



ENV/14/18/1311

November 13, 2018

Additional Principal Chief Conservator of Forests (C),
Ministry of Environment, Forests & Climate Change
E-5, Kendriya Paryavaran Bhavan
Link Road No.3
Ravi Shankar Nagar
Bhopal-462016

Sub: Compliance report for the period April 2018 to September 2018
Ref: Environmental Clearance no. J-11011/300/2015-IA II (I) dated
March 28, 2017 and its amendment dated February 21, 2018.

Respected Sir

Enclosed please find the compliance report of Environmental Clearance for the period April 2018 to September 2018.

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
Narendra K Shah

Director & Site Manager

Encl: As Stated

CC:

1. Mr S H Vegda, Environmental Engineer, Gujarat Pollution Control Board, Paryavaran Bhavan, Sector-10 A Gandhinagar (GPCB ID:23225)
2. Zonal Officer, Central Pollution Control Board, Parivesh Bhawan, Opp-VMC ward office No.10, Subhanpura, Vadodara-390023.

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

Registered Office & Factory
Plot No. 306/3, II Phase,
GIDC, Vapi - 396 195,
Gujarat, India

Tel +91 260 2407123
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BAYER VAPI PVT. LTD.

EC No: J-11011/300/2015-IA.II (I) Compliance Status report (April,18 - September,18)


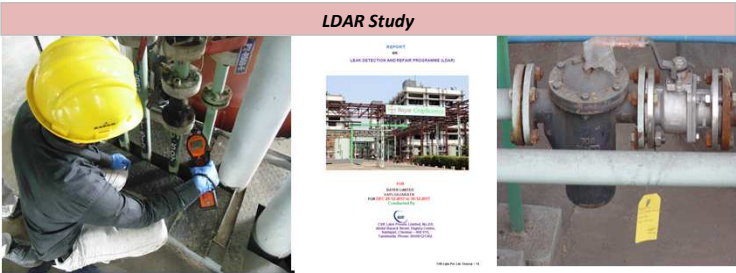
Sr.No.	EC Conditions	Compliance Status
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A. SPECIFIC CONDITIONS

