

F. No. J-11011/201/2013-IA II (I)
Government of India
Ministry of Environment, Forest and Climate Change
(I.A. Division)

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Dated: 21st December, 2016

To

✓
M/s Shakambhari Ispat and Power Ltd.,
Village Pavatpur, Radhamadhabpur, Madand,
PO-Bortoria, District Purulia, West Bengal.

Subject: Expansion of Integrated Steel Plant (from existing 0.074 MTPA Steel Billets to 0.3 MTPA Rolled products and 0.2 MTPA Billet) with captive power plant of 99 MW [65 MW (6 MW existing + 59 MW proposed) from AFBC and 34 MW (6 MW existing + 28 MW proposed) from WHRB] of M/s Shakambhari Ispat and Power Ltd., located at Village Pavatpur, Radhamadhabpur, Madandih, PO-Bortoria, District Purulia, West Bengal – Environmental Clearance regarding.

Sir,

This has reference to your online application No. IA/WB/IND/48189/2014 Dated 6th February, 2016 along with copies of EIA/EMP report seeking environmental clearance under the provisions of the EIA Notification, 2006 for the project mentioned above. An application for proposed integrated Steel plant of M/s Shakambhari Ispat and Power Ltd. was initially received in the Ministry on 05.03.2013 for obtaining Terms of References (TORs) as per EIA Notification, 2006. The revised Form- I was received on 04.11.2014. The project was appraised by the Expert Appraisal Committee (Industry) during its meeting held on 11.12.2014 and prescribed TORs to the project for undertaking detailed EIA study for the purpose of obtaining environmental clearance. Accordingly, the Ministry of Environment, Forest and Climate Change had prescribed TORs to the project vide letter No. J-11011/201/2013-IAII(I) dated 13th April, 2015. The proposed project activity is listed at S.No. 3(a) under Category 'A' of the Schedule of EIA Notification 2006.

2.0 It is an existing steel plant located at Village Pavatpur, P.O. Bartoria, P.S. Neturia, District Purulia, West Bengal. The proposal is for enhancement of integrated steel plant production from 0.074 MTPA Steel Billets to 0.3 MTPA Rolled products and 0.2 MTPA Billet. The power plant capacity will be enhanced from 12 MW to 99 MW [6 MW to 65 MW from AFBC and 6 MW to 34 MW from WHRB]. The project site lies at 23^o 36' 52" N Latitude and 86^o 47' 12" E Longitude. The project site is well connected by road and rail. The National Highway NH-2 is about 27 Km away from the existing site. The nearest railway station is Ramkanali, which is about 7.5 km away from the site. Raniganj and Durgapur are the nearest cities where market facilities are available.

3.0 The company has already acquired 177.19 Acres land at Madandih in Bartoria, Purulia, West Bengal in which their existing plant is running and the expansion will be

accommodated in the vacant space of this land. The project essentially aims at installing facilities for the manufacture of 0.5 MTPA steel billets and converts 0.3 MTPA billets to rolled product and balance billets for sale or supply to sister units. The configuration of the existing and the proposed plant is as under:

Sl.No.	Facilities	Configurations			Product	Production	End Use
		Existing	Expansion	Final			
1.	Coal Washery	-	0.74 MTPA	0.74 MTPA	Clean Coal Middlings Rejects	0.33 MTPA 0.28 MTPA 0.05 MTPA	DRI AFBC Sale
2.	Rolling Mill	400 TPD	600 TPD	1,000 TPD	Rolled product	3,00,000 TPA	Sale
3.	Iron Ore Beneficiation	-	0.63 MTPA	0.63 MTPA	Beneficiated IO Tailings	0.394 MTPA 0.236 MTPA	Pellet Sale/ Landfill
4.	Sinter Plant	-	1X20 m ²	1X20 m ²	Sinter	1,98,000 TPA	MBF
5.	Pellet Plant	-	1X1870 TPD	1X1870 TPD	Pellet	5,82,000 TPA	DRI
6.	DRI with Pre-heater	3x100TPD	4x350 TPD	3x100TPD 4x350 TPD	Sponge Iron	5,44,000 TPA	IF
7.	MBF	-	1x350m ³	1x350m ³	Hot metal	2,49,900 TPA	IF
8.	Ferro Alloy Plant	-	2X12 MVA 2X12 MVA	2X12 MVA 2X12 MVA	Fe-Mn Si-Mn	36,608TPA 26,542 TPA	IF
9.	IF with LRF & or AOD	1x8T,2x15T,2x12T,8H	2X35T, 4X25T	1x8T,2x15T 2X35T,4X25T	Billet	5,23,950TPA with Ferro-alloys	Rolling Mill
10.	Oxygen Plant	-	225 m ³	225 m ³	Oxygen		MBF
11.	Lime Plant	-	250 TPD	250 TPD	Calcined Lime	80,000 TPA	DRI/Billet/Sinter
12.	AFBC	6MW	59 MW	65 MW	-	65 MW Power	Internal Use
13.	WHRB	6MW	28 MW	34 MW	-	34 MW Power	Internal Use

