guwalda P.F.	7.79	E	Banvan P.F. Near Village Joriah	8.61	NE	Gondhan P.F.	8.62	NE	Chaupanki P.F.	10.18	ENE	Indaur R.F.	11.12	E	Khidarpur P.F.	11.18	SE	Sare Kalan P.F.	11.83	ENE	Bhalki P.F.	12.36	SSE	Milakpur Turk P.F.	13.07	ESE	Rangala R.F.	14.27	NNE	Gotoli P.F.	14.52	SE	
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27.2.6 The existing project was accorded Consent to Establish vide letter no. RPCB/RO/BWD/OR-755/493 dated 30.06.2006. The proposal for obtaining Environmental Clearance has been applied first time as per provision of Notification dated 20.07.2022. Consent to Operate (Latest) for the existing unit was accorded by Rajasthan State Pollution Control Board vide letter no. F(CPM)/Alwar(Tijara)/3978(1)/2018-2019/5823-5825 dated 18.01.2023. The validity of CTO

is up to 31.07.2026. Details of CTE/CTO obtained so far and implementation status are as follows:

27.2.7 Implementation status of the existing CTE/CTO:

Details	Document no.	Date	Validity	Implementation status
Details of Earlier EC	The proposal for obtaining Environmental Clearance has been applied first time as per provision of Notification dated 20.07.2022.			
DETAILS OF CTE	RPCB/RO/BWD/OR-755/493	30.06.2006	Valid For 3 Years Or Upto The Actual Date Of Production	Granted for CTD BARS,TMT BARS (1,50,000MT/Ann um)
	F(CPM)/Alwar(Tijara)/8(1)/2011-2012/ 4737-4739	07.09.2012	05.04.2012 TO 31.03.2015	Granted for M.S. INGOTS -80TPD (24,000MTPA)
	F(CPM)/Alwar(Tijara)/8(1)/2011-2012/ 4411-413	29.04.2015	03.10.2013 TO 30.09.2016	Granted for COAL GASIFIER -1.50TPH
	F(CPM)/Alwar(Tijara)/8(1)/2011-2012/ 3259-3261	02.11.2015	02.11.2015 TO 31.10.2018	Granted for M.S.INGOTS/ BILLETS - 90TPD (27,000MTPA)
	F(CPM)/Alwar(Tijara)/8(1)/2018-2019/ 1768-1770	21.06.2018	12.12.2015 TO 30.11.2018	Granted for COAL PULVERIZER- 1 no.
	F(CPM)/Alwar(Tijara)/8(1)/2018-2019/ 1765-1767	21.06.2018	12.10.2016 TO 30.09.2021	Granted for DG SET 1(125kVA) - ,DG SET 1- (380kVA)
DETAILS OF CTO	RPCB/RO/BWD/OR-527/858	27.07. 2007	31.07.2008	Granted for CTD BARS (1,50,000MT/ Annum)
	RPCB/RO/BWD/OR-755/1465	18.08.2009	31.07.2010	Granted Extension Of CTO For CTD BARS (1,50,00MT/ Annum)

Details	Document no.	Date	Validity	Implementation status
	F(CPM)/Alwar(Tijara)/8(1)/2011-2012/ 7462-7464	16.01.2012	01.08.2010 TO 31.07.2013	Granted for MS CTD/TMT BARS & MS ROUND (1,50,000MT/ Annum)
	F(CPM)/Alwar(Tijara)/8(1)/2011-2012/ 67-69	04.05.2015	01.08.2013 TO 31.07.2016	Granted for MS CTD/TMT BARS & MS ROUND (1,50,000MT/ Annum)
	F(CPM)/Alwar(Tijara)/8(1)/2018-20199/ 17671-1773	21.06.2018	01.08.2016 TO 31.07.2021	Granted for MS CTD/TMT BARS & MS ROUND (1,50,000mt/ Annum) & M.S. INGOTS/ BILLETS (90TPD)
	--	---	Applied for renewal of CTO and	Pending for want of Environmental Clearance.

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

S. No.	Product	Existing Capacity (MTPA)	Total Capacity (MTPA)
1.	MS Ingots/Billets	27,000 TPA (90TPD)	27,000 TPA (90TPD)
2.	MS CTD/TMT Bars & MS Round	1,50,000 TPA (500TPD)	1,50,000 TPA (500TPD)
3.	Induction Furnace	9Ton/Heat	9Ton/Heat
4.	Heating Furnace	21Ton/Hr	21Ton/Hr

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

S. No.	Raw Material	Existing Quantity	Total Quantity	Source	Distance	Mode of transport
		Consumption				
1	Scrap	94.940 MT/Day	94.940 MT/Day	1. From Kamal Ispat Pvt. Ltd.; 2. Atal Steels LLP;	~150 km	By road through Trucks
2	MS Billets	530.170 MT/Day	530.170 MT/Day			

S. No.	Raw Material	Existing Quantity	Total Quantity	Source	Distance	Mode of transport
		Consumption				
				3. BLC Metals Pvt. Ltd.; 4. Aarohi Enter Prises; 5. Hella Infra market Pvt. Ltd.; 6. Ramayana Ispat Pvt. Ltd.; 7. GG Engineering Ltd.; 8. Narula Enter Prises; 9. OM MurtiI spat LLP		
3	LSHS (Low Sulphur Heating Stock)	24,000Lit/Day (48Lit/ton)	24,000Lit/Day (48Lit/ton)	From nearest source	~100 km	By road through Tanker

27.2.10 Existing one time water requirement is 88 m³/day, out of which 32 m³/day of fresh water requirement is being obtained from the ground water and permission for the same was obtained from CGWA vide letter no. CGWA/NOC/IND/ORIG/2021/10436 dated 09.01.2021 and the remaining 56 m³/day is being met from the recycling. Renewal application for CGWA NOC has been applied vide application no.21-4/11354/RJ/IND/2018 dated 13.01.2023 to tune of 32 KLD.

27.2.11 Existing power requirement of 4.998MW (4998kVA) (15095.5KW Sanctioned capacity) is obtained from JVVNL, Alwar from nearest GSS of 220KV. JVVNL, Alwar (~ 1.0Km, North, TMT Chowk from the project site.

27.2.12 Baseline Environmental Studies:

PERIOD	March - May-2022
AAQ parameters at 10 locations	<ul style="list-style-type: none"> PM10- 73.6 to 168.9µg/m³ PM2.5- 43.4 to 99.3 µg/m³ SO2-7.2 to 22.4 µg/m³ NO2-13.1 to 44.6 µg/m³ CO-802 to 2062 µg/m³
Incremental GLC level	PM-0.07 to 1.25 µg/m ³ (Level at 1.62 Km in SSE Direction) SO2-0.00012 to 0.02 µg/m ³ (Level at 2.03Km in SW Direction)
Ground Water Quality at 10 locations	<ul style="list-style-type: none"> pH: 7.07-7.60; Total Hardness: 96 to 412mg/l, Chlorides: 43.98 to 393.88 mg/l, Fluoride: 0.34 to 0.99 mg/l. Heavy metals <0.001mg/l.

Surface Water Quality at 0 locations	Surface water was not found in the study area																							
Noise Levels at 10 locations	50.2 to 64.8 dBA for day time and 42.9 to 55.5 dBA for night time.																							
Traffic assessment study findings	<ul style="list-style-type: none"> Traffic study has been conducted at SH-25 which is approximately 3.32Km from the plant site. Transportation of raw material, fuel & finished product will be done 100% by road. Existing PCU is 808.25PCU/hr on SH-25 and existing level of service (LOS) is Good/Average/Fair (V/C=0.538). <table border="1"> <thead> <tr> <th>Road</th> <th>(V) Volume in PCU/Hr</th> <th>C Capacity in PCU/Hr</th> <th>V/C*</th> <th>LOS</th> </tr> </thead> <tbody> <tr> <td>SH-25</td> <td>808.25</td> <td>1500</td> <td>0.538</td> <td>D</td> </tr> </tbody> </table> <ul style="list-style-type: none"> PCU load after proposed project will be 808.25(Existing) + 82(Additional) PCU/hr and level of service (LOS) will be: Good/Average/Fair (V/C=0.5935) <table border="1"> <thead> <tr> <th>Road</th> <th>(V) Volume in PCU/Hr</th> <th>C Capacity in PCU/Hr</th> <th>V/C*</th> <th>LOS</th> </tr> </thead> <tbody> <tr> <td>SH-25</td> <td>890.25</td> <td>1500</td> <td>0.5935</td> <td>D</td> </tr> </tbody> </table>				Road	(V) Volume in PCU/Hr	C Capacity in PCU/Hr	V/C*	LOS	SH-25	808.25	1500	0.538	D	Road	(V) Volume in PCU/Hr	C Capacity in PCU/Hr	V/C*	LOS	SH-25	890.25	1500	0.5935	D
Road	(V) Volume in PCU/Hr	C Capacity in PCU/Hr	V/C*	LOS																				
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Road	(V) Volume in PCU/Hr	C Capacity in PCU/Hr	V/C*	LOS																				
SH-25	890.25	1500	0.5935	D																				
Flora and fauna	No schedule I fauna and endangered Flora found within the study area.																							

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

S. No.	Type of Waste	Source	Quantity generated (TPA)	Mode of Treatment/ Disposal
1.	Municipal Solid Waste (@0.125 Kg/ day	Domestic	6.562TPA	Sent to Municipal site, Bhiwadi, Rajasthan.
2.	STP Sludge	From STP	0.150 TPA	Used as manure for plantation
3.	Miss Roll/ Mill Scale	From Production process	2655 TPA	Sold to authorized vendor within the Local Market.
4.	Slag	From production Process	1350TPA	Sold to authorized vendor within the Local Market.

27.2.14 Public Consultation: The Public Hearing is exempted as per MoEF&CC Notification S.O. 3250(E), dated 20th July, 2022.

An amount of Rs 11.79 lakhs has been incurred for various CER activities implemented in Year 2018-2022. The year wise details of the same are given in table below:

S. No.	Category	Activities Proposed	Cost (Rs.)
			Capital
1.	Infrastructure and education, Donation (April 2018 - March 2019)	Donation to Sri Balaji Arogyavara Prasadini Scheme, Rathi Educational Society, Sri krishan Gaushala Budhibawal, Shiv Kavar Sangh Sewa Samiti, Devanshi Rathi Foundation	Rs.6,18,100
2.	Infrastructure and education (April 2019 - March 2020)	Sri Balaji Arogyavara Prasadini Scheme, Rathi Educational Society, Infrastructure and education promotion, Donation to Srikrishan Gaushala Budhibawal, Shiv Kavar Sangh Sewa Samiti, Devanshi Rathi Foundation, Donation to Shree Venkateshwara Foundation, Alwar Chamber of Commerce & Industries towards Donation for Stall on National safety Day,	1,94,600
3.	Education (April 2020 - March 2021)	Rathi Educational Society	1,75,000
4.	Infrastructure and education (April 2021 - March'2022)	Rathi Research Centre, Sri Balaji Arogyavara Prasadini Scheme, Rathi Educational Society	96,000
5.	Infrastructure and education (April 2022 - December'2022)	Donation to Sri Balaji Arogyavara Prasadini Scheme, Rathi Educational Society, Sri krishan Gaushala Budhibawal	4,54,500
Total			Rs.11,79,700

Action plan as per MoEF&CC O.M. dated 30/09/2020 (Based on Socio-economic survey):

Activity	Location	Action Plan with Budget in (Capital Cost-in Lakhs)			Recurring (In Lakh)
		I st year	II nd Year	III rd Year	
Construction of 4.0 Nos. Rain water Harvesting structure	Sarpanch Office Panchayat Mayapur, Tapukara.	8.0	8.0	-	1.0
RO with Water cooler	Govt School Khushkhera	3.0	3.0	-	0.25
Solar light on Street	Budhi Bawal Tapukara Road. Karoli, Kamalpur,	9.0	9.0	9.0	0.75
Plantation & Tree Guard nearby villages	Budhi Bawal Village, Karoli, Kushkhera,	6.0	6.0	6.0	0.75
Medical check up camps	Khushkhera, Budhi Bawal, Kamalpur & Karmsiwas, Karoli, Ladamka	6.0	6.0	6.0	1.0

