

F. No.J-11011/745/2007-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: 16<sup>th</sup> October, 2018

To,

**M/s Jubilant Life Sciences Limited**  
Village Nimbut, Railway Station Nira,  
District Pune - 2 (Maharashtra)

**Sub: Expansion of Molasses based Distillery from 90 KLPD to 200 KLPD, Organic Chemical Products, 12 MW Captive Power Plant and Acetic Anhydride Plant under product mix by M/s Jubilant Life Sciences Limited at Nimbut Nira, Pune (Maharashtra) - Amendment in Environmental Clearance - reg.**

Sir,

This refers to your online proposal No.IA/MH/IND2/72003/2008 dated 15<sup>th</sup> March, 2018 for amendment in the environmental clearance to the above project.

2. The proposal is for amendment in the environmental clearance dated 23<sup>rd</sup> December 2008 granted by the Ministry in favour of M/s Jubilant Organosys Ltd to the project for expansion of molasses based distillery unit from 90 KLPD to 200 KLPD, organic chemical products & 12 MW new Captive Power Plant at Nimbut Nira, District Pune (Maharashtra).

The environmental clearance was earlier amended on 21<sup>st</sup> December, 2010 for change in product mix (involving increase in production capacity of Acetic Anhydride but decrease in capacity of Acetaldehyde and Acetic Acid), and was later transferred in the name of M/s Jubilant Life Sciences Limited vide this Ministry's letter dated 17<sup>th</sup> July, 2018.

3. Now the project proponent has sought further amendment in the said environmental clearance in respect of manufacturing Ethyl Alcohol (200 KLD) to be revised as Ethyl Alcohol (94%) & Anhydrous Alcohol (Ethyl Alcohol-99.8%).

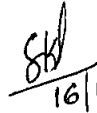
4. The proposal was considered by the Expert Appraisal Committee (Industry-2) in the Ministry in its meeting held on 26-28 February, 2018 and 24-26 April, 2018. The Committee, after deliberations, has recommended for the proposed amendment as below:-

*'Ethyl Alcohol' to be read as 'Ethyl Alcohol (94%) & Anhydrous Alcohol (99.8%)' subject to their manufacturing through Molecular Sieve Bed Technology with no increase in pollution load.'*

5. Based on recommendations of the EAC, the Ministry of Environment, Forest and Climate Change hereby accords approval for the proposed amendment in the environmental clearance dated 23<sup>rd</sup> December 2008, (amended on 21<sup>st</sup> December, 2010), to the project for expansion of Molasses based Distillery unit from 90 KLPD to 200 KLPD, Organic Chemical Products, 12 MW New Captive Power Plant by M/s Jubilant Life Sciences Limited at Nimbut Nira, Baramati, Pune (Maharashtra), **as stated in para 4 above.**




6. The project proponent shall seek No increase in Pollution Load certificate from the State Pollution Control Board. All other terms and conditions stipulated in the environmental clearance dated 23<sup>rd</sup> December 2008, amended on 21<sup>st</sup> December, 2010, shall remain unchanged.

  
16/10/2018  
**(S K Srivastava)**  
**Scientist E**

**Copy to:-**

1. The Principal Secretary, Environment Department, Government of Maharashtra, 15<sup>th</sup> Floor, New Administrative Building, Mantralaya, **Mumbai** - 32
2. The Additional Principal Chief Conservator of Forests, Ministry of Environment, Forest and Climate Change, Regional Office (WCZ), Ground Floor, East Wing, New Secretariat Building, Civil Lines, **Nagpur-1** (Maharashtra)
3. The Member Secretary, Central Pollution Control Board Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, **Delhi** - 32
4. The Member Secretary, Maharashtra Pollution Control Board, Kalpataru Point, 3<sup>rd</sup> and 4<sup>th</sup> floor, Opp. Cine Planet, Sion Circle, **Mumbai** - 22
5. Monitoring Cell, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, **New Delhi** - 3
6. Guard File/Monitoring File/Record File

  
16/10/2018  
**(S. K. Srivastava)**  
**Scientist E**

F. No. J-11011/745/07-IA II (I)  
**Government of India**  
**Ministry of Environment and Forests**  
**(I.A. Division)**

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Dated 21<sup>st</sup> December, 2010

To,

Shri K. K. Sharma  
 General Manager (EHS)  
 M/s Jubilant Organosys Ltd.  
 Noida-201301, U.P.

