F.No. J-11011/311/2014-IAII(I)

Government of India
Ministry of Environment, Forest and Climate Change
(IA-Il Division)

Indira Paryavaran Bhawan Jorbagh Road, New Delhi - 3 Dated: 8th January, 2018

To,

M/s Jubilant Life Sciences Limited (Unit-3) Plot No. 5, SEZ, Vilayat GIDC, Taluka Vagra, District **Bharuch** - 392012 (Gujarat)

Sub: Setting up Technical Grade Pesticides and Intermediates Manufacturing Unit by M/s Jubilant Life Sciences Limited (Unit-3) at Plot No. 5, SEZ, Vilayat GIDC, Taluka Vagra, District Bharuch (Gujarat) - Environmental Clearance - reg.

Ref.: Online proposal no. IA/GJ/IND2/51463/2014 dated 6th October, 2017

Sir,

This has reference to your online proposal no. IA/GJ/IND2/51463/2014 dated 6th October, 2017 for environmental clearance to the above project, along with the documents including Form-1, terms of reference (ToR), EIA/ EMP report containing the public hearing proceedings/details.

2. The Ministry of Environment, Forest and Climate Change has examined the proposal for Environmental Clearance to the project for setting up Technical Grade Pesticides and Intermediates Manufacturing Unit of capacity 32350 TPA by M/s Jubilant Life Sciences Limited (Unit-3) in an area of 20 ha at Plot No.5, SEZ, Vilayat GIDC, Taluka Vagra, District Bharuch (Gujarat). The details of proposed products are as under: -

Product	Quantity (TPA)		
Mepiquat Chloride	160		
Chlormequat Chloride	2000		
Chlorpyrifos & its derivatives	10000		
lmidacloprid	1000		
Acetamiprid	500		
Thiamethoxam	500		
Thiacloprid	200		
Chlorfluazuron	100		
Chlorantraniliprole	1000		
Cyantraniliprole	1000		
Triclopyr	220		
Triclopyr butoxy ethyl ester	220		
Fluroxypyr-meptyl	1000		
ClodinafopPropargyl	200		
Diquat dibromide	1500		
	Mepiquat Chloride Chlormequat Chloride Chlorpyrifos & its derivatives Imidacloprid Acetamiprid Thiamethoxam Thiacloprid Chlorfluazuron Chlorantraniliprole Cyantraniliprole Triclopyr Triclopyr butoxy ethyl ester Fluroxypyr-meptyl ClodinafopPropargyl		



S. No.	Product	Quantity (TPA)
16	Haloxyfop-P-methyl	100
17	Fluazifop-P-butyl	50
18	Diflufenican	100
19	Nicosulfuron	150
20	Picloram	300
21	Clopyralid	300
22	Paraquat & its derivatives	5000
23	Trifloxystrobin	400
24	lmazethapyr	100
25	Pyroxsulam	150
26	Picoxystrobin	2000
27	Boscalid	100
28	Azoxystrobin	1000
29	Intermediates of any of the above (#1 to #28)	As per requirement within the approved capacity
30	2-Chloro-6- (trichloromethyl)pyridine	3000
	TOTAL	32350

- 3. The total plot area is 20 ha located within a SEZ operated by Jubilant Infrastructure Limited (JIL) in the GIDC, Vilayat spread over an area of 107 ha. It is proposed to develop a greenbelt area of 16,000 m² within the premises of proposed unit in addition to the green belt developed in the common green belt area within the SEZ boundary. As per Form-1, there are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km of the project site. Bhukhi river is flowing at 2.94 km in the South.
- **4**. The estimated project cost is Rs.250 crores. Total capital cost earmarked for pollution control measures is Rs.957.27 lakhs and the recurring cost for O&M shall be about Rs.208.2 lakhs per annum. It has been proposed to allocate Rs.6.25 Crores @ 2.5 % towards Corporate Social Responsibility.
- 5. Total water requirement of 1492 cum/day shall be met from surface water i.e. Narmada water, which shall be supplied by GIDC through JIL. Total effluent generated is estimated to be 659 cum/day, out of which 564 cum/day, after treatment in ETP, shall be discharged to the deep sea through GIDC drain.
- 6. The power requirement for the proposed facility shall be 4 MW which is proposed to be met either through captive generation by SEZ operator M/s JIL or sourced from grid of Dakshin Gujarat Vij Company Limited (DGVCL). In addition, the plant shall have 4 DG sets of 500 kVA capacity each, for emergency power back-up during grid power failure. Adequate stack heights, as per CPCB standards, shall be provided to the DG sets.



