

No. J-11011/155/2003 - IA 5 (I)

Government of India

Ministry of Environment & Forests

E mail: plabudra@yahoo.com

Parvavaran Bhawan,

C.O.O. Complex, Lodi Road,

New Delhi - 110 003

Dated the 31st March, 2004

To

The Managing Director,
M/s Hindustan Zinc Ltd.,
Yashad Bhawan,
Udaipur- 313004, Rajasthan.

Sub:

Zinc smelter plant (1,70,000 TPA) and Captive Power plant (154 MW)
project by M/s Hindustan Zinc Limited (HZL) at village Putholi in District
Chitrkurgah, Rajasthan - environmental clearance req.

Sir,

This has reference to your communication no. HZL/ENV/A(4)9/2172 dated 25.08.03 along with application, EIA REMP and related project documents and subsequent clarifications furnished by you vide your letters dated 17th November, 2003 and 28th December, 2003 for environmental clearance of the above mentioned project.

The Ministry of Environment and Forests has examined your application. It is noted that the proposal involves setting up of a Zinc smelter plant of 1,70,000 MTPA capacity and Captive power plant of 154 MW capacity. The area required for the project is 114.05^{ha}, which is already in the possession of M/s HZL. The project does not involve diversion of forestland and displacement of people. The Chitrkurgah Fort is located at a distance of 8.5km from the plant. Zinc extraction will be through hydro metallurgical extraction route by the "Roast-Leach Electro Winning Technology". Water requirement of 21508 m³/d will be met from the Gosunda dam. The solid waste shall be generated in the form of Jarosite (68700 TPA), Spent catalyst (15 K/A), Anode mud (6000 TPA), Cooler cake (2000 TPA), mercury sludge (20TP), ETP sludge (4800 TPA) and ash (1,07,100 TPA). The jarosite, ETP sludge and cooler cake shall be stabilized into jarfix and disposed off into the land fill. The mercury sludge and spent catalyst shall be sold to authorized re-processors. Anode mud will be recycled and ash will be sold to cement manufacturers. The surplus ash will be disposed off in the ash disposal area by dry disposal route. NOC from the Rajasthan State Pollution Control Board has been obtained on 15th October, 2003. The public hearing panel has recommended the project in the meeting held on 6th June, 2003. Total cost of the project is Rs. 970 crores.

2.0. The Ministry of Environment and Forests hereby accords environmental clearance to the above project under the provisions of EIA Notification dated 27th January, 1984 as amended subsequently subject to strict compliance of the following specific and general conditions.

A. SPECIFIC CONDITIONS:

The gaseous emissions from various process units should conform to the standards prescribed by the concerned authorities from time to time. The State Board 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 should go beyond the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit should not be restarted until the control measures are rectified to achieve the desired efficiency.

