## F. No. J-11011/186/2012- IA II (I) Government of India Ministry of Environment, Forests and Climate Change (I.A. Division)

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

E-mail: Ik.bokolia@nic.in

**Telefax: 24695313** Date: 16<sup>th</sup> May, 2015

To.

Shri Prasad K Shetty (Proprietor) M/s Om Titanates Plot No. C-1-B/2805 & 2806, GIDC, Sarigam District Valsad, Gujarat- 396 155

E-mail:omtitanates@gmail.com; vanita@omtitanates.com; ajay@omtitanates.com

Subject: Expansion of Synthetic Organic Chemical manufacturing unit at Plot Nos.C-1-B/2805 & 2806, GIDC, Sarigam, District Valsad, Gujarat by M/s OM Titanates – Environmental Clearance req.

Ref.: Your letter no. nil dated on 03.12.2013.

Sir,

This has reference to your letter dated 03.12.2013 alongwith project documents including Form I, Terms of References, Pre-feasibility Report and EIA/EMP Report regarding above mentioned project.

2.0 The Ministry of Environment, Forests and Climate Change has examined the application. It is noted that the proposal is for expansion of Synthetic Organic Chemical manufacturing unit at Plot Nos.C-1-B/2805 & 2806, GIDC, Sarigam, DistrictValsad, Gujarat by M/s OM Titanates. Total plot area is 1406 m². Total cost of project is Rs. 81.85 Lakhs. Damanganga canal, river Darotha and River Damanganga is flowing at a distance of 10 km. Following products will be manufactured:-

S.N.	Name of Product			Quantity (TPM)
			Existing Scenario	Proposed Scenario
	Main Products			
1	Tetra Butyl Titanate			
2	Tetra Iso Propyl Titanate			
3	TPT-20 B			
4	Tetra2-Ethyl Hexyl			100
	Titanate	Blending	50	
5	Titanium Acetyl			
	Acetonate			
6	Ethyl Titanate			,
7	Di-isopropyl ethyl amine		Nil	15
8	Ammonium Choride		47	94
9	Sodium/potassium Ethyl		Nil	22
	Sulphate			
	Total		50	231

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- 3.0 Scrubber will be provided to control process emission viz. Ammonia & HCI. Total fresh water requirement from GIDC water supply will be increased from 4 m³/day to 13.5 m³/day after expansion. Total industrial effluent generation will be 1 m³/day after proposed expansion from boiler blowdown. Effluent will be treated in the effluent treatment plant (ETP) and treated effluent will be used for toilet flushing. Sewage will be treated in STP and treated sewage will be reused for horticulture purpose. Waste oil and used batteries will be sold to authorized recyclers/re-processors. After proposed expansion project, Ammonium chloride will be added as product in product list & will be sold as product.
- 4.0 Public hearing was exempted as per section 7 (i), (iii) Stage (3), Para (i)(b) of EIA Notification, 2006.
- 5.0 All synthetic organic chemical industries located inside the notified industrial estate/area are listed at S.N. 5(f) under category 'B' and appraised at State level. Due to applicability of general condition (i.e. interstate boundary within 10 Km), project proposal is treated as category 'A' project and appraised at Central Level.
- The proposal was considered by the Expert Appraisal Committee (Industry) in its  $3^{rd}$  and  $34^{th}$  meetings held during  $3^{rd} 5^{th}$  December, 2012 and  $17^{th} 19^{th}$  February, 2015 respectively. Proponent and the EIA Consultant namely M/s Precitech Laboratories Pvt. Ltd., have presented EIA / EMP report as per the TOR. EAC has found the EIA / EMP Report and additional information to be satisfactory and in full consonance with the presented TORs. The Committee recommended the proposal for environmental clearance.
- 7.0 Based on the information submitted by the project proponent, the Ministry of Environment, Forest and Climate Change 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) National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21<sup>st</sup> July, 2010 and amended time to time shall be followed by the unit.
- scrubber shall be provided to control process emission viz. Ammonia & HCI. The scrubbed water should be sent to ETP for further treatment. Efficiency of scrubber shall be monitored regularly and maintained properly. Scrubbers vent shall be provided with on-line detection and alarm system to indicate higher than permissible value of controlled parameters. At no time, the emission levels shall go beyond the prescribed standards. The system should be interlocked with the pollution control equipments so that in case of any increase in pollutants beyond permissible limits, plant should be automatically stopped.
- Ambient air quality data shall be collected as per NAAQES standards notified by the Ministry vide G.S.R. No. 826(E) dated 16<sup>th</sup> September, 2009. The levels of PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>X</sub>, CO, HCl and VOC 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 GPCB. All necessary steps should be taken for monitoring of chlorine and HCl as well as VOCs in the proposed plant.

