



सत्यमेव जयते

File No: IA-J-11011/243/2019-IA-II(IND-I)
Government of India
Ministry of Environment, Forest and Climate Change
IA Division



Date 05/02/2024



To,

M/S LLOYDS METALS AND ENERGY LIMITED.
At Plot A-1 and A-2, MIDC Area, Ghugus, Chandrapur, Maharashtra -442505
Email: lloydsm12568@gmail.com

Subject: Expansion of Sponge Iron Plant from 3,24,000 TPA (4 x 100TPD & 1 x 500 TPD) to 6,84,000 TPA by Installation of Additional 2 x500 TPD Kilns & Power Plant from 25 MW to 85 MW(WHRB + AFBC) by M/s Lloyds Metals & Energy Limited, located at Plot A-1 and A-2, MIDC Area, Ghugus, Chandrapur, Maharashtra–Grant of Environmental Clearance under the provisions EIA Notification, 2006 -regarding.

Sir/Madam,

This refers to your proposal no IA/MH/IND1/453629/2023 dated 14.12.2023 along with copy of EIA report, Forms (Part A, B and C) seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. Further, PP has submitted the information on Portal on 16.01.2024.

2. The particulars of the proposal are as below :

(i) EC Identification No.	EC23A1003MH5973383N
(ii) File No.	IA-J-11011/243/2019-IA-II(IND-I)
(iii) Clearance Type	Fresh EC
(iv) Category	A
(v) Project/Activity Included Schedule No.	3(a) Metallurgical Industries (ferrous and non ferrous),3(a) Metallurgical Industries (ferrous and non ferrous),3(a) Metallurgical Industries (ferrous and non ferrous),1(d) Thermal Power Plants,1(d) Thermal Power Plants
(vi) Sector	Industrial Projects - 1
(vii) Name of Project	Expansion of Sponge Iron Plant from 3,24,000 TPA (4 x 100TPD & 1 x 500 TPD) to 6,84,000 TPA by Installation of Additional 2 x500 TPD Kilns & Power Plant from 25 MW to 85 MW(WHRB + AFBC) At Plot A-1 and A-2, MIDC

	Area, Ghugus, Chandrapur, Maharashtra by Lloyds Metals & Energy Limited.
(viii) Name of Company/Organization	M/S LLOYDS METALS AND ENERGY LIMITED.
(ix) Location of Project (District, State)	CHANDRAPUR, MAHARASHTRA
(x) Issuing Authority	MoEF&CC
(xi) Applicability of General Conditions as per EIA Notification, 2006	No

3. As per the provisions of the Environment Impact Assessment (EIA) Notification, 2006, the above-mentioned project/activity is covered schedule S. No. 3(a) Metallurgical Industries (ferrous & non-ferrous) and 1(d) Thermal Power Plants under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.

4. The proposal is considered in the 51th meeting of the EAC for Industry-I sector held during 2nd -4th January, 2024, wherein the Committee, after detailed deliberations, recommended the proposal. The minutes of the meeting and all the project documents are available on PARIVESH portal which can be accessed at <https://parivesh.nic.in>.

5. The details of the proposal are as per the EIA/EMP report submitted by the proponent. The salient features of the proposal as presented during the above-mentioned meetings of EAC (Industry 1 Sector) are given at **Annexure 1**, Unit configuration and capacity are given at **Annexure II** and PH action plan given at **Annexure III**.

6. The EAC, in its meeting held during 2nd to 4th January, 2024, inter-alia, deliberated the following:

1. The project of M/s Lloyds Metals and Energy Limited located in Plot No. A-1 and A-2, MIDC Area, Ghugus, Chandrapur, Maharashtra is for expansion of sponge iron plant from 3,24,000 TPA (4 x 100TPD & 1 x 500 TPD) to 6,84,000 TPA by Installation of Additional 2 x500 TPD Kilns & Power Plant from 25 MW to 85MW (WHRB + AFBC).
2. The existing projects for sponge iron manufacturing plant was accorded the NOC vide Ir.no. Env (NOC)2005/747/CR.97/D.I, dated 28th December 2005, for coal washery environmental clearance was accorded vide Ir.no. J-11015/272/2007-IA.II (M) dated 9th April 2008 and for waste Heat Recovery Based Captive Power Plant of 25 MW capacity environmental clearance was accorded vide Ir.no. J-13012/123/07-IA-II dated 12th October 2009 & Environmental clearance for expansion by adding Induction Furnaces and rolling Mill was accorded by MoEF&CC, New Delhi vide EC Identification No. EC23A008MH158367, File no. IA-J-11011/243/2019-IA-II(IND), Dated 01/05/2023. Consent to Operate was accorded by Maharashtra State pollution Control Board vide Ir. no. Format1.0/CAC/UAN No.MPCB-CONSENT-0000123174/ CO/2203001536 validity of CTO is up to 31.12.2023.
3. The EAC, constituted under the provision of the EIA Notification, 2006 comprising Expert Members/domain experts in various fields, examined the proposal submitted by the Project Proponent in desired format along with EIA/EMP reports prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.
4. The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP reports. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.
5. The Committee noted that the EIA reports are in compliance of the ToR issued for the project, reflecting the present environmental status and the projected scenario for all the environmental components. The Committee deliberated on the proposed mitigation measure towards Air, Water, Noise and Soil pollutions. The Committee suggested that the storage of toxic/explosive raw materials/products shall be undertaken with utmost precautions and following the safety norms and best practices.
6. The EAC also took into consideration the drone survey of the project site and kml file on the Google Earth presented by the project proponent along with DSS of the project site on PARIVESH and made following deliberations accordingly.
7. The proposed project falls in the Critically Polluted Area of Chandrapur as notified by Central Pollution Control Board

