



सत्यमेव जयते

Government of India

Ministry of Environment, Forests & Climate Change

F. No. J-11011/241/2011- IA II (I)

Indira Paryavaran Bhawan

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Dated: 11th August 2014

To
Shri Yunus P Khalivala,
(Dy. Manager (EHS))
M/s Jubilant Life Sciences Ltd.
Block No. 133, Village Samlaya, Taluka Savli
District Vadodara – 391520 Gujarat
E-mail: yunus_khalivala@jubl.com Fax No. : 91-2667 251305

Subject: Expansion of Synthetic Organic Chemicals (1067 MTPM to 4400 MTPM) of M/s Jubilant Life Science Ltd. at Block No. 133, Sy. No. 133 (Partly), 129,130,131, 132 (Part), 134, 136, 137, 138, 139 (Part), 140, 141, 144, 147, 148, 201, 202, 203, 204, 206, 207, 208, Village Samlaya, Taluka Savli, District Vadodara, Gujarat – Environmental Clearance - reg.

Sir,

This has reference to your letter dated 12th July, 2012 along with project documents including EIA-EMP Report, public hearing report and subsequent communication vide your letter dated 7th January, 2014 seeking environmental clearance on the aforesaid project. Terms of Reference (TOR) was accorded vide this Ministry's letter of even no. dated 06.09.2011 for preparation of EIA-EMP Report.

All the Synthetic Organic Chemicals located outside notified industrial area are listed at S.N. 5(f) under Category 'A' and appraised at the Central level.

2. The Ministry of Environment and Forests has examined the application. It is noted that the proposal is for expansion of Synthetic Organic Chemicals (1067 MTPM to 4400 MTPM) of M/s Jubilant Life Science Ltd. at Block No. 133, Sy. No. 133 (Partly), 129,130,131, 132 (Part), 134, 136, 137, 138, 139 (Part), 140, 141, 144, 147, 148, 201, 202, 203, 204, 206, 207, 208, Village Samlaya, Taluka Savli, District Vadodara, Gujarat. GPCB vide letter no. GPCB/CCA-VRD-267 (4)/ID:22119/170223 dated 3rd January 2014 has submitted the status of compliance to the conditions stipulated in the 'Consent to Operate of the existing Synthetic Organic Chemicals Plant, wherein it is mentioned that overall the unit is in compliance of the Consent Conditions specified by GPCB. Total plant area is 3,62,500m². Out of which, greenbelt will be developed in 49261 m² of land. River Mini River flows at a distance of 0.76 km. No national park/wildlife sanctuary/tiger reserve/elephant reserve is located within 10 km distance. Total project cost is Rs. 60 crores, of

which an estimated Rs. 114 lakhs and Rs 41.77 lakhs have been earmarked toward capital costs and recurring costs per annum for implementation of environment management plan.

3. The following products will be manufactured:

S.N	Product falling under one group (Proposed common group)	Name of the Products	Existing Capacity (MTPM)	Additional Capacity (MTPM)	Capacity after Expansion (MTPM)
EC Product					
1	Ethoxylate of Nonyl Phenol, fatty Acid Fatty Alcohol, DEG & Castor Oil, Choline chloride (Liquid Choline Chloride 75%, Acidifier Liquid, Chloromequate Chloride (Choline dichloride) 50% to 67.5%, Ethoxylate PCL3 (Triss) etc.	Ethoxylate of Nonyl phenol, fatty Acid Fatty Alcohol, DEG & Castor Oil	200	---	3400
2		Liquid Choline Chloride 75%	667	1333	
3		Acidifier Liquid	40	460	
4		Chloromequate Chloride (Choline dichloride) 50% to 67.5%	150	450	
5		Ethoxylates PCI3 (Triss)	10	40	
6		Choline Chloride Crystals	0	50	
7	Betaine	Betaine	0	500	500
8	2 – Vinyl Pyridine	2 – Vinyl Pyridine	0	500	500
		Total	1067	3333	4400
Non EC Product					
8	Choline chloride Dry, (Dry Choline chloride, Acidifier Dry etc.	Dry Choline Chloride	833	1167	2500
9		Acidifier (Dry Base)	50	450	
10	Premix (Animal Feed – Premix, Feed Emulsifier of Castor oil, Liquid formulation and tonics etc.	Animal Feed – Premix	416	834	3550
11		Feed Emulsifier ethoxylates of Castor oil	0	400	
12		Feed Emulsifier lysolecithin	0	400	
13		Chelated minerals for feed and food applications	0	500	
14		Liquid Formulations and tonics	0	500	

15		Encapsulated products for livestock, poultry and swine	0	500	
16	Carrier	Corn Cob Carrier	333	517	850
17	EOCO2 (Ethylene Oxide & Carbon Dioxide)	EOCO2 (Ethylene Oxide & Carbon Dioxide)	150	150	300
18	Oil Field Chemicals	Oil Field Chemicals	120	0	120
19	Choline Chloride Crystals	Choline Chloride Crystals	0	50	50
20	Silica 50%	Silica 50%	0	500	500
		Sub total	1902	5968	7870
Grand Total			2969	9251	12220

4. Bagfilter along with stack of adequate height will be provided to saw dust/agro waste fired boiler. Total water requirement from ground water source will be increased from 197.7m³/day to 355.2m³/day after expansion. Industrial effluent generation will be increased from 59.9m³/day to 80m³/day after expansion. Industrial effluent will be treated in effluent treatment plant (ETP) comprising primary, secondary and tertiary treatment facilities. Treated effluent will be discharged to CETP after conforming to the standards prescribed for the effluent discharge by GPCB. Online TOC analyzer, pH meter and flow meter will be installed to monitor the treated water quality before discharging into CETP. ETP sludge and process waste will be sent to Treatment Storage Disposal Facility (TSDF) for hazardous waste. Waste oil and used batteries will be sold to authorized recyclers/re-processors.

