F. No. J-11011/320/2012- IA II (I) Government of India Ministry of Environment, Forest and Climate Change (I.A. Division)

Indira Paryavaran Bhawan Aliganj, Jorbagh Road, New Delhi -110003

E-mail: Ik.bokolia@nic.in Telefax: 011-24695313 Dated: 12th October, 2015

To.

Shri Ranjan Basu (Sr. Vice President Operations)
M/s Deepak Fertilizers and Petrochemicals Corporation Ltd.
Plot K-1 to K-5, MIDC, Taloja, District Raigad,
Maharashtra- 410208

E-mail: ranjan.basu@dfpcl.com; Fax No.: 022-27412413

Subject: Expansion of NPK Fertilizer Manufacturing Unit at DFPCL Complex, K-1 to K-5, MIDC Industrial Area, District Raigad, Maharashtra by M/s Deepak Fertilizers and Petrochemicals Corporation Ltd. Environmental Clearance reg.

Ref.: Your letter no. nil dated on 28th November, 2013.

Sir.

This has reference to your letter dated 28th November, 2013 alongwith project documents including Form I, Terms of References, Pre-feasibility Report, EIA/EMP Report and subsequent submission of additional information vide letter dated 19th May, 2014 and 15th December, 2014 regarding above mentioned project.

- 2.0 The Ministry of Environment, Forest and Climate Change has examined the application. It is noted that proposal is for the expansion of complex fertilizer unit from 3,24,000 MTPA of single grades of Ammonium Nitrate Phosphate (ANP) to 6,00,000 MTPA of multiple grades NPK fertilizer at its Taloja facilities. M/s Deepak Fertilizers and Petrochemicals Corporation Ltd. is presently manufacturing single grade ANP fertilizer using prilling process. The proposed project is based on granulation technology. It is proposed to install two identical streams of 1000 TPD NPK granulation plant. Proposed plant is to be designed to manufacture different grades of AN and DAP based NPK fertilizer with an option of producing fortified grades from the same units. Total plot area is 3,85,584 m² of which greenbelt will be developed in 63,219 m². No additional land will be acquired for the proposed expansion. It is reported that there is no Eco-sensitive zone like biosphere reserve, National Park, Wildlife Sanctuary is present within 10 Km of the study area. It is reported that River Kasardi flows near the site, which is non perennial in nature. Cost of the expansion project is Rs. 360 crores.
- 3.0 Ventury type fume pre-scrubber will be installed for the granulator. All exhaust gases from the scrubber will be sent to the final washing step the Tail gas scrubber, which will include a multi spraying system in the horizontal feeding arm and a packed section in the vertical tower. Gas after washing will be finally released to the atmosphere through a common stack. The last section of TGS is equipped with a demister to avoid droplet entrainment. Fresh water requirement for the proposed project will be 550 m3/day, which will be met from recycled/treated effluent of the existing unit. Sewage will be treated in the sewage treatment plant (STP). Existing effluent generation is 3800 m³/day, which is treated

in the ETP capacity of 5000 m³/day. Existing treated effluent is discharged to the CETP for further treatment. The CETP effluents are discharged through a marine outfall into the sea at a distance of 10km from the MIDC. In this project, it is proposed to install reverse osmosis (RO) of 600 m³/day, from which expected to create 500 m³/day treated water and 100 m³/day of rejects. RO treated water will be reused/recycled in the process. Rejects will be sent to multiple effect evaporator (MEE). Thus there is reduction in effluent discharge. Spent oil will be sent to authorized recycler/re-processors. Spent catalysts and used oil will be sold to authorized re-processors/recyclers.