(CPCB). The EAC deliberated on the revised compliance of the conditions as per Ministry's guideline dated 24th October 2019 and found it satisfactory.

8. Total land leased by MIDC to M/s Lloyds Metals & Energy Limited (LMEL) is 93.52 ha in which plot no. A-1 is 4.00 ha & A-2 is 89.52 ha. The land use of project site is industrial land and is acquired by project proponent. No Additional land is required.
9. The nearest habitation to plant is Ghugus village located at 0.5 km away from the project site boundary in North direction. The EAC deliberated on environmental safeguard measures undertaken to minimise the impact on the habitation of the locals and found it satisfactory. Further, PP has advised to strengthen the greenbelt layer towards the village.
10. There are two natural drainages passing through project site. Anuradha Lake (620 m, W), Wardha River (2.5 Km, SW), Nirguda Nala (3.0 Km, SSW), Penganga River (5.0 Km, SE) and Sarai Nala (6.5 Km, NE) are flowing within 10 Km. radius of the plant site. The EAC deliberated on the drainage conservation plan and found it satisfactory.
11. The total water requirement for existing operational unit (2674 m³/day) + for units to be installed (1627 m³/day) + project under consideration vide this application (5123 m³/day) = 9424 m³/day. The water requirement for the proposed project (TOR 1+TOR 2) will be about 6750 KLD which will be sourced from Wardha River. The EAC deliberated on the water requirement is of the opinion that PP shall obtain necessary permission from the Competent Authority in this regard.
12. The Committee has found that the baseline data and incremental GLC due to the proposed project and the mitigation measures proposed by the project proponent and is of the opinion that regular monitoring shall be carried and stringent measures shall be undertaken to keep all the parameters within NAAQ standards.
13. The PP has submitted that Existing green belt has been developed in 47.7 ha. area which is about 51% of the total project area of 93.52 ha., 2,34,650 nos. of trees are planted and 1,05,000 nos. survived till date. Further gap filling will be done. About 15000 nos. of trees will be planted. Further PP has submitted an undertaking dated 30.01.2023 for ensuring gap filling of existing plantation within six months along with greening and paving in plant area and approach road from SH to Main gate of the plant. The EAC deliberated on the greenbelt action plan and found it satisfactory.
14. The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found them to be satisfactory.
15. The Committee also deliberated on the public hearing issues along with action plan submitted by the proponent to address the issues raised during the public hearing and found it satisfactory.
16. The Committee deliberated upon the certified compliance report of IRO and action taken report submitted by PP with respect to the partial/non complied conditions alongwith review report of IRO and found it satisfactory.
17. The EAC also deliberated on the written submission of the project proponent and found it satisfactory.
18. The EAC deliberated on the proposal with due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC found the proposal in order and recommended for grant of environmental clearance.
19. The environmental clearance recommended to the project/activity is strictly under the provisions of the EIA Notification 2006 and its subsequent amendments. It does not tantamount/construe to approvals/consent/permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.
20. The EAC also reviewed the EC conditions (specific and general) pertaining to Industry-I projects and observed that some of the specific conditions stipulated so far in the previously recommended EC projects are common and applicable to most of the projects in general. In view of the same, the General Conditions (in case of EC projects) have been revised through reallocation of these common conditions from specific to General Conditions (in case of EC projects). Accordingly, the instant project is also being stipulated with the modified General conditions.

7. The EAC, in its 51th meeting of Expert Appraisal Committee (Industry-1 Sector) held during **2nd to 4th January, 2024**, based on information & clarifications provided by the project proponent and after detailed deliberations **recommended** the instant proposal for grant of Environment Clearance under the provisions of EIA Notification, 2006 subject to the stipulation of specific conditions and general conditions as per the Ministry's Office Memorandum No. 22-34/2018-III dated 9/8/2018 based on project specific requirements.

