

F. No. J-11011/82/2017-IA II (I)
Government of India
Ministry of Environment, Forest and Climate Change
(IA Division)

Indira Paryavaran Bhawan
Jor Bagh Road, N Delhi - 3
Dated: 13th April, 2018

To,

M/s Gujarat Agrochem Pvt Ltd,
Plot No.2901 to 2906, GIDC Panoli,
District **Bharuch** (Gujarat)

Sub: Expansion of Pesticide Technical & Intermediates manufacturing unit by M/s Gujarat Agrochem Pvt Ltd at Plot No. 2901 to 2906, GIDC Panoli, District Bharuch (Gujarat) - Environmental Clearance - reg.

Ref: Online proposal no. IA/GJ/IND2/62032/2017 dated 29th January, 2018.

Sir,

This has reference to your online proposal no. IA/GJ/IND2/62032/2017 dated 29th January, 2018 along with project documents namely, EIA/EMP report for the above mentioned project.

2. The Ministry of Environment, Forest and Climate Change has examined the proposal for grant of environmental clearance to the project for expansion of Pesticide Technical & Intermediates manufacturing unit from 110 TPM to 1195 TPM by M/s Gujarat Agrochem Pvt Ltd in a total area of 30,000 sqm at Plot No.2901 to 2906, GIDC Panoli, District Bharuch (Gujarat). The expansion of other products included inorganic compounds namely, Sodium Sulfite, Ammonium Chloride, Potassium Chloride and Poly Aluminium Chloride from the present capacity of 609 TPM to 1875 TPM and by-products namely, HCl, Spent Sulphuric Acid, NaCl solution, Cu(OH)₂ powder from 920.76 TPM to 1823.63 TPM, requiring no environmental clearance.

3. The details of products presently manufactured and after the proposed expansion, are as under:-

S. No.	Product	Category	Existing capacity (TPM)	Capacity after Expansion (TPM)	CAS Nos.
Pesticides Intermediates & Technical					
1	DV Acid Chloride	5(b)	110	250	52314-67-7
2	Meta Phenoxy Benzaldehyde	5(b)		250	39515-51-0
3	Cypermethrin (Tech.)	5(b)		200	52315-07-8
4	Permethrin (Tech.)	5(b)		100	52645-53-1
5	Alphamethrin (Tech.)	5(b)		50	67375-30-8
6	Metamitron (Tech.)	5(b)		150	41394-05-2
7	MBB Forcut	5(b)		45	
8	Ethofumesate (Tech.)	5(b)			26225-79-6



9	Hydroxy Benzo Furan (HBF)	5(b)		100	7473-98-5
10	Lambda Cyhalothrin (Lambamethrin)	5(b)	--		91465-08-6
11	Diethyl Phenyl Acetamide (Tech.) (DEPA)	5(b)	--		2431-96-1
12	Pyriproxypane	5(b)	--	50	95737-68-1
13	Tefluthrin	5(b)	--		79538-32-2
14	TransFluthrin	5(b)	--		118712-89-3
	Total		110	1195	
Products not requiring environmental clearance					
15	Sodium Sulfite	-	200	487	7757-83-7
16	Ammonium Chloride	-	60	217	12125-02-9
17	Potassium Chloride	-	60	140	7447-40-7
18	PAC/Aluminium Chloride (30%)	-	289	1031	1327-41-9
	Total		609	1875	
By-products					
1	Hydrochloric Acid (30%)	-	180	202	7647-01-0
2	Spent Sulphuric Acid	-	140.76	528	7664-93-9
3	NaCl Solution (18%)	-	600	1091	7647-14-5
4	Cu(OH) ₂ Powder	-	-	2.63	20427-59-2
	Total		920.76	1823.63	

4. Total land area is 30,000 sqm and no additional land will be required for the proposed project. Greenbelt has been developed in an area of 9281.18 sqm. The estimated project cost is Rs.61.8 crores including existing investment of Rs.45.68 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs.15.07 crores and the Recurring cost (operation & maintenance) will be about Rs.9.3 crores per annum.

