MAHARASHATRA POLLUTION CONTROL BOARD

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MAHARASHTRA

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Mumbai - 400 022

Red/L.S.I

Date: 17/12/2011

Consent No: BO/PAMS/Amend/E/EIC NO.PN-11361-11/CC- CA(-79

Consent to Establish under Section 25 of the Water (Prevention & Control of Pollution) Act, 1974 & under Section 21 of the Air (Prevention & Control of Pollution) Act, 1981 and Authorization / Renewal of Authorization under Rule 5 of the Hazardous Wastes (Management, Handling & Transboundry Movement) Rules 2008

[To be referred as Water Act, Air Act and HW (M&H) Rules respectively].

CONSENT is hereby granted to

M/s Jubilant Life Sciences Ltd Village Nimbut-Nira, Rly Station Nira Tal-Baramati, Dist-Pune

located in the area declared under the provisions of the Water Act, Air act and Authorization under the provisions of HW(M&H) Rules and amendments thereto subject to the provisions of the Act and the Rules and the Orders that may be made further and subject to the following terms and conditions:

- 1. **The Consent to Establish is granted for a period up to:** Commissioning of the unit or 5 years whichever is earlier.
- 2. The Consent is valid for the manufacture of -

Sr. No.	Product Name	Maximum UOM Quantity	
1 0	Ethyl Alcohol	110	KL/D
2	Acetic anhydride	125	Ton/D
3	Ethyl acetate	136	Ton/D
4	Carbon dioxide-By Product	60	Ton/D
5	Power	12	MW

3. CONDITIONS UNDER WATER ACT:

- (i) The daily quantity of trade effluent from the factory shall not exceed 767.00M3.
- (ii) The daily quantity of sewage effluent from the factory shall not exceed 155.00M³. (They shall not increase in the domestic effluent due to the expansion)
- (iii) Trade Effluent:

Treatment: The applicant shall provide comprehensive treatment system consisting of primary / secondary and/or tertiary treatment as is warranted with reference to influent quality and operate and maintain the same continuously so as to achieve the quality of the treated effluent to the following standards:

1	рН	Between	5.5 to 9.0
2	Suspended Solids	Not to exceed	100 mg/l.

3	BOD 3 days 27 deg C	Nat to exceed	100 mg/l
4	COD	Not to exceed	250 mg/l.
5	Oil & Grease	Not to exceed	10 mg/l
6	Total Dissolved Solids	Not to exceed	2100 mg/l
7	Chlorides	Not to exceed	600 mg/l
8	Sulphates	Not to exceed	1000 mg/l
9	Total Ammonical Nitrogen	Not to exceed	50 mg/l

(iv) Trade Effluent Disposal:

A) Treatment: The applicant shall provide comprehensive treatment system consisting of multi effect evaporator followed by well slop boiler, Potash Rich Ash from slop boiler will be mixed in the bio-compost of existing plant. The trade effluent from Ethyl Acetate Plant will be recycled to Alcohol Distillery.

The arrangements provided for the above treatment shall be leak proof and no effluent or leakage / seepages shall find its way into the environment thereby causing pollution of surface ground / generated water. In no case, at any time effluent shall finds its way to any water body directly or indirectly.

(They shall be zero discharge due to the proposed expansion in production as listed in Sr. No 2 above)

Conditions for Aerobic Composting:

- The spent wash should be stored in impervious tanks. The spent wash tanks should have proper lining with HDPE and should be kept in proper condition to prevent ground water pollution. As per the CPCB recommendation and undertaking given by the company, storage should not exceed 30 days capacity.
- ii) Applicant shall ensure availability of adequate filter material such as press mud, baggasses, agricultural, biological waste as required for effective composting system. Documentary evidence to this effect shall be submitted to the Board.
- iii) Composted material shall meet the following specifications:-

- 2		
Moisture	222	30 to 35 %
C/N	***	Below17
Nitrogen	***	1.5 to 2 %
Phosphorous		1.5 to 2 %
Pottasium		3 to 4 %

- The composting shall be such that it includes mechanical mixing and spraying of spent wash alongwith mechanical aeration to ensure thorough composting Hand / Manual spraying of spent wash shall not be permitted.
- v) The compost leachete (1 gr of compost mixed with 100 ml of distilled water and filtered) Filtrate shall conform to the following limit.

pH ... Between 7.5 to 8.0 BOD 3 days 27 ° C ... 30 mg/l

vi) A pucca leak proof guard pond of sufficient holding capacity should be provided to cope up with the effluent discharge during short term process disturbances or in monsoon. In case of prolonged disturbance in effluent treatment and disposal system concerned units shall be shut down and shall not be restarted without rectifying the system.

