

F. No. J-11011/279/2006-IA.II (I)
Government of India
Ministry Environment and Forests
(I.A. Division)

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New Delhi – 110 003

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Dated 6th December, 2006

To,

✓ Shri Jayakumar Janakaraj
Sr. Vice President
M/s Vedanta/ Hindustan Zinc Ltd.
Chanderya Led – Zinc Smelter
P.O. Putholi, Gangrar, Chittorggarh – 312021
Rajasthan

Fax : 01472-255816 / 0294-527386 / 011-29837954

E-mail : csr.mehta@vedanta.co.in

Subject : Expansion of Zinc smelter (2,50,000 TPA) and Captive Power Plant (100 MW) at Putholi, Gangrar, Chittorggarh Rajasthan by M/s Vedanta / Hindustan Zinc Ltd. – Environmental clearance reg.

Sir,

This has reference to your letter No. HZL/CLZS/ENV/MoEF/06/9586 dated 24th July, 2006 alongwith application, EIA/EMP and related project documents and subsequent clarifications furnished by you vide your letters dated 7th August, 2006 and 4th September, 2006 for seeking environmental clearance of the above mentioned project under the EIA Notification, 1994.

2.0 The Ministry of Environment and Forests has examined your application. It is noted that the proposal involves expansion of Zinc Smelter 2,50,000 TPA (2,10,000 TPA and Zinc smelter and 40,000 TPA by de-bottlenecking of existing 1,70,000 TPA zinc smelter) and Captive Power Plant (100 MW) at Putholi, Gangrar, Chittorggarh, Rajasthan. No additional land will be required since the expansion project will be set up in 26.5 ha out of existing 335.85 ha. land available. Zinc concentrates will be sourced from the captive mines of HZL viz. Rampur Agucha Mines, Rajpura Dariba Mines, Zawar Mine, Sindesar Khurd Mines. Calcine will be sourced from other zinc smelters (captive/imported).

3.0 Bag filters and ESP will be installed to control dust and air emissions. Total water requirement from Gosunda Dam will be 11,000 m³/d and permission accorded by the Govt. of Rajasthan. The effluent will be treated in the ETP followed by Reverse Osmosis. The wastewater generated from CPP will be recycled and used for dust suppression in coal and ash handling areas. The RO rejects, ETP sludge, Cobalt cake, cooler cake, anode mud, enrichment cake, and spent catalyst etc. will be sent to existing secured landfill. Waste / used oil will be sold to registered recyclers. Ash will be given to cement / brick manufacturers.

4.0 Public hearing panel has recommended the project in the meeting held on 29th June, 2006. 'No Objection Certificate' has been accorded by the Rajasthan State Pollution Control

Board vide letter No. 12 (CII-78)RPCB/G.III/1432 dated 3rd August, 2006. Total cost of the project is Rs. 970.00 Crores.

5.0. The Ministry of Environment and Forests hereby accords environmental clearance to the above project under the provisions of EIA Notification dated 14th September, 2006 subject to strict compliance of the following specific and general conditions.

A. SPECIFIC CONDITIONS:

- i. The gaseous emissions from various process units shall conform to the standards prescribed by the concerned authorities from time to time. The Rajasthan State Pollution Control Board (RSPCB) may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location. At no time, the emissions level shall go beyond the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency.
- ii. The company shall install on-line stack emission monitoring equipments for continuous monitoring of SO₂, NO_x, SPM and O₂ and all the pollution control measures shall be inter-locked. The company shall install fume extractors and bag filters to control the emissions from all melting & casting units. Electrostatic precipitators (ESP) in Captive Power Plant (CPP), Gas Cleaning Plant (GCP) and Sulphuric acid plant shall be installed to control dust and SO₂ emissions within the stipulated limits of 50 mg/Nm³. The low NO_x burners shall be installed to control the NO_x emissions.
- iii. Impact of SO₂ emissions from H₂SO₄ plant and CPP in ambient air shall be assessed by the project proponent and a detailed report submitted to the Ministry including its Regional Office at Lucknow, CPCB and RSPCB.
- iv. All the recommendations made in Charter for Corporate Responsibility for Environment Protection (CREP) shall be strictly followed and SO₂ emission limit shall be controlled less than 2 kg/ton of H₂SO₄ produced and acid mist limit of 50 mg/Nm³ shall be achieved by December, 2006.
- v. Fugitive emissions, acid mist vapours, fumes and SO₂ shall be controlled and work environment monitored for prevailing contaminants regularly. Fugitive dust emissions in the handling area and at various transfer points shall be minimized by provision of dust suppression system. Bag filters shall be installed in the Roaster, Calcine handling & storage section, Zn atomizing unit, Dross milling section to control fugitive emissions. The Company shall improve overall house keeping by asphaltting the internal roads and to reduce the generation of fugitive dust from vehicle movements.
- vi. Total water requirement from Gosunda dam shall not exceed 34,000 m³/d as allocated by the Energy Department, Govt. of Rajasthan and water shall also be released from the Gosunda Dam for the use by the public as per the agreement signed. It shall be ensured that irrigation in the surrounding areas is not affected due to non-release of water by HZL. No ground water will be used. As reflected in the EIA/EMP, all the effluent generated shall be treated in the ETP followed by feeding to Reverse Osmosis (RO) plant. The water treated in RO Plant shall be recycled in the process and rejects of RO plant shall be evaporated in solar evaporation pond. The RO rejects and ETP sludge shall be sent to existing secured landfill. The wastewater generated from CPP shall be recycled and used for dust suppression in coal and ash handling areas. The treated effluent shall conform to the prescribed standards and recycled to maintain the zero discharge.