E-mail : [ashok\\_kakur@jubl.com](mailto:ashok_kakur@jubl.com) ; [arpit\\_nanavati@jubl.com](mailto:arpit_nanavati@jubl.com);

Fax No. : 91-40-23412957

**Subject: Acetic Anhydride Plant at Nira, Pune in Maharashtra by M/s Jubilant Organosys Ltd. - Change in product mix reg.**

**Ref. : Your letter no. nil dated 12<sup>th</sup> July, 2010.**

Sir,

Kindly refer your letter no. nil dated 12<sup>th</sup> July, 2010 wherein you have mentioned that you want to install Acetic Anhydride Plant (125 TPD) against the Acetyldehyde (100 TPD) and Acetic Acid (100 TPD) (Total Capacity 200 TPD). You have also mentioned that due to reduction in the quality from 200 TPD to 125 TPD, raw material requirement, total volume of production and pollution load will reduce.

2. It is observed that Ministry has accorded environmental clearance for the expansion of Molasses based Distillery unit (90 KLPD to 200 KLPD), Organic chemical products & 12 MW New Captive Power Plant at Nimbut Nira, District Pune in Maharashtra vide letter no. J-11011/745/2007-IA II(I) dated 23<sup>rd</sup> December, 2008 to M/s Jubilant Organosys Ltd. for the following products and production capacity:

S.N.	Product	Unit	Existing Capacity	Proposed Capacity	After expansion
1	Ethyl Alcohol	KLD	90	110	200
2	Acetaldehyde	TPD	83	100	183
3	Acetic acid	TPD	103	100	203
4	Acetic anhydride	TPD	52	0	52
5	Ethyl Acetate	TPD	111	136	247
6	Carbon dioxide	TPD	20	60	80
7	Vinyl Acetate Monomer	TPD	45	0	45
8	Power	MW	0	12	12

3. Now, you have proposed to manufacture acetic anhydride plant (125 TPD) in place of acetaldehyde (100 TPD) & acetic acid (100 TPD) due to fluctuating market demand of acetaldehyde & acetic acid as per details given below :

S. N.	Product	Unit	EC as per 2008	Proposed amendment in product mix	Total after amendment
1	Ethyl Alcohol	KLD	200	--	200
2	Acetaldehyde	TPD	183	100 (Deduction )	83
3	Acetic acid	TPD	203	100 (Deduction )	103
4	Acetic anhydride	TPD	52	125 (Addition)	177
5	Ethyl Acetate	TPD	247	--	247
6	Carbon dioxide	TPD	80	--	80
7	Vinyl Acetate Monomer	TPD	45	--	45
8	Power	MW	12	--	12

4. The matter was discussed in the Expert Appraisal Committee (Industry-2) held during 16<sup>th</sup>-17<sup>th</sup> September, 2010. You have informed that pollution load will not increase due to reduction in the quantity of change in product mix. Fresh water consumption will be reduced from 4,665 m<sup>3</sup>/day to 4,637 m<sup>3</sup>/day. Effluent quantity will be reduced by 16 m<sup>3</sup>/day and 'Zero' discharge of effluent will be maintained. There will be no change in solid/hazardous waste generation.

5. The matter was examined in the Ministry and have agreed for amendment in the product mix by adding Acetic anhydride (125 TPD) in place of Acetaldehyde & Acetic Acid (100 TPD each) subject to satisfactory compliance to all the environmental conditions stipulated in the environmental clearance no. J-11011/745/2007-IA-II(I) dated 23<sup>rd</sup> December, 2008.