5. Public Hearing/Public Consultation meeting conducted by the Gujarat Pollution Control Board on 16th May, 2012.

6. The proposal was considered by the Expert Appraisal Committee (Industry) in its 26th and 6th meetings held during 17th-18th August, 2011 and during 5th March, 2013 – 7th March, 2013 respectively. The Committee recommended the proposal for environmental clearance.


7. Based on the information submitted by the project proponent, the Ministry of Environment and Forests hereby accords environmental clearance to above project under the provisions of EIA Notification dated 14th September 2006, subject to the compliance of the following Specific and General Conditions:

A. SPECIFIC CONDITIONS:

- i) National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21st July, 2010 and amended time to time shall be followed by the unit.
- ii) Bag filter along with stack of adequate height shall be provided to saw dust/agro waste fired boiler as per CPCB/Gujarat Pollution Control Board (GPCB) guidelines.
- iii) Ambient air quality data shall be collected as per NAAQES standards notified by the Ministry vide G.S.R. No. 826(E) dated 16th September, 2009. The levels of PM₁₀, SO₂, NO_x, CO and VOC

shall be monitored in the ambient air and displayed at a convenient location near the main gate of the company and at important public places. The company shall upload the results of monitored data on its website and shall update the same periodically. It shall simultaneously be sent to the Regional office of MOEF, the respective Zonal office of CPCB and Gujarat Pollution Control Board (GPCB).

- iv) 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. The emissions shall conform to the limits stipulated by the GPCB.
- v) 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.
- vi) Total fresh water requirement from ground water source shall not exceed 355.2m³/day and prior permission shall be obtained from the CGWA.
- vii) Industrial effluent shall not exceed 80m³/day. Industrial effluent will be treated in ETP and treated effluent shall be discharged to CETP after conforming to the standards prescribed for the effluent discharge and obtaining permission from the GPCB. No process effluent shall be discharged in and around the project site. Water quality of treated effluent from ETP shall be monitored regularly.
- viii) Treated effluent shall be passed through guard pond. Online pH meter, flow meter and TOC analyzer shall be installed.
- ix) Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.
- x) Solvent management shall be 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.
- xi) Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm. Solvent transfer shall be by pumps.
- xii) 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 GPCB shall be obtained for disposal of solid / hazardous waste in the TSDF. Measures shall be taken for fire fighting facilities in case of emergency.

- 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) The company shall undertake following waste minimization measures :-
- Metering and control of quantities of active ingredients to minimize waste.
 - Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
 - Use of automated filling to minimize spillage.
 - Use of Close Feed system into batch reactors.
 - Venting equipment through vapour recovery system.
 - Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- xv) 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.
- xvi) 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. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- xvii) Green belt shall be developed at least in 33 % of the plant area 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 shall be as per the CPCB guidelines.
- xviii) The company shall comply with the recommendations made in the EIA-EMP/Risk assessment report. Risk assessment shall be included in the safety Manual.
- xix) All the commitments made to the public during public hearing/public consultation meeting held on 16th May, 2012 shall be satisfactorily implemented and adequate budget provision shall be made accordingly.
- xx) At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment based on earlier Public Hearing Issues, locals need 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.
- xxi) The Company shall submit within three months their policy towards Corporate Environment Responsibility which shall inter-alia address (i) Standard operating process/procedure to be into focus any infringement/deviation/ violation of environmental or forest norms/conditions, (ii) Hierarchical system or Administrative order of the Company to deal with environmental issues and ensuring compliance to the environmental clearance conditions and (iii) System of reporting of non compliance/violation environmental norms to the Board of Directors of the company and/or stakeholders or shareholders.
- xxii) Provision shall be made for the housing for the construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structure to be removed after the completion of the project. All the construction wastes shall be managed so that there is no impact on the surrounding environment.
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B. GENERAL CONDITIONS:

- i. The project authorities shall 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 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 is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.
- iv. 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).
- v. 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.
- vi. Usage of Personnel Protection Equipments (PPEs) by all employees/ workers shall be ensured.
- vii. 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, risk mitigation measures and public hearing relating to the project shall be implemented.
- viii. The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. CSR activities shall be undertaken by involving local villages and administration.
- ix. The company shall undertake eco-developmental measures including community welfare measures in the project area for the 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. As proposed, the company shall earmark sufficient funds towards capital cost and 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.
- xii. A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, ZilaParisad/Municipal Corporation, Urban local Body and the local NGO, if any, from who 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, the respective Zonal Office of CPCB and the Gujarat Pollution Control Board. 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 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 www.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.

8. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

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

10. 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 Waste (Management, Handling and Trans-boundary Movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules.



(Dr. T Chandini)
Director

Copy to:

1. The Principal Secretary, Forests & Environment Department, Government of Gujarat, Sachivalaya, 8th Floor, Gandhi Nagar - 382 010, Gujarat.
2. The Chief Conservator of Forests (Western Zone), Ministry of Environment & Forests, Regional Office, E-5, Arera Colony, Link Road -3, Bhopal -462 016, M.P.
3. The Chairman, Central Pollution Control Board PariveshBhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi - 110 032.
4. The Chairman, Gujarat State Pollution Control Board, Paryavaran Bhawan, Sector 10 A, Gandhi Nagar-382 043, Gujarat.
5. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
6. Guard File/Monitoring File/Record File.