5. There are no National parks, Wildlife sanctuaries, Biosphere reserves, Tiger/Elephant reserves, Wildlife Corridors etc within 10 km from the project site.

6. Total water requirement is estimated to be 764.56 cum/day, which includes fresh water demand of 532.56 cum/day. The same would be reduced to 480 cum/day by increasing the efficiency of the cooling tower, and proposed to be met from the GIDC water supply. Necessary permission in this regard has been obtained from GIDC.

Total effluent of 431.88 cum/day will be treated through ETP followed by RO and MEE. Treated effluent of 148.98 cum/day shall be taken to the final effluent treatment plant (FETP) of M/s Narmada Clean Technology, and then discharged to deep sea through GIDC pipeline. The RO permeate of 232 cum/day will be reused for meeting the process requirements (boiler and other utilities) and 50.9 KL/Day of RO reject will be sent to MEE & ATFD.

Power requirement will be increased from 2300 to 5000 kVA proposed to be met from DGVCL/State power Distribution Corporation Limited. Existing unit has 3 Nos. DG sets of 1000 kVA, 625 kVA & 320 kVA capacity, additionally DG Sets of Capacity 1010 KVA (3 Nos), 725 kVA (3 Nos) & 625 kVA (1 No). Stack (height 10 m) will be provided as per CPCB norms to the proposed DG sets. DG sets of 1000 kVA, 625 kVA & 320 will be used as standby during

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power failure. Existing 1000 kVA & 320 kVA will be replaced by new DG Sets of 1010 kVA (3 Nos), & 725 kVA (3 Nos).

Existing unit has two boilers of 8 TPH capacity each. Additionally two coal fired boiler of 10 TPH capacity each and one boiler of 16 TPH capacity will be installed. Two thermo pack of 10 million kcal/hr capacity each and one thermo pack of 10 million kcal/hr (standby) capacity will be installed. Multi cyclone separator/ bag filter/ESP with a stack of height of 30 m will be installed to control the particulate emissions (within statutory limit of 115 mg/Nm³). Water scrubber and caustic scrubber will be provided to process plant-1 & plant-2 reactors. Water scrubber and caustic scrubber will be provided to the bromine recovery plant.

7. Used Lube Oil (50 Ltr/M) will be sold to GPCB authorized reprocessors. Spent Solvents (Toluene) will be reused within the premises or co-processing in cement industries or incineration at CHWIF. Process Distillation Residue (71 MT/M) & Residual Waste (150 MT/M) will be sent to CHWIF or sent to Cement Industries for Co-processing. MEE Salt (1200 MT/M) will be sent to TSDF. Empty Bags, Barrels will be sold to GPCB authorized reprocessors. ETP Sludge will be sent to TSDF. Spent Carbon from ETP will be sent to TSDF or sent to Cement Industries for Co-processing. Aluminum Chloride (30%), Hydrochloric Acid (30%), Spent Sulphuric Acid, NaCl Solution (18%) & Cu (OH)₂ powder will be sold to end user.

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

9. The ToR for the project was granted on 31st May, 2017 and amended on 22nd June, 2017 exempting public hearing under the provisions as per Para 7 Stage III (3)(i)(b) of the EIA Notification, 2006.

10. The proposal was considered by the Expert Appraisal Committee (Industry-2) in its 34th meeting held during 26-28 February, 2018. The project proponent and their consultant M/s Aqua-Air Environmental Engineers Pvt Ltd have presented EIA/EMP report as per the ToR. The Committee found the EIA/ EMP Report to be satisfactory and in consonance with the presented ToR. The Committee has recommended the proposal for grant of environmental clearance.