6. All the other specific and general conditions shall remain same and complied satisfactorily.

7. This letter shall be kept with the original environmental clearance letter.

8. This letter has been issued after approval from the competent authority.

  
(Dr. P.B. Rastogi)  
Director

Copy to :

1. The Secretary, Department of Environment and Forests, Govt. of Maharashtra, Mumbai - 400 001, Maharashtra.
2. The Chief Conservator of Forests (Central), Ministry of Environment & Forests, Regional Office, Link Road No. 3, E - 5, Arera Colony, Bhopal - 462 016, M.P.
3. The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi - 110 032.
4. The Chairman, Maharashtra Pollution Control Board, Shri Chatrapati Shivaji Maharaj Municipal Market Building, 4<sup>th</sup> Floor, Mata Ramabai Ambedaker Road, Mumbai - 400 001, Maharashtra.
5. Adviser, IA-II (I), Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
6. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
7. Guard File / Monitoring File / Record File.

  
(Dr. P.B. Rastogi)  
Director



भारत सरकार  
पर्यावरण एवं वन मंत्रालय  
Government of India  
Ministry of Environment & Forests  
(IA Division)

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E-mail: [plahujarai@yahoo.com](mailto:plahujarai@yahoo.com)  
Telefax: 011: 2436 3973

F. No. J-11011/745/2007- IA II (I)

Dated the December 23, 2008

To,

The Vice President (Operations)  
M/s Jubilant Organosys Ltd.  
Village: Nimbut, Railway Station Nira  
Distt. Pune, Maharashtra-412102

**Sub: Expansion of Mollasses based Distillery unit from 90 KLPD to 200 KLPD, Organic chemical products & 12 MW New Captive Power Plant at Nimbut Nira, District Pune in Maharashtra by M/s Jubilant Organosys Ltd. – Environmental clearance regd.**

Sir,

This has reference to your letter No N:MRS:021/08 dated 8<sup>th</sup> September, 2008 along with copy of EIA/EMP and Public hearing reports seeking environmental clearance under the Environmental Impact Assessment Notification, 2006.

2.0 The Ministry of Environment and Forests has examined the proposal. It is noted that M/s Jubilant Organosys Ltd. have proposed for expansion of Mollasses based Distillery from 90 KLPD to 200 KLPD, to manufacture Organic chemical products & install a 12 MW New Captive Power Plant at Nimbut Nira, District Pune in Maharashtra. No protected forests/eco-sensitive area located within 10 Km. radius from the unit. River Nira flows at a distance of 0.5 km from project site. Proposed expansion will be carried within the existing unit. Total land of the unit at present is about 130 Acres. Land required for proposed expansion would be around 23 Acres, which will be accommodated within existing premises. Green belt will be developed in 16.5 acres of land apart from the existing green belt of 25 acres. The unit will be in operation for 350 days. The project cost is estimated to be Rs. 200.00 crores of which an amount of Rs. 27.00 crores will be spent on environmental protection measures.

3.0 Details of the product profile are given below:

Sr No	Product Name	Unit	Existing Capacity	Proposed capacity	Total
1	Ethyl Alcohol	KLD	90	110	200
2	Acetaldehyde	TPD	83	100	183
3	Acetic acid	TPD	103	100	203
4	Acetic anhydride	TPD	52	0	52
5	Ethyl Acetate	TPD	111	136	247
6	Carbon dioxide	TPD	20	60	80
7	Vinyl Acetate Monomer	TPD	45	0	45
8	Power	MW	0	12	12

