

Lead Smelter

No J-11011/17/2005-1A-1R(I)
Government of India
Ministry of Environment and Forests

Email: platu1rai@yahoo.com
Telo no. 24363973
Paryavaran Bhavan, CGO Complex,
Lodi Road, New Delhi-110003
Dated the 3rd August, 2005

To

The General Manager (Environment)
M/s Hindustan Zinc Limited
Yashad Bhavan, Udaipur 313004
Rajasthan India

Sub: Expansion of Lead smelter at village Putholi, Tehsil Gangrar in district Chittorgarh in Rajasthan by M/s Hindustan Zinc Limited.

Sir,

This has reference to your letter No. CLZS/GM/ENV/LEAD05 dated 21st January, 2005 along with application, EIA /EMP and related project documents and subsequent clarifications furnished by you vide your letters dated 28th February, 2005, 7th June, 2005 and letter no. EMU-01966 dated 20.06.2005 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 expansion of lead smelter plant of 60,000 TPA capacity. The area required for the project is 0.8 ha. which is available within the premises of existing zinc smelter plant. The project does not involve diversion of forest land and displacement of people. The Chittaurgarh Fort is located at a distance of 6.5km from the plant. It is noted that company will adopt environmental friendly Lance seal smelting technology with all stages of smelting in a single, compact and totally closed furnace with high lead and by product recovery, flexibility to use variety of feed materials including secondaries and low water consumption. The heat evolved during oxidation of ore will be used in smelting operation. Water requirement of 2592 m³/d will be met from the Gosunda dam. Permission to draw 1500 MCFT of water has been obtained from the Energy Department, Govt. of Rajasthan on 19th November, 1994. The solid waste shall be generated in the form of slag from the lead smelter furnace (15000MTPA). The slag after granulation will be sold to the cement manufacturing companies and will be used for road construction. NOC from the Rajasthan State Pollution Control Board has been obtained on 26.2.2005. The public hearing panel has recommended the project in the meeting held on 17.11.04. Total cost of the project is Rs. 97.5 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, 1994 as amended subsequently 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 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.
- ii. As reflected in the EIA /EMP, existing Double Contact Double Adsorption (DCDA) plant for sulphuric acid recovery from SO₂ shall be upgraded by use of high active catalyst and high efficiency plate heat exchangers. The company shall ensure that SO₂ emission from the lead smelter plant are taken to existing sulphuric acid plant properly and converted to sulphuric acid. The stack from the sulphuric acid plant shall 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 shall be controlled less than 2kg/tonne of H₂SO₄ produced and acid mist limit of 50mg/Nm³ shall be achieved by December, 2006.
- iii. The company shall install continuous air quality monitoring stations. One continuous ambient air quality monitoring station shall be set up at Chittorgarh fort to assess the impact of the lead smelter on the fort. Data monitored shall be submitted to the Ministry and CPCB/SPCB once in six months.
- iv. Fugitive emissions, acid mist vapours, fumes and SO₂ shall be controlled and work environment monitored for prevailing contaminants regularly. Fugitive dust emissions in the lead concentrate handling area and at various transfer points shall be minimized by provision of dust suppression system. The trucks carrying concentrate shall be fully covered. The Company shall improve overall house keeping by asphaltting the internal roads and to reduce the generation of fugitive dust from vehicle movements.
- v. The company shall 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 50mg/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 shall be installed to control the NO_x emissions.
- vi. As reflected in the EIA /Environmental Management Plan, discharge of process effluent shall not exceed 19 m³/hr. The treated effluent shall conform to the prescribed standards and recycled to maintain the zero discharge. Reverse Osmosis plant shall be installed for desalination and reuse of effluent to achieve zero discharge. The rejects from the RO plant shall be evaporated in a solar evaporation pond to be constructed within smelter premises.

vii. The solid waste generated in the form of slag shall be granulated and sold to cement manufacturing and also for use in road construction.

viii. Green belt of adequate width and density in and around the captive power plant shall be developed as per Central Pollution Control Board guidelines in 61.12 ha. of area in addition to 106 ha. of existing area already brought under green belt. Around the periphery of plant and township canopy based green belt should be developed.

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 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.

iv. 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, 1983 or as amended from time to time. The treated wastewater should 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 (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 walls, 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 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.
- x. The Regional Office of this Ministry at Lucknow/Central Pollution Control Board/State Pollution Control Board will 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 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 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.
- 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. Anuj Kumar
(Dr. P. L. Anuj Kumar)
Director

Copy to:

- i) Secretary, Department of Environment and Forests, Government of Rajasthan, Jaipur.
- i) Chief Conservator of Forests, Central Region, Ministry of Environment and Forests, B-1/72, Sector-A, Aliganj, Lucknow-226020.
- ii) Chairman, Central Pollution Control Board, Parvash Bhavan, CBD-cum-Office complex, East Arjun Nagar, New Delhi-1100032.
- iii) Chairman, Rajasthan State Pollution Control Board, 4, Institutional area, Uhalana, Doongri, Jaipur.
- iv) JS(CCI-I), Ministry of Environment and Forests
- v) Director (Monitoring Cell), Ministry of Environment & Forests.
- vi) Guard File
- vii) Record File.

(Dr. P. L. Ahujara)
Director