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## F. No. J-11011/664/2008- IA II (I) Government of India Ministry of Environment and Forests (I.A. Division)

Paryavaran Bhawan CGO Complex, Lodhi Road New Delhi – 110 003 E-mail: ms.industry-mef@nic.in

Tele/fax: 011 - 2436 3973 Dated: 22<sup>nd</sup> April, 2010

To,

The President (Operations)
M/s Chambal Fertilizers and Chemicals Ltd
PO. Gadepan-325 208,
District Kota, Rajasthan

Sub: Expansion of Fertilizer and Chemicals Unit Ammonia (690000 MTPA), Urea (1200000 MTPA), Heat Recovery Steam Generator (HRSG, 60TPH) and 18MW captive power generation & utilities Facilities CGF3 at P.O. Gadepan, District Kota, Rajasthan by M/s Chambal Fertilizers and Chemicals Ltd (CFCL). -reg. Environmental Clearance

Sir.

This has reference your letter no. CFCL/G-3/90603 dated 4<sup>th</sup> March, 2010 along with copies of EIA/EMP and public hearing reports seeking environmental clearance under EIA Notification 2006 for the above mentioned project.

- 2. The Ministry of Environment and Forests has examined the proposal and it is noted that M/s Chambal Fertilizers and Chemicals Limited have proposed for expansion of Fertilizer and Chemical Unit for Ammonia, Urea & utility facilities for the Chambal Fertilizers Complex-3 at Gadepan in District Kota in Rajasthan. The capacity for urea and ammonia plants will be 1,200,000 MTPA and 6900,00 respectively. Besides 18MW Captive power plant and 60 TPH HRSG will be installed. No additional land is required and proposed expansion will be carried adjacent to the existing plants on the land available for future expansion. The company has an area of 1060 acres. No ecosensitive areas are located within 15 km periphery of the plant. Project is based on natural gas as a raw material which will be available through GAIL pipeline. The total cost of the project will be Rs. 4000 Crores.
- 3. It is noted that total peak water requirement will be 754m3/hr. The fresh water requirement will be 554m3/hr. The water requirement for the existing plant is drawn from the Kali Sindh/ Parwan River at a distance of 6 km from the project site. Additional water requirement (200m3/d) will be met from reverse osmosis unit. CFCL has approval to draw 20 cusecs of water from Kali –Sindh River. With the installation of RO unit and recycling of treated effluent, there will be no additional water drawl from the river. The balance fresh water requirement will be met by augmenting the facilities on Kali-Sindh River. The power requirement of 18 MWH will be met from captive power generation from gas based power plant with heat recovery steam generator. No additional storage

facilities are envisaged for ammonia. Existing ammonia storage (2 x 5000 MT) will be integrated for further buffer stocking of product ammonia for expansion project on need based i.e. as and when down stream urea plant is out.

- 4. The major hazardous waste generation from the brown field expansion will be spent catalyst. With the new technological advancements, the life cycle of present generation catalyst is more than 5 years and all the spent catalyst are proposed to be disposed to authorized recyclers as per the CPCB/RPCB guidelines. Residuals from RO unit will be disposed to brick kilns.
- 5. The project activity is listed at 5 (a) and is of 'A' Category under the Schedule of EIA Notification, 2006. Therefore, proposal has been appraised at the Centre.
- 6. The proposal was placed before the Expert Appraisal Committee in its meeting held on 18-19<sup>th</sup> March, 2010. The Committee recommended the proposal for environmental clearance. Public hearing of the project was held on 6.1.2010.
- 7 Based on the information submitted, presentation made by you and your consultant EQMS India Pvt Ltd, Delhi, the Ministry of Environment and Forests hereby accords environmental clearance to above project under the provisions of EIA Notification dated 14<sup>th</sup> September 2006 subject to the compliance of the following Specific and General conditions:

## A. SPECIFIC CONDITIONS:

- i) The company shall comply with all the conditions stipulated in the environmental clearances issued vide letters no. J-11011/2/96-IA-II dated 24.7.1996, and letter no. J-11011/152/2006-IA-II (I) dated 18.9.2007.
- The company shall undertake measures for water conservation. The specific water consumption shall not exceed 8m3/MT of urea. The waste water generated from all sources after treatment shall be recycled back in the process to maintain zero discharge condition. The process water condensate shall be recycled as boiler feed water. The waste water generation shall not exceed 5m3/MT of urea produced.
- The project authority shall obtain prior permission from the State Irrigation Department. A copy of permission shall be submitted to the Ministry's Regional Office at Lucknow.
- iv) The gaseous emissions (NOx, NH3, urea dust) from various units shall conform to the prescribed standards. At no time, the emissions levels shall go beyond the stipulated standards. In the event of failure of pollution control system (s) adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency.