- 4.0 Public hearing was exempted under per section 7(i), (iii) Stage (3), Para (i)(b) of EIA Notification, 2006.
- 5.0 All the Fertilizer Plant are listed at S.N. 5(a) under Category 'A' and appraised at the Central level.
- 6.0 The proposal was considered by the Expert Appraisal Committee (Industry-2) in its 5th, 17th and 32nd meetings held during 31st January, 2013 1st February, 2013, 18th-19th March, 2014 and 20th–21st January, 2015 respectively. The Committee recommended the proposal for environmental clearance.
- 7.0 Based on the information submitted by the project proponent, 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) All the conditions stipulated in environmental clearance J-11011/218/2004-IA (II) dated 24th February, 2006 and SEAC-2010/CR.656/TC.2 dated 11th May, 2011 accorded for the existing projects shall be implemented.
- ii) The project proponent shall follow guidelines and policies of the State Government w.r.t. the river regulation zone for conservation of river. State Pollution Control Board shall issue the consent to establish/consent to operate after complying the guidelines for the location of unit from river.
- iii) Ammonia bearing fumes from the reactor and granulator of the Complex Fertilizer shall be scrubbed. Scrubbing shall have interlocking system with main plant.
- iv) The gaseous emissions (SO₂, NOx, NH₃, HC and Fluoride) and particulate matter from various process units shall conform to the norms prescribed by the CPCB/SPCB from time to time. At no time, the emission levels shall go beyond the prescribed standards. Air emission shall be monitored online (24x7) by the Company. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Stack emissions shall be monitored regularly.
- v) Ambient air quality data shall be collected as per NAAQES standards notified by the Ministry vide G.S.R. No. 826(E) dated 16th September, 2009. The levels of PM₁₀ (Urea dust), SO₂, NOx, Ammonia, Ozone and HC shall be monitored in the ambient air and displayed at a convenient location near the main gate of the company and at important public places. The company shall upload the 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 Maharashtra Pollution Control Board (MPCB). Calibration of continuous ambient air quality monitoring stations shall be conducted quarterly.
- vi) In plant control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Fugitive emissions shall be controlled by providing closed storage, closed handling & conveyance of chemicals/materials, multi cyclone separator and water sprinkling system. Fugitive emissions in the work zone environment, product, raw materials storage area etc. shall be regularly monitored. The emissions should conform to the limits stipulated by the MPCB.
- vii) The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution.
- viii) Unit shall never store ammonia more than 10,000 Ton at the site. If eventuality arises and it needs to be emptied, the additional 3000 T ammonia storage to be kept standby and the rest of NH3 to be transported to JNPT site, where they store Imported ammonia.
- ix) Total water requirement shall not exceed 500 m³/day for the proposed unit and met from treated/recycled water.
- x) Industrial effluent shall be treated in effluent treatment plant (ETP) and recycled back in the process.
- xi) No effluent shall be discharged outside the premises and 'Zero' effluent discharge shall be ensured.
- xii) Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.
- xiii) All the effluents after treatment shall be routed to a properly lined guard pond for equalization and final control. In the guard pond, automatic monitoring system (24x7) for flow, and relevant pollutants (i.e. pH, ammoniacal nitrogen, nitrate nitrogen etc) shall be provided with high level alarm system. Monitoring Data to be provided to respective Regional Office of the MoEF and Company's website.
- xiv) Regular monitoring of ground water by installing peizometric wells around the guard pond and sludge disposal sites shall be periodically monitored and report shall be submitted to the concerned Regional Office of the Ministry, CPCB and SPCB.
- xv) The company shall construct the garland drain all around the project site to prevent runoff of any chemicals containing waste into the nearby water bodies. Effluent shall be properly treated and treated wastewater shall conform to CPCB standards.
- xvi) The company shall obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Trans-Boundary Movement) Rules, 2008 and amended as on date for management of Hazardous wastes. Measures shall be taken for fire fighting facilities in case of emergency.
- xvii) Spent catalysts and used oil shall be sold to authorized recyclers/re-processors only.
- xviii) The Company 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.

- xix) Remote operated valve placed on NH₃ line to avoid leakage/equipment check shall be performed to ensure that remote operated valve (ROV) is all time is functional.
- xx) The company shall strictly follow all the recommendations mentioned in the Charter on Corporate Responsibility for Environmental Protection (CREP).
- xxi) 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 OISD 117 norms.
- xxii) Occupational health surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.
- xxiii) Green belt shall be developed in 33 % of the plant area. Selection of plant species shall be as per the CPCB guidelines.
- exiv) Provision shall be made for the housing for the construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile sewage treatment plant, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structure to be removed after the completion of the project. All the construction wastes shall be managed so that there is no impact on the surrounding environment.

B. GENERAL CONDITIONS:

- The project authorities shall strictly adhere to the stipulations made by the State Government and Maharashtra Pollution Control Board.
- ii. 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.
- 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 stations is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.
- iv. 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).
- v. 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.
- vi. 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.
- vii. Usage of Personnel Protection Equipments (PPEs) by all employees/ workers shall be ensured.

- 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, risk mitigation measures and public hearing relating to the project shall be implemented.
- ix. The company shall undertake all relevant measures for improving the socioeconomic conditions of the surrounding area. CSR 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. As proposed, company shall earmark sufficient funds toward capital cost and recurring cost respectively 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 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, 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.
- 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, the respective Zonal Office of CPCB and the Maharashtra Pollution Control Board. 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 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.

- 8.0 The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- 9.0 The Ministry reserves the right to stipulate additional conditions, if found necessary. The company in a time bound manner will implement these conditions.
- 10.0 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 Waste (Management, Handling and Trans-Boundary Movement) Rules, 2008 and the Public Liability Insurance Act, 1991 alongwith their amendments and rules.

(Lalit Bokolia) Additional Director

Copy to:-

- 1. The Principal Secretary, Environment Department, Government of Maharashtra, 15th Floor, New Administrative Building, Mantralaya, Mumbai 400 032
- 2. The Chief Conservator of Forests (Central), Kendriya Paryavaran Bhavan, Link Road No.3, Bhopal-462016.
- 3. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi 110.032.
- 4. The Chairman, Maharashtra Pollution Control Board, Kalpataru Point, 3rd and 4th floor, Opp. Cine Planet, Sion Circle, Mumbai-400 022.
- 5. Monitoring Cell, Ministry of Environment Forest and Climate Change, Indira Paryayaran Bhayan, *Jor bagh Road*, New Delhi.
- 6. Guard File/Monitoring File/Record File.

(Lalit Bokolia) Additional Director