

**F. No. J-11011/335/2012-IA II (I)**  
**Government of India**  
**Ministry of Environment, Forests and Climate Change**  
**(I.A. Division)**

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Dated: January 30<sup>th</sup> 2015

To,  
**Shri SS Dahiya (Director)**  
**M/s Flow Tech Chemicals Pvt. Ltd.**  
**PACL Campus Naya Nangal,**  
**District Ropar, Punjab.**

**E-mail: [info@flowtechgroup.com](mailto:info@flowtechgroup.com)**

**Subject: Chemical manufacturing Unit of M/s Flow Tech Chemicals Pvt. Ltd. at  
PACL Campus, Naya Nangal, Dist. Ropar, Punjab– Environmental  
Clearance reg.**

**Ref.: Your letter no. nil dated 5<sup>th</sup> September, 2013.**

**Sir,**

Kindly refer your letter dated 5<sup>th</sup> September, 2013 alongwith project documents including Form I, Terms of References, Pre-feasibility Report, EIA/EMP Report and subsequent communications vide your letter dated 29<sup>th</sup> May, 2014, 9<sup>th</sup> September, 2014 and clarification obtained from Regional Office, MoEF&CC letter dated 14<sup>th</sup> November, 2014 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 setting up of Chemical manufacturing Unit at PACL Campus, Naya Nangal, Dist. Ropar, Punjab by M/s Flow Tech Chemicals Pvt. Ltd. Proposed unit will be established within the campus of M/s Punjab Alkali Chemical Limited Campus and chlorine will be obtained through pipeline from M/s Punjab Alkali. M/s Flowtech has entered into a MoU with PACL for using chlorine gas to be supplied. River Satluj is flowing at a distance of 3.5 km. Inter-state boundary (Himachal Pradesh) is at a distance of 4 Km. It is reported that no notified national parks/wildlife sanctuaries are located within 10 Km distance. Nagal wet land from the project site which is approximately 5 Km. Nearest sanctuary "Takhani Rehampur" is located at a distance of 51 Km from the project site. Palsed protected forest, Thapal protected forest, Ramgarh Parla protected forest and RamgarhAwarla protected forest are located within 10 Km distance. Plot area is 12000 m<sup>2</sup>. Cost of project is Rs. 47.50 Lakh. The following products will be manufactured:

S.N.	Products	Quantity ( MTPA)
1	Chlorinated Paraffin Wax	19200 MTPA
2	Hydrochloric Acid (HCl) By-products	38400 MTPA

3.0 Graphite block absorber will be provided to process vents to control process emissions viz. HCl. Diluted HCl in graphite absorbers and excess emitted chlorine gas will be neutralized with caustic soda solution and formation of commercial grade hypochloride solution will be carried out in Punjab Alkali Chemical Ltd. Chlorine alarm system will be installed for early warning on action of chlorine control. No chlorine will be stored in the plant premises. Fresh water requirement from ground water source will be 90 m<sup>3</sup>/day. Entire effluent from utilities blow down, domestic sewage etc will be treated in biological effluent treatment plant followed by Reverse Osmosis. Treated effluent will be recycled/reused for the cooling tower make up. No effluent shall be discharged outside the plant premises and 'Zero' effluent discharge concept will be followed. ETP sludge will be sent to treatment storage disposal facility for hazardous waste (TSDF). Spent oil will be sent to authorized recyclers/re-processor.

4.0 Public Hearing / Public Consultation meeting was conducted on 3<sup>rd</sup> April, 2013.

5.0 All Synthetic Organic Chemicals Units located outside the notified industrial area/estate are listed at S.N. 5(f) under category 'A' and appraised at Central level.

6.0 The proposal was considered by the Expert Appraisal Committee (Industry) in its meetings held during 8<sup>th</sup> – 9<sup>th</sup> January, 2013, 28<sup>th</sup> – 30<sup>th</sup> May, 2014 and 1<sup>st</sup>- 2<sup>nd</sup> December, 2014 respectively. Project Proponent and the EIA Consultant namely Vardan Environet, S.N. 158, List of Accredited Consultant Organizations (Alphabetically)/ Rev. 20/ May 05, 2014, 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, Forests 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.
- ii) Two stage chilled water/caustic scrubber/ Graphite block absorber shall be provided to process vents to control HCl. The scrubbing media shall be sent to effluent treatment plant (ETP) for treatment. Efficiency of scrubber shall be monitored regularly and maintained properly. At no time, the emission levels shall go beyond the prescribed standards.
- iii) Chlorine shall be supplied through pipeline. Chlorine alarm system shall be installed for early warning on action of chlorine control. No chlorine shall be stored in the plant premises. An adequate safety and Risk Assessment Plan for use of Chlorine shall be prepared based on which an On-site and Off-site Emergency Preparedness and Disaster Management Plan shall be prepared and implemented.
- iv) In plant control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Adequate dust suppression systems with water spray shall be provided for storage yard, junction houses. Raw material loading and

unloading area shall be covered and also provided with water spraying system. Fugitive emissions in the work zone environment, product, raw materials storage area etc. shall be regularly monitored and records maintained. The emissions shall conform to the limits stipulated by the Punjab Pollution Control Board (PPCB).

