



F. No. IA-J-11011/330/2016-IA-II(I)
Government of India
Ministry of Environment, Forest and Climate Change
(IA-II Section)

By Speed Post/Online

Indira Paryavaran Bhawan
 Jorbagh Road, New Delhi - 3

Dated: 25th November, 2019

To

M/s UPL Ltd
 Plot No.3-11,
 GIDC Industrial Area Vapi
 District Valsad (Gujarat) – 396 195

Sub: Expansion of Pesticides and Pesticide Specific Intermediates Manufacturing Unit by M/s UPL Ltd at Plot No. 3-11, A-2/1, A-2/2, A-2/6 & A-1/2, Phase-I, GIDC Notified Industrial Area Vapi, District Valsad (Gujarat) - Environmental Clearance - reg.

Sir,

This has reference to your proposal No. IA/GJ/IND2/71396/2016 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 pesticides and pesticide specific intermediates manufacturing unit from the present capacity of 1541 TPM to 4097 TPM by M/s UPL Ltd in a total area of 69,639 sqm at Plot No.3-11, A-2/1, A-2/2, A-2/6 & A-1/2, Phase-I, GIDC Notified Industrial Area Vapi, District Valsad (Gujarat).

3. The details of products are as under:-

S.No.	Product	Existing	Proposed	Total
		Capacity (TPM)		
Pesticide (Technical)				
1	Cypermethrin	330	170	500
2	Permethrin	100	50	150
3	Propanil	108	492	600
4	Safener (UPH-203-S)	5	45	50
5	Alpha Cypermethrin /(or) Beta Cypermethrin / (or) Imidacloprid	30	50	80
6	Bifenthrin /(or) Lambda Cyhalothrin /(or) Clodinofof Propargyl (UPH-203) /(or) Thiamethaxam (Star)	32	118	150
7	Desmedipham (DMP) /(or) Phenmedipham /(or) Metribuzin /(or) Metamitron	90	150	240
8	Aluminium Phosphide	200	600	800
9	Magnesium Phosphide (Fumigant)	8	42	50
10	Zinc Phosphide	40	80	120
11	Azoxystrobin /(or) Trifloxystrobin /(or) Kresoxim Methyl	--	100	100
12	Sulfosulfuron	--	10	10
Total		943	1907	2850

EC for M/s UPL Ltd

Pesticide Intermediates				
13	Dicloro Vinyl Acid Chloride (DVACL)	300	50	350
14	Metaphenoxy Benzaldehyde (MPBAD)	275	75	350
15	Denatonium Benzoate	1	4	5
16	Meta Phenoxy Benzyl Alcohol (MPBAL)	--	150	150
17	Tri Phenyle Phosphate (TPPa)	--	40	40
18	2, 4 Hydroxy Phenyl Propionic Acid	--	40	40
	L-2 Chloro Propionic Acid			
19	2 Chloro Propionic Acid Chloride	--	40	40
20	Amino Aceto Nitrile Sulphate (AANS)	--	50	50
21	Ammonium Carbamate (MR-17)	--	200	200
22	2-Chloroimidazo (1,2-a) pyridine-3-sulfamide (ASAM)	2	--	2
23	Hydrazide	20	--	20
Total		598	649	1247
Grand Total (products requiring EC)		1541	2556	4097
Pesticide Formulation & Inorganic Products (not requiring EC)				
24	Liquid and / or Solid Formulation	300	700	1000
25	Red Phosphorus	80	--	80
Total (products not requiring EC)		380	700	1080

By-Product

S. No.	By Product	Exiting	Proposed	Total
		Capacity (TPM)		
1	Phosphoric Acid (100% basis)	40	98.40	138.40
2	Hydrochloric Acid 30%	2048	239.90	2287.90
3	Spent Sulfuric Acid (46%) (or)	1025	140.15	1165.15
	Ammonium Sulfate	600	86.38	686.38
4	Phosphorous Oxychloride	640	58.55	698.55
5	Ammonium Chloride	34.80	Nil	34.80
6	Sodium Bromide solution	720	570.19	1290.19
7	Sodium Sulfite Solution (or)	930	218.66	1148.70
	Sodium Sulfite salt (or)	190	41.92	231.92
	Sodium Bi sulfite Solution (or)	930	240.69	1170.69
	Sodium Bi Sulfite (solid)	190	48.14	238.14
8	KCl salt (or)	160	28.00	188.00
	KCl Sol	900	158.00	1058.00
9	Cu(OH) ₂ /CuSO ₄	10	1.66	11.66
10	Sodium Sulfate	160	23.00	183.00
11	MPBAD distillation Cut	20	2.25	22.25
12	AlCl ₃ 20%/ Poly AlCl ₃	1130	319.27	1449.27
13	Mono Chloro Benzene	---	29.85	29.85
14	Methyl Benzate	---	15.00	15.00
15	Formic Acid	---	108.68	108.68
16	Dimethoxy methane	---	36.11	36.11
17	Methoxy Propanol	---	15.16	15.16
Total		9,727.80	2,479.90	12,208.00

4. The land area available for the project is 69,639 sqm, and no additional land is required for the proposed expansion. Industry has already developed greenbelt/plantation in an area of 33% of the project area, covering 2,691 sqm at project site and 20,308 sqm at Vikram Farm, Nahuli Village. The estimated project cost is Rs. 28,563.13 lakhs excluding existing investment of Rs. 23,800 lakhs. Total capital cost earmarked towards environmental pollution control measures is Rs. 3414.11 lakhs and the recurring cost (operation and maintenance) will be about Rs. 949.2 lakhs per annum. Total employment opportunity will be for 679 persons directly & 100 persons indirectly after expansion.