The details of raw material required for the plant is presented in the following table.

Sl. No.	Raw Material	Quantity in TPA	Sourcing	Mode of transport
1.	Coke	1,92,871	Local purchase	Road
2.	Coal for Washery	7,76,816	Eastern Coal Field	Rail
3.	Imported Coal	2,60,064	Imported Coal	Ship
4.	Mn ore	1,31,974	MOIL/Odisha	Rail/Road
5.	Dolomite	24,488	Madhya Pradesh	Rail/Road
6.	Iron ore lump	3,49,460	Odisha/Jharkhand	Rail/Road
7.	Iron Ore fines(Pellet plant)	6,00,000	Essel Mining/Sirajjudin & co	Rail/Road
8.	Iron Ore fines(Sinter plant)	1,82,952	Odisha/Jharkhand	Rail/Road
9.	Bentonite	6,000	Import	Ship
10.	Scrap	9,000	In plant generation	Road
11.	Cashing Sheet	265	Local Purchase	Road

4.0 It has been mentioned that in order to control pollution ESPs will be provided with stacks for DRI kilns, Sinter plant and CFBC; Bag filter with stack for IFs, Pellet Plant, Lime Plant and Raw Material Handling Plant (RMHP). It has been proposed to plant about 50,000 local trees @ 10,000 trees per year to develop green belt (with >15,000 trees per ha) to control dust and noise pollution. Zero discharge would be adopted for the plant and 98.5% of water to be cleaned and recycled. The waste water generated will be used in green belt development and dust suppression. The Blast Furnace slag will be sent to the cement plant, the BF sludge to the ceramic plant, fly ash will be sent to the brick kilns, coal washery reject will be sent to briquette making, iron ore tailings for sale for tile making, dolo char will be burnt in AFBC and excess ash will be stored within the plant premises for the period of 2 years. For future storage of iron-ore tailing and excess ash, the proponent will submit the land acquisition details to the Ministry.

5.0 It is estimated that the water requirement for the proposed expansion would be about 559 m³/hr i.e. 13,416 m³/day. The water will be drawn from the Damodar water reservoir in Damodar river, which is 13 km away from project site through DVC in phases. Clearance to draw 0.55 MGD has already been obtained. The total power requirement for the plant is 136.4MW, out of which 99 MW will be sourced from CPP and balance 37.4 MW will be drawn from DVC. The clearance for drawing 50 MW power from DVC grid is in place.

6.0 The Public Hearing for the proposed expansion project was held on 14th October, 2015 at Sampriiti Sadan i.e Panchayat Samity Hall in Neturia of Purulia District of West Bengal under the chairmanship of Additional District Magistrate (Development), District Purulia.

7.0 The proposal was considered by the Expert Appraisal Committee (EAC) for Industry-I Sector during its 4th meeting of held on 25th - 26th February, 2016 and 7th meeting held on 30th May to 1st June, 2016 and recommended the project for Environmental Clearance and stipulated Specific Conditions along with other environmental conditions while considering for accord of environmental clearance.

8.0 The Ministry of Environment, Forest and Climate Change has considered the application based on the recommendations of the Expert Appraisal Committee (Industry-I)

and hereby decided to grant environmental clearance to the above mentioned expansion of integrated Steel Plant (from existing 0.074 MTPA Steel Billets to 0.3 MTPA Rolled products and 0.2 MTPA Billet) with captive power plant of 99 MW [65 MW (6 MW existing + 59 MW proposed) from AFBC and 34 MW (6 MW existing + 28 MW proposed) from WHRB] of M/s Shakambhari Ispat and Power Ltd., under the provision of EIA Notification 2006, as amended, subject to strict compliance of the following Specific and General conditions:

