

## Compliance Report of Environmental Clearance dated 14<sup>th</sup> June 2018

### COMPLIANCE STATUS REPORT OF EC

EC issued vide letter No. J-11011/378/2013/1-A/-II [I] dated 10<sup>th</sup> January 2018

**M/s. Hemani Intermediates Pvt. Ltd. (Unit-IV)**, Setting up Pesticide Manufacturing Plant at Plot No. E-362, GIDC Estate, Dahej-I, Taluka Vagra, District Bharuch (Gujarat). Total project area is 9705 m<sup>2</sup>. Narmada River is flowing at 1.8 km. Total project cost is Rs. 15.00 Crores. List of the proposed products and their capacity is given below.

S. No.	Product	Quantity (TPM)
<b>1. Fungicides</b>		
a)	Hexaconzole (T)	300
b)	Tebuconzole (T)	
c)	Propioconzole (T)	
<b>2. Herbicides</b>		
a)	Dicamba (T)	300
b)	Metribuzine (T)	
c)	Pendimethalin (T)	
<b>3. Insecticides</b>		
a)	Transfluthrin (T)	300
b)	Cyfluthrin & Beta Isomers (T)	
c)	Bifenthrin (T)	
d)	Cypermethrin (T) & Beta/Zeta/Theta Isomers (T)	
e)	Imidacloprid (T)	
<b>Total</b>		<b>900</b>

#### By-products:

S.No.	Product	Quantity (TPM)
1.	Hydrochloric Acid (32%)	250
2.	Sodium Sulphate Solution (30% to 35%)	2000
3.	Aluminum Chloride (25%)	1000
4.	Potassium Chloride Solution	860
5.	Sulphuric Acid (70%)	100
6.	Sodium Sulphite Solution (20%)	600

3. The estimated project cost is Rs.15 crores. Total capital cost earmarked for pollution control measures shall be Rs.2.5 crores and recurring cost shall be Rs.1.10 crore/annum. The total plot area is 9705 m<sup>2</sup>. As per Form-1, there are no National Park, Sanctuary, Eco-Sensitive Area within 10 km from the project site. Narmada river is flowing at a 3.5 Km.

4. Daily water consumption shall be 366 m<sup>3</sup>/ day and daily wastewater generation shall be 139 m<sup>3</sup>/day (Industrial: 119 m<sup>3</sup>/day & Domestic: 20 m<sup>3</sup>/day). Water requirement for the proposed project shall be met through GIDC water supply. Wastewater from industrial operations shall be treated in ETP. The final treated effluent (69 m<sup>3</sup>/day) shall be discharged to deep sea through GIDC pipeline. Whereas MEE condensate (50 m<sup>3</sup>/day) shall be reused in cooling tower of the plant.

Fuel for different utilities in the plant shall include: coal for boiler- 35 MT/day, LDO-10 KL/Day and diesel- 50 Liters/h (emergency).

Alkali scrubber will be provided to control process emissions viz. HCl, Cl<sub>2</sub> and SO<sub>2</sub>. ESP along with 50 m stack height will be provided to coal fired boiler (20 TPH). DG set (1000 kVA) will be installed. ETP sludge will be sent to TSDF at Dahej. Used /spent oil and spent catalyst shall be sent to authorized reprocessors. Fly ash shall be sold to brick manufacturers.

5. The project/activities are covered under Category A of item 5(b) 'Pesticides industry and Pesticide specific intermediates' of the Schedule to the Environment Impact Assessment (EIA) Notification and requires appraisal at central level by the sectoral EAC in the Ministry.

6. The ToR for the project was granted by Ministry vide letter dated 23<sup>rd</sup> April, 2014 providing exemption from public hearing under the provisions as per para 7 III Stage (3) (i)(b) of the EIA Notification, 2006.

7. The proposal was considered by the Expert Appraisal Committee (Industry-2) in its 18<sup>th</sup> meeting held during 23-25 January, 2017. The project proponent and their accredited consultant M/s Aqua-Air Environmental Engineers Pvt Ltd, presented the EIA/ EMP report as per the ToR. The Committee found the EIA / EMP report as satisfactory and complying with the ToR. The Committee has recommended the proposal for grant of environmental clearance.