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

S. No.	Type of Waste	Hazardous Waste Category	Quantity TPM	Method of Collection	Treatment / Disposal
1	Chemical sludge from waste water treatment (ETP, MEE/ Dryer etc.)	35.3	1800	Poly bags/ loose	TSDF for Landfill
2	Empty barrels /containers /liners contaminated with hazardous chemicals /wastes	33.3	400 Nos.	As is	sale to authorized vendor
3	Used or Spent Oil	5.1	5	Drums	Sale to CPCB/GPCB authorized Reprocessor
4	Process wastes or residues	29.1	750	Drums	Cement Co-incineration/ Incinerator / TSDF for Landfill
5	Spent Catalysts	29.5	24	Poly Bag/ loose	TSDF for Landfill / Sale to authorized agency
6	Date-expired and off- specification pesticides	29.3	10	Poly Bag / Drums	Incineration/ Cement Co-incineration
7	Spent Solvents	29.4	20 KL	Drums	Sale to CPCB/GPCB authorized agency
8	Spent carbon or filter medium	36.2	30	Poly Bags	Cement Co-incineration/ Incinerator / TSDF
9	Sludge from wet scrubber	37.1	2	Drums	Cement Co-incineration / Landfill
10	Corrosive wastes	Class C2	5	Drums	TSDF for Landfill
11	Wastes or residue containing oil	5.2	0.5	Drums	Cement Co-incineration /Incineration / TSDF for Landfill
12	Contaminated Organic or aqueous phase	C 12	50	Drums/ tank	Cement Co-incineration/ Incinerator/ authorised MEE

- 8. The project/activity is covered under category A of item 5(b) 'Pesticides industry and pesticide specific intermediates' of the Schedule to the Environmental 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 by Ministry vide letter dated 6th January, 2015 followed by the amendment on 27th March, 2017. Public hearing was conducted by the SPCB on 18th August, 2017.
- **10.** The proposal was considered by the Expert Appraisal Committee (Industry-2) in its 30th meeting held during 2-3 November, 2017. The project proponent and their accredited consultant M/s Kadam Environmental Consultants, presented the EIA / EMP report as per the ToR. The Committee found the EIA / EMP Report to be satisfactory and complying with the 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 EAC (Industry-2), the Ministry of Environment, Forest and Climate change hereby accords environmental clearance to the project 'Setting up Technical Grade pesticides and Intermediates Manufacturing unit' of capacity 32350 TPA by M/s Jubilant Life Sciences Limited (Unit-3) at Plot No.5, SEZ, Vilayat GIDC, Taluka Vagra, District Bharuch (Gujarat), under the provisions of the EIA Notification, 2006, subject to the compliance of the terms and conditions as below:
- (a) Total production of pesticides for domestic sale shall include manufacturing of 10% biopesticides, to be achieved progressively within a period of 5 years from the date of commissioning of the project.
- (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) The effluent discharge of 564 cum/day, through GIDC pipeline to deep sea, shall conform to the standards prescribed under the Environment (Protection) Rules, 1986.
- (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, if any, 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 1492 m³/day proposed to be met from GIDC supply through M/s JIL-SEZ. Prior permission in this regard shall be obtained from the concerned regulatory authority.
- (i) Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.
- (j) 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.

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- (k) 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.
- (I) 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.
- (m) The company shall undertake waste minimization measures in the following manner:-
 - (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.
- (n) The green belt shall be developed along the plant periphery of M/s Jubilant Life Sciences Limited (Unit-3) in downward wind direction, and along road sides etc. Total plantation within the unit as well as that already in place for the SEZ operated by M/s JIL, shall not be less than 33% of the total SEZ area. Selection of plant species shall be as per the CPCB quidelines in consultation with the State Forest Department.
- (o) All the commitments made regarding issues raised during the public hearing/consultation meeting held on 18th August, 2017 shall be satisfactorily implemented.
- (p) At least 2.5% of the total project cost shall be allocated for 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.
- (q) The company shall make all arrangements for control of noise from the drilling activity. Acoustic enclosure shall be provided for the DG sets along with the adequate stack height as per CPCB guidelines.
- (r) 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.
- (s) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (t) Optimum quantity of raw material storage should not exceed 15 days at any point of time.
- (u) 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 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

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- 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 stations 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 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 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 Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 read with subsequent amendments therein.

(S. K. Srivastava) Scientist E

Copy to: -

- The Additional Principal Chief Conservator of Forests (C), Ministry of Environment, Forest and Climate Change, Regional Office (WZ), E-5, Kendriya Paryavaran Bhawan, E-5 Arera Colony, Link Road-3, Ravishankar Nagar, **Bhopal** – 462016 (Madhya Pradesh)
- The Secretary, Forests & Environment department, Government of Gujarat, Sachivalaya, 8th Floor, Gandhinagar (Gujarat)
- 3. The Member Secretary, Central Pollution Control Board Parivesh Bhavan, East Arjun Nagar, **Delhi** 32
- The Member Secretary, Gujarat Pollution Control Board, Paryavaran Bhavan, Sector-10 A, Gandhinagar-382010 (Gujarat)
- 5. Monitoring Cell, Ministry of Environment, Forest and Climate Change, New Delhi
- Guard File/Monitoring File/Record File

(S. K. Śrivastava) Scientist E