8. The MoEF&CC has examined the proposal in accordance with the Environment Impact Assessment (EIA) Notification, 2006 & further amendments thereto and after accepting the recommendations of the Expert Appraisal Committee (Industry-1 Sector) hereby decided to grant **Environment Clearance** for instant proposal of **M/s Lloyds Metals & Energy Limited**, under the provisions of EIA Notification, 2006 subject to specific conditions and general conditions at **Annexure IV**.

9. The Ministry reserves the right to stipulate additional conditions, if found necessary at subsequent stages and the project proponent shall implement all the said conditions in a time bound manner. The Ministry may revoke or suspend the environmental clearance, if implementation of any of the above conditions is not found satisfactory.

10. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986.

11. Any appeal against this environmental clearance 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.

12. The above conditions shall be enforced, *inter-alia* under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

13. This issues with approval of the competent authority.

Copy To

1. The Secretary, Environment & Forest Department, Government of Maharashtra, 4th Floor, Mantralaya, Mumbai-400032
2. The Secretary, Revenue Department, Government of Maharashtra, 4th Floor, Mantralaya, Mumbai-400032
3. The Director General of Forest, Ministry of Environment, Forest and Climate Change, New Delhi.
4. The Principal Chief Conservator of Forests & Government of Maharashtra, MECL Building, Dr. Ambedkar Bhawan, Seminary Hills, Civil Lines, Nagpur-440006
5. The Deputy Director General of Forests (C), Integrated Regional Office, Ministry of Environment, Forest and Climate Change, Regional Office (WCZ), Ground Floor, East Wing, New Secretariat Building Civil Lines, Nagpur-440001
6. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi - 32
7. The Member Secretary, Maharashtra Pollution Control Board, Kalpataru Point, 3rd and 4th floor, Opp. PVR Cinema, Sion Circle, Mumbai-400 022.
8. The Member Secretary, Central Ground Water Authority, Jamnagar House, 18/11, Man Singh Road Area, New Delhi, Delhi 110001
9. The District Collector, Chandpur, Mumbai
10. Monitoring Cell, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi.
11. Guard File/Monitoring File/Website/Record File/Parivesh Portal

The salient features of the proposal as presented during the meetings of EAC

S. No.	Particulars	Details								
a.	Terms of Reference for undertaking EIA study	20.07.2021								
b.	Period of baseline data collection	15th September 2020 to 15th December 2020								
c.	Date of Public Consultation	06.05.2022								
d.	Action plan to address the PH issues	An amount of Rs. 739 Lakhs has been earmarked for implementation of the commitments made during Public Hearing and need based activities. Detail of activities proposed attached as Annexure III .								
e.	Location of the project	Plot A-1 and A-2, MIDC Area, Ghugus, Chandrapur, Maharashtra								
f.	Latitude and Longitude of the project site	Point	Latitude	Longitude						
		A	19°56'30.56"N	79° 6'56.83"E						
		B	19°56'30.22"N	79° 7'1.57 "E						
		C	19°56'14.10"N	79° 7'15.52"E						
		D	19°55'28.81"N	79° 7'20.75"E						
		E	19°55'13.75"N	79° 7'4.87"E						
		F	19°55'14.36"N	79° 6'57.21"E						
g.	Total land	93.52 ha [MIDC Land]								
h.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	Total land is in possession. Additional 8.56 ha adjacent private land was considered at the time of ToR. Now, the proposed project of Induction furnace and rolling mill will be installed in existing plant premises. No Additional land is required.								
i.	Existence of habitation & involvement of R&R, if any	<p>Project site: None</p> <p>Study Area:</p> <table border="1"> <thead> <tr> <th>Habitation</th> <th>Distance</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Ghugus</td> <td>0.5 Km</td> <td>N</td> </tr> </tbody> </table>			Habitation	Distance	Direction	Ghugus	0.5 Km	N
Habitation	Distance	Direction								
Ghugus	0.5 Km	N								
j.	Elevation of the project site	189 m above mean sea level								
k.	Involvement of Forest land if any.	Not applicable as no Forest land is involved in the project site.								
l.	Water body exists within the project site as well as study area	<p>Project site: There are two seasonal drains passing through project site</p> <p>Study area</p> <table border="1"> <thead> <tr> <th>Water body</th> <th>Distance</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Anuradha Lake</td> <td>620 m</td> <td>W</td> </tr> </tbody> </table>			Water body	Distance	Direction	Anuradha Lake	620 m	W
Water body	Distance	Direction								
Anuradha Lake	620 m	W								