1	National Emission Standards for Pesticide Manufacturing and Formulation Industry issued by the Ministry vide G.S.R. 46(E) dated 3rd February, 2006 and amended time to time shall be followed by the unit.	<p>The emission standard for pesticides industry unit amended on June 13, 2011 and is being followed. Emission from incinerator stacks are monitored by MOEF & CC and NABL accredited Laboratory on monthly basis. The monitored values of emission are as under:</p> <table border="1"> <thead> <tr> <th colspan="7">Incinerator Stack (April-18 to September-18)</th> </tr> <tr> <th rowspan="2">Month</th> <th colspan="6">Parameters</th> </tr> <tr> <th>PM (mg/Nm3)</th> <th>HCl (mg/Nm3)</th> <th>SO2 (mg/Nm3)</th> <th>HF (mg/Nm3)</th> <th>NOx (mg/Nm3)</th> <th>Total Dioxins & Furans (ng TEQ/Nm3)</th> </tr> </thead> <tbody> <tr> <td>Limit</td> <td>50</td> <td>50</td> <td>200</td> <td>4</td> <td>400</td> <td>0.1</td> </tr> <tr> <td>Apr-18</td> <td colspan="6">Not in Operation during visit</td> </tr> <tr> <td>May-18</td> <td>39.62</td> <td>3.82</td> <td>24.40</td> <td>1.44</td> <td>46.91</td> <td>-</td> </tr> <tr> <td>Jun-18</td> <td>27.74</td> <td>3.14</td> <td>26.60</td> <td>1.30</td> <td>45.46</td> <td>-</td> </tr> <tr> <td>Jul-18</td> <td>30.84</td> <td>3.86</td> <td>23.01</td> <td>1.11</td> <td>42.72</td> <td>0.014</td> </tr> <tr> <td>Aug-18</td> <td>22.42</td> <td>2.86</td> <td>17.67</td> <td>1.30</td> <td>37.51</td> <td>-</td> </tr> <tr> <td>Sep-18</td> <td colspan="6">Not in Operation during visit</td> </tr> </tbody> </table>	Incinerator Stack (April-18 to September-18)							Month	Parameters						PM (mg/Nm3)	HCl (mg/Nm3)	SO2 (mg/Nm3)	HF (mg/Nm3)	NOx (mg/Nm3)	Total Dioxins & Furans (ng TEQ/Nm3)	Limit	50	50	200	4	400	0.1	Apr-18	Not in Operation during visit						May-18	39.62	3.82	24.40	1.44	46.91	-	Jun-18	27.74	3.14	26.60	1.30	45.46	-	Jul-18	30.84	3.86	23.01	1.11	42.72	0.014	Aug-18	22.42	2.86	17.67	1.30	37.51	-	Sep-18	Not in Operation during visit					
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2	Adequate stack height shall be provided to gas fired boiler to control particulate emissions.	<p>Site has provided adequate stack height for wide dispersion of stack emission. We are using Natural gas as a clean fuel in boiler. Emission from gas fired boilers are monitored by MOEF & CC and NABL accredited Laboratory on monthly basis. The monitored values of emission as under:</p> <table border="1"> <thead> <tr> <th colspan="4">Emission From Boiler stack</th> </tr> <tr> <th rowspan="2">Month</th> <th colspan="3">Parameters</th> </tr> <tr> <th>PM (mg/Nm3)</th> <th>SO2 (ppm)</th> <th>NOx (ppm)</th> </tr> </thead> <tbody> <tr> <td>Limit</td> <td>150</td> <td>100</td> <td>50</td> </tr> <tr> <td>Apr-18</td> <td>BDL*</td> <td>3.10</td> <td>27.36</td> </tr> <tr> <td>May-18</td> <td>BDL*</td> <td>3.05</td> <td>29.72</td> </tr> <tr> <td>Jun-18</td> <td>BDL*</td> <td>2.73</td> <td>25.70</td> </tr> <tr> <td>Jul-18</td> <td>BDL*</td> <td>2.59</td> <td>26.75</td> </tr> <tr> <td>Aug-18</td> <td>BDL*</td> <td>3.61</td> <td>23.60</td> </tr> <tr> <td>Sep-18</td> <td>BDL*</td> <td>2.83</td> <td>23.77</td> </tr> </tbody> </table> <p>* BDL= Below detection limit</p>	Emission From Boiler stack				Month	Parameters			PM (mg/Nm3)	SO2 (ppm)	NOx (ppm)	Limit	150	100	50	Apr-18	BDL*	3.10	27.36	May-18	BDL*	3.05	29.72	Jun-18	BDL*	2.73	25.70	Jul-18	BDL*	2.59	26.75	Aug-18	BDL*	3.61	23.60	Sep-18	BDL*	2.83	23.77																														
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3	Two stage water scrubber followed by alkali scrubber shall be provided to process vent to control process emissions viz. HCl, SO2, Cl2, NOx, HBr. 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 online 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 equipment so that in case of any increase in pollutants beyond permissible limits, plant should be automatically stopped.	<p>1.Two stage scrubbers are provided to control process emissions from process vents. Online pH meter is provided in scrubbing system.</p> <p>2. Scrubber water is treated in evaporation section followed by Effluent treatment plant.</p> <p>3.Efficiency of scrubber is being monitored by measuring outlet emission and maintaining concentration of scrubber solution. The online detection alarm system and interlock with pollution control equipment will be provided in new projects.</p> <p>4. Monitoring of process vent and stack is carried out by MOEF & CC and NABL accredited Laboratory. Monitored values of last Six months are as under:</p> <table border="1"> <thead> <tr> <th colspan="4">Emission From Process Vent (April -18 to September-18)</th> </tr> <tr> <th rowspan="2">Month</th> <th colspan="3">Parameters</th> </tr> <tr> <th>SO2 (mg/Nm3)</th> <th>HCl (mg/Nm3)</th> <th>HBr (mg/Nm3)</th> </tr> </thead> <tbody> <tr> <td>Limit</td> <td>40</td> <td>20</td> <td>5</td> </tr> <tr> <td>Apr-18</td> <td>27.13</td> <td>9.27</td> <td>3.46</td> </tr> <tr> <td>May-18</td> <td>33.71</td> <td>11.87</td> <td>2.18</td> </tr> <tr> <td>Jun-18</td> <td>27.21</td> <td>10.30</td> <td>-</td> </tr> <tr> <td>Jul-18</td> <td>22.50</td> <td>8.88</td> <td>1.76</td> </tr> <tr> <td>Aug-18</td> <td>29.28</td> <td>11.60</td> <td>1.62</td> </tr> <tr> <td>Sep-18</td> <td>20.63</td> <td>11.09</td> <td>-</td> </tr> </tbody> </table>	Emission From Process Vent (April -18 to September-18)				Month	Parameters			SO2 (mg/Nm3)	HCl (mg/Nm3)	HBr (mg/Nm3)	Limit	40	20	5	Apr-18	27.13	9.27	3.46	May-18	33.71	11.87	2.18	Jun-18	27.21	10.30	-	Jul-18	22.50	8.88	1.76	Aug-18	29.28	11.60	1.62	Sep-18	20.63	11.09	-																														
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4	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 and records maintained.	<p>The following measures are taken to control fugitive emission:</p> <ol style="list-style-type: none"> 1. Close charging system 2. Double Mechanical seal/ magnetic seal less pumps are used for solvent 3. Installed 20 mbar nitrogen blanketing system 4. Vent of entire plant storage vessels, reactors, condensers and any other equipment are connected to a common header. 5. Work environment monitoring of opening areas is done regularly. <div style="text-align: center;"> <p>Workplace Area Monitoring</p>  </div>
5	A proper Leak Detection and Repair (LDAR) Program for pesticide industry shall be prepared and implemented as per CPCB guidelines. Focus shall be given for prevention of fugitive emissions for which preventive maintenance of pumps, valves, pipelines are required. Proper maintenance of mechanical seals of pumps and valves shall be given. A preventive maintenance schedule for each unit shall be prepared and adhered to.	<ol style="list-style-type: none"> 1. A Leak Detection and Repair (LDAR) studies have been carried out in two plants through NABL and MoEF&CC accredited CVR Labs pvt.Ltd. during 29th December- 30th December 2017 as per CPCB guidelines. Based on calculation its conclude that VOC emission before repair was 23.236 kg/year which is reduce up to 4.668 kg/year after repairing leakages. A LDAR study for remaining plants are under progress. 2. Around 62 nos. of LEL detectors based on LEL detection principle have been installed in all areas where there is a likelihood of HC leakages from pumps and other equipment. <div style="text-align: center;"> <p>LDAR Study</p>  </div>
6	Company shall take all the measures in order to protect the machineries and equipment for pesticide producing unit from ageing.	<ol style="list-style-type: none"> 1. Regular maintenance of pesticide producing machineries and equipment is carried out. 2. Testing of all vessels/rectors are carried out by competent person at defined frequency. 3. Equipment design will be done accordingly.
7	Continuous monitoring system for chlorine, HCl, Cl ₂ as well as VOCs shall be installed at all important places/areas. Effective measures shall be taken immediately, when monitoring results indicate above the permissible limits. Alarm for chlorine leakage if any in the liquid chlorine storage area is provided along with automatic start of the scrubbing system.	<ol style="list-style-type: none"> 1. 62 nos LEL detectors installed across the plant to monitor any leakage of HC. 2. The HC monitoring is being carried out regularly. Presently we are not using chlorine at site. The equipment will be designed and implemented during construction phase where chlorine to be used.


