

F. No. IA-J-11011/3/2017-IA-II(I)
Government of India
Ministry of Environment, Forest and Climate Change
(IA- II Section)

Indira Paryavaran Bhawan
Jorbagh Road, New Delhi - 3

Dated: 29th August, 2018

To

M/s Gujarat Insecticides Limited
Plot No.805/806
GIDC Estate, Ankleshwar
District **Bharuch** (Gujarat)

Sub: Expansion of Agrochemicals, Intermediates and Polymers Manufacturing Unit by M/s Gujarat Insecticides Limited at Plot No.805/806, GIDC Estate, Ankleshwar, District Bharuch (Gujarat) - Environmental Clearance - reg.

Sir,

This has reference to your proposal No. IA/GJ/IND2/61482/2017 dated 1st February, 2018 submitting the EIA/EMP report on the above subject matter.

2. The Ministry of Environment, Forest and Climate Change has examined the proposal for environmental clearance to the project for expansion of Agrochemicals, Intermediates and Polymers manufacturing unit from the present capacity of 4180 TPA to 21650 TPA (Agrochemicals from 3830 TPA to 20600 TPA and Organic chemicals/polymers from 350 TPA to 1050 TPA) by M/s Gujarat Insecticides Limited at Plot No.805/806, GIDC Estate, Ankleshwar, District Bharuch (Gujarat).

3. The details of products are as under:-

S. No	Product	Existing		Proposed		Total	
		TPM	TPA	TPM	TPA	TPM	TPA
1	Fenvalerate/Lambda Cyhalothrin/Bifenthrin/Deltamethrin/Thiamethoxam/Buprofezin	8.33	100	191.67	2300	200	2400
2	Quinalphos/Triazophos/Chlorpyriphos/Temephos/Methyl Chlorpyriphos/Profenophos	100	1200	100	1200	200	2400
3	Meta Phenoxy Benzaldehyde (MPB)/Dichloro Phenol (DCP)	200	2400	300	3600	500	6000
4	Indoxacarb/Tricyclazole/Hexaconazole/Propiconazole/Metalaxyl	10.83	130	189.17	2270	200	2400
5	Dicamba	--	--	416.66	5000	416.66	5000
6	Diafenthiuron	--	--	100	1200	100	1200
7	Carbendazim	--	--	100	1200	100	1200
8	Crude Pigment Violet – 23/Poly Ether Ketone (PEK)/Poly (2,5 Benzamidazole) (ABPBI)/Poly Ether Ketone Ketone (PEKK)/Polybenzoxazole (ABPBO)/Poly Ether Imide (PEI)	25	300	58.33	700	83.33	1000



9	N-Acetoacetyl Aminobenzimidazolone (NAA)	4.16	50	--	--	4.16	50
	Total		4180		17470		21650

4. The existing land area is 73084 sqm, no additional land will be required for the proposed expansion. Industry has developed greenbelt in an area of 11786.73 sqm out of the total area. The estimated project cost for expansion is Rs.193.02 crore, out of which Rs.55.75 crore will be utilized for upgradation and augmentation of environment management system. The project will provide employment for 610 persons as direct and 300 persons indirect after expansion.

5. There are no National parks, Wildlife sanctuaries, Biosphere reserves, Tiger/Elephant reserves, Wildlife corridors etc. within 10 km from the project site. Amravati river is flowing at a distance of 6.49 km (E) from project site.

6. Total water requirement is estimated to be 2994 cum/day, of which fresh water requirement is 2152 cum/day proposed to be met from GIDC water supply.

Presently, 820 KLD of effluent (750 KLD industrial + 70 KLD domestic) is treated in ETP having primary, secondary and tertiary treatment. Treated effluent is discharged into the underground pipeline connected to FETP of M/s Narmada Clean Tech for final disposal in deep sea. Boiler and cooling tower blowdown of 162 KLD shall be reused for washing and then sent to ETP. Additional 1027 KLD of industrial effluent generated from the expansion shall be treated in ETP and further subjected to RO. RO permeate of 842 KLD shall be recycled back to process, and RO reject shall be sent to MEE for further treatment. Further, 95 KLD of domestic effluent shall be treated in STP (110 KLD) & treated water shall be utilized for green belt maintenance.

Total power requirement after expansion will be 3000 KVA (1800 KVA +1200 KVA), which will be sourced from DGVCL. After commencement of 3 MW Power Plant, the power supply from DGVCL shall be used only when required. The unit have two D.G set of capacities 1250 KVA & 700 KVA. Additionally, two DG sets of 1500 KVA each are proposed as standby source of electricity.

Existing unit has two thermic fuel heater & one fuel heater of 2 lakh kcal/h capacity (HSD/NG) and coal/briquette fired boiler of 10 TPH capacity. Additionally, it is proposed to have three (2 lakh kcal/h) & two (4 lakh kcal/h) HSD/NG fired thermic fuel heaters and a coal fired boiler of 25 TPH. Steam from the boiler shall be utilized for 3 MW power plant and for process.