Activity	Location	Action Plan with Budget in (Capital Cost-in Lakhs)			Recurring (In Lakh)
		I st year	II nd Year	III rd Year	
Awareness program regarding organic manure use for agriculture, hygiene, sanitation	Sarpanch Office Panchayat Mayapur, Tapukara.	2.0	2.0	2.0	1.0
Distribution of Computer in Govt. Schools.	Govt School Khushkhera, Govt. Sr. Sec. School, Budhi Bawal & Govt Primary School, Basai Tapukara Alwar Rajasthan	5.0	4.5	3.0	1.0
Woman skill development Programme.	Sarpanch Office Panchayat Mayapur, Tapukara.Karoli, Kushkhera,Kamalpur	12.0	12.0	12.0	4.0
Total (139.5 Lakhs)		51.0	50.5	38.0	9.75

27.2.15 The capital cost of the existing project is Rs 82.01Crores and the capital cost for environmental protection measures is proposed as Rs. 1.74 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs. 0.198 Crores. The employment generation from the proposed project is 175.The details of cost for environmental protection measures is as follows:

S. No.	Description of Item	Existing Capital Cost (In Lacs)	Recurring Cost (In Lacs)	Proposed Capital Cost (In Lacs)	Recurring Cost (In Lacs)	Total Cost (In Lacs)
1.	Air Pollution Control/ Noise	35.0	3.50	15.0	1.5	50.0
2.	Water Pollution Control	5.0	0.50	10.0	1.0	15.0
3.	Environmental Monitoring	--	3.0	--	--	--
4.	Plantation Development	10.0	2.0	5.0	0.50	15.0
5.	Solid waste Management	5.0	1.0	--	--	5.0
6.	Rainwater harvesting Structure Maintenance	7.28	0.50	--	--	7.28
	Socio-Economic Improvement					
*7.	Activities	11.79	0.50	139.5**	9.75	151.29
	Total	74.07	11.0	169.5	12.75	243.57

Action Plan to Mitigate Higher values of PM and CO in Core Zone

Emission	Management			
	S. No.	Source	APCM provided	APCM proposed
A. Air Emission From equipment i.e. 1. Induction Furnace- (Capacity- 9 Ton/Heat) 2. Reheating Furnace				

	A. Induction Furnace	Collection Hood and Venturi wet Scrubber is already installed to control the Dust/ suspended matter from the Induction Furnace and in existing condition is being routed to stack height of 30m.	--
	B. From Re-Heating Furnace	Flue gases from the reheating furnace of rolling mill is being routed through 30.0m stack height.	Wet Scrubber is proposed to installed to control emissions of particulate matter from the Re-Heating Furnace followed by Stack (Height - 30m)
<p>Management:</p> <ul style="list-style-type: none"> • The industry has stopped to use coal as fuel in reheating furnace after guideline issued from Commission for Air Quality Management (CAQM). • The industry is using LSHS (Low Sulphur Heavy Stock) for operation. • Inside the plant premises, Green area development is being/ will be done to attenuate the pollution. Only local species is planted at site. ~ 135 Plants of Beema Bamboo also planted at site to contain the emission at plant premises and will also act as carbon reduction. It total area under green cover/ plantation is 30.23% area plant premises. 			
B. DG Sets-200kVA & 380kVA (Currently Stopped/ Sealed)	DG is stopped currently.		
C. Vehicular Emission	Source	Management	
	Transportation	<ul style="list-style-type: none"> ➤ PUC certified vehicles is/will be used; ➤ 60% of CNG vehicles are being used in transportation. ➤ Speed limit of 10Km/hr. is/will be maintained in the plant premises. ➤ Inside the plant premises, Green area development is being/ will be done to attenuate the pollution. Only local species is planted at site. ~ 135 Plants of Beema Bamboo also planted at site to contain the emission at plant premises and will also act as carbon reduction. It total area under green cover/ plantation is 30.23% area plant premises. ➤ Good House Keeping is/ will be maintained. 	

27.2.16 **Action Plan As Per National Air Monitoring Programme (NAMP):** The project is located in Critically Polluted Area, Khushkhera. Additional mitigation measures are/ will be adopted and action plan is prepared 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. Ministry of Environment, Forests and Climate Change (MoEF&CC) has notified for implementation of Graded Response Action Plan through Environment Pollution(Prevention Control) Authority Vide S.O. 118(E) dated 12.01.2017. Following measures is/ will be implement as per Graded Response Action Plan:-

Guideline for very poor (ambient PM2.5 or PM 10 value is between 121-250 µg/m³ or 351-430 µg/m³ respectively)	Implementation Plan by Industry	Action undertaken/ Planned
Stop use of Diesel Generator sets	Will use DG set after conversion or permitted fuel as and when.	Stopped Currently.
Enhance Parking Fee by 3-4 times	To reduce traffic, Vehicle Pooling will be implemented	The same is encouraged in the unit
Stop use of Coal	Coal usage is already discontinued.	Industry is currently using LSHS.
Stringently enforce/ stop garbage Burning	Domestic solid waste is already sent to Municipal Council, Bhiwadi, Rajasthan.	The same practice is/will be adopted in the unit.
Fugitive Dust	Efforts are being made to keep good housekeeping to reduce the dust generation. The roads and unpaved areas is being/will be moistened frequently.	The same is being/will be constantly maintained by the unit
Plantation Development	40% green area development is envisaged with proper action plan within unit and outside along avenue plantation on all approach roads with min. 2 rows is being planted.	30.24% of area (~10647Sq. m) is developed Green Cover within the plant premises and >11.36% of area (4000 Sq.M) area of RIICO park is already planted outside the plant premises and plantation is done at outer boundary of plant premises - 1015.50Sq.M to achieve the 40% total green area.

Action Plan and Mitigation Measures

Environmental Attributes	Mitigation Measure
Air	<ul style="list-style-type: none"> ❖ The coal usage is already discontinued and industry is already switch over to LSHS as per issued guideline. ❖ Stack monitoring is being carried out and quarterly submission is being done to RSPCB ❖ CEMS will be installed within six month & connected to SPCB & CPCB Server.

Environmental Attributes	Mitigation Measure
	<ul style="list-style-type: none"> ❖ All the material transfer point will be covered and storage on cooling beds. ❖ Best available technology is being used for Induction Furnace <ul style="list-style-type: none"> ➤ 40% greenbelt inside and outside the premises. Greenbelt outside the project premises such as avenue plantation, plantation in vacant areas, social forestry etc. (30.24% of area (~10647Sq. m) is developed Green Cover within the plant premises and >11.36% of area (4000 Sq.M) area of RIICO park is already planted outside the plant premises and plantation is done at outer boundary of plant premises -1015.50Sq.M to achieve the 40% total green area.) ❖ Strength internal roads such as widening, pavement etc.
Water	<ul style="list-style-type: none"> ❖ Use of treated water from CETP to reduce the stress on ground water as and when available. Khushkhera Industrial area there is no CETP is available. ❖ Continuous monitoring of effluent quality will be done. ❖ Rain Water harvesting storage and recharge the bore well is already exists in the plant premises. ❖ No waste water is being/ will be discharged outside the plant premises. ❖ Industry will install STP of 10KLD for the treatment of domestic waste water.
Land	<ul style="list-style-type: none"> ❖ Strengthen the plantation is being/will be done to at plant premises. ❖ Beema Bamboo is already planted at plant premises to reduce the carbon emission and contain the emission at plant site. ❖ Dumping of waste (slag) at designated locations approved by SPCB/PCC's will be done.
Other Condition (additional)	<ul style="list-style-type: none"> ❖ Monitoring of compliance of EC conditions will be submitted with third party audit every year ❖ 1% of the CER , i.e.2 times for CPA.

27.2.17 Existing green belt has been developed in 1.0647 Ha area which is about 30.24% of the total project area of 3.52 Ha with total sapling of 1689 Trees. Proposed greenbelt will be developed in 0.5015 ha which is about 11.36% of the total project area. Thus total of 1.5662 ha area (41.50% of total project area) will be developed as plantation. A 1 m wide greenbelt, consisting of at least 3 tiers around plant boundary is being developed as plantation 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.

27.2.18 PP has reported the following related to the project under consideration:

Particular	Details
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Direction	A letter issued from RSPCB vide letter no. RPCB/RO/BWD/1747 dated 25.01.2022 for Direction under section 12(2) (xi) of the Commission for Air Quality Management in National Region and Adjoining areas Act'2021 for closure of Industrial Operations/Process. Thus, the industry is closed till further order.
Court Case	IA No. 150/2022 in Appeal No.-29/2022 at NGT.

Following is the chronology of direction issued against the project:

Date	Particulars
25-01-2022	Direction for Closure from CAQM (Commission for Air Quality Management in National Region)
25-01-2022	Letter from RO Bhiwadi to JVVNL for Disconnect Power in Compliance of CAQM
27-01-2022	D.C. from JVVNL
4-04-2022-	Re Correction from JVVNL As per Ro-letter 04/04/22
9-04-2022	Start Production
5-05-2022	Closure letter from CAQM
9-05-2022	D.C-from JVVNL
6-09-2022	Reconnection (temporary for 7 days) for monitoring by Ro Bhiwadi and Dist. Magistrate, Alwar
8.09.2022	Production Start
14.09.2002	D.C. from JVVNL
06-10-2022	Reconnection from JVVNL after issue of CTO on 4/10/2022 & Joint. inspector of DM & RO Report on 24/9/22 Ro letter dated 4/10/22
8-10-2022	Start Production

Certified Compliance report from SPCB

27.2.19 The site inspection cum compliance report of CTO is received from Regional Office of RSPCB, Bhiwadi vide letter no. RPCB/RO/BWD-2282/3713 dated 17.03.2023. As per the report and based on the inspection, IRO has recommended for continuation of project subject to condition that the unit shall comply with emission standards as prescribed by the CAQM-NCR vide its direction no. 64.

Written representations:

27.2.20 During the meeting, based on the deliberations made by the EAC, the project proponent vide letter dated 28.04.2023 through email dated 28.04.2023 submitted the following information:

- **Greenbelt Details:** The existing greenbelt details along with the photographs and the proposed greenbelt action plan along with the site location map and budget.
- **Mitigation of Fugitive Emissions:** The revised mitigation measures that will be undertaken by the project proponent to minimise the fugitive emission as follows:
 1. Frequent Water Sprinkling on the kutchra road (unpaved) will be done using treated STP treated water.

2. The approach road inside the plant premises will be paved/ cemented.
 3. Avenue plantation on both side of approach road with approx. 20 trees on either side of the road will be done.
 4. Speed the limit 10km/hr. to prevent the dust.
 5. All material transfer points will be paved and confined.
 6. No open garbage(general waste) burning will be allowed.
- **Justification for higher values of PM and CO in Buffer zone:**
The higher values of PM and CO in the Buffer Zone are due to ongoing construction activity, road traffic, garbage burning and industries lies in the 10 km radius of the study area Thus, RIICO industrial area of Khushkhera, Bhiwadi is categorized as Critically Polluted Area (CPA). The List of major Industries Operating within the 10Km Radius area from the project site is also submitted. The action plan to mitigate the fugitive emissions is updated at para 27.2.15 above. The action plan for CPA as per national air monitoring programme is updated at para 27.2.16 above.
 - **Details of directions/Litigation:** The details of the direction issued and the chronology which is updated at para 27.2.18 above.
 - **Details of budget on socio-econmic development of nearby areas:** The details of the existing expenditure towards socio economic issues and the revised proposed action plan to address the socio economic issues is updated at para 27.2.14 above.
 - **Plans / Maps:** PP has also submitted a revised layout plan and a fire plan.