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8	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.	1.Site has provided adequate stack height to control gaseous emission from DG. 2. The stipulated conditions will be designed and implemented during construction phase. 3. Adequate PPEs like ear plug/ ear muff is provided to employee at the entry point of DG house.																		
9	Solvent management shall be carried out as follows : 1.Chilled brine circulation system shall be provided to condensate solvent vapors and reduce solvent losses. It shall be ensured that solvent recovery should not be less than 95%. 2.Reactor and solvent handling pump shall have mechanical seals to prevent leakages. 3.The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery 4.Solvents shall be stored in a separate space specified with all safety measures. 5.Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done. 6.Entire plant shall be flame proof. The solvent storage tanks should be provided with breather valve to prevent losses.	1. Reactors and condensers are connected with necessary cooling arrangement like brine,chilling,cooling water etc. 2.Magnetic seal less/ double mechanical seal centrifugal pumps are provided for solvents handling. 3.To achieve desired recovery, efficient condensers has been installed after calculating required HTA. 4.Solvents are stored in storage tank as per PESO & site specific process &plant safety guideline. The solvent tanks equipped with breather valve, sprinkler system, nitrogen blanketing etc. 5. Proper earthing has been provided to all equipment and regular inspections are done to maintain continuity. 6.The hazardous area classification has been carried at site and equipment has been selected based on zone.																		
10	Total water requirement from GIDC water supply shall not exceed 2900 m3/day and prior permission should be obtained from the Competent authority.	Last six months water consumptions are as under: <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th colspan="2">Water Consumption (April-18 to September-18)</th> </tr> <tr> <th>Month</th> <th>Average Consumption (In KL/Day)</th> </tr> </thead> <tbody> <tr> <td>Limit</td> <td align="center">2964</td> </tr> <tr> <td>Apr-18</td> <td align="center">1554</td> </tr> <tr> <td>May-18</td> <td align="center">1557</td> </tr> <tr> <td>Jun-18</td> <td align="center">1497</td> </tr> <tr> <td>Jul-18</td> <td align="center">1367</td> </tr> <tr> <td>Aug-18</td> <td align="center">1460</td> </tr> <tr> <td>Sep-18</td> <td align="center">1445</td> </tr> </tbody> </table>	Water Consumption (April-18 to September-18)		Month	Average Consumption (In KL/Day)	Limit	2964	Apr-18	1554	May-18	1557	Jun-18	1497	Jul-18	1367	Aug-18	1460	Sep-18	1445
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11	Industrial effluent generation shall not exceed 900 m3/day. As proposed, wastewater will be segregated at source and treated based on its characteristics viz High COD & High TDS and Low COD & Low TDS. High COD & High TDS effluents will be sent to MEE followed by RO while Low COD & Low TDS effluents will be treated in ETP followed by RO. The treated wastewater shall be discharged to Common Effluent Treatment Plant (CETP) for final treatment.	<p>The wastewater is segregated based on COD,TDS and BOD/COD ratio. The wastewater generation philosophy is as under:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="background-color: #fce4d6;">Sr.No</th> <th style="background-color: #fce4d6;">Characteristics</th> <th style="background-color: #fce4d6;">Treatment</th> </tr> </thead> <tbody> <tr> <td align="center">1</td> <td>High COD High TDS and Volatile component</td> <td>Stripper followed by evaporator and ETP</td> </tr> <tr> <td align="center">2</td> <td>Low COD High TDS</td> <td>Evaporator followed by ETP</td> </tr> <tr> <td align="center">3</td> <td>High COD Low TDS</td> <td>Incinerator</td> </tr> <tr> <td align="center">4</td> <td>Medium COD Medium TDS</td> <td>Fenton</td> </tr> <tr> <td align="center">5</td> <td>Low COD Low TDS and BOD/COD ratio>0.4</td> <td>ETP</td> </tr> </tbody> </table> <p>Final effluent discharge is being monitored daily for pH,COD,BOD,TSS,NH3-N.The online analyser provided at the discharge of treated effluent. The analyser are connected with GPCB/CPCB server for transferring online data. The auto shut off valve provided at the discharge of treated effluent which stops the discharge in case of exceedance of parameters. Last six month effluent generation quantity and quality are as under:</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th colspan="5" style="background-color: #fce4d6;">Effluent Data (April-18 to Sept-18)</th> </tr> <tr> <th style="background-color: #fce4d6;">Month</th> <th style="background-color: #fce4d6;">Average Discharged to CETP (KLD)</th> <th style="background-color: #fce4d6;">COD (mg/L)</th> <th style="background-color: #fce4d6;">TSS (mg/L)</th> <th style="background-color: #fce4d6;">NH3-N (mg/L)</th> </tr> </thead> <tbody> <tr> <td style="background-color: #fce4d6;">Limit</td> <td style="background-color: #fce4d6;">900</td> <td style="background-color: #fce4d6;">250</td> <td style="background-color: #fce4d6;">300</td> <td style="background-color: #fce4d6;">50</td> </tr> <tr> <td>Apr-18</td> <td>513</td> <td>72</td> <td>43</td> <td>10.60</td> </tr> <tr> <td>May-18</td> <td>563</td> <td>64</td> <td>58</td> <td>2.40</td> </tr> <tr> <td>Jun-18</td> <td>642</td> <td>86</td> <td>39</td> <td>3.00</td> </tr> <tr> <td>Jul-18</td> <td>750</td> <td>85</td> <td>32</td> <td>2.46</td> </tr> <tr> <td>Aug-18</td> <td>702</td> <td>72</td> <td>56</td> <td>1.84</td> </tr> <tr> <td>Sep-18</td> <td>609</td> <td>64</td> <td>42</td> <td>2.40</td> </tr> </tbody> </table> <p>All results are within the prescribed limit. The treated effluent discharged to Common Effluent Treatment Plant (CETP) through GIDC underground drainage system operated by Vapi Green Enviro Private Limited (Formerly known as Vapi Waste and Effluent Management Company Limited)</p>	Sr.No	Characteristics	Treatment	1	High COD High TDS and Volatile component	Stripper followed by evaporator and ETP	2	Low COD High TDS	Evaporator followed by ETP	3	High COD Low TDS	Incinerator	4	Medium COD Medium TDS	Fenton	5	Low COD Low TDS and BOD/COD ratio>0.4	ETP	Effluent Data (April-18 to Sept-18)					Month	Average Discharged to CETP (KLD)	COD (mg/L)	TSS (mg/L)	NH3-N (mg/L)	Limit	900	250	300	50	Apr-18	513	72	43	10.60	May-18	563	64	58	2.40	Jun-18	642	86	39	3.00	Jul-18	750	85	32	2.46	Aug-18	702	72	56	1.84	Sep-18	609	64	42	2.40
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12	Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.	<p>Site has separate collection system for effluent and storm water. The capacity of guard pond is 3000 KL.</p> 																																																															
13	Hazardous chemicals shall be stored in tanks in tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm. Solvent transfer shall be by pumps.	<ol style="list-style-type: none"> 1.All hazardous chemicals are stored in tanks. 2. Adequate number of flame arrestor provided. 3. Double mechanical seal/seal less pumps used for solvent transfer 																																																															
14	The by-products which fall under the purview of the hazardous waste Rules, be handled as per the provisions of the said Rules and necessary permissions shall be obtained under the said Rules.	<p>The site has authorisation for collection, storage and disposal of by-products falling under the the Hazardous Waste (Management, Handling and Trans- Boundary Movement) Rules, 2016 valid up to September 30,2021.</p>																																																															