Stack of adequate height will be provided to the heaters/boilers/ DG sets as per CPCB norms. Alkali scrubbers/two stage water scrubbers will be used for pollution control system.

7. The solid /hazardous waste generation and its management are as under:

S. No	Type	Sch.	Category (As Per Schedule Rules, 2016)	Total generation after expansion (MTPA)	Source of generation	Mode of disposal
1.	Spent Solvent	I	20.2	36	From Process	Sent to CHWIF for Incineration
2.	Distillation Residues	I	20.3	6348		Sent to CHWIF for incineration or to
3.	Process Waste	I	26.1	816		

SD

	Sludge/ Residue containing acid, Toxic metals, organic compounds					M/s Ultra tech Cement Ltd/ M/s Ambuja Cement Ltd for co-processing
4.	Process wastes or residues	I	29.1	720	From detoxification of effluent	Sent to CHWIF for Incineration
5.	Sludge containing residual pesticides	I	29.2	9000	From ETP	Sent to common TSDF site
6.	Date-expired and off specification pesticides	I	29.3	120	From Process	Sent to CHWIF for Incineration
7.	Spent Catalysts	I	29.5	72		Sent to incineration or to authorized re-refiners/ recycler
8.	Empty barrels/ containers/liners contaminated with hazardous chemicals/wastes	I	33.1	1079.08	From Process & maintenance	Disposal through authorized decontamination facility/recycler or reuse/send back to supplier/Common TSDF
9.	Oil and Grease skimming	I	35.4	48	From ETP	Disposal to common TSDF site
10.	Spent Carbon or filter medium	I	36.2	72	From Tertiary treatment in ETP	Sent to CHWIF for incineration or to M/s Ultra tech Cement Ltd/ M/s Ambuja Cement Ltd for co-processing
11.	Used or Spent Oil	I	5.1	36	From Machinery	Reuse in plant & machinery as lubricant/ sell to authorized re-refiners/ recycler or Sent to CHWIF for incineration
12.	Wastes or residues containing oil	I	5.2	12	From Machinery	Reuse in plant & machinery as lubricant/ sell to authorized re-refiners/ recycler or Sent to CHWIF for incineration
13.	Ammonia	II	A10	756	By-product from scrubber	Aqueous ammonia solution (15 %) - Disposal by sell out to authorized users who are having authorization with valid CTO and rule 9 permission to receive this waste.
14.	Halogen-Containing compounds which	II	B10	3300	By-product from process	KCl Powder- Disposal by sell out to authorized users

SD

	produce acidic vapours on contact with humid air or water e.g. silicon tetrachloride, aluminium chloride, titanium tetrachloride					who are having authorization with valid CTO and rule 9 permission to receive this waste.
15.	Halogen-Containing compounds which produce acidic vapours on contact with humid air or water e.g. silicon tetrachloride, aluminium chloride, titanium tetrachloride	II	B10	61224	By-product from process	Potassium chloride solution & Aluminum chloride solution - Disposal by sell out to authorized users who are having authorization with valid CTO and rule 9 permission to receive this waste.
16.	Inorganic acids	II	B15	31860	By-product from process	Spent Sulphuric acid - Disposal by sell out to authorized users who are having authorization with valid CCA and rule 9 permission to receive this waste.
17.	Calcium Chloride (35%)	II	B10	6396	By-product from process	Calcium chloride (35%) - Disposal by sell out to authorized users who are having authorization with valid CTO and rule 9 permission to receive this waste.
18.	Sodium bisulfite (20-25%)	II	B23	15590	By-product from scrubber	Sodium bisulfite (20-25%) - Disposal by sell out to authorized users who are having authorization with valid CTO and rule 9 permission to receive this waste.
19.	Calcium Sulfate (92%)	--	--	1992	By-product from scrubber	Calcium Sulfate (92%) - Disposal by sell out to authorized users who are having authorization with valid CTO and rule 9 permission to receive this waste.

STW

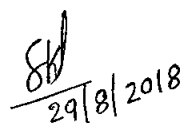
8. The project/activities are covered under category A of item 5(b) 'Pesticides industry and pesticide specific intermediates (excluding formulation)' and category B of item 5(f) 'Synthetic Organic Chemicals' of the Schedule to the Environment Impact Assessment Notification, 2006, and requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

9. The terms of reference (ToR) for the project was granted on 10th July, 2017 exempting public hearing as per Para 7(i) III. Stage (3) (i) (b) of the EIA Notification, 2006.

10. The proposal for environmental clearance (EC) was placed before the EAC (Industry-2) in its meetings held on 26-28 February, 2018 and 24-26 April, 2018 in the Ministry. The project proponent and their consultant M/s Siddhi Green Excellence Pvt Ltd presented the EIA/EMP report as per the ToR. The committee found the EIA/EMP report satisfactory and in consonance with the ToR, and recommended the proposal for environmental clearance with certain conditions.