Deliberations by the Committee

27.2.21 The Committee noted the following:

1. The instant proposal is for regularization of the existing project of Rolling Mill, as per the provisions of the Notification dated 20.07.2022, having capacity of MS Ingots/Billets of 27,000 TPA (90TPD), MS CTD/TMT Bars & MS Round of 1,50,000 TPA (500TPD), Heating Furnace - 21Ton/Hr, Induction Furnace - -9 Ton/Heat. The proposal is for regularization in compliance of MoEF&CC letter no. F. No. - IA-J-11013/24/2022-IA-II(I) dated 13.04.2022 to Rajasthan State Pollution Control Board and order of Hon'ble National Green Tribunal in O.A. no. 55/2019(WZ) in matter of Gajubha Jesar Jadeja vs Union of India & Ors. dated 12.02.2020 & Letter no. F. No. - IA-J-11013/24/2022-IA-II(I) dated 13.04.2022.
2. 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.
3. 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.

4. 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.
5. The total project area is 35,200Sq.m.(3.52Ha) which is situated in Khushkhera RIICO Industrial Area and is under the possession of the company. The proposed project will be coming within the existing plant premises.
6. The EAC noted that the instant project falls under Critically Polluted Area (CPA). PP has committed the proposed mitigation measures and detailed action plan as per para 27.2.16 above.
7. The Committee has deliberated on the baseline data and incremental GLC due to the proposed project and observed that some parameters are recorded beyond the standards being in the CPA. The EAC advised to undertake additional mitigation measures are/ will be adopted and action plan is prepared 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.
8. As reported by PP, a letter has been issued from RSPCB vide letter no. RPCB/RO/BWD/1747 dated 25.01.2022 for Direction under section 12(2) (xi) of the Commission for Air Quality Management in National Region and Adjoining areas Act, 2021 for closure of Industrial Operations/Process. PP has further reported that the production has resumed after reconnection from JVVNL after issuance of CTO dated 4/10/2022 & Joint. inspector of DM & RO Report dated 24/9/22 and 04/10/22. Also, there is a court case in Hon'ble NGT vide IA No. 150/2022 in Appeal No.-29/2022.
9. The water requirement for the project is estimated as 88 m³/day, out of which 32 m³/day of fresh water requirement is being obtained from the ground water and permission for the same was obtained from CGWA vide letter no. CGWA/NOC/IND/ORIG/2021/10436 dated 09.01.2021 and the remaining 56 m³/day is being met from the recycling. Renewal application for CGWA NOC has been applied vide application no.21-4/11354/RJ/IND/2018 dated 13.01.2023 to tune of 32 KLD.
10. The Sahibi River and other water bodies exists within the study area of 10 km around the project site. The EAC is of the opinion that water body shall not be disturbed. Mitigation measures w.r.t. safeguarding the water body shall be implemented.
11. The EAC noted that the existing green belt has been developed in 1.0647 Ha area which is about 30.24% of the total project area of 3.52 Ha with total sapling of 1689 Trees. Proposed greenbelt will be developed in 0.5015 ha which is about 11.36% of the total project area. Thus total of 1.5662 ha area (41.50% of total project area) will be developed

as plantation. The Committee deliberated on the action plan and budget allocation for green belt development and found it satisfactory.

12. As the PP has expressed the paucity of land availability, the PP shall explore to do green belt/large size trees all along the perimeter of the project in large containers and vertical type of plantation similar to vertical gardening thereby creating a green barrier between the project and adjacent residential area to mitigate dust and noise pollution.
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 deliberated upon the certified compliance report of SPCB and found it satisfactory and as recommended by RO, EAC is of the view that PP shall strictly comply with emission standards as prescribed by the CAQM-NCR vide its direction no. 64.
15. The Committee also deliberated on the expenditure incurred on socio-economic development of the nearby villages issues along with revised action plan proposed for further socio-economic development of the nearby villages and found it satisfactory.
16. The EAC also deliberated on the submitted written representation 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:

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

A. Specific Condition:

- i. This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, or any direction issued by statutory body, if any, as may be applicable to this project.
- 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. The PP shall strictly implement the action plan prepared 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 05/07/2022 and the Direction issued by the Commission for Air Quality Management in National Region and Adjoining Areas.
- v. The industry shall use PNG gas as per direction no. 64 of the Commission for Air Quality Management in National Region and Adjoining Areas.
- vi. The PP shall comply all the directions as issued by the Commission for Air Quality Management in National Region and Adjoining Areas, from time to time.
- vii. Sahibi river and other water bodies exists within the study area of 10 km around the project 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.
- viii. The water requirement for the project is 88 m³/day, out of which 32 m³/day of fresh water requirement is proposed to be obtained from the ground water and the remaining 56 m³/day from the recycling. Necessary permission shall be obtained from the Competent Authority in this regard. PP shall also explore the possibility of shifting to alternate source of water to reduce dependency on groundwater. Also, efforts shall be made to restrict abstraction of Ground water only for the domestic water demand (drinking purpose only).
- ix. Rain water harvesting shall be implemented to recharge/harvest water as per the action plan submitted in the EIA/EMP report.
- x. TCLP analysis of the slag samples shall be carried out periodically. In case of presence of hazardous material, the same shall be sent to TSDF. In case of non-hazardous material, slag shall be utilized at project site for brick manufacturing and construction work after the recovery of metal.
- xi. Performance test shall be conducted on all pollution control systems every year and report shall be submitted to Integrated Regional Office of the MoEF&CC.
- xii. Online stack monitoring system for IF and RHF shall be installed and monitoring report shall be submitted to the concerned Regional Office of the MoEF&CC along with the six monthly compliance report.
- xiii. Two online Continuous Ambient Air Quality Monitoring station shall be set up. The location of the CAAQMS shall be decided in consultation with the SPCB.

- xiv. All stockyards shall have impervious flooring and shall be equipped with water spray system for dust suppression. Stock yards shall also have garland drains and catch pits to trap the run off material and shall be implemented as per the action plan submitted in EIA/EMP report.
- xv. Action plan for developing connecting and internal road in terms of MSA as per IRC guidelines shall be implemented.
- xvi. 85-90 % of billets shall be rolled directly in hot stage. RHF shall operate using only Light Diesel Oil or LSHS as a fuel.
- xvii. Low NO_x Burners will be installed at Reheating Furnace for control of Gaseous emissions generated while using PNG.
- xviii. 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.
- xix. The particulate matter emissions from the process stacks shall be less than 30 mg/Nm³ and measures shall be undertaken as per the submitted action plan. Efficient Air monitoring equipment shall be installed.
- xx. Water Sprinklers/Water mist system shall be installed near raw material yards, operational units and other strategic locations to control fugitive emissions from the plant.
- xxi. Bag filters shall be cleaned regularly and efficiency of bag filter system shall be monitored at regular intervals.
- 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. Suitable measures shall be adopted for sewage water handling to ensure no contamination of any kind of water body.
- xxiii. A proper action plan must be implemented to dispose of the electronic waste generated in the industry.
- xxiv. Three tier Green Belt shall be developed in at least 40% of the project area in a time frame of one year with native species all along the periphery of the project site of adequate width and tree density shall not be less than 2500 per ha. Survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years. PP shall also emphasize on road side plantation. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.
- xxv. Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface.
- xxvi. All the commitments made towards socio-economic development of the nearby villages 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. PP shall adopt nearby villages and prepare and implement a robust plan to develop them into model villages in next 10 years.

- xxvii. 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.
- xxviii. 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 with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS 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 carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5 in reference to PM emission, and SO2 and NOx in reference to SO2 and NOx emissions) within and outside the plant area (at least at four locations one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.
- iii. 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.

- 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. The project proponent shall ensure covered transportation and conveying of ore, coal and other raw material to prevent spillage and dust generation.
- vii. The project proponent shall provide primary and secondary fume extraction system at all heat treatment furnaces.
- viii. Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.
- ix. Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.

III. Water quality monitoring and preservation

- i. The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.
- ii. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
- iii. The project proponent shall provide the ETP for effluents of rolling mills to meet the standards prescribed in G.S.R 277 (E) 31st March 2012 (applicable to IF/EAF) as amended from time to time.

IV. Noise monitoring and prevention

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

V. Energy Conservation measures

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

VI. Waste management

- i. Used refractories shall be recycled as far as possible.
- ii. Oily scum and metallic sludge recovered from rolling mills ETP shall be mixed, dried, and briquetted and reused melting Furnaces
- iii. Kitchen waste shall be composted or converted to biogas for further use.

VII. Green Belt

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

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

VIII Public hearing and Human health issues

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

IX. Environment Management

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 30/09/2020. As part of Corporate Environment Responsibility (CER) activity, company shall adopt nearby villages based on the socio-economic survey and undertake community developmental activities in consultation with the village Panchayat and the District Administration as committed.
- ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures 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 shareholder's / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.

X. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.

- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- viii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- ix. The PP shall put all the environment related expenditure, expenditure related to Action Plan on the PH issues, and other commitments made in the EIA/EMP Report etc. in the company web site for the information to public/public domain. The PP shall also put the information on the left over funds allocated to EMP and PH as committed in the earlier ECs and shall be carried out and spent in next three years, in the company web site for the information to public/public domain.
- x. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Agenda No. 27.3

27.3 Manufacturing of 2400 TPA of Manganese Oxide by roasting and 2400 TPA of Medium Carbon Ferro-Manganese & Low Carbon Ferro-Manganese OR, 80 TPA of Ferro Molybdenum OR, 80 TPA of Ferro Vanadium OR, 80 TPA of Ferro Titanium by Thermite Process by M/s. Vibhuti Alloys, located at Plot No. B17/1, Butibori Industrial area, MIDC Nagpur, Maharashtra - Consideration of Environmental Clearance.

[Proposal No. IA/MH/IND/261008/2019; File No. IA-J-11011/168/2019-IA.II(I)]

[Consultant : Pollution and Ecology Control Services; Valid upto 09.05.2023]

27.3.1 M/s. Vibhuti Alloys has made online application vide proposal no. IA/MH/IND/261008/2019 dated 13.04.2023 along with copy of EIA/EMP report, Form-2 and certified CTO 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), under Category “A” of the schedule of the EIA Notification, 2006 and appraised at Central Level.

27.3.2 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 up to 09.05.2023, as on April 29, 2023].

Details submitted by Project proponent

27.3.3 The details of the ToR are furnished as below:

Date of Application	Consideration	Details	Date of Accord	ToR Validity
29/04/2019	6 th meeting of EAC (Industry-1) held on 29/04/2019 to 30/04/2019	Terms of Reference	20/05/2019	19/05/2023

27.3.4 The project of M/s. Vibhuti Alloys located in Plot No. B17/1 Butibori Industrial area, MIDC Butibori Village, Nagpur Tehsil, Nagpur District, Maharashtra is Proposed Manufacturing of 2400 TPA of Manganese Oxide by Roasting and 2400 of TPA Ferro Manganese M.C./L.C , 80 TPA of Ferro Titanium OR 80 TPA of Ferro Vanadium OR 80 TPA of Ferro Molybdenum (By Thermite Process).