8. Based on the proposal submitted by the project proponent and recommendations of EAC (Industry-2), the Ministry of Environment, Forest and Climate Change hereby accords environmental clearance to project '*Setting up Pesticide Manufacturing Plant*' of capacity 900 TPM by M/s Hemani Intermediates Pvt Ltd at Plot No. E-362 , GIDC Estate, Dahej-1, Taluka Vagra, District Bharuch (Gujarat), under the provisions of the EIA Notification, 2006, and the amendments therein, subject to the compliance of terms and conditions as under:

**Note: Company has obtained Environmental Clearance and Consent to Establish for Setting up Pesticide Manufacturing Plant at Plot No. E-362, GIDC Estate, Dahej-I, Taluka: Vagra, District: Bharuch (Gujarat). But construction activity is not started yet, so consent to operate is not applied.**

No	Brief Specification	Compliance Report
<b>A</b>	<b>SPECIFIC CONDITIONS :</b>	
I	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.	Agreed to comply the norms of 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.
II	Imported coal (with sulphur content less than 5%)/briquettes/natural gas shall be used as fuel.	Agreed to use Imported coal (with sulphur content less than 5%)/briquettes/natural gas as fuel.
III	Adequate stack height shall be provided to gas fired boiler to control particulate emissions.	Agreed to provide adequate stack height to gas fired boiler to control particulate emissions.
IV	Two stage water scrubber followed by alkali scrubber shall be provided to process vent to control process emissions viz. HCl, SO <sub>2</sub> , Cl <sub>2</sub> , NO <sub>x</sub> , HBr. Acidic scrubber shall be provided to process vent to control process emissions viz. NH <sub>3</sub> & HC. 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 equipment so that in case of any increase in pollutants beyond permissible limits, plant should be automatically stopped.	Agreed to provide two stage water scrubber followed by alkali scrubber to process vent to control process emissions viz. HCl, SO <sub>2</sub> , Cl <sub>2</sub> , NO <sub>x</sub> , HBr. Agree to provide acidic scrubber to process vent to control process emissions viz. NH <sub>3</sub> & HC. The scrubbed water to be sent to ETP for further treatment. Efficiency of scrubber to be monitored regularly and maintained properly. Scrubbers vent will be provided with on-line detection and alarm system to indicate higher than permissible value of controlled parameters. At no time, the emission levels will go beyond the prescribed standards.
V	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.	Agreed to provide in plant control measures for checking fugitive emissions from all the vulnerable sources. Fugitive emissions to 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 will be provided at loading and unloading areas to control dust emissions. Fugitive emissions in the work zone environment, product, raw materials storage area etc. will be regularly monitored and records maintained.
VI	A proper Leak Detection and Repair (LDAR) Program for	Agreed to prepare and implement

	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.	proper Leak Detection and Repair (LDAR) Program for pesticide industry as per CPCB guidelines. Focus will 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.
VII	Company shall take all the measures in order to protect the machineries and equipment for pesticide producing unit from ageing.	Agreed to take all the measures in order to protect the machineries and equipment for pesticide producing unit from ageing.
VIII	Continuous monitoring system for chlorine, HCl, Cl <sub>2</sub> 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.	Agreed to install continuous monitoring system for chlorine, HCl, Cl <sub>2</sub> as well as VOCs at all important places/areas. Effective measures will 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.
IX	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.	Agreed to disperse the gaseous emissions from DG set through adequate stack height as per CPCB standards. Acoustic enclosure will be provided to the DG sets to mitigate the noise pollution.
X	Solvent management shall be carried out as follows:-	
a	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%.	Agreed to provide chilled brine circulation system to condensate solvent vapors and reduce solvent losses to ensure that solvent recovery should not be less than 95%.
b	Reactor and solvent handling pump shall have mechanical seals to prevent leakages	Agreed to provide mechanical seals to reactor and solvent handling pump to prevent leakages.
c	The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery	Agreed to provide condensers with sufficient HTA and residence time to achieve more than 95% recovery.
d	Solvents shall be stored in a separate space specified with all safety measures.	Agreed to store solvents in a separate space specified with all safety measures.
e	Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.	Agreed to provide proper earthing at all the electrical equipment wherever solvent handling is done.
f	Entire plant shall be flame proof. The solvent storage	Agreed to make the entire plant flame