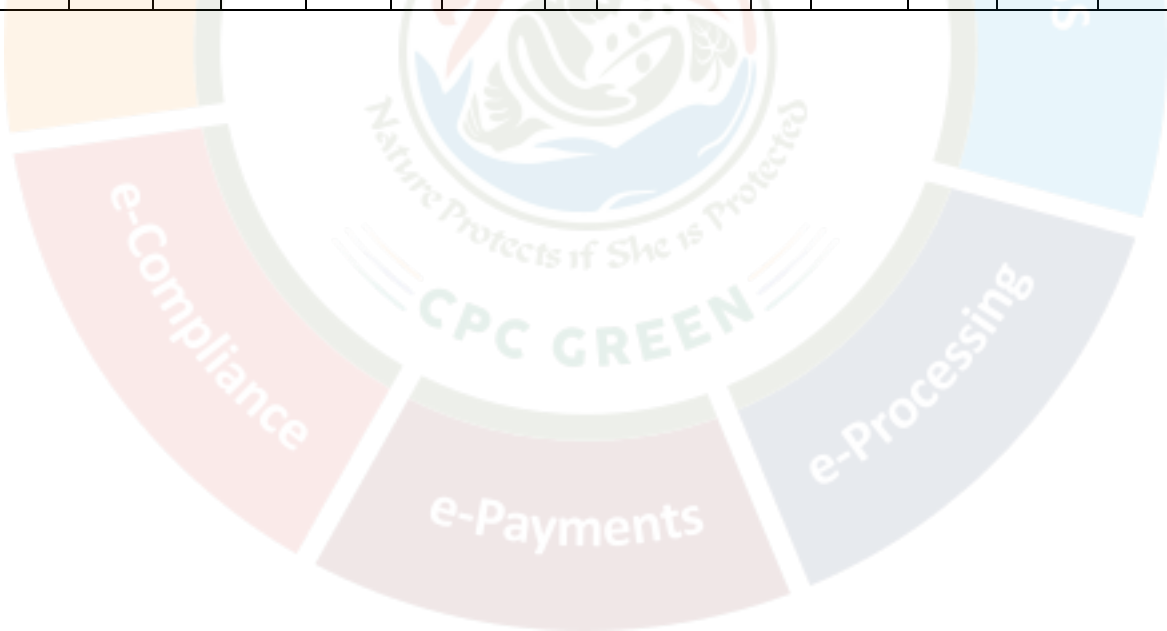
S. No.	Particulars	Details		
			Wardha River	2.5 Km
	Nirguda Nala	3.0 Km	SSW	
	Penganga River	5.0 Km	SE	
	Sarai Nala	6.5 Km	NE	
m.	Existence of ESZ / ESA / national park / wildlife Sanctuary / biosphere Reserve / tiger reserve / elephant reserve etc. if any within the study area	List of Reserved and protected forests: Pardi Reserved Forest, 6.0 Km (SW)		
n.	CPA/SPA	The Project site is located in Chandrapur District which was declared as Critically Polluted Area vide NGT order dated 10.07.2019 and lifting of abeyance of Ministry's OM is published on 5th July 2022. PP proposes to comply all the conditions given in MOEF & CC issued letter No-Q-16017/38/2018-CPA dated 24th October 2019. The compliance of the conditions given in MOEF & CC issued letter No-Q-16017/38/2018-CPA dated 24th October 2019 is submitted in EIA/EMP report.		
o.	Project cost	Proposed – INR Rs 300 Crores		
p.	EMP cost	Type	Capital (Rs. in Crores)	Recurring (Rs. in Crores)
		Proposed	12.2	1.003
q.	Employment opportunity	1100 persons		
r.	Water and Power requirement	(Total)Water –9424 KLD, Power –40 MW		

Annexure II

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

S. No.	Plant Equipment/ Facility	Existing facilities as per EC dated 28 th December 2005, 9 th April 2008 & 12 th October 2009 & 1st May 2023						Proposed Units		Final (Existing + Proposed)		Remarks		
		Total (A+B)		Implemented (A)		Unimplemented (B)		As per CTO		Configuration	Capacity			
		Configuration	Capacity	Configuration	Capacity	Configuration	Capacity	Configuration	Capacity					
1.	Sponge Iron plant	1 x 500 TPD & 4 x 100 TPD	3,24,000 TPA	1 x 500 TPD & 4 x 100 TPD	3,24,000 TPA	-	-	1 x 500 TPD & 4 x 100 TPD	3,24,000 TPA	2 x 500 TPD	3,60,000 TPA	3 x 500 TPD & 4 x 100 TPD	6,84,000 TPA	Proposed Unit
2.	Coal Washery	0.216 MTPA OR 150 TPH	0.216 MTPA OR 150 TPH	0.216 MTPA OR 150 TPH	0.216 MTPA OR 150 TPH	-	-	-	Washed Coal: 472500 MT/Year Unwashed Coal: 159375 MT/Year Low grade Coal: 15000 MT/Year	-	-	0.216 MTPA OR 150 TPH	0.216 MTPA OR 150 TPH	No Change
3.	Power Plant	25 MW	25 MW	25 MW	25 MW	-	-	25 MW	25 MW	60 MW	60 MW	85 MW	85 MW	Proposed Unit