27.3.5 Environmental Site Settings:

S. No.	Particulars	Details	Remarks
i.	Total land	0.1 ha (MIDC land)	Land use: Existing Shed : 500 sq.m Green Belt Area : 335 sq. m Road Area : 50 sq. m

S. No.	Particulars	Details	Remarks															
			Open Area : 100 sq. m Parking Area : 15 sq. m															
ii.	Land acquisition details	Total Land of 0.1 ha. is in possession with Vibhuti Alloys	Expansion will be carried out within existing shed of MIDC land which is leased out of total plot of 0.1 Ha (1000 sq. mt).															
iii.	Existence of habitation & involvement of R&R, if any.	Project site: Nil Study Area: <table border="1"> <thead> <tr> <th>Habitation</th> <th>Distance</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Tembhari</td> <td>0.8 km</td> <td>NE</td> </tr> </tbody> </table>	Habitation	Distance	Direction	Tembhari	0.8 km	NE	Status of R&R. Not Applicable									
Habitation	Distance	Direction																
Tembhari	0.8 km	NE																
iv.	Latitude and Longitude of all <u>corners</u> of the project site.	<table border="1"> <thead> <tr> <th>Point</th> <th>Latitude</th> <th>Longitude</th> </tr> </thead> <tbody> <tr> <td>A.</td> <td>20°55'33.24"N</td> <td>78°57'27.96"E</td> </tr> <tr> <td>B.</td> <td>20°55'32.53"N</td> <td>78°57'27.68"E</td> </tr> <tr> <td>C.</td> <td>20°55'32.97"N</td> <td>78°57'26.35"E</td> </tr> <tr> <td>D.</td> <td>20°55'33.68"N</td> <td>78°57'26.64"E</td> </tr> </tbody> </table>	Point	Latitude	Longitude	A.	20°55'33.24"N	78°57'27.96"E	B.	20°55'32.53"N	78°57'27.68"E	C.	20°55'32.97"N	78°57'26.35"E	D.	20°55'33.68"N	78°57'26.64"E	
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C.	20°55'32.97"N	78°57'26.35"E																
D.	20°55'33.68"N	78°57'26.64"E																
v.	Elevation of the project site	206 m above mean sea level																
vi.	Involvement of Forest land if any.	No Forest Land Involved.																
vii.	Water body exists within the project site as well as study area	Project site: No Water Body exists within the project site. Study area <table border="1"> <thead> <tr> <th>Water body</th> <th>Distance</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Vena river</td> <td>3.5 Km</td> <td>E</td> </tr> <tr> <td>Krishna nala</td> <td>4.5 Km</td> <td>SW</td> </tr> <tr> <td>Kanholi Canal</td> <td>6.0 Km</td> <td>SW</td> </tr> <tr> <td>Vadgaon lake</td> <td>9.6 Km</td> <td>SE</td> </tr> </tbody> </table>	Water body	Distance	Direction	Vena river	3.5 Km	E	Krishna nala	4.5 Km	SW	Kanholi Canal	6.0 Km	SW	Vadgaon lake	9.6 Km	SE	NA
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viii.	Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area	Nil	Archaeological structures, Historical places, Sanctuaries and Biosphere are not present within 10 km.															

27.3.6 The existing project was accorded Consent to Establish vide Ref.no. MPCB/1709000065 dated 01.09.2017 obtained from Maharashtra Pollution Control Board (MPCB) for Grinding unit. As per EIA notification 2006, for grinding unit not require Environmental Clearance. Consent to

Operate for the existing unit was accorded by Maharashtra State Pollution Control Board vide letter. No. RO-NAGPUR/CONSENT/ /2110000922 dated 21/10/2021. The validity of CTO is up to 30.08.2027.

S. No	Obtained Name	Obtained Certificate Name	Date of Issue	Reference No.	Obtained From	Approval granted for
1.	Consent to establish under Section 25 of the Water Act, 1974 & under Section 21 of Air Act, 1981 and Authorisation under Rule 5 of Hazardous Wastes and Other Waste Rules 2016	CTE	01.09.2017	MPCB/ 1709000065	Maharashtra Pollution Control Board (MPCB)	<ul style="list-style-type: none"> • Grinding of Manganese- 30000 MT/ annum • Silico Manganese- 24000 MT/annum • Ferro Manganese- 24000 MT/annum
2.	Consent to operate under Section 26 of the Water Act, 1974 & under Section 21 of Air Act, 1981 and Authorisation under Rule 5 of Hazardous Wastes and Other Waste Rules 2016	CTO	12.07.2018	MPCB/UAN No. 43657/1807000498	MPCB	<ul style="list-style-type: none"> • Grinding of Manganese- 30000 MT/annum • Silico Manganese- 24000 MT/annum • Ferro Manganese- 24000 MT/annum • Grinding of coal- 2400 MT/annum

S. No	Obtained Name	Obtained Certificate Name	Date of Issue	Reference No.	Obtained From	Approval granted for
3.	Consent to establish under Section 25 of the Water Act, 1974 & under Section 21 of Air Act, 1981 and Authorisation under Rule 5 of Hazardous Wastes and Other Waste Rules 2016	CTE	09.09.2020	BO/JD(APC)/UAN No. MPCB-CONSENT-00000081625/E/CC-538	MPCB	<ul style="list-style-type: none"> • Medium Carbon Ferro Manganese & Low Carbon Ferro • Manganese - 2400 T/year • Ferro Molybdenum - 80 T/year • Ferro Vanadium- 80 T/year • Ferro Titanium- 80 T/year • Manganese Oxide- 2400 T/year
4.	Renewal of Consent to operate under Section 26 of the Water Act, 1974 & under Section 21 of Air Act, 1981 and Authorisation under Rule 5 of Hazardous Wastes and Other Waste Rules 2016	Renewal of CTO	20.10.2021	RO- NAGPUR/ CONSENT /12110000922	MPCB	<ul style="list-style-type: none"> • Grinding of Manganese- 30000 MT/annum • Grinding of Silico Manganese- 24000 MT/annum • Grinding of Ferro Manganese- 24000 MT/annum • Grinding of coal- 2400 MT/annum

27.3.7 Implementation status of the existing EC:

Facilities and Capacity envisaged	CTE/CTO	Implementation status
Grinding of Manganese (30000TPA)	Consent to Established for existing grinding unit vide letter no. RMPCB/1709000065 dated 01.09.2017	The plant is partly operational and that operates only on an average 130 nos of days in year.
Grinding of Silico Manganese (24000TPA)		
Grinding of Ferro Manganese (24000 TPA)		
Grinding of Coal (2400 TPA)	Consent to Operate is issued vide letter No RO-Nagpur/Consent/2110000922 dated 20-10-2021 valid upto 30-08-2027	

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

S. No.	Plant Equipment/ Facility	Existing facilities as per consent								Proposed Units		Final (Existing +Proposed)	
		Total (A+B)		Implemented (A)		Unimplemented (B)		As per CTO					
		Configuration	Capacity	Configuration	Capacity	Configuration	Capacity	Configuration	Capacity	Configuration	Capacity	Configuration	Capacity
1.	Grinding of Manganese	-	30000 TPA	-	30000 TPA	-	-	-	30000 TPA	-	-	-	-
2.	Grinding of Silico Manganese	-	24000 TPA	-	24000 TPA	-	-	-	24000 TPA	-	-	-	-
3.	Grinding of Ferro Manganese	-	24000 TPA	-	24000 TPA	-	-	-	24000 TPA	-	-	-	-
4.	Grinding of Coal	-	2400 TPA	-	2400 TPA	-	-	-	2400 TPA	-	-	-	-
5.	Manganese Oxide by Roasting Method	-	-	-	-	-	-	-	-	-	2400 TPA	-	-
6.	Medium Carbon Ferro-Manganese & Low Carbon Ferro-Manganese by Thermite Process OR		-	-	-	-	-	-	-	-	2400 TPA	-	-
7.	Ferro Molybdenum by Thermite Process OR										80 TPA	-	-
8.	Ferro Vanadium by Thermite Process OR		-	-	-	-	-	-	-	-	80 TPA	-	-
9.	Ferro Titanium by Thermite Process		-	-	-	-	-	-	-	-	80 TPA	-	-

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

S. No	Raw Material	Quantity			Source	Distance from site (Km)	Mode of Transportation
		Existing	Expansion (TPA)	Total (TPA)			
1.	Manganese Ore	-	2800	2800	From DP Rai Mines /Local Procurement/ MOI	50-100 km	Road
2.	Aluminum Scrap	-	410	410	Local Procurement/Imported	50-100 km	Road
3.	Lime Powder/ Fluorspar	-	548	548	From Rajasthan / Katni / Wani/Local Procurement	100-300 km	Road
4.	Silico Manganese	-	1416	1416	Local Procurement/ Raipur	300 km	Road
5.	Molybdenum Concentrate	-	81	81	Imported	-	Road
6.	Aluminum Powder	-	9	9	Local Procurement/ Imported	-	Road
7.	Lime Powder	-	8	8	Rajasthan/ Katni / Wani	100-300 km	Road
8.	Mill Scale	-	45	45	Local procurement from wire drawing units	50-100 km	Road
9.	Ferro Silicon	-	30	30	Assam/Bhutan	500 km	Road
10.	Vanadium Pentoxide (flakes)	-	77	77	Mexico/Imported	500 km	Road
11.	Aluminum Shots	-	40	40	Local Procurement/ Imported	50-100 km	Road
12.	Fluorspar	-	5	5	From Rajasthan/Katni / Wani	50-100 km	Road
13.	Iron Scrap	-	41	41	Local Procurement	50-100 km	Road
14.	Ilmenite	-	104	104	Kerala/Imported Wani	500 km	Road
15.	Aluminum Powder	-	47	47	Local Procurement/ Imported	50-100 km	Road

S. No	Raw Material	Quantity			Source	Distance from site (Km)	Mode of Transportation
		Existing	Expansion (TPA)	Total (TPA)			
16.	Lime Powder	-	1	1	Rajasthan/Katni/Wani	100-300 km	Road
17.	Iron Ore	-	16	16	Orissa	200-300 km	Road
18.	Manganese Ore	-	3000	3000	From DP Rai Mines/Local Procurement/MOIL	100-300 km	Road
19.	Coal		272	272	Local Procurement/E-auction	100-300 km	Road

27.3.10 The water requirement for the proposed project is estimated as 5 m³/day, which will be obtained from the MIDC Butibori.

27.3.11 Existing power requirement of 60 HP is obtained from State Electricity Board The power requirement for the proposed project is estimated as 22 HP will be obtained from the State Electricity Board.

27.3.12 Baseline Environmental Studies:

Particulars	Parameter										
AAQ parameters at 8 Locations (min and max)	<ul style="list-style-type: none"> AAQ parameters PM_{2.5} = 18.4 to 26.7 µg/m³ PM₁₀ = 40.9 to 62.1 µg/m³ SO₂ = 13.7 to 27.6 µg/m³ NO_x = 15.0 to 33.1 µg/m³ 										
Incremental GLC level	PM ₁₀ = 0.01906 µg/m ³ (Level at 1.2 km in SW Direction) SO ₂ = 0.00637 µg/m ³ (Level at 1.3 km in SW Direction)										
Ground water quality at 8 locations	pH: 7.1 to 7.9, Total Hardness: 138 to 423 mg/l, Chlorides: 18.4 to 58.9 mg/l, Fluoride: 0.3 to 0.6 mg/l. Heavy metals BDL to 0.09 mg/l.										
Surface water quality at 6 locations	pH: 7.1 to 7.9; DO: 5.2 to 6.7 mg/l and BOD: <3 mg/l to 3.9 mg/l COD from 5.2 mg/l to 12.3 mg/l										
Noise levels Leq (Day and Night)	41.4 to 60.8 dB(A) for the day time and 37.7 to 51.0 dB(A) for the Night time.										
Traffic assessment study findings	<p>Traffic study has been conducted. Transportation of raw material, fuel & finished product will be done by road.</p> <ul style="list-style-type: none"> Existing PCU is 4238 PCU/hr & 1073 PCU/hr on Butibori-NH361 Road Office & MIDC Road respectively (NH/SH/MDR) and existing level of service (LOS) is: A-Very Good for both the roads. <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Road</th> <th>V (Volume in PCU/hr.)</th> <th>C (Capacity in PCU/hr.)</th> <th>Proposed V/C Ratio</th> <th>LOS</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Road	V (Volume in PCU/hr.)	C (Capacity in PCU/hr.)	Proposed V/C Ratio	LOS					
Road	V (Volume in PCU/hr.)	C (Capacity in PCU/hr.)	Proposed V/C Ratio	LOS							

Particulars	Parameter				
		Near MIDC Office	4256	17,024	0.25
	T point at project site	1091	10,910	0.10	A-Very Good
	* Note: Capacity as per IRC106:1990 Guide line for capacity for roads. Conclusion: The level of service will be A-Very Good after including additional traffic due to proposed project				
Flora and fauna	No schedule I fauna and endangered Flora found within the study area				

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

S. No.	Source and Type of Waste	Quantity generated (TPA)	Disposal
1.	Ferro-Manganese Slag	1927	Slag will be reused for lining & earth preparation of reaction vessels & remaining excess slag if any will be sold to authorized recyclers.
2.	Ferro Titanium Slag	79	
3.	Ferro- Molybdenum Slag	90	
4.	Ferro Vanadium Slag	78	
5.	Ash	1.0	Will be sold to local brick manufacturers
6.	Used oil	0.5 KL/Annum	Used spent oil will be sold to registered vendors only.