- v) The company shall upload the status of compliance of the stipulated environmental clearance conditions, including results of monitored data on its website and shall update the same periodically. It shall simultaneously be sent to the Regional office of MOEF, the respective Zonal office of CPCB and the State Pollution Control Board. The levels of PM10, NH3, methane and NOx (ambient levels) and emissions from the stacks shall be monitored and displayed at a convenient location near the main gate of the company and at important public places.
- vi) To control fugitive emissions, regular monitoring of shop floor environment shall be carried. Leakages in the form of gases, liquid and dust emission shall be checked and mitigative measures taken. The company shall provide de-dusting system at all the transfer points in the bagging system. The dust emissions from the urea plant shall conform to the prescribed standards.
- vii) The company shall install low NOx burners in primary reformer furnaces and in gas turbine to mitigate the NOX emission.
- viii) It is noted that the residuals from RO unit shall be disposed to the brick kilns . the company shall review the scheme for disposal of RO rejects and submit to the Ministry.
- ix) The company shall develop the green belt in 33% area, out of total area to mitigate the effect of fugitive emissions and noise as per the guidelines CPCB.
- x) The company shall implement all the recommendations made in the Charter on Corporate Responsibility for Environmental Protection (CREP) for fertilizer industries.
- xi) Occupational health surveillance of the workers shall be carried out on a regular basis and records shall be maintained as per the Factories Act.
- xii) The company shall undertake adequate protection measures for handling of ammonia vapour in case of plant upset condition. Safety valve exhaust and drains shall be connected to flare and vent stack.
- xiii) The company shall review the need for additional storage of ammonia. While decommissioning naphtha storage tank which shall be ensured that the tank is fully empty and made free of hydrocarbons.
- xiv) The company shall comply with the recommendations made in the EIA/EMP and Risk assessment reports.
- xv) The company shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling.

- xvi) During transfer of materials, spillages shall be avoided and garland drains be constructed to avoid mixing of accidental spillages with domestic waste and storm drains.
- xvii) 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 shall strictly adhere to the stipulations of the SPCB/State Government or any statutory body.
- (ii) The gaseous emissions (SO<sub>2</sub>, NOx, NH<sub>3</sub>, fertilizer dust) and particulate matter from various process units shall conform to the standards prescribed by the concerned authorities from time to time. Emission data shall be periodically monitored and reports submitted to Ministry's Regional Office, CPCB and SPCB.
- (iii) All the waste waters generated from the various processes shall be recycled/reuse in the plant and zero discharge shall be maintained. The domestic waste water shall be treated in septic tanks and treated waste shall be used for irrigation in the green belt.
- (iv) No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.
- (v) At no time, the emissions shall exceed the prescribed limits. In the event of failure of any pollution control system adopted by the unit, the unit shall be immediately put out of operation and shall not be restarted until the desired efficiency has been achieved.
- (vi) The locations of ambient air quality monitoring stations shall be reviewed in consultation with the State Pollution Control Board (SPCB) and additional stations shall be installed, if required, in the downwind direction as well as where maximum ground level concentrations are anticipated.

- (vii) Dedicated scrubbers and stacks of appropriate height as per the Central Pollution Control Board guidelines shall be provided to control the emissions from various vents. The scrubbed water shall be sent to ETP for further treatment.
- (viii) All the storage tanks will be under negative pressure to avoid any leakages. Breather valves, N<sub>2</sub> blanketing and secondary condensers with brine chilling system shall be provided for all the storage tanks to minimize vapour losses. All liquid raw material shall be stored in storage Tanks and Drums.
- (ix) The company shall undertake following Waste Minimization measures.
  - Metering and control of quantities of active ingredients to minimize waste.
  - > Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
  - > Use of automated filling to minimize spillage.
  - Use of 'Closed Feed' system into batch reactors.
  - > Venting equipment through vapour recovery system.
  - > Use of high pressure hoses for equipment cleaning to reduce wastewater generation.
- (x) Fugitive emissions in the work zone environment, product, and raw materials storage area shall be regularly monitored. The emissions shall conform to the limits imposed by the State Pollution Control Boards/Central Pollution Control Board.
- (xi) The project authorities shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 as amended in October, 1994 and January, 2000.
- (xii) The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).
- (xiii) The company shall develop rain water harvesting structures to harvest the run off water for recharge of ground water.
- (xiv) The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment. The eco-development plan should be submitted to the SPCB within three months of receipt of this letter for approval.

- (xv) A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.
- (xvi) The project authorities shall earmark adequate funds 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 shall not be diverted for any other purpose.
- (xvii) The implementation of the project vis-à-vis environmental action plans shall be monitored by the concerned Regional Office of the Ministry/SPCB / CPCB. A six monthly compliance status report shall be submitted to monitoring agencies and shall be posted on the website of the Company.
- (xviii) 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 who suggestions/ representations, if any, were received while processing the proposal.
- (xix) The project proponent shall also submit six monthly reports on the status of compliance of the stipulated E C conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the State Pollution Control Board.
- The environmental statement for each financial year ending 31<sup>st</sup> March in Form-V as is mandated shall be submitted 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 MoEF by e-mail.
- (xxi) 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/Committee and may also be seen at Website of the Ministry at <a href="http://envfor.nic.in">http://envfor.nic.in</a>. 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 concerned Regional Office of the Ministry.

- (xxii) 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 start of the project.
- 8. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- 9. The Ministry reserves the right to stipulate additional conditions, if found necessary. The company in a time bound manner will implement these conditions.
- 10. Any appeal against this environmental clearance shall lie with the National Appellate Authority, if preferred, within a period of 30 days as prescribed under section 11 of the National Environment Appellate Authority Act, 1997.
- 11. The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Water Pollution) Act, 1981, the Environment (Protection) Act, 1986 Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules.

(Dr.P.L. Ahujarai) 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-1/72, Sector-A, Aliganj, Lucknow-226020.
- iii) Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office complex, East Arjun Nagar, New Delhi-1100032.
- iv) Chairman, Rajasthan State Pollution Control Board, 4, Institutional area, Jhalana, Doongri, Jaipur.
- v) Director (Monitoring Cell), Ministry of Environment & Forests.
- vi) Monitoring file/Guard File/Record File.

(Dr.P. L. Ahujarai) Director