11. Based on the proposal submitted by the project proponent and recommendations of the EAC, the Ministry of Environment, Forest and Climate Change hereby accords environmental clearance to project **'Expansion of Pesticide Technical & Intermediates manufacturing unit'** from 110 TPM to 1195 TPM by M/s Gujarat Agrochem Pvt Ltd in a total area of 30,000 sqm at Plot No.2901 to 2906, GIDC Panoli, District Bharuch (Gujarat), under the provisions of the EIA Notification, 2006, and the amendments therein, subject to compliance of the terms and conditions as under:-

(a) Total production of pesticides shall include manufacturing at least 10% of bio-pesticides.

(b) 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.



- (c) Treatment of effluent of 148.98 cum/day, shall conform to the standards prescribed under the Environment (Protection) Rules, 1986, to take it to the FETP followed by discharge through GIDC pipeline to deep sea.
- (d) 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.
- (e) 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.
- (f) 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.
- (g) Solvent management shall be carried out as follows:
- (i) Reactor shall be connected to chilled brine condenser system.
 - (ii) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.
 - (iii) The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.
 - (iv) Solvents shall be stored in a separate space specified with all safety measures.
 - (v) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
 - (vi) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.
 - (vii) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- (h) Total fresh water requirement shall not exceed 480 cum/day to be met from GIDC supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.
- (i) 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.
- (j) Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.
- (k) 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.
- (l) 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.
- (m) 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.



(n) 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.

(o) The company shall undertake waste minimization measures as below:-

- (i) Metering and control of quantities of active ingredients to minimize waste.
- (ii) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
- (iii) Use of automated filling to minimize spillage.
- (iv) Use of Close Feed system into batch reactors.
- (v) Venting equipment through vapour recovery system.
- (vi) Use of high pressure hoses for equipment clearing to reduce wastewater generation.

(p) 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.

(q) At least 2.5% of the total project cost shall be allocated for Enterprise Social Commitment and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.

(r) 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.

(s) 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.

(t) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.

(u) Raw material storage shall not exceed 7 days at any point of time.

(v) 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.

11.1 The grant of Environmental Clearance is further subject to compliance of other generic conditions as under:-

(i) The project authorities must strictly adhere to the stipulations made by the state Pollution Control Board (SPCB), State Government and/ or any other statutory authority.

(ii) No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry. In case of deviations or alterations in the project proposal from those submitted to this Ministry, a fresh reference shall be made 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 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 complied with.
- (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 utilize the same for different industrial operations within the plant.
- (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 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, risk mitigation measures and public hearing shall be implemented.
- (ix) The company shall undertake all measures for improving socio-economic conditions of the surrounding area. CSR activities shall be undertaken by involving local villagers, administration and other stake holders. Also eco-developmental measures shall be undertaken for overall improvement of the environment.
- (x) A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.
- (xi) 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.
- (xii) 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.
- (xiii) 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.




(xiv) 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.

(xv) 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.

12. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not found to be satisfactory.


13. The Ministry reserves the right to stipulate additional conditions, if found necessary. The company in a time bound manner will implement these conditions.

14. The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Water Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991, read with subsequent amendments therein.


13/4/2018
(S. K. Srivastava)
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Copy to:-

1. The APCCF, Regional Office (WZ), E-5, Kendriya Paryavaran Bhawan, E-5 Arera Colony, Link Road-3, Ravishankar Nagar, **Bhopal** - 16 (MP)
2. The Principal Secretary, Forests & Environment Department, Government of Gujarat, Block 14, 8th floor, Sachivalaya, **Gandhinagar** - 10 (Gujarat)
3. The Member Secretary, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, **Delhi** - 32
4. The Member Secretary, Gujarat Pollution Control Board, Paryavaran Bhawan, Sector 10A, **Gandhinagar** - 10 (Gujarat)
5. Monitoring Cell, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor bagh Road, New Delhi.
6. Guard File/Monitoring File/Record File.


13/4/2018
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