4.0 The total water requirement is 7231 m<sup>3</sup>/d. About 2723 m<sup>3</sup>/d of water requirement will be met from the recycling of water through RO and utility. The fresh water requirement of 4667 m<sup>3</sup>/d will be sourced from the river Nira. Total effluent generation will be 1560 m<sup>3</sup>/day. The spent wash generation after the proposed expansion will be 1210 m<sup>3</sup>/day. The spent wash treatment will be by evaporation followed by incineration in slop boiler for power generation to achieve zero discharge. The condensate from the evaporator (1020m<sup>3</sup>/d) will be recycled. The steam from the boiler will be used for power generation. The effluent from organic chemical plants will be treated in Effluent Treatment plant. Treated effluent will be reused in Utility. Utility effluent will be treated in RO plant and reused in Utility. While domestic effluent will be treated in a sewage treatment plant and treated effluent will be reused in horticulture. In the existing distillery, about 1170m<sup>3</sup>/d of spent wash is generated which after bio methanation about 800m<sup>3</sup>/d of treated spent wash is sent to RO plant and 370m<sup>3</sup>/d is composted with press mud. The permeates (560m<sup>3</sup>/d) will be recycled in the distillery unit and rejects (240m<sup>3</sup>/d) will be composted with press mud. The particulate emissions from the 75 TPH AFBC coal fired boiler and 23 TPH slop and coal fired boiler will be controlled by ESP and Bag filter respectively and the emissions will be dispersed through stack of 75 m and 23 m respectively.

5.0 About 4.4 TPD of fermentation sludge would be generated, and will be used in the bio composting. Fly ash generation will be reduced to 47 TPD from existing rate of generation of 52 TPD due to use of imported coal. Fly ash will be used for land reclamation within the unit or will be supplied to cement manufacturers. The ash from the boiler 34TPD will be used as fertiliser. The Hazardous waste generated from proposed Acetic acid & Ethyl acetate plant would be reprocessed for recovery and concentrated to minimize the quantity of generation. The additional generation of about 40 kg/d, will be sent to common hazardous waste facility of Maharashtra Enviro power Ltd.-Ranjangone, while 10 Ltr/day of used oil will be sold to authorized preprocessors.

6.0 All molasses based distilleries have been listed at Sl. no. 5 (g) in category 'A', as per the EIA notification, 2006 and have to be appraised by the central Government. Since the unit is manufacturing synthetic chemicals it also falls in the category 5 (f) of EIA Notification, 2006. The Expert Appraisal Committee (Industry) considered the project in its 87<sup>th</sup> meeting held on 25<sup>th</sup> - 26<sup>th</sup> November, 2008 (p.185-187/c). The Committee recommended the project for environmental clearance. The method of treatment of spent wash is as per the CPCB guidelines.

7.0 Based on the information submitted by project authorities, the Ministry of Environment and Forests hereby accords environmental clearance to above project under the provisions of EIA Notification dated 14<sup>th</sup> September 2006 subject to strict compliance of the following Specific and General conditions:

**A. SPECIFIC CONDITIONS:**

- i. The particulate emissions from the 75 TPH Coal fired AFBC boiler and 23 TPH slop and coal fired boiler shall be controlled by installation of ESP and bag filters respectively. The emissions shall be dispersed through stacks for which height shall be as per the CPCB standards.
- ii. The company shall adopt continuous fermentation technology. The spent wash generated after generated after the proposed expansion shall be concentrated in the Multiple Effect Evaporator followed by incineration in the boiler to achieve zero discharge. In the existing distillery the spent wash after bio methanation shall be sent to RO plant. The permeates shall be recycled and rejects shall be composted with press mud to achieve zero discharge. No effluent shall be discharged outside the factory premises and zero discharge shall be strictly followed. Land and other requirements for treatment of spent wash with press mud shall be as per the CPCB guidelines. The compost yard shall be made impervious as per the CPCB guidelines. The compost yards shall have leachate collection system.
- iii. The effluent from the chemical plant shall be subjected to acid recovery and the balance effluent streams along with the existing effluent shall be treated in the ETP. The treated effluent after conforming to the prescribed standards shall be recycled. The effluent stream from the cooling tower and boiler blowdown shall be sent to RO plant and permeates shall be used for cooling tower makeup. The domestic effluent after treatment in the sewage treatment plant shall be used for green belt development.
- iv. The spent wash shall be stored in impervious pucca lagoons. The spent wash lagoons shall have proper lining with HDPE and shall be kept in proper condition to prevent ground water pollution. As per the CPCB recommendation, storage shall not exceed 30 days capacity.
- v. Adequate numbers of ground water quality monitoring stations by providing piezometers around the compost plant and the project area shall be set up. Sampling and trend analysis monitoring must be made on monthly a basis and report submitted to SPCB and this Ministry.
- vi. The company shall obtain permission to draw water from the State Irrigation Authority.
- vii. Green belt in 33% of the plant area shall be provided to mitigate the effects of fugitive emissions all around the plant and compost yard as per the CPCB guidelines in consultation with the local DFO.
- viii. Company shall adopt rainwater harvesting measures to recharge the ground water.