S. No.	Plant Equipment/ Facility	Existing facilities as per EC dated 28 th December 2005, 9 th April 2008 & 12 th October 2009 & 1st May 2023								Proposed Units	Final (Existing + Proposed)	Remarks		
		Total (A+B)		Implemented (A)		Unimplemented (B)		As per CTO						
		Configuration	Capacity	Configuration	Capacity	Configuration	Capacity	Configuration	Capacity				Configuration	Capacity
4.	Induction Furnace	-	-	-	-	6 x 30 T	5,00,000 TPA	-	-	6 x 30 T	5,00,000 TPA	6 x 30 T	5,00,000 TPA	Construction not started
5.	Rolling Mill	-	-	-	-	5,00,000 TPA	5,00,000 TPA	-	-	5,00,000 TPA	5,00,000 TPA	5,00,000 TPA	5,00,000 TPA	Construction not started



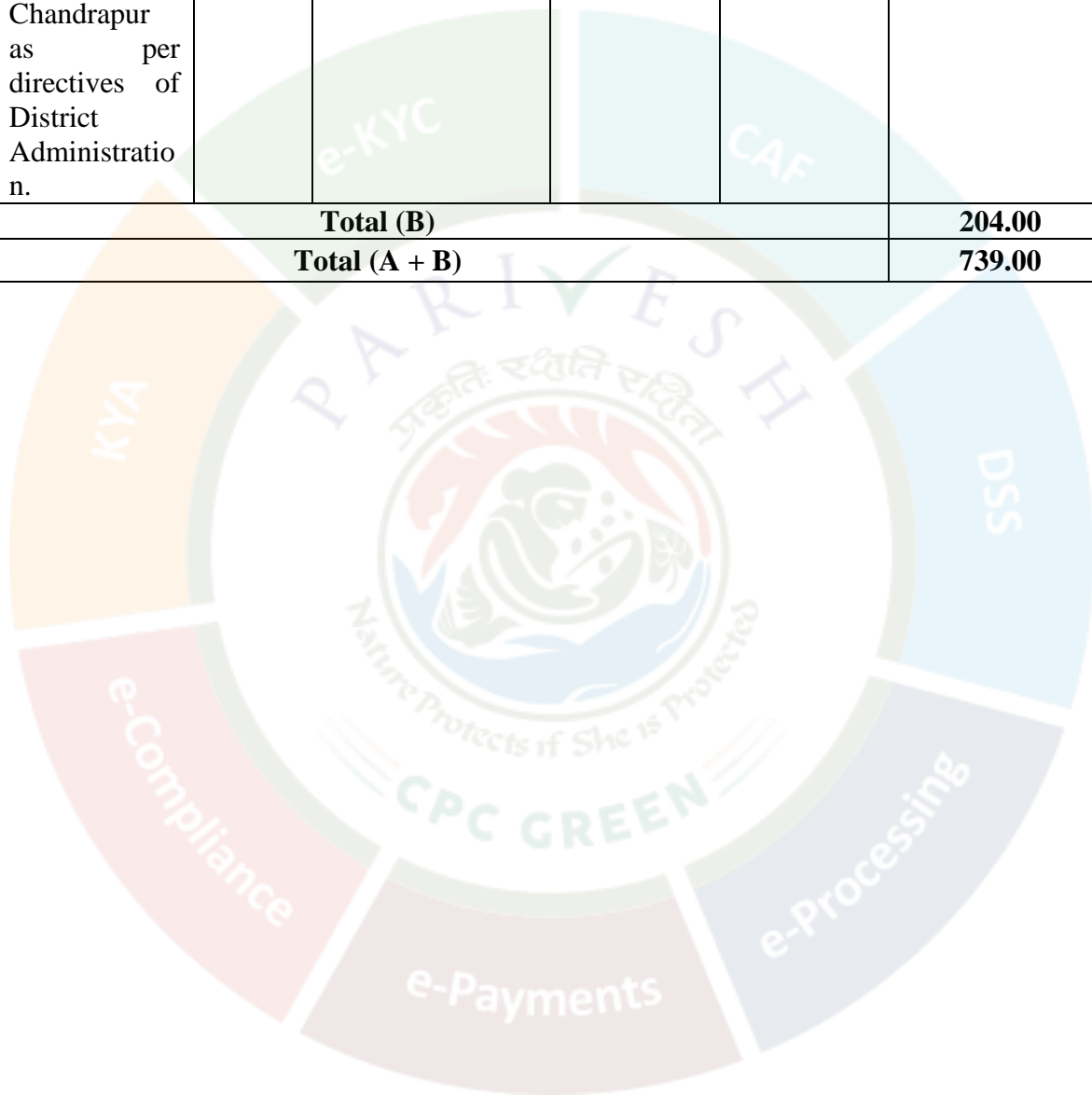
Public Consultation Action plan as per MoEF&CC O.M. dated 30.09.2020