- vii) The composting yard site shall be made leak proof by proper lining. A catch drain shall be provided around the composting site to collect the storage pound for application on compost depots. Arrangements for over turning of compost material in windows and spraying of spent wash shall be made to ensure appropriate aeration and uniform distribution of spent wash.
- viii) In case of composting in open fields, the application of spent wash shall stop by end of April, so that compost is ready and the site is cleared of the composted manure before monsoon (i.e.31st May). The manure shall be collected and stored on a raised platform with suitable rain cover so that the compost manure is not washed away by rain / runoff.
- ix) Characteristic of soil, ground water and effect on crop yield should monitored in the area where compost is used as manure and results thereof shall be compiled and reported in the Environment Statement to be submitted every year.
- x) The test wells shall be provided around the compost site for ground water monitoring. The well water quality has to be maintained at 2006 level.
 - Adequate numbers of ground water quality monitoring stations by providing plezometers around the compost plant and the project area should be set up sampling and trend analysis monitoring must be made on monthly a basic and report submitted to SPCB.
- xi) Top pullover impervious sheets shall be provided for entire compost yard pressmud and compost storage so as to cover the same during untimely rains and idle period.
- xii) The operation of distillery should be restricted to 270 days in a year and that it will not operate during rainy season.
- (v) Sewage Effluent Treatment: The applicant shall provide comprehensive treatment system as is warranted with reference to influent quality and operate and maintain the same continuously so as to achieve the quality of treated effluent to the following standards.

(1) Suspended Solids Not to exceed 100 mg/l. (2) BOD 3 days 270 C. Not to exceed 100 mg/l.

- (vi) Sewage Effluent Disposal: The treated domestic effluent shall be soaked in a soak pit, which shall be got cleaned periodically. Overflow, if any, shall be used on land for gardening / plantation only.
- (vii) Non-Hazardous Solid Wastes:

Sr. No.	Type Of Waste	Quantity	UOM	Treatment Disposal	
1	Fermentation slud	8.00	Ton/D	Bio-composting	
2	Coal Ash from imported coal.	47.00	Ton/D	Brick Mfg and Land filling	

(viii)Other Conditions: Industry should monitor effluent quality regularly.

4. CONDITIONS FOR MOLASSES STORAGE:

i) The molasses shall be properly collected and stored in steel tanks which shall be absolutely leak proof. At no stage of handling of molasses, there shall be leakage of spillage.

- ii) The capacity of tanks for storage of molasses shall be such that at no time the molasses shall be required to be stored in kutcha pits. Adequate space storage capacity shall be available to take care of bumper production of sugar, non-lifting of molasses etc.
- All the area on which molasses are stored and handled should be provided with drain for diverting the spills to the treatment plant / molasses tank. Suitable arrangements for accidental discharges of molasses from the tanks shall be provided to contain the same within factory premises.
- Destruction of molasses and its disposal shall not be done without specific permission in writing from the authorized officer of the Board, intimation of intention to destroy or dispose of the molasses shall be given to the Board atleast 15 (fifteen) days in advance by registered post under intimation to the Sub Regional Officer and Regional Officer of the Board under whose jurisdiction the factory is situated.
- v) The storage tanks shall be kept in good conditions all the year round with adequate maintenance. The tanks size and capacity per cm, height, total capacity in tones shall be displayed prominently near the tank.
- vi) The above conditions shall be in addition tot and not in derogation of the provisions contained in the "Bombay Molasses Rules, 1955" and "Maharashtra Storage and Supply Regulation, 1965"
- vii) The industry should monitor effluent quality regularly.

5. The applicant shall comply with the provisions of the Water (Prevention & Control of Pollution) Cess Act, 1977 (to be referred as Cess Act) and amendment Rules, 2003 there under

The daily water consumption for the following categories is as under:

(i) Domestic purpose

158.00 CMD

(ii) Water gets Polluted &

Pollutants are Biodegradable ...

1606.00 CMD

(iii) Water gets Polluted, Pollutants are not Biodegradable & Toxic ...

0.00 CMD

(iv) Industrial Cooling, spraying

in mine pits or boiler feed

3884.00CMD

The applicant shall regularly submit to the Board the returns of water consumption in the prescribed form and pay the Cess as specified under Section 3 of the said Act.