- ix. 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, mobile sewage treatment plant, 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.

**B. GENERAL CONDITIONS:**

- i. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.
- ii. Ambient Air Quality Monitoring Stations shall be set up in the down wind direction as well as where maximum ground level concentration of SPM, SO<sub>2</sub>, NO<sub>x</sub>, are anticipated in consultation with the State Pollution Control Board.
- iii. Adequate number of influent and effluent quality monitoring stations shall be set up in consultation with the State Pollution Control Board. Regular monitoring should be carried out for relevant parameters.
- iv. The industry shall ensure that the treated effluent and stack emissions from the unit are within the norms stipulated under the EPA rules or SPCB whichever is more stringent. In case of process disturbances/failure of pollution control equipment adopted by the unit, the respective unit shall be shut down and shall not be restarted until the control measures are rectified to achieve the desired efficiency.
- 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 should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA ( day time) and 70 dBA ( night time).
- vi. Occupational health surveillance programme shall be undertaken as regular exercise for all the employees. The first aid facilities in the occupational health centre shall be strengthened and the medical records of each employee shall be maintained separately.
- vii. A separate environmental management cell equipped with full fledged laboratory facilities must be set up to carry out the environmental management and monitoring functions.
- viii. The project authorities shall provide requisite funds for both recurring and non-recurring expenditure to implement the conditions stipulated by the non-recurring expenditure 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 provided shall not be diverted for any other purpose.




- ix. The implementation of the project vis-à-vis environmental action plans will be monitored by Ministry's Regional Office at Bhopal /State Pollution Control Board/Central Pollution Control Board. A six monthly compliance status report along with the monitored data shall be submitted to the monitoring agencies.
- x. 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 State Pollution Control Board/ Committee and may also be seen at Website of the Ministry of Environment and Forests at <http://envfor.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 Regional office.
- xi. 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 land development work.

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

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

10.0 Any appeal against this environmental clearance shall lie with the National Environment Appellate Authority, if preferred within a period of 30 days as prescribed under Section 11 of the National Environment Appellate Authority Act, 1997.

11.0 The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management and Handling) Rules, 2003 and the Public Liability Insurance Act, 1991 alongwith their amendments and rules.

  
(Dr. P. L. Ahujarai)  
Director

**Copy to:**

1. The Secretary, Department of environment and forests, Govt. of Maharashtra.
2. The Chief Conservator of Forests (Central), Ministry of Environment & Forests, Regional Office, E - 3 / 240 Arera Colony Bhopal - 462 016.
3. The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar New Delhi - 110 032.
4. The Chairman Maharashtra Pollution Control Board, Shri Chatrapati Shivaji Maharaj Municipal Market Building, 4<sup>th</sup> Floor, Mata Ramabai Ambedaker Road, Mumbai- 400 001.

5. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
6. Guard File.
7. Monitoring File.
8. Record File.

(Dr. P. L. Ahujarai)  
Director