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15	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. Membership of TSDF for hazardous waste disposal shall be obtained.	<p>1.The site has authorisation for collection, storage and disposal of hazardous waste under the the Hazardous Waste (Management, Handling and Trans- Boundary Movement) Rules, 2016 valid up to September 30, 2021.</p> <p>2.Following measures are taken by site for fire fighting in case of emergency:</p> <ul style="list-style-type: none"> - Trained fire fighter available at site 24 X 7. - Fire Hydrant system. - Sprinkler System - Hazmat Foam system for blanketing solvent - Full fledged Emergency Control Center and 03 nos. of Fire tenders. - Fire water storage tank of 3000 KL. <p>3. Site has valid membership of TSDF operated by Saurashtra Enviro Projects Pvt Ltd. (SEPPL); Vapi Green Enviro Limited (formerly Known as Vapi waste & Effluent Mgt. Co. Ltd) ; Recycling Solutions Pvt. Ltd. (RSPL) and Geohybrid Industrial Solutions Private limited for disposal of hazardous waste.</p>
16	ETP sludge, inorganic waste shall be sent to TSDF site. High calorific value waste such as spent organic shall be sent to cement factory/incinerated.	<p>1.ETP sludge, inorganic waste is sent to the authorised TSDF sites operated by Saurashtra Enviro Projects Pvt Ltd. (SEPPL); Vapi Green Enviro Limited (formerly Known as Vapi waste & Effluent Mgt. Co. Ltd).</p> <p>2. High calorific value waste is incinerated In in-house incineration facility as well as sent to common Hazardous Waste Incineration Facilities (CHWIF) operated by Saurashtra Enviro Projects Pvt Ltd. (SEPPL).</p>
17	The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended in October, 1994 and January, 2000. All Transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.	<p>1. On Site Emergency Action Plan in place to handle any emergency.</p> <p>2. The safety audit carried out by competent person every year. The safety audit was conducted in the month of July, 2018.</p> <p>3. The mock drill is carried out regularly.</p> <p>4. The transportation of hazardous chemicals as per Motor Vehicle Act shall be complied.</p> <div style="display: flex; justify-content: space-around;">   </div> <p align="center"><i>Mock Drill</i> <i>Mock Drill</i></p>
18	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.	<p>The following measures are taken for protection of fire hazard</p> <ol style="list-style-type: none"> 1. Awareness of process and plant safety guideline among all employees. 2. Hazardous Area Classification and Risk Assessment (HACRA) for each plant. 3. Double earthing is provided in each tank. 4. Nitrogen blanketing is provided to all tanks of flammable solvents. 5. Spark arresters are provided to vehicles entering in the tank farm. 6. The flame proof electrical equipment are provided in the flammable area. 7. Full Fledged Emergency Control center available at site including centralized smoke detection system and 03 nos fire tenders 8. Fire Hydrant system 9. Trained fire fighters available at site 24 X 7 hrs. 10. Fixed fire protection system.