- iv) 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. Dust suppression system including water sprinkling system shall be provided at loading and unloading areas to control dust emissions. Fugitive emissions in the work zone environment, product, raw materials storage area etc. shall be regularly monitored.
- v) For further control of fugitive emissions, following steps shall be followed:
  - a) Closed handling system shall be provided for chemicals.
  - b) Reflux condenser shall be provided over reactor.
  - c) System of leak detection and repair of pump/pipeline based on preventive maintenance.
  - d) The acids shall be taken from storage tanks to reactors through closed pipeline. Storage tanks shall be vented through trap receiver and condenser operated on chilled water.
  - e) Cathodic protection shall be provided to the underground solvent storage tanks.
- vi) 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.
- vii) Fresh water requirement from GIDC water supply should not exceed 13.5 m³/day. No ground water shall be used.
- viii) Trade effluent should be treated in ETP. Sewage shall be treated in the STP. 'Zero' effluent discharge should be adopted and no effluent will be discharged outside the premises. Online monitoring (24x7) for pH and TOC may be conducted within the plant.
- Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.
- x) 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 and prior permission from GPCB shall be obtained for disposal of solid / hazardous waste in the TSDF. Measures shall be taken for fire fighting facilities in case of emergency.
- Xi) 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.
- xii) The company shall undertake following waste minimization measures :
  - a. Metering and control of quantities of active ingredients to minimize waste.
  - b. Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
  - c. Use of automated filling to minimize spillage.
  - d. Use of Close Feed system into batch reactors.
  - e. Venting equipment through vapour recovery system.

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- f. Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- 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) 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 should be undertaken on regular basis. Training to all employees on handling of chemicals should be imparted. Occupational health surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.
- xv) As proposed, greenbelt should be developed at least 160 m<sup>2</sup> area in and around the plant premises to mitigate the effects of fugitive emissions all around the plant as per the CPCB guidelines in consultation with DFO.
- xvi)All the recommendations made in the risk assessment report should be satisfactorily implemented.
- xvii) The Company shall submit within three months their policy towards Corporate Environment Responsibility which should inter-alia address (i) Standard operating process/procedure to being into focus any infringement/deviation/ violation of environmental or forest norms/conditions, (ii) Hierarchical system or Administrative order of the Company to deal with environmental issues and ensuring compliance to the environmental clearance conditions and (iii) System of reporting of non-compliance/violation environmental norms to the Board of Directors of the company and/or stakeholders or shareholders.

## B. GENERAL CONDITIONS:

- The project authorities shall strictly adhere to the stipulations made by the Gujarat 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.

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- 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 socio-economic 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, the company shall earmark sufficient funds towards capital cost and recurring cost per annum 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, ZilaParisad/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 Gujarat 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 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.

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- 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 <a href="www.moef.nic.in">www.moef.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.
- 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.

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- 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.
- 11.0 Environment Clearance is issued to M/s OM Titanates for expansion of synthetic organic chemical manufacturing unit at Plot Nos.C-1-B/2805 & 2806, GIDC, Sarigam, District Valsad, Gujarat.

(Lalit Bokolia) Additional Director

Copy to:-

1. The Principal Secretary, Forests & Environment Department, Government of Gujarat, Sachivalaya, 8<sup>th</sup> Floor, Gandhi Nagar - 382 010, Gujarat.

2. The Addl. Principal Chief Conservator of Forests (Central), Ministry of Environment & Forests, Regional Office, E-5, Arera Colony, Link Road -3, Bhopal -462 016, M.P.

3. The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi - 110 032.

4. The Chairman, Gujarat State Pollution Control Board, Paryavaran Bhawan, Sector 10 A, Gandhi Nagar-382 043, Gujarat.

5. Monitoring Cell, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhavan, Jorbagh *Road*, New Delhi.

6. Guard File/Monitoring File/Record File/Notice Board.

(Lalit Bokolia) Additional Director