6. CONDITIONS UNDER AIR ACT:

- (i) The applicant shall install a comprehensive control system consisting of control equipments as is warranted with reference to generation of emission and operate and maintain the same continuously so as to achieve the level of pollutants to the following standards:
- a) Control Equipment:
 - I. ESP for new high pressure coal fired boiler and bag filters for stop fired boiler.
 - II. There shall not be any secondary (fugitive) emissions.

b) Standards for Emissions of Air Pollutants:

(i) SPM/TPM

Not to exceed

150 mg/Nm3

(ii) SO2

Not to exceed

7200 Kg/day

7. Standards for Stack Emissions:

(i) The applicant shall observe the following fuel pattern:-

Sr. No.	Type Of Fuel	Quantity	UOM
1	Coal	310.00	MT/D
2	Spent Wash cake	25.00	MT/D

(ii) The applicant shall erect the chimney(s) of the following specifications:-

Sr. No.	Chimney Attached To	Height in Mtrs.	
1	Boiler F (High Pressure Boiler)	75.00	
2	Boiler G (Slop Fired Boiler)	45.00	
3	Furnace -AC2OII Plant	47.00	
4	D.G Set (600KVA)	4.00	

- (iii) The applicant shall provide ports in the chimney(s) and facilities such as ladder, platform etc. for monitoring the air emissions and the same shall be open for inspection to/and for use of the Board's Staff. The chimney(s) vents attached to various sources of emission shall be designated by numbers such as S-1, S-2, etc. and these shall be painted/displayed to facilitate identification.
- (iv) The industry shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standard in respect of noise to less than 75 dB(A) during day time and 70 dB(A) during night time. Day time is reckoned in between 6 a.m. and 10 p.m. and night time is reckoned between 10 p.m. and 6 a.m.

(vi) Other Conditions:

- 1) The industry should not cause any nuisance in surrounding area.
- 2) The industry should monitor stack emissions and ambient air quality Regularly.

8. <u>C.R.E.P. Conditions for Distillery:</u>

1) Existing Molasses - Based Distilleries

Non-compliant distilleries will furnish bank guarantee and action plan to concerned State Boards to ensure compliance with any of combination of the following measures

- Compost making with press mud / agricultural residue /Municipal Waste.
- ii) Concentration and drying /incineration.
- iii) Treatment of spent wash through bio-methanation followed by two stage secondary treatment and dilution of treated effluent with process water for irrigation as per norms prescribed by CPCB/MoEF.
- iv) Treatment of spent wash through bio-methanation followed by secondary treatment (BOD<2500 mg/l) for controlled discharge into sea through a proper submerged marine outfall at a point permitted by SPCB/CPCB in consultation with National Institute of Oceanography (NIO) so that Dissolved Oxygen in the mixing zone does not deplete.

v) For taking decision on feasibility of one time controlled land application of treated effluent a study will be undertaken within three months.

Road map for utilization of spent wash by the distilleries to achieve zero discharge in inland surface water courses will be as -100 % utilization of spent wash.

Till 100% utilization of spent wash is achieved controlled and restricted discharge of treated effluent from lined lagoons during rainy season will be allowed by SPCB/ CPCB in such a way that the perceptible colouring of river water bodies does not occur.

9. Conditions for D.G. Set

- a. Noise from the D.G. Set should be controlled by providing an acoustic enclosure or by treating the room acoustically.
- b. Industry should provide acoustic enclosure for control of noise. The acoustic enclosure/ acoustic treatment of the room should be designed for minimum 25 dB (A) insertion loss or for meeting the ambient noise standards, whichever is on higher side. A suitable exhaust muffler with insertion loss of 25 dB (A) shall also be provided. The measurement of insertion loss will be done at different points at 0.5 meters from acoustic enclosure/room and then average.
- c. The industry shall take adequate measures for control of noise levels from its own sources within the premises in respect of noise to less than 55 dB(A) during day time and 45 dB(A) during the night time. Day time is reckoned between 6 a.m. to 10 p.m and night time is reckoned between 10 p.m to 6 a.m.
- d. Industry should make efforts to bring down noise level due to DG set, outside industrial premises, within ambient noise requirements by proper sitting and control measures.
- e. Installation of DG Set must be strictly in compliance with recommendations of DG Set manufacturer.
- f. A proper routine and preventive maintenance procedure for DG set should be set and followed in consultation with the DG manufacturer which would help to prevent noise levels of DG set from deteriorating with use
- g. D.G. Set shall be operated only in case of power failure
- h. The applicant should not cause any nuisance in the surrounding area due to operation of D.G. Set.