- vii. The solid waste generated in the form Jarosite shall be stabilized as Jarofix and disposed off in Jarofix disposal yard inside the plant premises. Cobalt cake, cooler cake, anode mud, enrichment cake, ETP sludge and spent catalyst etc. shall be disposed off in secured landfill (SLF). Waste/used oil shall be sold to registered recyclers. Ash shall be given to cement / brick manufacturing units.
- viii. Canopy based green belt of adequate width and density in and around the around the periphery of plant, township and captive power plant in 142 ha. shall be developed as per CPCB guidelines.

B. GENERAL CONDITIONS:

- i. The project authorities must strictly adhere to the stipulations made by the Rajasthan State Pollution Control Board and the State Government.
- ii. No expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.
- iii. Adequate number of ambient air quality-monitoring stations shall be established in the downward direction as well as where maximum ground level concentration of SPM, SO₂ and NO_x are anticipated in consultation with the Rajasthan State Pollution Control Board. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional Office at Lucknow and the CPCB / RSPCB 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 from time to time. The treated wastewater shall be recycled in the plant as well as utilization for plantation purposes.
- v. The project authorities must strictly comply with the rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous Wastes (Management and Handling) Rules, 2003. Authorization from the State Pollution Control Board must be obtained for collection, storage, treatment and disposal of hazardous wastes.
- vi. 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).
- vii. Occupational Health Surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- viii. The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA / EMP /risk analysis and DMP report.
- ix. The project authorities shall provide Rs. 111.50 Crores and Rs. 12.00 Crores towards capital cost and recurring cost/annum for environmental pollution control measures to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government and submit an implementation schedule for all the conditions

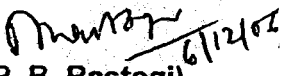
stipulated herein to this Ministry and its Regional Office at Lucknow. The funds so provided shall not be diverted for any other purposes.

- x. The Regional Office of this Ministry at Lucknow, CPCB / RSPCB shall monitor the stipulated conditions. A six monthly compliance report and the monitored data along with statistical interpretation should be submitted to them regularly.
- xi. 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 State Pollution Control Board/ Committee and may also be seen at Website of the Ministry of Environment and Forests 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 shall be forwarded to the Regional office.
- xii. The 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.

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

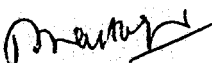
7.0. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner will implement these conditions.

8.0. The above conditions will 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, the Hazardous Wastes (Management and Handling) Rules, 2003 and the Public Liability Insurance Act, 1991 along with their amendments and rules.


(Dr. P. B. Rastogi)
Additional Director

Copy to :

1. Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, Delhi - 110032.
2. Chairman, Rajasthan State Pollution Control Board, 4, Institutional area, Jhalana, Doongri, Jaipur, Rajasthan.
3. Chief Conservator of Forests (Central), Ministry of Environment and Forests, Central Region, Kendriya Sadan, Sector H, Aliganj, Lucknow - 226 024, U.P.
4. Secretary, Department of Environment and Forests, Government of Rajasthan, Jaipur, Rajasthan.
5. Joint Secretary (CCI-I), Ministry of Environment and Forests, Paryavaran Bhawan, CGO Complex, New Delhi.
6. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhawan, CGO Complex, New Delhi.
7. Guard File.
8. Monitoring File.
9. Record File.


(Dr. P. B. Rastogi)
Additional Director