	tanks should be provided with breather valve to prevent losses.	proof. The solvent storage tanks to be provided with breather valve to prevent losses.
XI	Total water requirement from GIDC water supply shall not exceed 366 m3/ day and prior permission should be obtained from the competent authority.	Total water requirement from GIDC water supply will not exceed 366 m3/ day and prior permission is obtained from the competent authority.
XII	Industrial effluent generation shall not exceed 119 m3/day. The wastewater will be segregated at source and treated based on its characteristics. High COD & high TDS effluents will be sent to MEE followed by secondary and tertiary treatment, while low COD & low TDS effluents will be treated in the ETP, and then discharged to deep sea through GIDC pipeline.	Industrial effluent generation will not exceed 119 m3/day. The wastewater will be segregated at source and treated based on its characteristics. High COD & high TDS effluents will be sent to MEE followed by secondary and tertiary treatment, while low COD & low TDS effluents will be treated in the ETP, and then discharged to deep sea through GIDC pipeline.
XIII	Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.	Process effluent/any wastewater will not be mixed with storm water. Storm water drain will be passed through guard pond only.
XIV	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	Agreed to store hazardous chemicals in tanks in tank farms, drums, carboys etc. Flame arresters will be provided on tank farm. Solvent transfer will be done by pumps.
XV	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 MPCB 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.	The company will 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 MPCB will be obtained for disposal of solid / hazardous waste in the TSDF. Measures will be taken for fire fighting facilities in case of emergency. Membership of TSDF for hazardous waste disposal will be obtained.
XVI	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.	ETP sludge, inorganic waste will be sent to TSDF site. High calorific value waste such as spent organic will be sent to cement factory/incinerated.
XVI I	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.	Agreed to 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 will be as per the Motor Vehicle Act (MVA), 1989.

XVI II	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.	Agreed to make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system will be as per the norms.
XIX	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	Agreed to carry out occupational health surveillance of the workers on a regular basis and maintain records as per the Factories Act.
XX	Green belt should be developed as proposed 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.	Agreed to develop green belt 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 will be as per the CPCB guidelines.
XXI	An Environment Cell will be set up and a regular environmental manager having PG qualification in environmental sciences/environmental engineering to be appointed for looking after the environmental management practices in the plant.	Agreed for set up of Environment Cell and a regular environmental manager with PG qualification in environmental sciences/environmental engineering will be appointed for looking after the environmental management practices in the plant.
XXI I	At least 2.5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment 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	Agreed to earmark 2.5 % of the total cost of the project towards the Enterprise Social Commitment and item-wise details along with time bound action plan will be prepared and submitted to the Ministry's Regional Office at Bhopal. Implementation of such program will be ensured accordingly in a time bound manner.
XXI II	All the recommendations made in the risk assessment report should be satisfactorily implemented.	Agreed to implement all the recommendations made in the risk assessment report satisfactorily.
XXI V	Continuous online (24x7) 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 the respective Regional Office of MoEF&CC, CPCB and SPCB	Agreed to install continuous online (24x7) monitoring for flow measurement and measurement of pollutants within the treatment unit. Data will be uploaded on company's website and provided to the respective Regional Office of MoEF&CC, CPCB and SPCB.
<b>B.</b>	<b>General Conditions :</b>	
I	The project authorities shall strictly adhere to the stipulations made by the Gujarat Pollution Control Board.	Agreed to 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	No further expansion or modifications in the plant will be carried out without prior approval of the Ministry of Environment and Forests.

	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 Gujarat Pollution Control Board (GPCB) 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.	Agreed to comply.
iv	The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be followed.	Agreed to follow the National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009.
v	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).	The overall noise levels will be kept well within the standards in and around the plant area by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation.
vi	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.	Agreed to 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.
vii	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.	Agreed to impart training to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees will be undertaken on regular basis. Training to all employees on handling of chemicals will be imparted.
viii	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.	Agreed to 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 will be implemented.
ix	The company shall undertake CSR activities and all relevant measures for improving the socio-economic conditions of the surrounding area.	Agreed to undertake CSR activities and all relevant measures for improving the socio-economic conditions of the surrounding area.
x	The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.	Agreed to 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.	Agreed for set up of separate Environmental Management Cell equipped with full fledged laboratory facilities to carry out the Environmental Management and Monitoring functions.
xii	The company shall earmark sufficient funds for 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.	Agreed to earmark sufficient funds for 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 will not be diverted for any other purpose.
xiii	A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zila Parisad/Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.	A copy of the clearance letter is sent by the project proponent to Zila Parisad vide letter no. HIL/175/18-19 dated 22/01/2018.
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 reports shall be posted on the website of the company.	Company submits the 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.  Company has submitted 2 compliance of the stipulated Environmental Clearance conditions. April, 2018 to September, 2018 October, 2018 to March, 2019.
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 Gujarat 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 Bhopal Regional Offices of MoEF by e-mail.	Agreed to submit the environmental statement for each financial year ending 31 <sup>st</sup> March in Form-V as is mandated to the Gujarat Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, and will also be put on the website of the company along with the status of compliance of environmental clearance conditions and will also be sent to the Bhopal Regional Offices of MoEF by e-mail.
xvi	The project proponent shall inform the public that the project has been accorded environmental clearance by	Complied.



	<p>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="http://envfor.nic.in">http://envfor.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.</p>	
xvii	<p>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.</p>	<p>Agreed to 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.</p>