5. There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors, etc. within 10 km distance from the project site. Daman Ganga, Kolak and Darotha rivers are flowing at a distance of 1.30 km, 6.39 km and 3.89 km in S, NE and SW direction respectively.

6. Total water requirement is estimated to be 5880.21 cum/day, of which estimated fresh water demand is 5239.21 cum/day (Existing-3815.21 cum/day, Proposed-1424 cum/day), which will be further reduced to 3640 cum/day, proposed to be met from GIDC water supply.

Industrial effluent will be segregated into high TDS stream, high COD and toxic concentrated stream and normal stream. High COD and toxic concentrated effluent will be treated the Incinerator of BEIL, Ankleshwar. High TDS effluent will be treated in Multiple Effect Evaporation. Normal effluent will be treated in existing ETP, and the effluent from the ETP of 2647 cum/day will be sent for further treatment in the CETP at Vapi.

Power requirement after expansion will be 19786.27 kW including existing 9082.34 kW KVA and will be met from Dakshin Gujarat Vij Company Ltd (DGVCL). Existing unit has one DG set of 1250 kVA and two DG sets of 500 kVA each capacity, additionally two DG sets of 500 kVA each will be used as standby during power failure. Stack (height 15.5 m) will be provided as per CPCB norms.

Existing unit has 10 TPH, 8 TPH, 5 TPH and 23 TPH FO/NG, FO/NG, FO/NG and Imported coal fired boilers, respectively. Electrostatic precipitator with a stack height of 55 m as per CPCB norms has been installed to Coal fired boiler for controlling flue gas emission within the statutory limit.

7. 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 Notification, 2006, and requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

8. The terms of reference (ToR) for the project was granted on 9th December, 2016, followed by amendment dated 9th October, 2017 exempting from public hearing.

9. The proposal for environmental clearance was considered by the EAC (Industry-2) in its meetings held on 26-28 February, 2018 and 24-26 September, 2018. The project proponent and their consultant M/s Eco Chem Sales & Services presented the EIA/EMP report. The Committee found the EIA/EMP report complying with the terms and conditions of the ToR, and recommended the proposal for environmental clearance to the project with certain conditions.

10. The proposal was further examined in the Ministry in accordance with the Ministry's Office Memorandum No. 22-23/2018-IA.III (pt) dated 31st October 2019 enclosing the letter No. Q-16017/38/2018-CPA dated 24th October 2019 regarding compliance of Hon'ble NGT order dated 19.8.2019 (published on 23.8.2019) in OA No. 1038/2018, and as per the Central Pollution Control Board's letter dated 25th October, 2019 regarding mechanism for environmental management of critically and severely polluted areas and consideration of activities in such areas in compliance to Hon'ble NGT's order.

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 pesticides and pesticide specific intermediates manufacturing unit from the present capacity of 1541 TPM to 4097 TPM by M/s UPL Ltd at Plot No.3-11, A-2/1, A-2/2, A-2/6 & A-1/2, Phase-I, GIDC Notified Industrial Area Vapi, District Valsad (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 under:-

- (i) Consent to Establish/Operate (CTE/CTO) for the project shall be obtained from the State Pollution Control Board (SPCB) as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974, and the SPCB shall follow the mechanism/protocol issued by the Ministry vide letter no. Q-16017/38/2018-CPA dated 24th October, 2019 while issuing the CTE/CTO for the project, for improvement of environmental quality in the area.
- (ii) The treated effluent of 2647 cum/day shall conform to the standards prescribed under the Environment (Protection) Rules, 1986, to take it to the CETP at Vapi for further treatment. The Project Proponent will submit plan for achieving Zero Liquid Discharge with its techno-economic feasibility within 3 months from issue of this letter to Ministry for further decision on the same.
- (iii) 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.
- (iv) 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.
- (v) 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.
- (vi) 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.
- (vii) Total fresh water requirement shall not exceed 3640 cum/day to be met from GIDC water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.
- (viii) 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.

- (ix) Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system
- (x) 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.
- (xi) 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.
- (xii) 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, 1989.
- (xiii) 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.
- (xiv) 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.
- (xv) The green belt of at least 5-10 m width shall be developed in more than 40% 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. In addition, the project proponent shall develop greenbelt outside the plant premises also such as avenue plantation, plantation in vacant areas, social forestry etc.
- (xvi) As committed, funds allocation for the Corporate Environment Responsibility (CER) shall be 5 % of the total project cost. Item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.
- (xvii) 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.
- (xviii) 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.
- (xix) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (xx) Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of

effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

11.1. The grant of environmental clearance is subject to compliance of other general conditions, as under:-

- (i) The project authorities must strictly 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. ESC 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) 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, 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.
- (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.
- (xvi) 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.
- 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.
- 13.** Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- 14.** Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
- 15.** The above conditions will be enforced, inter alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Water Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and rules.

(डा. आर. बी. लाल)
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Copy to: -

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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 Bhavan, Sector-10A, Gandhinagar (Gujarat) - 10
5. The District Collector, District Valsad (Gujarat)
6. Guard File/Monitoring File/Website/Record File



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