



**STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY,
(SEIAA), ORISSA.**

(Constituted vide order No. S.O. 2674 (E) Date 17th Nov. 2008 of Ministry of Environment & Forest, Govt. of India, Under Environment Protection Act, 1986.) Qr. No. 5RF-2/1, Unit-IX, Bhubaneswar-751022
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Ref. No. _____

Dt. _____

SEIAA – 271/10

From

Bhagirathi Behera, IFS
Director, Environment-cum-
Spl. Secretary to Government
& Member Secretary, SEIAA, Orissa

To

Mr. Surya Narayan Senapati, Director
M/s Khedaria Ispat Ltd.
At-Naikenbahal, Po-Kuarmunda
Sundargarh-770039
Tel- 0661-2111377
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Sub: Environmental Clearance for expansion of Sponge Iron from 15000 TPA to 45000 TPA along with establishment of SMS (25,300) Rolling Mill (24,000 TPA) & captive power plant (6MW) of M/s Khedaria Ispat Ltd. at Naikenbahal, Kuarmunda in the district of Sundargarh.

Sir,

This has reference to letter no. KIL/EC/2009 dated 07.09.2009 along with application for Terms of Reference (ToR) and subsequent application vide letter no. KIL/10-11/87 dated 12.11.2010, no KIL/10-11/104 dated 21.12.2010, dated 26.04.2011, dated 12.05.2011 and dated 24.06.2011 on the above mentioned subject I am directed to say that the State Environment Impact Assessment Authority, Orissa have considered the application for the proposal for expansion of Sponge Iron Plant (15,000 TPA to 45,000 TPA), installation of induction furnace 2x4 T (25,300 TPA) rolling mill, 1x75 TPD (24,000 TPA), producer gas plant of capacity 1x25000 nm³/hr and captive power plant of capacity 6MW (3MW WHRB and 3MW AFBC boiler), at-Naikenbahal, Kuarmunda, Sundargarh. The total area acquired for the proposed expansion of the plant will be 19.85 acre. The total cost of the project will be Rs. 23.18 Crores. The expansion of sponge iron production will be through installation of one new DRI kiln of capacity 100 TPD. The details of existing and proposed products and production capacity are given as follows.

Sl. No.	Plant Facility	Product	Existing	Expansion	Total Capacity
1	DRI Plant	Sponge Iron	1x50 TPD (15,000 TPA)	1 x 100 TPD (30,000 TPA)	45,000 TPA
2	SMS (IF)	Steel Ingots	-	2 x 4T (25,300 TPA)	25,300 TPA
3	Rolling Mill	TMT Rods, Sections	-	1 x 75 TPD (24,000 TPA)	24,000 TPA
4	Producer Gas Plant	Producer gas	-	1 x 2500 NM3/HR	1x2500 Nm3/HR
5	Captive Power Plant				
a	WHR Boiler	-	-	1 X 15 TPH (3 MW)	6 MW
b	AFBC Boiler	-	-	1 X 15 TPH (3 MW)	
c	Turbo Generator	Power	-	1 X 6 MW	

The steel plants are air polluting in nature. Air emissions will be generated from the kiln and material handling section. E.S.P will be installed for control of emission from the Sponge Iron Kiln as well as AFBC. Dust Collector will be installed along with the Bag Filter to control the emission from the various material transfer points. Bag Filter with Suction Hood will be installed at Induction furnace for control of particulate emission. Water Spraying will be done to control the fugitive emissions. Ash handling system will be installed to minimize the fugitive dust emissions during handling of ash and the ash will be used inland filling. The total water requirement after the expansion of the project will be 2160 KLD which will be sourced from bore well. Public hearing for the proposal was conducted on 16.07.2010. The proponent along with consultant M/s Sun Consultancy Services, Bhubaneswar. Made a detailed presentation of their proposal for consideration of environmental clearance on 3rd and 4th March, 2011. The SEAC decided to consider the proposal after receipt of certain information. The SEAC decided to consider the proposal after receipt of certain information/clarification from the proponent. The proponent furnished the information/documents which is placed in the SEAC meeting held on 11.05.11. The committee opined certain clarifications are not satisfactory and decided to ask the proponent to clarify further. The proponent furnished clarification and the committee verified the same.