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Sr.No.	EC Conditions	Compliance Status
19	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	<p>The site has full fledged Occupational Health Center with full time Factory Medical Officer (FMO). Occupational health related surveillance is carried out regularly. Periodical medical examinations are carried out for all employees and records are maintained in Form No.32 and pre-employee medical examination records are maintained in Form No.33.</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Annual Medical Checkup</p>  </div> <div style="text-align: center;"> <p>Annual Medical Checkup</p>  </div> </div>
20	Green belt should be developed at least in 10.6 ha 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. Selection of plant species should be as per the CPCB guidelines.	<p>The company has developed green area inside the plant premises. The company has developed green area in 5.2 hectares land. The company has also developed green area adjacent to boundary wall. The green belt development work in progress in newly purchased land having area 5.4 ha. We have selected some plant species as per CPCB guideline and communicated to DFO vide our letter No. ENV/06/18/2702 dated February 27,2018 for further advice. Every year plantation is carried out to increase the greenbelt area.</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Tree Plantation by GPCB Officials</p>  </div> <div style="text-align: center;"> <p>Tree Plantation by GPCB Officials</p>  </div> </div>
21	At least 2.5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment 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	Site was exempted from Public hearing as per section 7(i),III stage (3), para (i)(b) of EIA Notification as the site is located in the notified Industrial area.
22	All the recommendations made in the risk assessment report should be satisfactorily implemented.	Shall be complied

