

**F. No. J-11011/159/2016-IA-II(I)**  
**Government of India**  
**Ministry of Environment, Forest and Climate Change**  
**(IA- II Section)**

Indira Paryavaran Bhawan  
Jorbagh Road, New Delhi - 3

Dated: 14<sup>th</sup> August, 2018

To

M/s Mangalore Chemicals & Fertilizers Ltd  
Panambur, Mangalore  
District **Dakshina Kannada** (Karnataka)

**Sub: Expansion cum Modernization of Fertilizer Plant by M/s Mangalore Chemicals & Fertilizers Limited at Panambur, Mangalore, District Dakshina Kannada (Karnataka) - Environmental Clearance - reg.**

Sir,

This has reference to your proposal No. IA/KA/IND2/55271/2016 dated 4<sup>th</sup> May 2018, submitting the EIA/EMP report on the above subject matter.

2. The Ministry of Environment, Forest and Climate Change has examined the proposal for environmental clearance to the project for expansion cum modernization of fertilizer plant (Ammonia from 247500 to 328500 TPA, Urea from 429000 to 569400 TPA, DAP/ NPK from 401500 to 1401500 TPA and Sulphonated Napthalene Formaldehyde/Poly Carboxylate Ether from 85000 to 103000 TPA) by M/s Mangalore Chemicals & Fertilizers Ltd at Panambur, Mangalore, District Dakshina Kannada (Karnataka).

3. The existing land area is 192 acres and no additional land would be required for the proposed expansion. Greenbelt has already been developed in an area of 64 acres i.e. covering 33 % of the total area of the project. The estimated project cost is Rs.1547 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.56 crores and the recurring cost (operation and maintenance) will be about Rs.10 crores per annum. Total employment generation will be 950 (750- existing and 200 for expansion) persons as direct and 700 (500-existing and 200 for expansion) persons indirect after expansion.

4. There are no National parks, Wildlife sanctuaries, Biosphere reserves, Tiger/Elephant reserves, Wildlife corridors etc. within 10 km from the project site. Gurupur River is flowing at a distance of 285 m in East direction.

5. The details of products are as under:-

Plant	Capacity (TPA)		
	Existing	Proposed	Total
Ammonia	2,47,500	81,000	3,28,500
Urea	4,29,000	1,40,400	5,69,400
DAP/NPK	4,01,500	10,00,000	14,01,500
SNF/ PCE	85,000	18,000	103,000

6. The present water requirement of 8928 cum/day is being supplied by Mangalore City Corporation, and no additional water will be required for the proposed expansion. There will be no change in effluent generation (Trade effluent-1290 cum/day, Domestic effluent-250 cum/day). All the industrial effluent generated from cooling tower and boiler blow down shall be treated in RO plant and then recycled. As such, the plant is based on Zero Liquid discharge system.



Existing power requirement is 45000 kVA and there would be no additional power demand. Existing unit has 8 DG sets of 7500 kVA capacity each. Stacks (height 44 m each) are provided as per CPCB norms to the existing DG sets.

Existing unit has three furnace oil fired boilers of capacity 40TPH, 35TPH & 5 TPH respectively. No additional boiler will be required for the proposed expansion. There will not be any gaseous emission from SNF/ PCE plant after expansion.


7. The project/activity is covered under category A of item 5 (a) 'Chemical fertilizers' of the Schedule to the Environment Impact Assessment Notification, 2006 and requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

8. The terms of reference (ToR) for the project was granted on 23<sup>rd</sup> September 2016. Public hearing was conducted by the Karnataka State Pollution Control Board on 11<sup>th</sup> January, 2018.

9. The proposal for environmental clearance (EC) was placed before the EAC (Industry-2) in its meeting held on 25-27 June, 2018 in the Ministry. The project proponent and their consultant M/s EQMS India Pvt Ltd presented the EIA/EMP report as per the ToR. The Committee found the EIA/EMP report satisfactory and in consonance with the ToR, and recommended the proposal for environmental clearance with certain conditions.