Sr.No.	MAJOR ACTIVITY HEADS	YEAR OF IMPLEMENTATION			TOTAL EXPENDITURE (Rs. in Lakhs)	
		1 st Year (Rs. in Lakhs)	2 nd Year (Rs. in Lakhs)	3 rd Year (Rs. in Lakhs)		
A) Based on Need Based						
1.	Cardiac Ambulance & Fire Fighting Vehicle (Foam Tender) for Chandrapur District	Physical Nos and Villages	1 nos. of fully equipped Cardiac Ambulance will be provided to the Dist. Medical Officer in coordination with Hon'ble Collector, Chandrapur Dist.	1 nos. of Firefighter of Foam Tender will be provided to Dist. Fire Department the Dist. in coordination with Hon'ble Collector, Chandrapur Dist.	Maintenance	150.00
		Budget in Lakhs	50.00	80.00	20.00	
2. Community and Infrastructure Development						
a.	Sewage Treatment Plant (STP)	Physical Nos and Villages	Construction of Sewage treatment plant at Mhatardevi & Usgaon Village	Construction of Sewage treatment plant at Shengaon & Belsani Village	Maintenance	140.00
		Budget in Lakhs	60.00	60.00	20.00	
b.	Road Construction at Ghugus in coordination with Ghugus Nagar Parishad	Physical Nos and Villages	2 nos of Concrete Road Construction at Ghugus town at below location 1. At ward No. 5, From Railway iron bridge to Wani	Maintenance	Maintenance	120.00

Sr.No.	MAJOR ACTIVITY HEADS		YEAR OF IMPLEMENTATION			TOTAL EXPENDITURE (Rs. in Lakhs)
			1 st Year (Rs. in Lakhs)	2 nd Year (Rs. in Lakhs)	3 rd Year (Rs. in Lakhs)	
			Main Road (Total Length - 330 meter) 01. From Atal Bihari Vajpayee Garden to Wani Main Road (Total Length - 300 meter)			
		Budget in Lakhs Rs.	100.00	10.00	10.00	
	Traffic Signal Installation at Chandni Chowk, Ghugus	Physical Nos and Villages	Traffic Signal Installation at Chandani Chowk, Ghugus	-	-	30.00
		Budget in Lakhs Rs.	30	-	-	
	Construction of Public Toilet in coordination with Ghugus Nagar Parishad.	Physical Nos and Villages	2 nos. of Community Toilet (A complex of Six toilets 3 for ladies and 3 for gents) at Ghugus town at below location 1. Shantinagar 2. Ghugus main market area	Maintenance	Maintenance	50.00

Sr.No.	MAJOR ACTIVITY HEADS	YEAR OF IMPLEMENTATION			TOTAL EXPENDITURE (Rs. in Lakhs)	
		1 st Year (Rs. in Lakhs)	2 nd Year (Rs. in Lakhs)	3 rd Year (Rs. in Lakhs)		
		Budget in Lakhs Rs.	40.00	5.00	5.00	
	High Mast	Physical Nos and Villages	5 nos. of High Mast will be installed at below location of Ghugus 01. Main Market area 02. Shnatinagar 03. Sainagar 04. Amrai Ward 05. Near Police Station	Maintenance	Maintenance	20.00
		Budget in Lakhs	18.00	1.00	1.00	
	Shamshan Ghat Renovation	Physical Nos and Villages	Shamshan Ghat shed construction and Solar water pump installation at Amrai Ward, Ghugus	-	-	15.00
		Budget in Lakhs	15.00	-	-	
	Plantation and beautification with seating arrangement at Buddha Vihar premises	Physical Nos and Villages	Plantation and beautification with seating arrangement at Buddha Vihar premises, Ghugus	-	-	10.00
		Budget in Lakhs	10.00	-	-	
Total (A)					535.00	
B) BASED ON PUBLIC HEARING /CONSULTATION						
1.	Avenue Plantation at Chandrapur	Villages	Avenue Plantation at Chandrapur			204.00