A. SPECIFIC CONDITION:

- i. The project proponent shall install 24x7 air monitoring devices to monitor air emissions, as provided by the CPCB and submit report to Ministry and its Regional Office.
- ii. No dumping is permitted in the abandoned coal mines 2B and 2C in nearby Parbelia Village. The iron ore tailing and excess ash should be stored within the plant premises for the period of 2 years for which land is available. The status of storage of above material shall be periodically reviewed by the regional office for land adequacy and environmental management. For future storage of iron ore tailing and excess ash, beyond the period of 2 years, the proponent will submit the land acquisition details to the Ministry.
- iii. In-plant control measures like bag filters, de-dusting and dust suppression system shall be provided to control fugitive emissions from all the vulnerable sources. Dust extraction and suppression system shall be provided at all the transfer points, coal handling plant etc. Bag filters shall be provided to hoods and dust collectors to coal and coke handling to control dust emissions. Water sprinkling system shall be provided to control secondary fugitive dust emissions generated during screening, loading, unloading, handling and storage of raw materials etc.
- iv. The ETP for Mini Blast Furnace effluent should be designed to meet Cyanide standard as notified by the MoEFCC.
- v. No effluent shall be discharged outside the plant premises and 'zero' discharge shall be adopted.
- vi. Continuous stack monitoring facilities for all the stacks shall be provided and sufficient air pollution control devices viz. Electrostatic precipitator (ESP), bag house, bag filters etc. shall be provided to keep the emission levels below 50 mg/Nm^3 and installing energy efficient technology.
- vii. Hot gases from DRI kiln shall be passed through Dust Settling Chamber (DSC) to remove coarse solids and After Burning Chamber (ABC) to burn CO completely. The gas then shall be cleaned in ESP before leaving out into the atmosphere through ID fan and stack.
- viii. Efforts shall further be made to use maximum water from the rain water harvesting sources. Use of air cooled condensers shall be explored and closed circuit cooling system shall be provided to reduce water consumption and water requirement shall be modified accordingly. All the effluent should be treated and used for ash handling,

dust suppression and green belt development. ETP sludge should be disposed off scientifically.

- ix. All the coal fines, char from DRI plant shall be utilized and no char shall be used for briquette making or disposed off anywhere else. All the other solid waste including broken refractory mass shall be properly disposed off in environment-friendly manner.
- x. All internal roads shall be black topped. The roads shall be regularly cleaned with mechanical sweepers. A 3-tier avenue plantation using native species shall be developed along the roads. Facilities for parking of trucks carrying raw coal from the linked coalmines shall be created within the Unit.
- xi. The Standards issued by the Ministry vide G.S.R. No. 277(E) dated 31st March, 2012 regarding integrated iron and steel plant shall be followed.
- xii. The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be followed.
- xiii. Gaseous emission levels including secondary fugitive emissions from all the sources shall be controlled within the latest permissible limits issued by the Ministry vide G.S.R. 414(E) dated 30th May, 2008 and regularly monitored. Guidelines / Code of Practice issued by the CPCB shall be followed.
- xiv. Regular monitoring of influent and effluent surface, sub-surface and ground water shall be ensured and treated wastewater shall meet the norms prescribed by the State Pollution Control Board or described under the Environment (Protection) Act, 1986 whichever are more stringent.
- xv. Proper handling, storage, utilization and disposal of all the solid waste shall be ensured and regular report regarding toxic metal content in the waste material and its composition, end use of solid/hazardous waste shall be submitted to the Ministry's Regional Office, SPCB and CPCB.
- xvi. A time bound action plan shall be submitted to reduce solid waste generated due to the project related activity, its proper utilization and disposal.
- xvii. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 1999 and subsequent amendments. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding shall be submitted to the Ministry's Regional Office.
- xviii. ~~A Risk and Disaster Management Plan shall be prepared and a copy submitted to the Ministry's Regional Office, SPCB and CPCB within 3 months of issue of environment clearance letter.~~
- xix. Green belt shall be developed in at least 33% of the project area by planting native and broad leaved species in consultation with local DFO and local communities as per the CPCB guidelines.

