



ENV/14/16/2805

May 28, 2016

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Additional Director (S),
Ministry of Environment & Forests,
Govt. of India,
Regional Office, Western Region,
Kendriya Paryavaran Bhavan,
Link Road No.3, Ravi Shankar Nagar,
BHOPAL - 462 016 (M.P.).

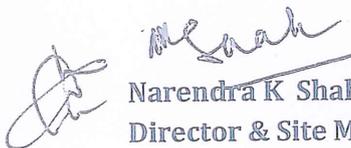
Ref: Environmental clearance no. J-11011/526/2008-IA II (I) dated
22.09.2008.

Sub: Compliance report for October 2015 to March 2016

Respected Sir

Enclosed please find the compliance report of Environmental Clearance for
the period October 2015 to March 2016. We hope you will find the same in
order.

Thanking you,
Yours faithfully,
For Bayer Vapi Private Limited
(Formerly Bilag Industries Private Limited)

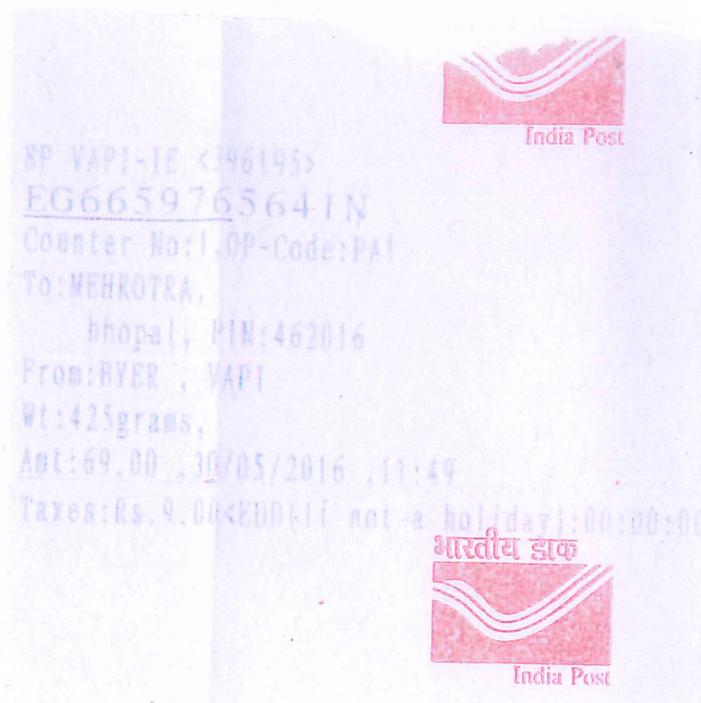

Narendra K Shah
Director & Site Manager

Encl: As Stated

Bayer Vapi Private Limited
(Formerly Bilag Industries Pvt. Lt)

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| BAYER VAPI PVT LTD. EC No. J-11011/526/2008-2008 Compliance Status report | | |
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| Sr.No. | EC Conditions | Compliance Status |
| 1 | The existing effluent treatment plant shall be expanded to meet the additional load. The process effluent after primary, secondary and tertiary treatment shall conform to be industry specific discharge standard notified under the Environment (Protection) Act,1986.The treated effluent shall be conveyed to GIDC drainage system leading to CETP of M/S Vapi Waste and Effluent Management CO Ltd. | Wastewater of the site is segregated based on COD, TDS and BOD/COD ratio and treated in the Wastewater pretreatment Plant (WWPT) followed by conventional effluent treatment plant. The wastewater pre-treatment plant comprises of evaporators, stripper, Fenton and treatment of cyanide containing effluent with the help of H2O2 for detoxification. The existing effluent treatment plant had been expanded as per requirement. The conventional effluent treatment plant consist of primary, secondary and tertiary treatment including Reverse Osmosis plant. The treated effluent is send to the CETP operated by Vapi Green Environ Limited (Formerly M/s. Vapi Waste and effluent management Co. Ltd).The online monitoring system installed for measurement of BOD, COD, TOC, TSS ,PH and flow at final discharge point of effluent treatment plant and also online data transferred to CPCB and GPCB Server. The schematic diagram of effluent treatment plant and photographs of online monitoring station are attached as Annexure 1 .The summary of analysis report of sample collected by Vapi Green Environ Limited is attached as Annexure 2 . |
| 2 | The gaseous emissions (So2,NOx,VOC and HCl) along with SPM and RSPM from various process units shall conform to the standard prescribed by the concerned authorities from time to time. At no time, the emission levels shall go beyond the stipulated standard.IN the event of Failure of pollution control system(s) adopted by the unit, the respective unit shall not be restarted unit the control measures are rectified to achieve the desired efficiency. | The ambient air quality monitoring carried out at 05 locations within the premises every month from MOEFCC and NABL accredited laboratory. The sample analysis reports are attached as Annexure 3 |
| 3 | Standards notified for pesticides unit under the Environment (Protection) Act,1986 and amended time to time shall be followed by unit. | Noted |
| 4 | For control of process emissions in the form of HCl,NH3 and Cl2, Scrubbers shall be installed. The incinerator unit-I shall be replaced by capacity incinerator (7.00 Mcal/hr.). To quench the emissions from the incinerator, Scrubber shall be provided and emissions shall inform to the prescribed standard for the incinerator under the environment(Protection)Act,1986. Regular monitoring of dioxin and furans shall be carried out in the emissions from the incinerator. | 09 nos.Two stage scrubbers are provided with scrubbing media to control process emissions. The incinerator is equipped with cyclone, bag filter and two stage scrubber and chimney having 40 height to control emission . The schematic diagram of incinerator is attached as Annexure 4 . We have two incinerator at site.The monitoring of process vents and stacks of incinerators & boilers are carried out every month by MOEFCC and NABL accredited laboratory. The sample analysis reports are attached as Annexure 5 . The Dioxin and Furan monitoring reports are attached as Annexure 6 . The online monitoring analyzer also provided at chimney. |
| 5 | Fugitive emissions in the work zone environment, product, raw materials storage area etc. shall be regularly monitored. The emissions shall conform to the limits imposed by GPCB. | The fugitive emission in the work zone environment is being carried out regularly. The Fugitive emissions report is attached as Annexure 7 . Various measures taken to control fugitive emission such as Close charging and packing system, Mechanical seal for solvent pumps, online PH monitors for scrubbers, Adequate ventilation, and nitrogen blanketing system etc. |
| 6 | The hazardous waste shall be disposed of as per the Hazardous waste (management and Handling) rules,2003. Authorization from the Gujarat Pollution control Board shall be obtained for disposal of Hazardous waste in the TSDF prior to implementation of the project. | Complied. The copy of authorization is attached as Annexure 8 valid upto February 01, 2017. |
| 7 | All the storage tanks shall be under negative pressure to avoid any leakages. Breathers,N2 blanketing and condensers will be provided for all the storage tanks. Closed handling systems for chemicals and solvents will be provided. Magnetic seals will be provided for pumps/agitators for reactors for reduction of fugitive emissions. Chilled Brine based condensers shall be used to prevent VOCemissions. Solvent traps shall be installed wherever necessary. | Complied |