27.3.14 Public Consultation:

Details of advertisement given	16.07.2020
Date of public consultation	17.08.2020
Venue	Online via zoom application
Presiding Officer	Additional District Magistrate
Major Issues raised	Employment to Locals, Installation of pollution control equipment, greenbelt development and healthcare and drinking water facilities.

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

S. NO.	MAJOR ACTIVITY HEADS	YEAR OF IMPLEMENTATION			Total Budget (Rs)	
		1 st Year	2 nd Year	3 rd Year		
Budgetary Allocation for CER as per the Important Issues of Public Hearing						
A). Based on Need Based & Study for three villages						
1	Impart training to the local interested youth for skill development	Physical Nos.	15	5	5	1,50,000
		Villages	Pohi Takalghat Kini Bujurg, and Bharkas			
		Budget (Rs)	1,50,000			
Budgetary Allocation for CER as per the Need Based Assessment						

B). Community & Infrastructure Development					
i) Construction of toilets with overhead tanks in various schools at the rate 50,000 per toilet	Physical Nos.	2	2	1	2,50,000
	Villages	Pohi Takalghat	Kini Bujurg,	Bharkas	
	Budget (Rs)	1.00,000	1,00,000	50,000	
ii) Providing LED Street lighting with solar panels at the 4000 per light	Physical Nos.	10	5	10	1,20,000
	Villages	Pohi	Takalghat	Bharkas	
	Budget (Rs)	40,000	40,000	40,000	
iv) Provision of clean Drinking Water Facilities (RO Unit)	Physical Nos.	2	1	1	1,00,000
	Villages	Kini Bujurg, Bharkas	Pohi	Takalghat	
	Budget (Rs)	50,000	25,000	25,000	
Total CER amount					6,20,000

27.3.15 Existing capital cost of project was Rs. 70.73 Lakhs. The capital cost of the proposed project is Rs. 3.00 Crores and the capital cost for environmental protection measures is proposed as Rs. 55 lakhs. The annual recurring cost towards the environmental protection measures is proposed as Rs. 9.5 lakhs. The employment generation from the proposed project / expansion is 50. The details of cost for environmental protection measures is as follows:

S. No.	Description of Item	Proposed (Rs. In Crores/lakhs)	
		Capital Cost	Recurring Cost/ year
i.	Bag filter and Dust collector (Air Pollution Control)	43 Lakhs	2.5 Lakhs
ii.	Settling tank and Packaged type STP (Water Pollution Control)	2.0 Lakhs and 5.0 lakhs	2.5 Lakhs
iii.	Air Quality, Water and Wastewater Quality, Noise Level, Soil Quality (Environmental Monitoring and Management by NABL/MOEF approved lab)	-	2.5 Lakhs
iv.	Green Belt Development (Plantation)	5.0 Lakhs	2.0 Lakhs
v.	Addressal of Public Consultation concerns	6.2 Lakhs	

27.3.16 Proposed greenbelt will be developed in 0.0335 ha which is about 33% of the total project area. At present 20 trees are planted in existing plant premises and in expansion phase 60-70 trees will be planted. 3 m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt.

27.3.17 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

27.3.18 The Sub Regional Officer, Maharashtra Pollution Control Board (MPCB), Nagpur vide letter No. MPC/SRN-II/1117/2022 dated 13.10.2022 certified the compliance status of conditions stipulated in consent to operate granted for existing plant with grinding and crushing activity.

Written representations:

- 27.3.19 During the meeting, based on the deliberations made by the EAC, the project proponent vide letter dated 27.04.2023 through email dated 27.04.2023 submitted the map showing aerial distance of the project site from the boundary of ESZ of nearest Wildlife sanctuaries which are beyond the 10 km radius of the project site.

Deliberations by the Committee

27.3.20 The Committee noted the following:

1. The instant proposal is for manufacturing of 2400 TPA of Manganese Oxide by Roasting and 2400 of TPA Ferro Manganese M.C./L.C, 80 TPA of Ferro Titanium OR 80 TPA of Ferro Vanadium OR 80 TPA of Ferro Molybdenum (By Thermite Process).
2. 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.
3. 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.
4. 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.
5. The total project area is 0.1 ha (MIDC land) which is under the possession of the company. Expansion will be carried out within existing shed of MIDC land which is leased out.
6. The existing project was accorded Consent to Establish vide Ref.no. MPCB/1709000065 dated 01.09.2017 obtained from Maharashtra Pollution Control Board (MPCB) for Grinding unit. As per EIA notification 2006, grinding unit does not require Environmental Clearance. Consent to Operate for the existing unit was accorded by Maharashtra State Pollution Control Board vide letter. No. RO-NAGPUR/CONSENT/ /2110000922 dated 21/10/2021. The validity of CTO is up to 30.08.2027.
7. The nearest habitation to the project site is Tembhari at a distance of 0.8 km in the NE direction. 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. The water requirement for the proposed project is estimated as 5 m³/day which is proposed to be obtained from the MIDC Butibori.

9. The Vena River is at a distance of 3.5 km from the project site in the East direction. The are other water bodies within the study area. The EAC is of the opinion that water bodies shall not be disturbed. Mitigation measures w.r.t. safeguarding the water bodies shall be implemented.
10. The Committee has found that the baseline data and incremental GLC due to the proposed project within NAAQ standards.
11. The PP has submitted that greenbelt will be developed in 0.0335 ha which is about 33% of the total project area. At present 20 trees are planted in existing plant premises and in expansion phase 60-70 trees will be planted. The EAC is of the opinion that additional greenbelt of 100 trees shall be completed in the coming monsoon.
12. The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found them to be satisfactory.
13. 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 and found it satisfactory.
14. The Committee deliberated on the certified compliance report of RO, MPCB and found it satisfactory.
15. The Committee deliberated upon the written submission of the Project Proponent and found it satisfactory.
16. 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.
17. 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:

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

A. Specific Condition:

- i. This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, or any direction issued by statutory body, if any, as may be applicable to this project.
- 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. The nearest habitation to the project site is Tembhari at a distance of 0.8 km in the NE direction. 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 this location in its environmental monitoring programme.
- v. Vena River is at a distance of 3.5 km from the project site in the East direction. There are other water bodies within the study area. 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.
- vi. Following additional arrangements to control fugitive dust shall be provided:
 - a. Fog / Mist Sprinklers at all conveyors point and on bulk raw material storage area (at the transfer points) like Iron Ore, Coal and for Fly Ash and similar solid waste storage areas.
 - b. Proper covered vehicle shall be used while transport of materials.
 - c. Wheel washing mechanism shall be provided in entry and exit gates with complete recirculation system.
- vii. All internal road and connecting road from project site to main highway shall be developed and maintained with suitable Million Axle Standard (MSA) as per the traffic load due to existing and proposed project.
- viii. Performance test shall be conducted on all pollution control systems every year and report shall be submitted to Regional Office of the MoEF&CC.
- ix. Particulate matter emission from stacks shall be less than 30 mg/Nm³.
- x. PP shall carry out periodically occupational health survey as per the applicable norms.
- xi. The 4th hole extraction system shall be provided in the Sub Merged Arc Furnaces and EAF.
- xii. 100% of the slag generated through the process shall be utilised.
- xiii. The water requirement of 5 m³/day, shall be sourced from MIDC Butibori. Necessary permission shall be obtained from the Competent Authority in this regard.
- xiv. 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. Suitable measures shall be adopted for sewage water handling to ensure no contamination of any kind of water body.

- xv. The company shall also undertake rain water harvesting measures as per the plan submitted in the EIA/EMP report and reduce water dependence from the outside source.
- xvi. As reported, PP shall adopt Villages and prepare and implement a robust plan to develop them into model villages in next 10 years.
- xvii. Briquetting and Jigging plant shall be installed in Ferro Alloys Plant.
- xviii. A proper action plan must be implemented to dispose of the electronic waste generated in the industry.
- xix. Three tier Green Belt shall be developed in at least 33% of the project area in the coming monsoon of 2023 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 along with windshield inside the plant premises to act as green barrier for air pollution & noise levels towards the Tembahi village. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.
- xx. Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface.
- xxi. Dry gas cleaning systems shall be provided by the project proponent to meet particulate matter emission norms of less than 30mg/Nm³ for the furnace flue gases.
- xxii. The PP shall minimize the evaporation losses in jigging operation to less than 10% using suitable advanced process.
- xxiii. The PP shall install CO sensors at the furnace top level and the monitoring report shall be submitted to the IRO, MoEF&CC in this regard.
- xxiv. 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.
- xxv. The Piezometric wells shall be established in all directions surrounding the project area to monitor groundwater levels and determine aquifer parameters such as transmissibility, hydraulic conductivity, storage, to sample groundwater for chemical/heavy metals/ toxic leachates and microbiological analysis.
- xxvi. The PP shall adopt the best practices of House-keeping in the whole project area and specially where the tailings are proposed to be stacked.
- xxvii. 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.
- xxviii. 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.

- xxix. 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 two Continuous Ambient Air Quality Station (CAAQS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- iii. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- iv. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.
- v. Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration.

- vi. The project proponent shall ensure covered transportation and conveying of ore, coal and other raw material to prevent spillage and dust generation.
- vii. The project proponent shall provide primary and secondary fume extraction system at all melting furnaces.
- viii. 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 (G.S.R 414 (E) dated 30th May 2008; G.S.R 277 (E) dated 31st March 2012 (applicable to IF/EAF); as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre- and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.
- iii. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
- iv. The project proponent shall provide the ETP for effluents of rolling mills to meet the standards prescribed in G.S.R 277 (E) 31st March 2012 (applicable to IF/EAF) as amended from time to time.
- v. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.
- vi. Tyre washing facilities shall be provided at the entrance/exit of the plant gates.

IV. Noise monitoring and prevention

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

V. Energy Conservation measures

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

VI. Waste management

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

VII. Green Belt

- i. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation.
- ii. Project proponent shall submit a study report on De-carbonization program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon

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

VIII. Public hearing and Human health issues

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

IX. Environment Management

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 30/09/2020. As part of Corporate Environment Responsibility (CER) activity, company shall adopt nearby villages based on the socio-economic survey and undertake community developmental activities in consultation with the village Panchayat and the District Administration as committed.
- ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures 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.
- ii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.

X. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.

- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- viii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- ix. The PP shall put all the environment related expenditure, expenditure related to Action Plan on the PH issues, and other commitments made in the EIA/EMP Report etc. in the company web site for the information to public/public domain. The PP shall also put the information on the left over funds allocated to EMP and PH as committed in the earlier ECs and shall be carried out and spent in next three years, in the company web site for the information to public/public domain.
- x. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Consideration of TOR

Agenda No. 27.4

27.4 Establishment of Greenfield steel plant comprising of Coal Washery Unit – 1.0 MTPA (throughput), DRI Kilns (7,09,500 TPA), Induction Furnaces with matching LRF & CCM (Hot Billets / Billets - 2,97,000 TPA), Rolling Mill (Rolled Products – 3,30,000 TPA), Ferro Alloy Unit 4 x 9 MVA (FeSi – 28,000 TPA/ FeMn – 1,00,800 TPA/ SiMn – 57,600 TPA/FeCr– 60,000 TPA), Briquetting Plant (400 Kg/Hr),WHRB based Power Plant –48 MW, CFBC based Power Plant - 16 MW & Brick Manufacturing unit (86,000 Bricks / Day) by M/s. Raigarh Ispat and Power Private Limited, located at Shivpuri Village, Raigarh Tehsil, Raigarh District, Chhattisgarh, - Consideration of Terms of Reference

**[Proposal No. IA/CG/IND1/413229/2023; File No. IA-J-11011/45/2023-IA-II(IND-I)]
[Consultant: Pioneer Enviro Consultants Private Limited; Valid upto 06.06.2023]**

27.4.1 M/s. Raigarh Ispat & Power Pvt. Ltd has made an application online vide proposal no. IA/CG/IND1/413229/2023 dated 15th April 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. 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.

