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F. No. J-11011/358/2007-1A 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 : hanumant.singh@nic.in

Telephone : 011: 2436 7076

Dated 3rd September, 2007

To,

M/s Coromandel Fertilizers Ltd.
Compound Fertilizer Plant
Ennore
Tamil Nadu

caswaranknv@cfl.murugappa.com

Fax-040-27844117

Sub: Expansion of Fertilizer Plant at Compound Fertilizer Plant, Ennore, Tamil Nadu by M/s Coromandel Fertilizers Ltd. Environmental Clearance reg.

Sir,

This has reference to your letter No. Nil dated 11th April 2007, along with Form1, pre-feasibility report and Environmental Assessment Study Report, seeking environmental clearance for the above project under the Environment Impact Assessment Notification, 2006.

2. The Ministry of Environment and Forests has examined your application and noted that proposal is for environmental clearance for expansion of Fertilizer Plant Ammonium Phosphate Sulphate (1,70,000 to 3,30,000 MTPA) Sulphuric Acid (1,81,000 to 2,80,450 MTPA) and Phosphoric Acid (35,800 to 66,000 MTPA)] at the Compound Fertilizer Plant, Ennore, Tamil Nadu by M/s Coromandel Fertilizers Ltd. Expansion will be done within existing land and no additional land will be acquired. Details of products and capacities are as follows:

Plant	Consent Capacity (Existing)	Proposed Capacity
Fertilizer Plant	170,000 MTPA	330,000 MTPA
Phosphoric acid Plant	35,800 MTPA	66000 MTPA
Sulphuric acid plant	1,81,000 MTPA	280450 MTPA

3. Total cost of the project will be about Rs. 1.50 – 2.00 Crores for process improvements for enhancing the production capacity of the Fertilizer plant. No Sulphuric acid and Phosphoric Plant will be installed and additional requirement if any of Sulphuric acid and Phosphoric Acid will be imported. Increase in production will be achieved through technology innovations, process improvements, improving on-stream hours, maximization of equipment capacity and continuous supply of raw materials. Sulphuric acid plant will be based on DCDA technology. Anodic alloy protected coolers and scrubbers will be provided to Sulphuric acid plants. Five stage scrubbing system will be provided to control gaseous emissions. Scrubbers will also be provided to Phosphoric acid plant to scrub fluorine. Spray nozzles in the Fertilizer plant, improved catalyst in the Sulphuric Acid Plant and Kimre mesh pads with multi wash system will be provided to Phosphoric acid plant to control air emissions. Cyclone and scrubbers will be provided to control dust. Scrubbers will be provided to control NH_3 and SO_2 , Bag filters will be provided in Phosphoric Acid Plant to control dust emissions. Fume scrubbing system will be provided in Granulation Plant.
4. Total water requirement from Chennai Metro Water Supply will be $300 \text{ m}^3/\text{day}$ and prior permission has already been obtained. All the waste water generated will be collected and recycled into the process (Phosphoric Acid Plant). No effluent will be discharged. Thermal desalination plant will be installed to convert sea water to DM water to avoid tapping of ground water.
5. Green belt is already developed in 8 acres out of total 45 acres land available and it is proposed to develop green belt in 10% more area covering almost 25% area.
6. All the Chemical Fertilizer plants have been listed at S. N. 5(a) under Category 'A' and are appraised at the Central level. As per Section 7 (ii) of the EIA Notification, 2006 the proposal is considered without EIA/EMP and public hearing due to expansion of the project in the same location and proposed adequate pollution control measures.
7. Based on the information submitted by you, the Ministry of Environment and Forests hereby accords environmental clearance to above project under the provisions of EIA Notification dated 14th September 2006 subject to the compliance of the following Specific and General conditions:

A. SPECIFIC CONDITIONS :

- i) The expansion of the project shall be based on process improvement, technology innovation, improving on stream hours, maximization of equipment capacity and continuous supply of raw materials. No additional Sulphuric acid and phosphoric acid plant shall be installed for additional requirement of Sulphuric acid and phosphoric acid which shall be met by importing. Due to enhancement of production pollution load shall not increase from the existing load.
- ii) The project authorities shall install efficient scrubbing system to control fluorine emission and bag filters for dust control in phosphoric acid plant .
- iii) Multi stage scrubbing system shall be installed to control ammonia and suspended particulate matter in fertilizer plant.
- iv) The project authority shall install dust collection system in fertilizer bagging plant.
- v) The Sulphuric Acid Plant shall be based on double conversion double absorption technology and anodic alloy protected acid coolers shall be provided. Start-up scrubbers shall be installed in both Sulphuric acid plants to minimize SO₂ emission during start-up.
- vi) The project authority shall install high efficiency scrubber nozzles, additional tailgas scrubber, improve the scrubber efficiency by optimizing the L/G ratio, install additional cyclones in scrubbing system and install mist eliminators in scrubbers.
- vii) The proponent shall not withdraw groundwater for the plant.
- viii) The company shall develop the green belt in atleast 25% land area to mitigate the effect of fugitive emissions and noise as per the guidelines CPCB.
- ix) The company shall implement all the recommendations made in the Charter on Corporate Responsibility for Environmental Protection (CREP) for fertilizer industries.

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 (SO₂, SO₃, NO_x, NH₃, F, 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, N₂ 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 "Close 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 and Hazardous Waste (Management and Handling) Rules, 1989, as amended from time to time. Authorization from the SPCB shall be obtained for collection, treatment, storage, and disposal of hazardous wastes.
- (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) Occupational health surveillance of the workers shall be carried out on a regular basis and records shall be maintained as per the Factories Act.
- (xv) 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.
- (xvi) The project proponent shall also comply with all the environmental protection measures and safeguards proposed in the EIA/EMP report.
- (xvii) A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.
- (xviii) 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.
- (xix) 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.

- (xx) 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 <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 concerned Regional Office of the Ministry.
- (xxi) 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.
10. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
11. The Ministry reserves the right to stipulate additional conditions, if found necessary. The company in a time bound manner will implement these conditions.
12. The above conditions will be enforced, inter-alia under the provisions of the Water(Prevention & Control of Pollution) Act,1974, Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 Hazardous Wastes (Management and Handling) Rules, 2003 and the Public Liability Insurance Act, 1991 along with their amendments and rules.


(H. S. Malviya)
Joint Director

Copy to: -

1. The Secretary (Environment), Govt. of Tamil Nadu, Fort. St. George, Chennai-600009.
2. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
3. The Chairman, Tamil Nadu Pollution Control Board, 100, Anna Salai, Guindy, Chennai - 600032.
4. The Chief Conservator of Forests (Central), Regional Office (SZ), Kendriya Sadan, IVth Floor, E&F Wings, 7th Main Road, IInd Block, Koramangala, Bangalore-560034.
5. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
6. Guard File.
7. Record File.


(H.S. Malviya)
Joint Director