Based on the information/documents and clarifications provided by the proponent and on recommendation of the State Expert Appraisal Committee, Orissa, the State Environment Impact Assessment Authority, Orissa hereby accords Environmental Clearance in favour of the project for a period of 5 (five) years under the provisions of the Environment Impact Assessment Notification, 2006 and 2009 and subsequent amendment thereto under various MoEF, Govt. of India circulars thereunder and subject to the following stipulated conditions.

Stipulated Conditions:-

1. The applicant (Project proponent) will take necessary measures for prevention, control and mitigation of Air Pollution, Water Pollution, Noise Pollution and Land Pollution including solid waste management as mentioned by him in Form-1, Final EIA reports and Environment Management Plan (EMP) in compliance with prescribed statutory norms and standards.
2. The applicant will take necessary steps for socio-economic development of the people of the area on need based assessment for providing employment, education, health care, drinking water and sanitation, road and communication facilities etc. after a detailed primary socio economic survey of the core zone.
3. The applicant will comply to the points, concerns and issues raised by the people during public hearing on 16.07.2010 in accordance with the commitments made by him thereon.
4. The applicant will take statutory clearance/ approval /permissions from the concerned authorities in respect of his project as and when required.
5. For post environmental clearance monitoring, the applicant will submit half-yearly compliance report in respect of the stipulated terms and conditions of Environmental Clearance to the State Environmental Impact Assessment Authority (SEIAA), Orissa on 1st June and 1st December of each calendar year.
6. Efforts shall be made to reduce PM₁₀, PM_{2.5}. Levels in the ambient air and a time bound action plan shall be submitted. On-line ambient air quality monitoring and continuous stack monitoring facilities for all the stacks shall be provided and sufficient air pollution control devices viz. Electrostatic precipitator (ESP), gas cleaning system, dust catcher, bag filters etc. shall be provided to keep the emission levels below 50 mg/Nm³ by installing energy efficient technology. At no time the emission level shall go beyond the prescribed standards. Interlocking facilities shall be provided so that process can be automatically stopped in case emission level exceeds the limit.
7. In plant control measures for checking fugitive emissions from all the vulnerable sources like spillage/raw materials/coal handlings etc. shall be provided. Further, specific measures like provision of dust suppression system consisting of water sprinkling, suction hoods, fans and bag filters etc. shall be installed at material transfer points, blast furnace stock house and other enclosed raw material handling areas. Centralized de-dusting system i.e. collection of fugitive emissions through suction hood and subsequent treatment through bag filter or any other device and finally emitted through a stack of appropriately designed height conforming to the standards. All the internal roads shall be asphalted. Fugitive emissions shall be regularly monitored and records maintained.

8. Excess water along with storm water during monsoon should not be discharged into the surrounding low lying area. The storm water during monsoon will be collected in a pond and after appropriate treatment shall be stored in a reservoir for use in plantation, dust suppression etc.
9. Under no circumstances the process water shall be discharged to nearby water-body. It should be properly treated, stored and 100% recycled in the process.
10. 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.
11. Gaseous emission levels including secondary fugitive emissions from all the sources should be controlled as per Ministry vide G.S.R. 414(E) dated 30th May, 2008 within the latest permissible limits issued by the Ministry and regularly monitored. Guidelines/ Code of Practice issued by the CPCB should be followed.
12. Hot gases from DRI kiln should be passed through Dust Settling Chamber (DSC) to remove coarse solids and After Burning Chamber (ABC) to burn CO completely and used in waste heat recovery boiler (WHRB). The gas then should be cleaned in ESP before leaving out into the atmosphere through ID fan and stack.
13. The char from DRI plant shall be utilized in AFBC boiler of power plant and no char shall be disposed off anywhere else. AFBC boiler shall be installed simultaneously along with the DRI plant to ensure full utilization of char from the beginning.
14. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 1999 and subsequent amendment in 2003 and 2009.
15. The treated effluents conforming to the prescribed standards shall be re-circulated and reused within the plant. There shall be no discharge outside the plant boundary. Arrangements shall be made so that effluents and storm water do not get mixed.
16. The design of rain water harvesting shall comprise of rain water collection from the built up and open area in the plant premises. Action plan and road map for implementation shall be submitted to the SEIAA within six months.
17. Adequate safety measures shall be provided in the plant area to check/minimize spontaneous fires in coal yard, especially during summer season. Details of these measures to be taken along with location plant layout shall be submitted to the SEIAA, Orissa.
18. A green belt of adequate width and density preferably with local species along the periphery of the plant & alongside roads etc. shall be raised so as to provide protection against particulates and noise. It must be ensured that at least 33% of the total land area shall be under permanent green cover. The project proponent shall ensure proper maintenance of green belt throughout the year & for this purpose they