27.4.2 Name of the EIA consultant: M/s. Pioneer Enviro Consultants Private Limited [List of ACOs with their Certificate / Extension Letter No: QCI/NABET/ENV/ACO/23/2699 valid till 06.06.2023, as on April 29, 2023].

Details submitted by Project proponent

27.4.3 The project of M/s. Raigarh Ispat & Power Pvt. Ltd., located at Shivpuri Village, Raigarh Tehsil, Raigarh (D), Chhattisgarh is for establishment of Greenfield steel plant comprising of Coal Washery Unit – 1.0 MTPA (throughput), DRI Kilns (7,09,500 TPA), Induction Furnaces with matching LRF & CCM (Hot Billets / Billets - 2,97,000 TPA), Rolling Mill (Rolled Products – 3,30,000 TPA), Ferro Alloy Unit 4 x 9 MVA (FeSi – 28,000 TPA/ FeMn – 1,00,800 TPA/ SiMn – 57,600 TPA/FeCr– 60,000 TPA), Briquetting Plant (400 Kg/Hr),WHRB based Power Plant – 48 MW, CFBC based Power Plant - 16 MW & Brick Manufacturing unit (86,000 Bricks / Day).

27.4.4 Environmental site settings:

S.No.	Particulars	Details	Remarks
i.	Total Land	46.337 Ha.(114.499 Acres) Private Land	Land Use: Partly Agricultural Land & Partly Scrub land
ii.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	Total Land : 46.337 Ha. Land acquisition & diversion details : Raigarh Ispat & Power Pvt. Ltd. – 32.558 Ha. (Land is registered & Applied for Diversion)	Lease Agreement has been entered between Gayatri Rolling Mills Pvt.

S.No.	Particulars	Details	Remarks																																																			
		Gayatri Rolling Mills – 13.779 Ha. (Land registered & Applied for Diversion)	Ltd. and Raigarh Ispat & Power Pvt. Ltd. for 13.779 Ha.																																																			
iii.	Existence of habitation & involvement of R & R, if any	No habitation exists in project site; Hence no R & R is involved.	---																																																			
iv.	Latitude and Longitude of the project site	Latitude and Longitude of the project site: <table border="1"> <thead> <tr> <th>Point</th> <th>Latitude</th> <th>Longitude</th> </tr> </thead> <tbody> <tr><td>Point # 1</td><td>22° 0'6.93"N</td><td>83°21'24.33"E</td></tr> <tr><td>Point # 2</td><td>22° 0'0.33"N</td><td>83°22'0.40"E</td></tr> <tr><td>Point # 3</td><td>22° 0'14.06"N</td><td>83°22'1.73"E</td></tr> <tr><td>Point # 4</td><td>22° 0'13.67"N</td><td>83°21'56.32"E</td></tr> <tr><td>Point # 5</td><td>22° 0'11.63"N</td><td>83°21'55.83"E</td></tr> <tr><td>Point # 6</td><td>22° 0'12.09"N</td><td>83°21'43.10"E</td></tr> <tr><td>Point # 7</td><td>22° 0'20.55"N</td><td>83°21'43.65"E</td></tr> <tr><td>Point # 8</td><td>22° 0'22.47"N</td><td>83°21'44.46"E</td></tr> <tr><td>Point # 9</td><td>22° 0'22.61"N</td><td>83°21'42.13"E</td></tr> <tr><td>Point #10</td><td>22° 0'23.49"N</td><td>83°21'40.17"E</td></tr> <tr><td>Point #11</td><td>22° 0'22.81"N</td><td>83°21'39.74"E</td></tr> <tr><td>Point #12</td><td>22° 0'22.84"N</td><td>83°21'28.80"E</td></tr> <tr><td>Point #13</td><td>22° 0'20.50"N</td><td>83°21'27.66"E</td></tr> <tr><td>Point #14</td><td>22° 0'18.80"N</td><td>83°21'29.22"E</td></tr> <tr><td>Point #15</td><td>22° 0'13.81"N</td><td>83°21'26.84"E</td></tr> <tr><td>Point #16</td><td>22° 0'14.03"N</td><td>83°21'24.81"E</td></tr> </tbody> </table>	Point	Latitude	Longitude	Point # 1	22° 0'6.93"N	83°21'24.33"E	Point # 2	22° 0'0.33"N	83°22'0.40"E	Point # 3	22° 0'14.06"N	83°22'1.73"E	Point # 4	22° 0'13.67"N	83°21'56.32"E	Point # 5	22° 0'11.63"N	83°21'55.83"E	Point # 6	22° 0'12.09"N	83°21'43.10"E	Point # 7	22° 0'20.55"N	83°21'43.65"E	Point # 8	22° 0'22.47"N	83°21'44.46"E	Point # 9	22° 0'22.61"N	83°21'42.13"E	Point #10	22° 0'23.49"N	83°21'40.17"E	Point #11	22° 0'22.81"N	83°21'39.74"E	Point #12	22° 0'22.84"N	83°21'28.80"E	Point #13	22° 0'20.50"N	83°21'27.66"E	Point #14	22° 0'18.80"N	83°21'29.22"E	Point #15	22° 0'13.81"N	83°21'26.84"E	Point #16	22° 0'14.03"N	83°21'24.81"E	---
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v.	Elevation of the project site	MSL of the Project area – 252 m to 275 m	---																																																			
vi.	Involvement of Forest land, if any	No Forest land is involved in the project site. Status of Stage I Forest Clearance: Not applicable	---																																																			
vii.	Water body (Rivers,Lakes, Nala,Natural Drainage,Canal etc.) exists within the project site as well as study area	<u>Project site:</u> Nil <u>Study area:</u> <table border="1"> <thead> <tr> <th>Water Body</th> <th>Distance</th> <th>Direction</th> </tr> </thead> <tbody> <tr><td>Gerwani Nala</td><td>1.10 kms.</td><td>N</td></tr> <tr><td>Kelo River</td><td>1.3 Kms.</td><td>NE</td></tr> <tr><td>Dewanmunda Nala</td><td>2.2 Kms.</td><td>NW</td></tr> <tr><td>Karanara Nala</td><td>3.0 Kms.</td><td>NE</td></tr> <tr><td>Banjari Nala</td><td>3.2 Kms.</td><td>N</td></tr> <tr><td>Ratrot Nala</td><td>5.2 Kms.</td><td>NNE</td></tr> <tr><td>Tipakhhol Pond</td><td>5.6 Kms.</td><td>S</td></tr> <tr><td>Barade Nala</td><td>6.7 Kms.</td><td>NW</td></tr> <tr><td>PajharNadi</td><td>6.75 Kms.</td><td>NNE</td></tr> <tr><td>Kokritaral Pond</td><td>7.2 Kms.</td><td>S</td></tr> <tr><td>Bilaspur Reservoir</td><td>7.3 Kms.</td><td>SW</td></tr> </tbody> </table>	Water Body	Distance	Direction	Gerwani Nala	1.10 kms.	N	Kelo River	1.3 Kms.	NE	Dewanmunda Nala	2.2 Kms.	NW	Karanara Nala	3.0 Kms.	NE	Banjari Nala	3.2 Kms.	N	Ratrot Nala	5.2 Kms.	NNE	Tipakhhol Pond	5.6 Kms.	S	Barade Nala	6.7 Kms.	NW	PajharNadi	6.75 Kms.	NNE	Kokritaral Pond	7.2 Kms.	S	Bilaspur Reservoir	7.3 Kms.	SW	---															
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viii.	Existence of ESZ/ESA/National	Study Area:	There are no notified National																																																			

S.No.	Particulars	Details		Remarks
	Park/Wildlife Sanctuary/Biosphere Reserve/Tiger Reserve/Elephant Reserve etc. if any within the study area	Name	Distance	<i>Park / Wild life sanctuary / Biosphere reserve /Tiger reserve with in 10 Km. radius of the project site.</i>
		Nil	Nil	
		Status of NBWL approval: <i>Not applicable</i>		<i>Based on secondary sources, movement of Elephants has been observed within the study area of the plant.</i>
		List of Reserved and protected forests:		
	Name	Distance		
		PF	0.02 Kms.	
		Urdana RF	2.2 Kms	

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

S. No.	Units (Products)	Unit Configuration	Production Capacity (in TPA)	
1.	DRI Kilns (Sponge Iron)	5 x 350 TPD & 2 x 200 TPD	7,09,500	
2.	Induction Furnace (Hot Billets/ Billets)	6 x 15 T	2,97,000	
3.	Rolling Mill (Rolled products) (85 % Hot charging with Hot Billets and remaining 15% through RHF with LDO)	1 x 600 TPD 1x 400 TPD	3,30,000	
4.	Ferro Alloys Unit (FeSi / FeMn / SiMn / FeCr)	4 x 9 MVA	FeSi-28,000 / FeMn -1,00,800/ SiMn -57,600/ FeCr-60,000	
5.	Briquetting Plant	400 Kg/hr	400 Kg/hr	
6.	Coal Washery & Beneficiation Plant	1.0 MTPA	8,50,000 TPA	
7.	Fly Ash Brick Manufacturing Unit	86,000 Bricks/ day	28.38 Million bricks /Annum	
8.	Power Plant	WHRB Power Plant	5 x 8 MW & 2 x 4 MW	48 MW
		CFBC Power Plant	1 x 16MW	16 MW

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

S. No.	Raw Material	Quantity (TPA)	Sources	Distance (in Kms.)	Mode of Transport
1.	Pellets	10,28,775	Chhattisgarh	~ 200	By rail & road (through covered trucks)
(or)					

S. No.	Raw Material	Quantity (TPA)	Sources	Distance (in Kms.)	Mode of Transport
2.	Iron Ore	11,35,200	Odisha, Chhattisgarh, Jharkhand & Imported	~ 500	By rail, road (Covered trucks) & Through vessel
3.	Indian Coal	1,059,300	SECL Chhattisgarh / MCL Odisha	~ 500	By rail & road (through covered trucks)
4.	Imported Coal	6,78,952	Indonesia / South Africa / Australia	~ 600	Through vessel, rail & by road (Covered trucks)
5.	Dolomite	52,611	Chhattisgarh	~ 150	By road (through covered trucks)
6.	Sponge Iron	3,00,000	Own generation	---	Through covered conveyers
7.	MS Scrap / Pig Iron	45,000	Own generation	~ 100	By road (through covered trucks)
8.	Ferro alloys	15,000	Own generation	---	By road (through covered trucks)
9.	Hot Billets / Billets / Ingots	3,46,170	Own generation	---	----
10.	LDO / LSHS	1,603Kl/annum	Nearby IOCL Depot	~ 100	By road (through Tankers)
11.	Dolochar	2,83,800	In plant generation	---	through covered conveyers
12.	Raw Coal (Washery)	10,00,000	SECL Chhattisgarh / MCL Odisha	~ 500	By rail & road (through covered trucks)
13.	Quartz	42,500	Chhattisgarh / Andhra Pradesh	~ 500	By road (through covered trucks)
14.	coke	36,792	Andhra Pradesh	~ 500	By road (through covered trucks)
15.	Mill scales	6,580	Inhouse Generation	---	By road (through covered trucks)
16.	MS Scrap / Mill scales	15,120	Inhouse Generation	---	By road (through covered trucks)
17.	Electrode Paste	1,800	Maharashtra / West Bengal	~ 300	By road (through covered trucks)
18.	Bagfilter dust	5,040	Own generation	---	---
19.	Manganese Ore	2,29,320	MOIL / OMC	~ 500	By Rail & Road

S. No.	Raw Material	Quantity (TPA)	Sources	Distance (in Kms.)	Mode of Transport
					(through covered trucks)
20.	FeMn Slag	60,944	Andhra Pradesh	~ 500	By road (through covered trucks)
21.	Magnetite / Bauxite	10,140	Chhattisgarh / Maharashtra	~ 500	By road (through covered trucks)

- 27.4.7 Water required for the proposed project will be 3450 KLD, Water required for proposed project will be sourced from partly from water Reservoir at the site and partly from Kelo river (which is at a distance of 1.3 Kms. from the project site). Water drawl permission Water Resource Department, Chhattisgarh will be obtained.
- 27.4.8 Power required for the proposed project will be 83 MW and same will be sourced from Captive Power Plant (64.0 MW) and remaining (19 MW) from State Grid.
- 27.4.9 The capital cost of the project is Rs. 1115 Crores. Employment generation from proposed project will be 600 nos. through direct employment and 1200 nos. through indirect employment.
- 27.4.10 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.