- v) Continuous monitoring system for HCl and chlorine shall be installed at all important places/areas. Effective measures shall be taken immediately, when monitoring results indicate above the permissible limits.
- 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) 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 Punjab Pollution Control Board (PPCB). The levels of PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, CO, HCl, Cl<sub>2</sub>, VOCs in ambient air shall be monitored and displayed at a convenient location near the main gate of the company and at important public places.
- viii) Total fresh water requirement from ground water source shall not exceed 90 m<sup>3</sup>/day and prior permission shall be obtained from the CGWA/SGWA.
- ix) Entire effluent from utilities blow down, domestic sewage etc shall be treated in biological effluent treatment plant followed by Reverse Osmosis. Treated effluent shall be recycled/reused for the cooling tower make up. Water quality of treated effluent shall meet the norms prescribed by CPCB/SPCB. Water quality of treated effluent from ETP shall be monitored regularly.
- x) No effluent from the plant shall be discharged outside the factory premises and 'Zero' effluent discharge concept shall be followed.
- xi) Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.
- xii) 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 PPCB shall be obtained for disposal of solid / hazardous waste in the TSDF. Measures shall be taken for firefighting facilities in case of emergency.
- xiii) 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.
- xiv) Alarm for chlorine leakage if any in the liquid chlorine storage area is provided along with automatic start of the scrubbing system.
- xv) 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 shall be imparted. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.

- xvi) As proposed, green belt over 33 % of the total project area shall be developed within plant premises with at least 10 meter wide green belt on all sides along the periphery of the project area, in downward direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.
- xvii) All the commitment made regarding issues raised during the Public Hearing/ consultation meeting held on 3<sup>rd</sup> April, 2013 shall be satisfactorily implemented.
- xviii) At least 5 % of the total cost of the project shall be earmarked towards the Enterprise social responsibility based on Public Hearing issues and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office at Bhopal. Implementation of such program shall be ensured accordingly in a time bound manner.
- xix) 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, 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:**

- i. The project authorities shall strictly adhere to the stipulations made by the Punjab 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 Punjab Pollution Control Board (PPCB) and it shall be ensured that at least one station 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. 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 its amendment time to time and prior permission from PPCB shall be obtained for disposal of solid / hazardous waste including boiler ash.

- vii. During transfer of materials, spillages shall be avoided and gulland drains be constructed to avoid mixing of accidental spillages with domestic wastewater and storm water drains.
- viii. Usage of Personnel Protection Equipments by all employees/ workers shall be ensured.
- ix. 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.
- x. The company shall also comply with all the environmental protection measures and safeguards proposed in the project report 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.
- xi. The company shall undertake CSR activities and all relevant measures for improving the socio-economic conditions of the surrounding area.
- xii. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.
- xiii. A separate Environmental Management Cell equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.
- xiv. As proposed, the company shall earmark sufficient funds toward 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.
- xv. 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.
- xvi. 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 Punjab Pollution Control Board. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.

- xvii. The environmental statement for each financial year ending 31<sup>st</sup> March in Form-V as is mandated shall be submitted to the Punjab 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 Chandigarh Regional Offices of MoEF by e-mail.
- xviii. 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.
- xix. 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 along with their amendments and rules.

(Lalit Bokolia )  
Additional Director

**Copy to :-**

1. The Principal Secretary, Environment Department, Government of Punjab, Chandigarh.
2. The Chief Conservator of Forests, Regional Office (Northern Zone), Bay No.24-25, Sector 31-A, DakshinMarg, Chandigarh-160030.
3. The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi - 110 032.
4. The Chairman, Punjab Pollution Control Board, VatavaranBhawan, Nabha Road, Patiala, 147001, Punjab.
5. Monitoring Cell, Ministry of Environment, Forests and Climate Change ParyavaranBhavan, CGO Complex, New Delhi.
6. Guard File/Monitoring File/Record File/ Notice Board.

(Lalit Bokolia )  
Additional Director