- xx. All the commitments made to the public during Public Hearing/public consultation meeting shall be satisfactorily implemented and adequate budget provision shall be made accordingly.
- xxi. At least 2.5% of the total cost of the project shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues, locals need and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office. Implementation of such program shall be ensured by constituting a Committee comprising of the proponent, representatives of village Panchayat and District Administration. Action taken report in this regard shall be submitted to the Ministry's Regional Office.
- xxii. The proponent shall prepare a detailed CSR Plan for every year for the next 5 years for the existing-cum-expansion project, which includes village-wise, sector-wise (Health, Education, Sanitation, Health, Skill Development and infrastructure requirements such as strengthening of village roads, avenue plantation, etc) activities in consultation with the local communities and administration. The CSR Plan will include the amount of 2% retain annual profits as provided for in Clause 135 of the Companies Act, 2013 which provides for 2% of the average net profits of previous 3 years towards CSR activities for life of the project. A separate budget head shall be created and the annual capital and revenue expenditure on various activities of the Plan shall be submitted as part of the Compliance Report to RO. The details of the CSR Plan shall also be uploaded on the company website and shall also be provided in the Annual Report of the company.
- xxiii. The Company shall submit within three months their policy towards Corporate Environment Responsibility which shall inter-alia address (i) Standard operating process/procedure to being into focus any infringement/deviation/ violation of environmental or forest norms/conditions, (ii) Hierarchical system or Administrative order of the Company to deal with environmental issues and ensuring compliance to the environmental clearance conditions and (iii) System of reporting of non-compliance/violation environmental norms to the Board of Directors of the company and/or stakeholders or shareholders.
- xxiv. The project proponent shall provide for solar light system for all common areas, street lights, villages, parking around project area and maintain the same regularly.
- xxv. The project proponent shall provide for LED lights in their offices and residential areas.
- xxvi. 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, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

B. GENERAL CONDITIONS:

- i. The project authorities must strictly adhere to the stipulations made by the West Bengal Pollution Control Board and the State Government.

- ii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEFCC).
- iii. At least four ambient air quality monitoring stations should be established in the downward direction as well as where maximum ground level concentration of PM₁₀, PM_{2.5}, SO₂ and NO_x are anticipated in consultation with the SPCB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional Office at Bhubneswar and the SPCB/CPCB once in six months.
- iv. Industrial wastewater shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended form time to time. The treated wastewater shall be utilized for plantation purpose.
- v. The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (nighttime).
- vi. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- vii. The company shall develop rain water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.
- viii. The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report. Further, the company must undertake socio-economic development activities in the surrounding villages like community development programmes, educational programmes, drinking water supply and health care etc.
- ix. Requisite funds shall be earmarked towards capital cost and recurring cost/annum for environment pollution control measures to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change (MoEFCC) as well as the State Government. An implementation schedule for implementing all the conditions stipulated herein shall be submitted to the Regional Office of the Ministry at Bhubneswar. The funds so provided shall not be diverted for any other purpose.
- x. A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad/Municipal Corporation, Urban Local Body and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the web site of the company by the proponent.
- xi. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MOEFCC at Bhubneswar. The respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; PM₁₀, SO₂, NO_x (ambient

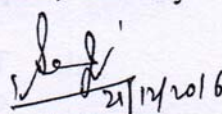
levels as well as stack emissions) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

- xii. The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MOEFCC, the respective Zonal Office of CPCB and the SPCB. The Regional Office of this Ministry at Bhubneswar / CPCB / SPCB shall monitor the stipulated conditions.
- xiii. The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental conditions and shall also be sent to the respective Regional Office of the MOEFCC at Bhubneswar by e-mail.
- xiv. The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry of Environment, Forests and Climate Change (MoEFCC) at <http://envfor.nic.in>. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same should be forwarded to the Regional office at Bhubneswar.
- xv. Project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.

9.0 The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

10.0 The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

11.0 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 Wastes (Management, Handling and Transboundary Movement) Rules, 2008 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules.


(Dr. Satish C. Garkoti)
Scientist 'F'

Copy to:-

1. The Secretary, Department of Environment, Government of West Bengal.
2. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi, 110 032.

3. The Chairman, West Bengal State Pollution Control Board, Paribesh Bhawan, Building No. 10-A, Block- LA, Sector 3, Salt Lake City, Kolkata – 700 091.
4. The Additional Principal Chief Conservator of Forests (C), Ministry of Environment, Forest and Climate Change, Regional Office (EZ), A/3, Chandersekharpur, Bhubaneswar – 751023.
5. Guard File / Record File/Monitoring file.

(Dr. Satish C. Garkoti)
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