Deliberation by the Committee

- 27.4.11 The Committee noted the following:
- i. The instant proposal is for establishment of Greenfield steel plant comprising of Coal Washery Unit – 1.0 MTPA (throughput), DRI Kilns (7,09,500 TPA), Induction Furnaces with matching LRF & CCM (Hot Billets / Billets - 2,97,000 TPA), Rolling Mill (Rolled Products – 3,30,000 TPA), Ferro Alloy Unit 4 x 9 MVA (FeSi – 28,000 TPA/ FeMn – 1,00,800 TPA/ SiMn – 57,600 TPA/FeCr– 60,000 TPA), Briquetting Plant (400 Kg/Hr), WHRB based Power Plant –48 MW, CFBC based Power Plant - 16 MW & Brick Manufacturing unit (86,000 Bricks / Day).
 - ii. **The EAC noted that proposed project site is very near to a Government School (approx. 80 metres) and around 300 students from the nearby villages’ studies in the said school, as reported by the PP. The proposed project will have a large impact on this Ecologically Sensitive Area (ESA). In view of the same, the Committee is of the view that being a greenfield project, the PP shall shift the project to an alternate site where there is no such ESA nearby.**
 - iii. Alternatively, the PP may approach the District Administration and obtain a documentary proof, whether any shifting of the school or Industry is possible so that school should not have any impact due to the project site.

- iv. Thus, the EAC opined that the case may be taken only if PP comes with an alternate site or submission of commitment letter from the District Administration pertaining to shifting of school or Industry to a safe place.

Recommendations of the Committee

- 27.4.12 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. 27.4.11 above and submit the revised application as per the provisions of EIA Notification, 2006.

Agenda No. 27.5

- 27.5 Proposed Standalone Grinding Unit of 72,000 TPA White Cement by M/s NGS White Cements AP Private Limited, located at Peddaveedu Village, Mattam Palle Mandal, Suryapet District, Telangana – Consideration of TOR.**

[Proposal No. IA/TG/IND1/416448/2023; File No. IA-J-11011/48/2023-IA-II(IND-I)]

- 27.5.1 M/s. NGS White Cements AP Pvt. Ltd. has made an online application vide proposal no. IA/TG/IND1/416448/2023 dated 20th Feb., 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 EIA Notification 2006 for the project mentioned above. The proposed project activity is listed as Activity 3 (b)- Cement Plants under Category “B” of the schedule of the EIA Notification, 2006 and attracts general condition due to the interstate Boundary of Telangana – Andhra Pradesh falls at a distance of 4.4 km in SSE direction from the proposed project site as per SOI Toposheet no. 56P/9 (E44T9), 56P/10 (E44T10), 56P/13 (E44T13) & 56P/14 (E44T14); Therefore, the project will be treated as Category- “A” project & appraised at Central Level.

- 27.5.2 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 till 07.08.2023, as on April 29, 2023].

Details submitted by Project proponent

- 27.5.3 The project of M/s. NGS White Cements AP Pvt. Ltd. located in Peddaveedu Village, Mattam Palle Mandal, Suryapet District, Telangana is for setting up of a new Proposed Standalone Grinding unit for production of White Cement 72000 TPA.

- 27.5.4 Environmental site settings:

S. No	Particulars	Details	Remarks
i.	Total land	1.55 ha [Govt land]	The land has been acquired by TSIIC (Telangana State

S. No	Particulars	Details	Remarks																																	
ii.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	Telangana State Industrial Infrastructure Corporation Ltd. (TSIIC) facilitated transfer of 1.55 ha of government land from Govt. of Telangana to NGS White Cements AP Pvt. Ltd.	Industrial Infrastructure Corporation) for industrial purpose and transferred to M/s NGS White Cements AP Pvt. Ltd. For setting up of Grinding Unit. As per G.O. MS No. 118 dated 23.07.2015 and G.O. MS No. 107 dt. 30.05.2016, Govt. Land allocated to TSIIC (Telangana State Industrial Infrastructure Corporation) for industrial purpose does not come under purview of the one-time conversion Act under 7 (e) of the AP Agriculture Land (Conversion to Non-Agriculture Purpose) Act 2006. Hence, Land Conversion is not required for the proposed land.																																	
iii.	Existence of habitation & involvement of R&R, if any.	<p>Project Site: No habitation present at project site.</p> <p>Study Area:</p> <table border="1"> <thead> <tr> <th>Habitation</th> <th>Distance (Km)</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Sultanpur Tanda Vill.</td> <td>0.3</td> <td>SW</td> </tr> <tr> <td>Krishna Tanda Vill.</td> <td>1.4</td> <td>WNW</td> </tr> <tr> <td>Bheemala Tanda Vill.</td> <td>1.5</td> <td>West</td> </tr> <tr> <td>Pedaveedu Vill.</td> <td>1.9</td> <td>NNE</td> </tr> <tr> <td>Ramachandrapuram Vill.</td> <td>2.1</td> <td>WSW</td> </tr> <tr> <td>Gundlapalli Vill.</td> <td>4.5</td> <td>ESE</td> </tr> <tr> <td>Thummada Tanda Vill.</td> <td>4.6</td> <td>NNW</td> </tr> <tr> <td>Matpalli Vill.</td> <td>4.9</td> <td>SSW</td> </tr> <tr> <td>Mattampalle</td> <td>6.0</td> <td>NE</td> </tr> <tr> <td>Raghunathapalem Vill.</td> <td>6.5</td> <td>East</td> </tr> </tbody> </table>	Habitation	Distance (Km)	Direction	Sultanpur Tanda Vill.	0.3	SW	Krishna Tanda Vill.	1.4	WNW	Bheemala Tanda Vill.	1.5	West	Pedaveedu Vill.	1.9	NNE	Ramachandrapuram Vill.	2.1	WSW	Gundlapalli Vill.	4.5	ESE	Thummada Tanda Vill.	4.6	NNW	Matpalli Vill.	4.9	SSW	Mattampalle	6.0	NE	Raghunathapalem Vill.	6.5	East	R&R is not applicable.
Habitation	Distance (Km)	Direction																																		
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S. No	Particulars	Details			Remarks
		Raghavapuram	6.6	WNW	
		However, there are total 17 villages fall within the 10 km radius of the study area.			
iv.	Latitude and Longitude of all corners of the project site	Point	Latitude	Longitude	--
		A.	16°44'33.18" N	79°49'53.50" E	
		B.	16°44'31.38" N	79°50'0.01"E	
		C.	16°44'32.55" N	79°50'0.78"E	
		D.	16°44'32.85" N	79°50'1.40"E	
		E.	16°44'30.21" N	79°50'2.59"E	
		F.	16°44'27.98" N	79°50'1.81"E	
		G.	16°44'29.45" N	79°49'57.16" E	
		H.	16°44'29.98" N	79°49'57.67" E	
		I.	16°44'31.40" N	79°49'58.33" E	
		J.	16°44'32.79" N	79°49'53.34" E	
v.	Elevation of the project site	79-81 m above mean sea level.			--
vi.	Involvement of Forest land if any.	No Forest land is involved in the project area.			
vii.	Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.,) exists within the project site as well as study area	Project Site - No water body exists at the project site. Study Area -			--
		Water body	Distance	Direction	
		Krishna River	~4.3 km	SSE	
		Vemuleru River	~4.8 km	West	
		Yathavakilla Lake	~9.8 km	NNW	
viii.	Existence of ESZ/ ESA/ National Park / Wildlife sanctuary / Biosphere reserve / Tiger reserve / Elephant reserve etc. if any within the study area	Nil. Reserve Forests: - <ul style="list-style-type: none"> ○ Sulanpur RF (Adjacent to South) ○ Tangeda RF (~5.5 Km in South) ○ Regulagadda RF (~5.8 Km in SSE) ○ Pittalsarikota RF (~5.5 Km in ESE) ○ Vajralgani RF (~5.0 km in West) ○ Mirchintavagu RF (~8.1 km in West) ○ Gundlapahad RF (~7.1 km in WNW) 			--

S. No	Particulars	Details	Remarks
		<ul style="list-style-type: none"> ○ Gurrambodu RF (~3.1 km in NNW) ○ Gurrambodu RF (~3.2 km in West) ○ Yepal Madhavaram RF (~7.6 km in East) 	

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

S. No.	Name of the Facility	Configuration	Capacity
1.	Cement Mill (Ball Mill)	20 MT/hr.	72000 TPA
2.	Bag house	100,000 m ³ /hr.	30 mg/Nm ³
3.	DG Set	420 KVA	-

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

S. No.	Name of Raw Material	Quantity (Million TPA)	Source	Distance & Mode of Transportation in km
1.	Clinker	0.068	Imported	Krishnapatnam port 310 kms and transport by closed shipping containers and clinker packed in sealed jumbo bags
2.	Gypsum	0.0014	Tuticorin	Tuticorin port 775 kms
3.	Others (Dolomite)	0.0058	Local Telangana	Ragunathapalem Telangana 10 kms and transport by trucks, packed in 50 kg bags

27.5.7 The water requirement for the project is estimated as 5 KLD, which will be sourced from ground water. Total water requirement, i.e., 5 KLD will be utilized only for domestic purpose, as no water is required for grinding unit.

27.5.8 The power requirement for the project is estimated as 0.5 MW, which will be sourced from State grid & D.G Set (425 KVA) (for emergency).

27.5.9 The capital cost of the project is Rs 10 Crores and the capital cost for environmental protection measures is proposed as Rs 1.5 Crores. The employment generation from the proposed project is 50 Persons during Implementation Phase and 70 Persons (20 Permanent & 50 Contractual) during Operation Phase.

27.5.10 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.

27.5.11 Proposed Terms of Reference: [Baseline data collection period: December, 2022 to February, 2023]

Attributes	Parameters	Sampling	
		No. of Stations	Frequency

A. Meteorology parameters	Temperature, Relative Humidity, Wind Speed, Wind Direction, Rainfall	01 (Project site)	Hourly
B. AAQ parameters	PM ₁₀ , PM _{2.5} , SO ₂ , NO ₂ , CO and PAHs	08	Twice a week (24 Hourly)
C. Noise	Equivalent noise levels in Leq in dB (A)	08	Once in a season (Day & Nighttime)
D. Water			
a. Surface water/ b. Ground water quality parameters	Parameters as per IS 10500 - 2012	Surface Water - 04 Ground water - 08	Once in a season
E. Land			
a. Soil Quality	Parameters As per IS 2720/USDA	08	Once in a season
b. Land Use	Agriculture, Habitation, Industry, Stony waste/ Quarries, Forest area, Plantation/ Vegetation, Open scrub, Water bodies etc.	10 km radius Study Area	Once in a Study period Season
F. Biological			
a. Aquatic	Flora and fauna	Study area	Once in a season
b. Terrestrial			
G. Socio-economic	Economic Demography	Study area	Once in a season

Deliberation by the Committee

27.5.12 The Committee noted the following:

- i. The instant proposal is for setting up of a new Proposed Standalone Grinding unit for production of White Cement 72000 TPA.
- ii. The total area of the proposed plant is 1.5 ha (Govt. Land), which is under the possession of the company. The land has been acquired by TSIIC (Telangana State Industrial Infrastructure Corporation) for industrial purpose and transferred to M/s NGS White Cements AP Pvt. Ltd. For setting up of Grinding Unit. PP reported that as per G.O. MS No. 118 dated 23.07.2015 and G.O. MS No. 107 dt. 30.05.2016, Govt. Land allocated to TSIIC (Telangana State Industrial Infrastructure Corporation) for industrial purpose does not come under purview of the one-time conversion Act under 7 (e) of the AP Agriculture Land (Conversion to Non-Agriculture Purpose) Act 2006. Hence, Land Conversion is not required for the proposed land.
- iii. Sultanpur Tanda Village (0.3 km, SW), Krishna Tanda (1.4 km, WNW), Bheemala (1.5 km), Pedaveedu (1.9 km, NNE), Ramchandrapuram (2.1 km, WSW) and other villages exist nearby within the study area of the project site.
- iv. The EAC noted that as reported Clinker (raw material) will be imported. The EAC is of

the view that PP shall try to explore the possibility for indigenous supply of raw material to meet its requirement subject to techno- economical viability.