Sr.No.	MAJOR ACTIVITY HEADS		YEAR OF IMPLEMENTATION			TOTAL EXPENDITURE (Rs. in Lakhs)
			1 st Year (Rs. in Lakhs)	2 nd Year (Rs. in Lakhs)	3 rd Year (Rs. in Lakhs)	
	and Development of Nana-Nani Park of about 2.5 Ha in Chandrapur as per directives of District Administration.		development of Nana Nani Park			
		Budget in Lakhs	204.00	-	-	
Total (B)						204.00
Total (A + B)						739.00



Specific conditions and general conditions

A. Specific Condition:

- i. The project proponent shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- ii. 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, if any, as may be applicable to this project.
- 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. In pursuance to MoEF&CC OMs dated 31st October, 2019 & 30th December, 2019 issued in compliance of the order of Hon'ble NGT in OA No. 1038/2018 dated 19th August, 2019, the compliance of all the conditions applicable to CEPI shall be implemented as per the submitted plan.
- v. The nearest habitation to plant is Ghugus village located at 0.5 km away from the project site boundary in North direction. Project Proponent shall implement the action plan for environmental safeguard measures to minimise the impact on the habitation of the locals as submitted. The company shall also include this location in its environmental monitoring programme and strengthen the greenbelt layer towards the village.
- vi. There are two natural drainages passing through project site. Anuradha Lake (620 m, W), Wardha River (2.5 Km, SW), Nirguda Nala (3.0 Km, SSW), Penganga River (5.0 Km, SE) and Sarai Nala (6.5 Km, NE) are flowing within 10 Km. radius of the plant site. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be implemented.
- vii. The total water requirement of 6750 KLD shall be sourced from Wardha River after obtaining necessary permission from the Competent Authority. No ground water abstraction is permitted.
- viii. Three tier Green Belt shall be developed in a atleast 50% of total project area as per the submitted action plan with native species all along the periphery of the project site of adequate width and tree density shall not be less than 2500 per ha. Survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years. Gap filling of existing plantation shall be completed within six months as per the commitment. PP shall develop greenbelt in the form of shelter belt comprising of total of 6 rows of 2x2 m plantation with tall trees & broad leaves with thick canopy alongwith windshield inside the plant premises to act as green barrier for air pollution & noise levels towards

Ghugus villages. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.

- ix. 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 amounting to Rs. 7.39 Crores shall be strictly implemented and progress shall be submitted to the Regional Office of MoEF&CC.
- x. PP shall undertake village adoption programme and prepare and implement the action plan to develop them into a model village.

B. General Conditions

I. Statutory compliance:

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

II. Air quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission as well as 04 Nos. Continuous Ambient Air Quality Station (CAAQMS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to SO₂ and NO_x 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. Sampling facility at process stacks shall be provided as per CPCB guidelines for manual monitoring of emissions.
- v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- vi. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.

- vii. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
- viii. Ensure covered transportation and conveying of raw material to prevent spillage and dust generation. The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.
- ix. Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration.
- x. The project proponent shall provide primary and secondary fume extraction system at all heat treatment furnaces.
- xi. Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.
- xii. Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.
- xiii. Pollution control system in the plant shall be provided as per the CREP Guidelines of CPCB.
- xiv. 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.
- xv. Bag filters shall be cleaned regularly and efficiency of bag filter system shall be monitored at regular intervals.
- xvi. 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.
- xvii. The particulate matter emissions from the process stacks shall be less than 30 mg/Nm^3 and measures shall be undertaken as per the submitted action plan. Efficient Air monitoring equipment shall be installed.
- 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. Hoppers of the coal crushing unit and other washery units shall be fitted with high efficiency bag filters/mist spray water sprinkling system shall be installed and operated effectively at all times of operation to check fugitive emissions from crushing operations, transfer points of closed belt conveyor systems and from transportation roads.

- xx. The raw coal, washed coal and coal wastes (rejects) shall be stacked properly at earmarked site (s) within stockyards fitted with wind breakers/shields. Adequate measures shall be taken to ensure that the stored mineral does not catch fire.
- xxi. The temporary reject sites should appropriate planned and designed to avoid air and water pollution from such sites.
- xxii. During operational phase at Captive Power Plant, Action Plan to monitor coke/coal dust exposures in different process plants using personal and area air samplers and to compare with permissible limits as per Indian Factories Act, 1948 shall be implemented.
- xxiii. The coal dust should be monitored at coal unloading, crushing, furnace areas and should be within 2 mg/m^3 , respirable dust fraction containing less than 5% quartz as per Indian Factories Act, 1948.
- xxiv. 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.
- xxv. Low NO_x Burners will be installed at Reheating Furnace for control of Gaseous emissions generated while using PNG.