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| 8 | All venting equipment shall have vapor recovery system. All the pumps and other equipment's where there is a likelihood of HC leakages shall be provided with leak detection and repair(LDAR) system and LEL indicators and Hydrocarbon detectors. Provision for immediate isolation of such equipments, in case of a leakage will also be made. The company shall provide a well defined leak detection and Repair (LDAR) programmed for quantification and control of fugitive emissions. The detectors sensitivity will be in ppm levels. | Around 41 LEL detectors installed across the plant to monitor any leakage. Also 04 Nos of chlorine detector and 02 Nos bromine detector installed in storage area. All solvent handling pumps provided with mechanical seals. |
| 9 | During transfer of materials, spillages shall be avoided and garland drains be constructed to avoid mixing of accidental spillages with domestic waste and storm drains. | All materials were transfer through closed system. Site has defined leak & spill control procedure incase of spillage and leakage. |
| 10 | The company shall make adequate arrangement for control of Odour nuisance from the plant premises. | Site has taken various measures for control of Odour are attached as Annexure 9 |
| 11 | The adequate financial provisions shall be made in the budget of the project for implementation of the above suggested environmental safeguards. Fund so earmarked shall not be diverted for any other purposes. | Cost incurred for the calendar year 2015 was Rs 50.85 Crores for operation of Environmental Management System. The budget for operation Environmental Management System for the year 2016 is 63.84 Crores. The capital cost incurred to upgrade Environmental Management System in Calendar year 2015 was 50.74 Crores. Adequate provision are made in budget for Environmental Management which is not diverted for any purpose. |
| 12 | Occupational health surveillance of the works shall be done on a regular basis and record maintained as per the Factories Act. | Occupational Health related surveillance has been carried out for all employee periodically and pre employment. Periodically medical examination has been carried out for employee and records maintained in Form No.32 and pre-employee medicals examination records maintained in Form No.33. The sample medical report of employee is attached as Annexure 10 |
| 13 | The company shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. | Site has well defined process and plant safety guideline fire fire and explosion.Dyke wall, Vent through Spiral Heat Exchanger, Flame arrestor, Breather valve with Nitrogen Blanketing. Tank is Pressure rated with compatible MOC,Actuated valve in the receiving line interlock with Level switch, HLA. Double Earthling connection. Emergency Preparedness Plan. Emergency fire alarm system. The Hazardous Area Classification and Risk Assessment (HACRA) has been carried out for each plant. |
| 14 | Training shall be imparted to all employees on safety and health aspects of chemical handling. As informed to ministry , OHSAS 18001 shall be continued. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemical shall be imparted. | Various type of internal and external training has been conducted on employee on safety and Health aspect. i.e. Material handling safety, MSDS of chemical etc. Periodically medical examination has been carried out for employee and records maintained in Form No.32 and pre-employee medicals examination records maintained in Form No.33 |
| 15 | Usages of PPEs by all employees/workers shall be ensured. | The safety induction training provided to all newly joined company and contract employess, The induction module include use of various PPEs. Vraious training seission has been organised from internal and external faculty for use and maintain of various PPEs. All required PPEs are provided by company. |
| 16 | The company shall strictly follow all the recommendations mentioned in the charter on Corporate Responsibility for environmental protection.(CREP) | Complied |
| 17 | The company shall adopt waste minimization/cleaner production techniques to reduce the pollution load and action plan in this regard submitted to the Ministry. | Complied. |
| 18 | The company shall undertake rainwater harvesting measures to recharge the ground water as well as reduced consumption of water. | Bore well is not allowed within the GIDC estate by statutory authorities. |
| 19 | The project authorities shall strictly adhere to the stipulations of the SPCB/state government or any statutory body. | Noted |
| 20 | 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 add additional environmental protection measures required, if any. | we have decommissed and discarded 02 Nos power generating units from site. The approved building is under construction |