10. Based on the proposal submitted by the project proponent and recommendations of the EAC (Industry-2), the Ministry of Environment, Forest and Climate Change hereby accords environmental clearance to the project for **Expansion cum Modernization of Fertilizer Plant (Ammonia from 247500 to 328500 TPA, Urea from 429000 to 569400 TPA, DAP/ NPK from 401500 to 1401500 TPA and Sulphonated Naphthalene Formaldehyde/Poly Carboxylate Ether from 85000 to 103000 TPA)** by M/s Mangalore Chemicals & Fertilizers Ltd at Panambur, Mangalore, District Dakshina Kannada (Karnataka), under the provisions of the EIA Notification, 2006, read with subsequent amendments therein, subject to compliance of the terms and conditions as environmental safeguards, as per **Annexure**.

11. The Ministry reserves the right to stipulate additional conditions, if found necessary at subsequent stages and the project proponent shall implement all the said conditions in a time bound manner. The Ministry may revoke or suspend the environmental clearance, if implementation of any of the above conditions is not found satisfactory.

  
14/8/2018  
(S. K. Srivastava)  
Scientist E

**Copy to:-**

1. The Additional PCCF (C), MoEF&CC Regional Office (SZ), Kendriya Sadan, 4<sup>th</sup> Floor, E&F Wings, 17<sup>th</sup> Main Road, Koramangala II Block, Bangalore - 34
2. The Secretary, Department of Forest, Environment & Ecology, Government of Karnataka, Room No. 708, Gate 2, Multi Storied Building, Dr. Ambedkar Veedhi, Bangalore - 1
3. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex East Arjun Nagar, Delhi - 32
4. The Member Secretary, Karnataka State Pollution Control Board, Parisara Bhavan, #49, 4<sup>th</sup> & 5<sup>th</sup> Floor, Church Street, Bangalore -1
5. Guard File/Monitoring File/Website/Record File

  
14/8/2018  
(S. K. Srivastava)  
Scientist E

**Environmental clearance to the project for Expansion cum Modernization of Fertilizer Plant by M/s Mangalore Chemicals & Fertilizers Limited at Panambur, Mangalore, District Dakshina Kannada (Karnataka)**

[F. No. J-11011/159/2016-IA-II(I); proposal No. IA/KA/IND2/55271/2016 dated 4<sup>th</sup> May 2018]

**TERMS AND CONDITIONS**

- (i) Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
- (ii) As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.
- (iii) To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms of 50 mg/Nm<sup>3</sup> for particulate matter and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- (iv) The present water requirement of 8928 cum/day is being supplied by Mangalore City Corporation, and no additional fresh water shall be required for the proposed expansion.
- (v) Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.
- (vi) Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.
- (vii) The project proponent shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.
- (viii) The project proponent shall undertake waste minimization measures such as: -
  - (a) Metering and control of quantities of active ingredients to minimize waste.
  - (b) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (ix) All the commitment made regarding issues raised during the Public Hearing/consultation meeting held on 11<sup>th</sup> January, 2018 shall be satisfactorily implemented.
- (x) The green belt shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc.
- (xi) At least 0.25% of the total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time

bound action plan shall be prepared and submitted to the Ministry's Regional Office.

- (xii) For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines, Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- (xiii) The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.
- (xiv) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (xv) Transportation of raw materials/products should be carefully performed using GPS enabled vehicles.
- (xvi) Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

#### **GENERIC CONDITIONS**

- (i) The project authorities shall adhere to the stipulations made by the State Pollution Control Board, Central Pollution Control Board, State Government and any other statutory authority.
- (ii) No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change. 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.
- (iii) The locations of ambient air quality monitoring stations shall be decided in consultation with the State Pollution Control Board (SPCB) and it shall be ensured that at least one station each is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.
- (iv) The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16<sup>th</sup> November, 2009 shall be followed.
- (v) 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).
- (vi) The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and use the same water for the process activities of the project to conserve fresh water.
- (vii) Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.

- (viii) The company shall also comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (ix) The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. ESC activities shall be undertaken by involving local villages and administration.
- (x) The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.
- (xi) A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.
- (xii) The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.
- (xiii) A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.
- (xiv) The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF&CC, the respective Zonal Office of CPCB and SPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.
- (xv) The environmental statement for each financial year ending 31st 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&CC by e-mail.
- (xvi) 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.
- (xvii) 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.