may engage professionals in this field for creation and maintenance of the green belt. An action plan for this purpose shall be prepared accordingly and submitted to the SEIAA, Orissa.

19. First aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.
20. Regular monitoring of ground level concentration of SO₂, NO_x, RSPM (PM₁₀, PM_{2.5}) etc. shall be carried out in the impact zone and records to be maintained. If at any stage these levels are found to exceed the prescribed limits, necessary control measures shall be provided immediately. The location of the monitoring stations and frequency of monitoring shall be decided in consultation with SPCB, Orissa.
21. Management and disposal of other solid waste and hazardous waste generated shall be done by the project proponent as per the provisions of the relevant statutory rules.
22. Provision shall be made for housing of construction labourers 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.
23. An Environmental Cell comprising of at least one expert in environmental science/engineering, occupational health and social scientist, shall be created at the project site itself and shall be headed by an officer of appropriate superiority and qualification. It shall be ensured that the Head of the Cell shall directly report to the head of the organization and he shall be held responsible for implementation of environmental regulations and social impact improvement of/mitigation measures.
24. Half yearly report on the status of implementation of the stipulated conditions and environmental safeguards shall be submitted to the appropriate authorities. (SEIAA, Orissa).
25. Separate funds shall be allocated for implementation of environmental protection measures along with item-wise break-up. These cost shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and year-wise expenditure should be reported.
26. The need of the local people should be appropriately addressed in the CSR activities to be undertaken by the project proponent in the area. An action plan in this regard should be prepared and submitted to SEIAA, Orissa.
27. The project proponent shall advertise in at least two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned within seven days from the date of this clearance letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the State Pollution Control Board and SEIAA.
28. A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parisad/ Municipal Corporation, urban local Body and the Local NGO, if any, from whom suggestions/ representations, if any, received while processing the proposal.

The clearance letter shall also be put on the website of the Company by the proponent.

29. The environment 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 clearance conditions and shall also be sent to the respective Regional Offices of the Ministry by e-mail.
30. The above mentioned stipulated conditions shall be complied in time bound manner. Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract penal action under the provisions of Environment Protection (EP) Act, 1986.

Member Secretary

Memo No _____/Dt. _____

Copy to

1. Ministry of Environment & Forests, Govt. of India, Paryavaran Bhawan, CGO Complex, Lodhi Road, New Delhi for kind information.
2. Principal Secretary, Forests & Environment Dept., Government of Orissa for kind information.
3. Chairman, State Pollution Control Board, Parivesh Bhawan, A/118, Nilakantha Nagar, Unit-8, Bhubaneswar for kind information.
4. Chief Conservator of Forests, Regional Office (EZ), Ministry of Environment & Forests, A-31, Chandrasekharapur, Bhubaneswar for kind information.
5. Chairman, Central Pollution Control Board, CBD-cum-office Complex, East Arjun Nagar, New Delhi-110032 for kind information.
6. Collector & District Magistrate, Sundargarh for kind information and necessary action.
7. Chairman/Member/Member Secretary, SEIAA for kind information.
8. Chairman, SEAC/Secretary, SEAC, Paribesh Bhawan, A/118, Nilakantha Nagar, Unit-VIII, Bhubaneswar for kind information.
9. Guard file for record.

Member Secretary