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| 21 | The project authorities shall comply with rules and regulations under manufacture, Storage and import of hazardous Chemicals Rules,1989 as amended. Authorization from SPCB shall be obtained for collection, treatment, storage and disposal of Hazardous waste. | On site Emergency Action Plan Prepared for handling any emergency within the plant premises. The external safety audit carried out from competent person every year and report submitted to DISH. Mock drill regular carried regular. The copy of mock drill report is attached as Annexure 11. The copy of authorization is attached as Annexure 8 valid up to February 01, 2017. |
| 22 | Ambient air quality monitoring stations shall be set up in the downwind direction as well as where maximum ground level concentration are anticipated in consultation with the State Pollution control Board. | The ambient air quality monitoring carried out at 05 locations within the premises every month from MOEFCC and NABL accredited laboratory. The sample analysis reports are attached as Annexure 3 |
| 23 | For control of process emissions, stacks of appropriate height as per the Central Pollution Control Board guidelines shall be provided. The scrubbed water shall be sent to ETP for further treatment | Two stage scrubbers are provided to control process emissions. The schematic diagram of scrubbers are attached as Annexure 12. |
| 24 | The company shall undertake following waste Minimization Measures: - Metering of quantities of active ingredients to minimize waste. - Reuse of by-products from the process as raw materials or raw material substitutes in other processes. - Maximizing recoveries. - Use of automated material transfer system to minimize spillage - Use of "Closed Feed" system into batch reactors. | All solid raw materials are weighted and then transferred to reactors. The liquid raw materials are transferred through mass flow meter or level indicator into the reactor. Majority of raw materials are charged through close feeding system. All solid finished goods are packed in bags though automated packing system and liquid finished goods are packed in drums. The generated by products mainly dilute HCl and sodium by sulphite used as raw materials in other products. The HCl and sodium bisulphite generated from CMAC product is used as raw materials for manufacturing same product or other product. Around 788 MT HCl used in last six month (from October 2015-March 2016) for CMAC manufacturing also 56.880 MT sodium bisulphite used in manufacturing Betacyfluthrin. The average solvent recoveries is around 95 % |
| 25 | The project authorities must strictly comply with the rules and regulations with regards to handling and disposal of hazardous waste in accordance with the Hazardous Waste (Management and Handling) Rules, 2003. Authorization from the SPCB shall be obtained for collections/treatment/storage/disposal of hazardous waste. | Complied |
| 26 | The overall noise levels in and around the plant area shall be kept well within the standards (85 dB) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of the noise generation. The ambient noise level shall conform to the standard prescribed under Environment (Protection) Act 1986 Rules, 1989 viz. 75 dB (day time) and 70 dB (night time). | The Noise monitoring is carried out at 10 locations quarterly from third party approved by State Pollution Control Board (SPCB). All results are within permissible limit. The sample copy of analysis reports are attached as Annexure 13 |
| 27 | A separate environmental management cell equipped with full fledged laboratory facilities shall be up to carry out the environmental management and monitoring functions. | The company has full-fledged Health, Safety and Environment Department. The copy of Organogram is attached as Annexure 14. The full fledged Environmental laboratory along with central laboratory is available at site to monitor day to day activities. |
| 28 | The project authorities shall develop greenbelt in 33% of project area as per the guideline of CPCB to mitigate the effect of fugitive emission. | Every year plantation is carried out to increase the green belt inside the plant premises. Company has purchased around 5.4 hectare land for green belt development. We will continue plantation programmed to increase green belt. The existing green belt photographs are attached as Annexure 15. |
| 29 | The implementation of the project vis-à-vis environmental action plans shall be monitored by Ministry's Regional office/SPCB/CPCB. A six monthly compliance status report shall be submitted to monitoring agencies. | Complied. The last six month compliance report submitted to your office vide our letter no. ENV/14/15/3011 dated November 30, 2015. |
| 30 | 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 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 Ministry's Regional Office. | Complied |
| 31 | 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 concerned authorities and the date of start of the project. | Noted |