10.CONDITIONS UNDER HAZARDOUS WASTE (MANAGEMENT, HANDLING & TRANSBOUNDRY MOVEMENT) RULES, 2008:

The Industry shall handle hazardous wastes as specified below.

Sr. No.	Type Of Waste	Quantity	UOM	Disposal
1	1.2 Tarry residues	6520.00	Kg/M	CHWTSDF for incineration
2	20.1 Contaminated aromatic, aliphatic or napthenic solvents	3000.00	Kg/M	CHWTSDF for incineration
3	5.1 Used /spent oil	630.00	Ltr/M	Send to authorized recycler

(ii) Treatment: - NIL

11. Industry shall comply with following additional conditions:

- i. The applicant shall maintain good housekeeping and take adequate measures for control of pollution from all sources so as not to cause nuisance to surrounding area / inhabitants.
- ii. The applicant shall bring minimum 33% of the available open land under green coverage/ tree plantation.
- iii. Solid waste The non hazardous solid waste arising in the factory premises, sweepings, etc., be disposed of scientifically so as not to cause any nuisance / pollution. The applicant shall take necessary permissions from civic authorities for disposal to dumping ground.
- iv. The applicant shall provide for an alternate electric power source sufficient to operate all pollution control facilities installed by he applicant to maintain compliance with the terms and conditions of the consent. In the absence, the applicant shall stop, reduce or otherwise, control production to abide by terms & conditions of this consent regarding pollution levels.
- v. The applicant shall not change or alter quantity, quality, the rate of discharge, temperature or the mode of the effluent / emissions or hazardous wastes or control equipments provided for without previous written permission of the Board.
- vi. The applicant shall provide facility for collection of environmental samples and samples of trade and sewage effluents, air emissions and hazardous wastes to the Board staff at the terminal or designated points and shall pay to the Board for the services rendered in this behalf.
- vii. The applicant shall make an application for renewal of the consent at least 60 days before the date of the expiry of the consent.
- viii. The firm shall submit to this office, the 30th day of September every year, the Environmental Statement Report for the financial year ending 31st March in the prescribed Form-V as pre the provisions of rule 14 of the Environment (Protection) (Second Amendment) Rules, 1992.
- ix. As inspection book shall be opened and made available to the Board's officers during their visit to the applicant.
- x. The applicant shall install a separate electric meter showing the consumption of energy for operation of domestic and industrial effluent treatment plants and air pollution control system. A register showing consumption of chemicals used for treatment shall be maintained.
- Xi. Separate drainage system shall be provided for collection of trade and sewage effluents. Terminal manholes shall be provided at the end of collection system with arrangement for measuring the flow. No effluent shall be admitted in the pipes / sewers down- stream of the terminal manholes. No effluent shall find its way other than in designed and provided collection System.
- xii. Neither storm water nor discharge from other premises shall be allowed to mix with the effluents from the factory.
- 10. This consent shall not be construed as any exemption from obtaining necessary No Objection Certificate from other Government agencies as may deemed fit necessary.
- 11. The industry shall comply the Environmental Clearance conditions obtained from MoEF, dated 23/12/2008 and amended dated 21/12/2010.

- 12. The industry shall apply for amalgamation of consents.
- 13. The applicant shall obtain consent to operate before starting actual commercial Production.
- 14. This consent is issued subject to no increase in pollution load due to change in product mix
- 15. This Consent is issued pursuant to the decision of Consent Appraisal Committee meeting of the Board held on 07/12/2011.
- 16. This amended consent granted has an overriding effect to earlier consent vide No MPCB/PCI-III/EIC No. PN-1810-07/CC-251, dated 22/08/2008 valid upto commissioning of the unit.
- 17. The Capital investment of Proposed Activity is Rs 42.69 Crores and total Capital investment of the five (5) units (existing and proposed) is Rs. 300.22 Crores.

Milind Mhaiskar, IAS) Member Secretary

To, M/s Jubilant Life Sciences Ltd Village Nimbut-Nira, Rly Station Nira Tal-Baramati, Dist-Pune

Copy to:

Regional Officer, MPCB, Pune / SRO, Pune I

-They are directed to ensure the compliance of consent conditions . Chief Accounts Officer / Cess Branch, MPCB / Master file.

Received Consent fee of -

Sr. No.	Amount(Rs.)	DD. No.	Date	Drawn On
1	25000/-	028514	29 Sep 2011	ICICI Bank
2	50000/-	126274	05 Oct 2011	SBI Bank