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23	The unit shall ensure Zero Liquid Discharge (ZLD) for the expanded capacity by recycling the treated effluent.	<p>Last five months recycle treated effluents are as under:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th colspan="3" style="background-color: #d9ead3;">Recycle treated effluent Quantity</th> </tr> <tr> <th style="background-color: #fce4d6;">Month</th> <th style="background-color: #fce4d6;">Quantity Recycled (KL)</th> <th style="background-color: #fce4d6;">Average Quantity Recycled (KL/Day)</th> </tr> </thead> <tbody> <tr> <td>Apr-18</td> <td align="center">4823</td> <td align="center">161</td> </tr> <tr> <td>May-18</td> <td align="center">4800</td> <td align="center">155</td> </tr> <tr> <td>Jun-18</td> <td align="center">4904</td> <td align="center">163</td> </tr> <tr> <td>Jul-18</td> <td align="center">4916</td> <td align="center">159</td> </tr> <tr> <td>Aug-18</td> <td align="center">5657</td> <td align="center">182</td> </tr> </tbody> </table>	Recycle treated effluent Quantity			Month	Quantity Recycled (KL)	Average Quantity Recycled (KL/Day)	Apr-18	4823	161	May-18	4800	155	Jun-18	4904	163	Jul-18	4916	159	Aug-18	5657	182
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24	Continuous online (24 x 7) monitoring to be installed for flow measurement and measurement of pollutants within the treatment unit. Data to be uploaded on company's website and provided to respective RO of MOEF&CC, CPCB and SPCB.	<p>Online monitoring station (24 x 7) is installed for monitoring flow, pH,TOC and TSS for treated effluent discharged to CETP.The online connectivity provided for measured parameters with GPCB & CPCB server.</p> <div style="text-align: center;">  <p><i>Online Continuous Effluent Monitoring Station</i></p> </div>																					

B. GENERAL CONDITIONS

1	The project authorities shall strictly adhere to the stipulations made by the state Pollution Control Board(SPCB), State Government and any other statutory authority.	The company follows all stipulations made by State Pollution Control Board (SPCB).
2	No further expansion or modifications in the plant shall be carried without prior approval of the Ministry of Environment and Forest. In case of deviations alterations in the project proposal from those submitted to this Ministry of clearance, a fresh reference shall be made to Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.	Shall be followed.
3	The locations of ambient air quality monitoring stations shall be decided in consultation with the SPCB 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 concentration are anticipated.	We have already installed 05 Nos. of ambient air quality monitoring station at site. The locations are marked in Site Layout. The ambient air quality monitoring stations are based on prominent wind direction. I.e. one is in upwind direction and remaining fours are in downwind direction. The same was informed to GPCB through letter No. ENV/06/17/1307 dated July 13,2017.