11. Based on the proposal submitted by the project proponent and recommendations of the EAC (Industry-2), the Ministry of Environment, Forest and Climate Change hereby accords environmental clearance to the project for **expansion of Agrochemicals, Intermediates and Polymers manufacturing unit from the present capacity of 4180 TPA to 21650 TPA (Agrochemicals from 3830 TPA to 20600 TPA and Organic Chemicals/polymers from 350 TPA to 1050 TPA)** by M/s Gujarat Insecticides Limited at Plot No.805/806, GIDC Estate, Ankleshwar, District Bharuch (Gujarat), under the provisions of the EIA Notification, 2006, read with subsequent amendments therein, subject to compliance of the terms and conditions as environmental safeguards, as per **Annexure**.

12. The Ministry reserves the right to stipulate additional conditions, if found necessary at subsequent stages and the project proponent shall implement all the said conditions in a time bound manner. The Ministry may revoke or suspend the environmental clearance, if implementation of any of the above conditions is not found satisfactory.


29/8/2018
(S. K. Srivastava)
Scientist E

Copy to:-

1. The Additional PCCF(C), MoEF&CC Regional Office (WZ), E-5, Kendriya Paryavaran Bhawan, E-5 Arera Colony, Link Road-3, Ravishankar Nagar, Bhopal -16
2. The Secretary, Forests and Environment Department, Government of Gujarat, Block 14, 8th Floor, Sachivalaya, Gandhinagar (Gujarat) -10
3. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi - 32
4. The Member Secretary, Gujarat Pollution Control Board, Paryavaran Bhawan, Sector-10A, Gandhinagar (Gujarat) - 10
5. Guard File/Monitoring File/Website/Record File


29/8/2018
(S. K. Srivastava)
Scientist E

Environmental clearance to the project for expansion of Agrochemicals, Intermediates and Polymers Manufacturing Unit by M/s Gujarat Insecticides Limited at Plot No.805/806, GIDC Estate, Ankleshwar, District Bharuch (Gujarat)

[F. No. IA-J-11011/3/2017-IA-II(I); Proposal No. IA/GJ/IND2/61482/2017 dated 1st February, 2018]

TERMS AND CONDITIONS

- (i) Total production of pesticides shall include manufacturing at least 25% of bio-pesticides.
- (ii) Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
- (iii) As proposed by the project proponent, Zero Liquid Discharge shall be ensured for the entire unit and no waste/treated water shall be discharged outside the premises. However, till commissioning of the proposed expansion, effluent of 750 cum/day shall conform to the standards prescribed under the Environment (Protection) Rules, 1986, to take it to the final ETP followed by discharge into NCT pipeline conveying treated effluent into deep sea.
- (iv) Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.
- (v) National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21st July, 2010 and amended from time to time shall be followed.
- (vi) To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- (vii) Solvent management shall be carried out as follows:
 - (a) Reactor shall be connected to chilled brine condenser system.
 - (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.
 - (c) The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.
 - (d) Solvents shall be stored 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.
 - (f) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.
 - (g) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.



- (viii) Total fresh water requirement shall not exceed 2152 cum/day to be met from GIDC water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.
- (ix) Industrial/trade effluent shall be segregated into High COD/TDS and Low COD/TDS effluent streams. High TDS/COD shall be passed through stripper followed by MEE and ATFD (agitated thin film drier). Low TDS effluent stream shall be treated in ETP/RO to meet the prescribed standards.
- (x) Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.
- (xi) Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.
- (xii) Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
- (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) Fly ash should be stored separately as per CPCB guidelines so that it should not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing along with the storm water. Direct exposure of workers to fly ash & dust should be avoided.
- (xv) The company shall undertake waste minimization measures as below:-
 - (a) Metering and control of quantities of active ingredients to minimize waste.
 - (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
 - (c) Use of automated filling to minimize spillage.
 - (d) Use of Close Feed system into batch reactors.
 - (e) Venting equipment through vapour recovery system.
 - (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xvi) The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
- (xvii) At least 0.75 % of the total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.
- (xviii) For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.

SH

- (xix) 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.
- (xx) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (xxi) Continuous online (24X7) monitoring system for stack emissions and the effluent, shall be installed for measurement of flow/discharge and the pollutants concentration, and the emission and effluent monitoring data to be transmitted to the CPCB and SPCB server as per the directions of CPCB in this regard.

GENERAL CONDITIONS

- (i) The project authorities shall adhere to the stipulations made by the State Pollution Control Board, Central Pollution Control Board, State Government and any other statutory authority.
- (ii) No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.
- (iii) The locations of ambient air quality monitoring stations shall be decided in consultation with the State Pollution Control Board (SPCB) and it shall be ensured that at least one station each is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.
- (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.
- (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).
- (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.
- (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.
- (viii) The company shall also comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.



- (ix) The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. CER activities shall be undertaken by involving local villages and administration.
- (x) The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.
- (xi) A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.
- (xii) The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.
- (xiii) A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.
- (xiv) The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF&CC, the respective Zonal Office of CPCB and SPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.
- (xv) The environmental statement for each financial year ending 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 the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of MoEF&CC by e-mail.
- (xvi) The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry at <http://moef.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.
- (xvii) The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.