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 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre- and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.
- iii. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.
- iv. Water meters shall be provided at the inlet to all unit processes in the plants.
- v. The project proponent shall make efforts to minimise water consumption in the plant complex by segregation of used water, practicing cascade use and by recycling treated water.
- vi. 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.
- vii. 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.
- viii. Rain water harvesting shall be implemented to recharge/harvest water as per the action plan submitted in the EIA/EMP report.
 - ix. 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.
 - x. The effluent discharge (mine waste water, workshop effluent) shall be monitored in terms of the parameters notified under the Water Act, 1974 Coal Industry Standards vide GSR 742 (E) dated 25.9.2000 and as amended from time to time by the Central Pollution Control Board.
 - xi. Heavy metal content in raw coal and washed coal shall be analysed once in a year and records maintained thereof.
 - xii. The rejects should preferably be utilized in FBC power plant or disposed off through sale for its gainful utilization. If the coal washery rejects are to be disposed off, it should be done in a safe and sustainable manner with adequate compaction and post closure arrangement to avoid water pollution due to leachate from rejects and surface run off from reject dumping sites.
 - xiii. An Integrated Surface Water Management Plan for the washery area up to its buffer zone considering the presence of any river/rivulet/pond/lake etc. with impact of coal washing activities on it, shall be prepared, submitted to MoEFCC and implemented.
 - xiv. Waste Water shall be effectively treated and recycled completely either for washery operations or maintenance of green belt around the plant.
 - xv. Rainwater harvesting in the washery premises shall be implemented for conservation and augmentation of ground water resources in consultation with Central Ground Water Board.
 - xvi. No ground water shall be used for coal washing unless otherwise permitted in writing by competent authority (CGWA) or MoEFCC. The make-up water requirement of washery should not exceed 1.5 m³/tonne of raw coal.
 - xvii. Regular monitoring of ground water level and quality shall be carried out in and around the mine lease area by establishing a network of existing wells and constructing new piezometers during the mining operations. The monitoring of ground water levels shall be carried out four times a year i.e. pre-monsoon, monsoon, post-monsoon and winter. The ground water quality shall be monitored once a year, and the data thus collected shall be sent regularly to MOEFCC/RO.
 - xviii. The project proponent shall take all precautionary measures to ensure riverine/ riparian ecosystem in and around the coal mine up to a distance of 5 km. A riverine/riparian ecosystem conservation and management plan should be prepared and implemented in consultation with the irrigation / water resource department in the state government
 - xix. Air Cooled condensers shall be used in the captive power plant.

IV. Noise monitoring and prevention

- i. Noise pollution shall be monitored as per the prescribed Noise Pollution (Regulation and Control) Rules, 2000 and amendments thereof, and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.
- iii. PP shall identify extreme hot areas through heat stress survey as well as noise monitoring within process plants to ensure that workers not exposed above 90 dBA levels as per Factories Act, 1948.

V. Energy Conservation measures

- i. Use torpedo ladle for hot metal transfer as far as possible. If ladles not used, provide covers for open top ladles.
- ii. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;
- iii. Provide LED lights in their offices and residential areas.
- iv. The project proponent shall provide waste heat recovery system (pre-heating of combustion air) at the flue gases of reheating furnaces.
- v. Practice hot charging of slabs and billets/blooms as far as possible.
- vi. Ensure installation of regenerative type burners on all reheating furnaces.
- vii. The project proponent shall provide waste heat recovery system on the DRI Kilns.
- viii. The dolochar generated shall be used for power generation.
- ix. Tar shall be recovered from producer gas and shall be sold to registered processors and phenolic water shall be incinerated in After Burn Chamber (ABC) of DRI kilns.
- x. The PP shall implement the guidelines on sponge iron plants issued by the CPCB/SPCB in this regard.

VI. Waste management

- i. Oil Collection pits shall be provided in oil cellars to collect and reuse/recycle spilled oil.
- ii. Kitchen waste shall be composted or converted to biogas for further use.
- iii. 100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office.
- iv. 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.

- v. A proper action plan must be implemented to dispose of the electronic waste generated in the industry.
- vi. Rejects from coal washery shall only be used either in the captive power plant (or) in the Thermal Power Plants meeting emission standards.

VII. Green Belt

- i. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration by trees.
- ii. Project proponent shall submit a study report on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon capture, use and storage and offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitor able with defined time frames.
- iii. Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface.

VIII. Public hearing and Human health issues

- i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii. The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms.
- iii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP. Safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- iv. 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.

- 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.
- iv. 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.

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, NO_x (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. Action plan for developing connecting and internal road in terms of MSA as per IRC guidelines shall be implemented
- vi. 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.
- vii. 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.
- viii. 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.
- ix. 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.

- x. The recommendations of the approved Site-Specific Wildlife Management Plan (in case of involvement of Schedule-I species) shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report to the concerned Regional Office of the MoEF&CC.
- xi. 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.
- xii. 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).
- xiii. 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.
- xiv. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xv. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xvi. 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.
- xvii. 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.