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4	The national Ambient Air Quality Emission standards issued by Ministry vide G.S.R NO. 826 (E) dated 16th November,2009 shall be followed.	<p>The ambient air quality monitoring are carried out at 05 locations within the premises on every month from MOEF&CC and NABL accredited laboratory. Monitored values of last six months are as under:</p> <table border="1"> <caption>Ambient Air Quality Monitoring (April-18 to September-18)</caption> <thead> <tr> <th rowspan="2">Month</th> <th colspan="4">Parameters</th> </tr> <tr> <th>PM10</th> <th>PM2.5</th> <th>Sulphur Dioxide (SO2)</th> <th>Oxides of Nitrogen</th> </tr> <tr> <th>Unit</th> <th>µg/m3</th> <th>µg/m3</th> <th>µg/m3</th> <th>µg/m3</th> </tr> <tr> <th>LIMIT</th> <th>100</th> <th>80</th> <th>80</th> <th>80</th> </tr> </thead> <tbody> <tr> <td>Apr-18</td> <td>69.59</td> <td>38.52</td> <td>14.16</td> <td>29.59</td> </tr> <tr> <td>May-18</td> <td>80.51</td> <td>40.80</td> <td>17.09</td> <td>36.00</td> </tr> <tr> <td>Jun-18</td> <td>66.71</td> <td>33.29</td> <td>13.17</td> <td>30.79</td> </tr> <tr> <td>Jul-18</td> <td>78.29</td> <td>38.32</td> <td>17.55</td> <td>36.59</td> </tr> <tr> <td>Aug-18</td> <td>76.69</td> <td>39.21</td> <td>16.79</td> <td>33.65</td> </tr> <tr> <td>Sep-18</td> <td>71.69</td> <td>36.15</td> <td>16.43</td> <td>32.66</td> </tr> </tbody> </table>	Month	Parameters				PM10	PM2.5	Sulphur Dioxide (SO2)	Oxides of Nitrogen	Unit	µg/m3	µg/m3	µg/m3	µg/m3	LIMIT	100	80	80	80	Apr-18	69.59	38.52	14.16	29.59	May-18	80.51	40.80	17.09	36.00	Jun-18	66.71	33.29	13.17	30.79	Jul-18	78.29	38.32	17.55	36.59	Aug-18	76.69	39.21	16.79	33.65	Sep-18	71.69	36.15	16.43	32.66							
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5	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)	<p>The Noise monitoring are carried out at 12 locations on monthly basis by MOEF & CC and NABL accredited Laboratory. All results are within permissible limit. The Average results of last six months are as under:</p> <table border="1"> <caption>Noise Monitoring (April-17 to September-18)</caption> <thead> <tr> <th>Sr.No</th> <th>Location</th> <th>Day Time (dBA)</th> <th>Night Time (dBA)</th> </tr> <tr> <th></th> <th>Limit</th> <th>75 dB(A)</th> <th>70 dB(A)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Near Main Gate</td> <td>63.10</td> <td>60.60</td> </tr> <tr> <td>2</td> <td>Near admin Building</td> <td>62.00</td> <td>59.06</td> </tr> <tr> <td>3</td> <td>Near EFSO Plant</td> <td>66.15</td> <td>64.70</td> </tr> <tr> <td>4</td> <td>Near ALCO Plant</td> <td>68.63</td> <td>65.44</td> </tr> <tr> <td>5</td> <td>Near Incinerator-2</td> <td>70.85</td> <td>65.42</td> </tr> <tr> <td>6</td> <td>Near Incinerator-3</td> <td>68.28</td> <td>61.64</td> </tr> <tr> <td>7</td> <td>Near Scrap Yard</td> <td>64.65</td> <td>59.52</td> </tr> <tr> <td>8</td> <td>Near HICO-I</td> <td>66.72</td> <td>63.74</td> </tr> <tr> <td>9</td> <td>Near CYFO Plant</td> <td>64.13</td> <td>60.18</td> </tr> <tr> <td>10</td> <td>Near Gate-II</td> <td>65.80</td> <td>57.24</td> </tr> <tr> <td>11</td> <td>Near Engineering Part Store</td> <td>61.83</td> <td>58.36</td> </tr> <tr> <td>12</td> <td>Near ETP</td> <td>67.95</td> <td>65.28</td> </tr> </tbody> </table>	Sr.No	Location	Day Time (dBA)	Night Time (dBA)		Limit	75 dB(A)	70 dB(A)	1	Near Main Gate	63.10	60.60	2	Near admin Building	62.00	59.06	3	Near EFSO Plant	66.15	64.70	4	Near ALCO Plant	68.63	65.44	5	Near Incinerator-2	70.85	65.42	6	Near Incinerator-3	68.28	61.64	7	Near Scrap Yard	64.65	59.52	8	Near HICO-I	66.72	63.74	9	Near CYFO Plant	64.13	60.18	10	Near Gate-II	65.80	57.24	11	Near Engineering Part Store	61.83	58.36	12	Near ETP	67.95	65.28
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6	The unit shall explore rainwater harvesting system in non-production building without recharging in to ground water.	Shall be complied																																																								