- v. The water requirement for the project is estimated as 5 KLD, which will be sourced from ground water. Total water requirement, i.e., 5 KLD will be utilized only for domestic purpose, as no water is required for grinding unit.

Recommendations of the Committee

27.5.13 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) Sultanpur Tanda Village (0.3 km, SW), Krishna Tanda (1.4 km, WNW), Bheemala (1.5 km), Pedaveedu (1.9 km, NNE), Ramchandrapuram (2.1 km, WSW) and other villages exist nearby within the study area 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 some of these locations in its environmental monitoring programme.
- (ii) Water requirement of 5 m³/day is proposed be met from ground water. Total water requirement, i.e., 5 KLD shall be utilized only for domestic purpose.
- (iii) PP shall try to explore the possibility for indigenous supply of raw material to meet its requirement.
- (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.
- (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.

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

Structure of EIA/EMP report**Executive Summary**

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

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

EIA/EMP Report

1. Introduction

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

2. Project description

A. Site Details

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

- iv. Latest High-resolution satellite image data having 1 m - 5 m spatial resolution like quickbird, Ikonos, IRS P-6 pan sharpened etc., along with delineation of plant boundary co-ordinates. Area must include at least 100 m all around the project location.
- v. Environment settings of the site and its surrounding along with map.
- vi. A list of major industries with name, products and distance from plant site within study area (10km radius) and the location of the industries shall be depicted in the study area map.
- vii. In case if the project site is in vicinity of the water body, 50 meters from the edge of the water body towards the site shall be treated as no development/construction zone. If it's near the wetland, Guidelines for implementing Wetlands (Conservation and Management) Rules, 2017 may be followed.
- viii. In case if the project site is in vicinity of the river, the industry shall not be located within the river flood plain corresponding to one in 25 years flood, as certified by concerned District Magistrate/Executive Engineer from State Water Resources Department (or) any other officer authorized by the State Government for this purpose as per the provisions contained in the MoEF&CC Office Memorandum dated 14/02/2022.
- ix. In case of canal/ nala/ seasonal drain and any other water body passing through project site, the PP shall submit the suitable steps /conservation plan/mitigation measures along with contouring, Run -off calculations, disposal etc. A robust and full proof Drainage Conservation scheme to protect the natural drainage/water bodies and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be provided in the report.
- x. Type of land, land use of the project site needs to be submitted.
- xi. Status of acquisition of land. If acquisition is not complete, stage of the acquisition process as per the MoEF&CC O.M. dated 7/10/2014 shall be furnished.
- 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 all 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 all the existing environment clearances including amendments shall be provided. A Certified Compliance Report (CCR) issued by the concerned Authority shall be valid for a period of one year from the date of inspection.

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

3. Description of the Environment

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

Attributes	Sampling		Remarks
	Network	Frequency	
A. Air Environment			
Micro-Meteorological <ul style="list-style-type: none"> • Wind speed (Hourly) • Wind direction • Dry bulb temperature • Wet bulb temperature • Relative humidity • Rainfall • Solar radiation • Cloud cover • Environmental Lapse Rate 	Minimum 1 site in the project impact area	1 hourly continuous	<ul style="list-style-type: none"> • IS 5182 Part 1-20 • Site specific primary data is essential • Secondary data from IMD, New Delhi • CPCB guidelines to be considered.
Pollutants <ul style="list-style-type: none"> • PM_{2.5} • PM₁₀ • SO₂ • NO_x • CO • HC 	At least 8-12 locations	As per National Ambient Air Quality Standards, CPCB Notification.	<ul style="list-style-type: none"> • Sampling as per CPCB guidelines • Collection of AAQ data (except in monsoon season) • Locations of various stations for different

Attributes	Sampling		Remarks
	Network	Frequency	
<ul style="list-style-type: none"> Other parameters relevant to the project and topography of the area 			<p>parameters should be related to the characteristic properties of the parameters.</p> <ul style="list-style-type: none"> 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			
<ul style="list-style-type: none"> Hourly equivalent noise levels 	At least 8-12 locations	As per CPCB norms	-
C. Water			

Attributes	Sampling		Remarks
	Network	Frequency	
<p>Parameters for water quality</p> <ul style="list-style-type: none"> 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 	<p>Samples for water quality should be collected and analyzed as per:</p> <ul style="list-style-type: none"> IS: 2488 (Part 1-5) methods for sampling and testing of Industrial effluents Standard methods for examination of water and wastewater analysis published by American Public Health Association. 		
<p>For River Bodies</p> <ul style="list-style-type: none"> Total Carbon pH Dissolved Oxygen Biological Oxygen Demand Free NH₄ Boron Sodium Absorption Ratio Electrical Conductivity TDS 	<ul style="list-style-type: none"> Surface water quality of the nearest River (60m upstream and downstream) and other surface water bodies 	<ul style="list-style-type: none"> Yield of water sources to be measured during critical season Standard methodology for collection of surface water (BIS standards) 	
<p>For Ground Water</p>	<ul style="list-style-type: none"> Ground water monitoring data should be collected at minimum of 8 locations (from existing wells /tube wells/existing current records) from the study area and shall be included. 		
<p>D. Traffic Study</p>			
<ul style="list-style-type: none"> Type of vehicles Frequency of vehicles for transportation of materials 	-		

Attributes	Sampling		Remarks
	Network	Frequency	
<ul style="list-style-type: none"> Additional traffic due to proposed project Parking arrangement 			
E. Land Environment			
Soil <ul style="list-style-type: none"> Particle size distribution Texture pH Electrical conductivity Cation exchange capacity Alkali metals Sodium Absorption Ratio (SAR) Permeability Water holding capacity Porosity 			Soil samples be collected as per BIS specifications
Land use/Landscape <ul style="list-style-type: none"> Location code Total project area Topography Drainage (natural) Cultivated, forest, plantations, water bodies, roads and settlements 			-
E. Biological Environment			
Aquatic <ul style="list-style-type: none"> Primary productivity Aquatic weeds Enumeration of phyto plankton, zoo plankton and benthos Fisheries Diversity indices Trophic levels Rare and endangered species Marine Parks/ Sanctuaries/ closed 			<ul style="list-style-type: none"> Detailed description of flora and fauna (terrestrial and aquatic) existing in the study area shall be given with special reference to rare, endemic and endangered species. Indicator species which indicate ecological and environment degradation should be identified and included to clearly state whether the proposed project would result in to any adverse effect on any species. Samples to collect from upstream and downstream of discharge point, nearby tributaries at downstream, and also from dug wells close to activity site. For forest studies, direction of wind should be considered while selecting forests.

Attributes	Sampling		Remarks
	Network	Frequency	
areas /coastal regulation zone (CRZ) Terrestrial <ul style="list-style-type: none"> • 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 reserve • Migratory routes 			<ul style="list-style-type: none"> • Secondary data to collect from Government offices, NGOs, published literature.
F. Socio-economic			
<ul style="list-style-type: none"> • Demographic structure • Infrastructure resource base • Economic resource base • Health status: Morbidity pattern • Cultural and aesthetic attributes • Education 			<ul style="list-style-type: none"> • Socio-economic survey is based on proportionate, stratified and random sampling method. • Primary data collection through questionnaire • Secondary data from census records, statistical hard books, topo sheets, health records and relevant official records available with Govt. agencies

iii. Interpretation of each environment attribute shall be enumerated and summarized as given below:

- Ambient air quality
- Ambient Noise quality
- Surface water quality
- Ground water quality
- Soil quality
- Biological Environment
- Land use
- Socio-economic environment

4. Anticipated Environment Impacts and mitigation measures (In case of expansion, cumulative impact assessment shall be carried out)

- i. Identification of potential impacts in the form of a **matrix** for the construction and operation phase for all the environment components

Activity	Environment	Ecological	Socio-economic
Construction phase			
Operation phase			

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

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

5. Analysis of Alternatives (Technology & Site)

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

6. Environmental Monitoring Program

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

Activity	Aspect	Monitoring Parameter	Location	Frequency	Responsibility
Construction phase					
Operation phase					

7. Additional Studies

- i. Project proponent shall submit a study report on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon capture, use and storage after offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitorable with defined time frames.
- ii. Details of adoption/ implementation status/plan to achieve the goal of Glasgow COP26 Climate Submit with regard to enhance the non-fossil energy, use of renewable energy, minimization of net carbon emission and carbon intensity with long-term target of "net Zero" emission.
- iii. Implementation status/measures adopted for avoiding the generation of single used plastic waste.
- iv. In cases the project is located in Critically and Severely Polluted Areas, additional mitigation measures adopted and detailed action plan to be submitted in the EIA/EMP Report as per MoEF&CC O.M. No. 22-23/2028-IA.III dated 31/10/2019 and MoEF&CC O.M. No. 22-23/2028-IA.III dated 5/07/2022 has to be submitted.
- v. Public consultation details (Entire proceedings as separate annexure along with authenticated English Translation of Public Consultation proceedings).
- vi. As part of Corporate Environment Responsibility (CER) activity, company shall adopt nearby villages based on the socio-economic survey and undertake community developmental activities in consultation with the village Panchayat and the District Administration. In this regard, time bound action plan as per the MoEF&CC Office Memorandum dated 30/09/2020 shall be submitted.
- vii. Summary of issues raised during public consultation along with action plan to address the same as per MoEF&CC O.M. dated 30/09/2020

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

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 PM₁₀ 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 techno-environment 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 P_{2.5}) 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 its 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

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

S. No.	Name	Position	27.04.2023
1.	Shri Rajive Kumar	Chairman	<i>Present</i>
2.	Dr. Dipankar Shome	Vice Chairman	<i>Present</i>
3.	Dr. S. Ranganathan	Member	<i>Present</i>
4.	Dr. Ranjit Prasad	Member	<i>Present</i>
5.	Dr. S. K. Singh	Member	<i>Present</i>
6.	Dr. Tejaswini Ananthkumar	Member	<i>Present</i>
7.	Dr. Hemant Sahasrabuddhe	Member	<i>Present</i>
8.	Dr. Jai Krishna Pandey	Member	<i>Present</i>
9.	Dr. E V R Raju	Member	<i>Present</i>
10.	Dr. S.K. Chaturvedi, Actg. DG, (Representatives of NCCBM)	Member	<i>Present</i>
11.	Shri Nazimuddin, Scientist 'F' (Representative of CPCB)	Member	<i>Present</i>
12.	Dr. S. Raghavan, Scientist 'D' (Representative of National Institute of Occupational Health (NIOH))	Member	<i>Absent</i>
13.	Dr. Sanjay Bist, Scientist 'E' (Representative of Indian Meteorological Department)	Member	<i>Present</i>
14.	Dr. R.B. Lal, Scientist F, MoEFCC	Member Secretary	<i>Present</i>
MOEFCC			
15.	Dr R P Rastogi	Scientist C	<i>Present</i>
16.	Dr Sandeepan BS	Scientist B	<i>Present</i>

Approval of EAC Chairman

Email**Director MoEFCC Dr R B LAL**

Re: Compiled Draft minutes of the 27th EAC Meeting held on April 27, 2023 for approval of the Chairman-Regarding

From : chairman eac ind 1
<chairman.eac.ind.1@gmail.com> Fri, May 05, 2023 10:02 AM

Subject : Re: Compiled Draft minutes of the 27th EAC Meeting held on April 27, 2023 for approval of the Chairman-Regarding

To : Additional Director MoEFCC Dr R B LAL
<rb.lal@nic.in>

Cc : rajivekumar1983@gmail.com,
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Dear Dr. Lal,

The minutes are approved.
Kindly do the needful.

Rajive Kumar
Chairman-Industry-1