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- As reflected in the EIA /EMP, Double Contact Double Adsorption (DCDA) plant for sulphuric acid recovery from SO₂ should be set up. The stack from the sulphuric acid plant should be provided with on-line stack emission monitoring equipment for continuous monitoring of SO₂. As per the recommendations made in Charter for Corporate Responsibility for Environment Protection, SO₂ emission limit should be controlled less than 2kg/tonne of H₂SO₄ produced and acid mist limit of 50mg/4m³ should be achieved by December, 2008. Continuous monitoring of SO₂ should be carried out.
- ii. Fugitive emissions, acid mist vapours, fumes and SO₂ should be controlled and work environment monitored for prevailing contaminants regularly. Fugitive dust emissions in the zinc concentrate handling area and at various transfer points should be minimized by provision of water sprinkling system. The Company should improve overall house keeping by asphaltting the internal roads and to reduce the generation of fugitive dust from vehicle movements.
 - iv. The company should install fume extractors and bag filters to control the emissions from all melting and casting units. The emissions shall conform to the prescribed standards of 60mg/Nm³. The particulate emissions from the captive power plant should be controlled by installation of ESP and controlled within the stipulated limits of 50mg/Nm³. The low NO_x burners should be installed to control the NO_x emissions.
 - v. As reflected in the EIA /Environmental Management Plan, discharge of process effluent shall not exceed 139 m³/hr. The treated effluent should conform to the prescribed standards and recycled to maintain the zero discharge. Reverse Osmosis plant should be installed for treatment of surplus effluent for reuse in the process to achieve zero discharge. The rejects from the RO plant should be evaporated in a solar evaporation pond to be constructed within smaller premises.
 - vi. The acid/hazardous waste/sludge generated from the process units should be disposed off in a secured double lined landfill with leachate collection and leak detection system. As reflected in EIA /EMP report, the jarosite should be stabilized to jarofix by application of technology obtained from M/s Canadian Electrolytic Zinc Limited. The landfill should be constructed at a safe height from the highest water table. The design of the landfill should be approved by SPCB as per Hazardous Wastes (Management and Handling) Rules, 2003. Ground water quality in the vicinity of the landfill should be regularly monitored by construction of Piezometers. The efforts should be made to sell spent catalyst to the authorized reprocessors. The anode mud should be recycled in the leaching plant. The ash generated from the captive power plant should be provided to the cement manufacturing units. The surplus quantity if any, should be disposed off in the ash disposal area by dry disposal method. The Piezometers should be constructed around the ash disposal area to monitor the ground water quality.
 - vii. Green belt of adequate width and density in and around the captive power plant should be developed in consultation with the DFO in 81.12 ha. of area in addition to the existing area already brought under green belt. Around the periphery of plant and township, canopy based green belt should be developed.

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GENERAL CONDITIONS:

The project authorities must strictly adhere to the stipulations made by the Rajasthan State Pollution Control Board and the State Government.

No expansion or modifications in the plant should be carried out without prior approval of the Ministry of Environment and Forests.

Adequate number of ambient air quality monitoring stations should be established in the downward direction as well as where maximum ground level concentration of SPM , SO_2 and NO_x are anticipated in consultation with the Rajasthan State Pollution Control Board. Data on ambient air quality and stack emission should be regularly submitted to this Ministry including its Regional Office at Lucknow and the State Pollution Control Board/Central Pollution Control Board once in six months.

Industrial waste water should 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 should be recycled in the plant as well as utilization for plantation purposes.

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.

The overall noise levels in and around the plant area should 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).

Occupational Health Surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.

The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA / EMP / risk analysis and DMP report.

The project authorities will provide adequate funds both recurring and non-recurring to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided should not be diverted for any other purposes.

The Regional Office of this Ministry at Lucknow/Central Pollution Control Board/State Pollution Control Board will monitor the stipulated conditions. A semi-monthly compliance report and the monitored data along with statistical interpretation should be submitted to them regularly.

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- xi. The Project Proponent should 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 should 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.
 - xii. The Project Authorities should 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.
- 3.0. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- 4.0. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner will implement these conditions.
- 5.0. 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.

P. Anujara
 (Dr. P. L. Anujara)
 Addl. Director

Copy to:

- i) Secretary, Department of Environment and Forests, Government of Rajasthan, Jaipur.
- ii) Chief Conservator of Forests, Central Region, Ministry of Environment and Forests, B-172, Sector-A, Aliganj, Lucknow-226020.
- iii) Chairman, Central Pollution Control Board, Paryesh Bhavan, CEID-cum-Office complex, East Arjun Nagar, New Delhi-110002.
- iv) Chairman, Rajasthan State Pollution Control Board, 4, Institutional area, Chhalana, Deeg, Jaipur.
- v) JS(CCI-I), Ministry of Environment and Forests
- vi) Director (Monitoring Cell), Ministry of Environment & Forests.
- vii) Guard File.
- viii) Record File.

(Dr. P. L. Anujara)
 Additional Director

Talked to Mr. Jankumar on 21/01/2011 regarding the project. In this regard before about the project concerned authorities (pollution control board) HO will have a meeting with them. By G.M (F. & E.)