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7	<p>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.</p>	<p>Standard operating Procedures are prepared for handling of various chemical and it's available in each plant of company premises. Training session is carried out regularly for employees.</p> <p>Periodical medical examinations are carried out for all employees and records are maintained in Form No.32 and pre-employee medical examination records are maintained in Form No.33.</p> <p>Various health awareness and training progamme have been imparted for employees like Heathy lifestyle Management and diet, Hazardous chemical awareness with personal health and hygiene, Safe handling of Bio-medical waste, First Aid Training etc. Various bulletins have been published to create awareness on Diabetes & Hypertension, Health impact due to Tobacco etc.</p>  <p align="center"><i>Training on Healthy Lifestyle Management and Diet</i></p>
8	<p>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 the project shall be implemented.</p>	<p>Shall be complied.</p>
9	<p>The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. CSR activities shall undertaken by involving local villages and administration.</p>	<p>Following CSR activities undertake by Bayer Vapi for improving the Socio-Economic conditions of the surrounding area.</p> <ol style="list-style-type: none"> 1.We have extended our supports to The Janseva Mandal – Vapi a Charitable Trust runs by Maniben Nagarji Mehta Hospital widely known as “Janseva Hospital” since 1994 serving health care services to people of Vapi and surrounding areas which will be spent more and more too needy and poor patient. 2. With the Object of Access to safe and clean drinking water, we have installed water treatment facility in chhiri village located near by site. 3. Bayer vapi received " Certificate of Appreciation" under the category of "Cohesive & strategic CSR partnership project" from Gujarat CSR Authority (GCSRA) for our contribution towards " Youth Education program" 

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Sr.No.	EC Conditions	Compliance Status
10	The company shall undertake eco-development measures including community welfare measures in the project area for the overall improvement of the environment.	Shall be complied.
11	A separate Environmental Management cell equipped with full fledged laboratory facilities shall be set up to carry out Environmental Management and Monitoring functions.	<p>Site has separate environment cell equipped with full fledged laboratory facilities to carry environment management & monitoring functions.</p>  <p align="center"><i>Environmental Laboratory - Bayer Vapi</i></p>
12	The company shall earmark sufficient funds 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.	The Site has provided adequate fund both capital and recurring to implement the conditions stipulated by MOEF & CC and GPCB along with implementation schedule. Also it is ensured that the fund so provided shall not diverted for any other purpose. The total recurring budget for the year 2018-19 for Environment is 61.8 cr.
13	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 whom suggestions/representations, if any were received while processing the proposal.	EC letters have been sent to all stake holders. EC letter also uploaded on company website.
14	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 State Pollution Control Board. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.	<p>Noted.</p> <p>Last half yearly EC compliance report for the period April-17 to September-17 submitted to Regional office of MOEF & CC, Bhopal, Respective zonal office of CPCB,Vadodara and GPCB through our letter No.ENV/14/17/2411.</p> <p>A copy of Environmental Clearance and six monthly compliance status of EC report is uploaded on company's website.</p>
15	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 status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.	<p>The Environmental statement for the period of April-17 to March-18 submitted to GPCB on August 22,2018.</p> <p>A copy of Environmental statement and compliance report is uploaded on company's website.</p> <p>The hard copy of EC compliance report submitted to the Bhopal Regional Offices of MOEF & CC.</p>

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16	The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of 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 copy of the same shall be forwarded to the concerned Regional Office of the Ministry.	Advertisement of Environmental clearance has been published two local news papers "SANDESH" & "DIVYABHASKAR" dated April 05,2017 and April 06,2017 respectively. The copies of advertisement submitted Regional office of MOEF&CC, Bhopal vide letter No. ENV/14/17/0704 dated April 07, 2017.
17	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	Shall be complied.