MAHARASHTRA POLLUTION CONTROL BOARD

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Red/LSI

Date: 2 | /06/2016

Consent No: Format -1.0/BO/CAC-CELL/EIC NO.AD----16/R/CAC- 8221

To,

M/s. Radico (NV) Distilleries Maharashtra Ltd., Plot No. D-192 to195, MIDC Area Shendra, Dist – Aurangabad.

Subject :

Amendment for the product 45 KLPD Ethanol plant in the existing Consent of 140 KLPD Molasses base & 60 KLPD Grain base Distillery Plant under RED category.

Ref

- 1. Consent to Operate granted by Board to the existing unit vide no. BO/CAC -CELL/EIC No. AD-17309-15/R/CAC-395 dated 21.01.2015.
- 2. Minutes of CAC meeting held on 02/06/2016.

Your application: CO1603000303.

Dated: 11.04.2016.

For: Amendment for the product 45 KLPD Ethanol plant in the existing Consent of 140 KLPD Molasses base & 60 KLPD Grain base Distillery Plant under RED category under Section 26 of the Water (Prevention & Control of Pollution) Act, 1974 & under Section 21 of the Air (Prevention & Control of Pollution) Act, 1981 and Authorization under Rule 5 of the Hazardous Wastes (M, H & T M) Rules 2008 is considered and the consent is hereby granted subject to the following terms and conditions and as detailed in the schedule I, II, & III annexed to this order:

1. The consent is granted for a period up to 31.08.2018.

2. The total capital investment of the Distillery Unit is Rs 306.03 Cr. (As per C.A. Certificate submitted by industry)

3. The Consent is valid for the manufacture of -

Sr. No.	Product / By-Product Name	Maximum Quantity	UoM
	Rectified Sprit OR ENA	4200	KL/M
1	(Industry shall manufacture only one product at	a time)	
9	OR		
2	ENA (From Rectified Spirit)	2850	KL/M
	Ethanol (From Rectified Spirit)	1350	KL/M
3	IMFL	174990	Cases/M
4	Carbon Di-oxide	2460	MT/M
5	Power generation (Bio gas base)	3	MW/D
6	Grain Spirit	1800	KL/M
7	Country Liquor based on grain sprit	300000	Cases/M
	By-product		
1	Cattle Feed (DWGS)	2760	MT/M

(Distillery Capacity shall not exceed Molasses based 140 KLPD, Grain based 60 KLPD & Ethanol 45 KLPD from Rectified Spirit)

4. Conditions under Water (P&CP), 1974 Act for discharge of effluent:

Sr. no.	Description	Permitted quantity of discharge (CMD)	Standards to be achieved	Disposal
1	Trade	1181 (186 after volume reduction)	As per Schedule -I	Bio- methanisation followed by Multiple effect evaporation followed by bio-composting
1.	1. effluent	280 (Generated from grain base)	As per Schedule -I	Zero discharge, hence NA.
2.	Domestic effluent	5.0	As per Schedule -I	On land for irrigation

5. Conditions under Air (P& CP) Act, 1981 for air emissions:

Sr.	Description of stack / source	Number of Stack	Standards to be achieved
1	Boiler (30 TPH)	1	As per Schedule - II
2	DG Set 1000 KWA (2 Nos.)	2	As per Schedule - II
3	D.G. Set 750 KVA	1	As per Schedule - II

6. Conditions under Hazardous Waste (M, H & T M) Rules, 2008 for treatment and disposal of hazardous waste:

Sr. No.	Type of Waste	Category	Quantity	UOM	Disposal
1	Used/ Spent Oil	5.1	1000	Ltr./Year	
2	Chemical Sludge	34.4	15	MT/M	Used as in
3	Distillation residue	36.4	75	MT/M	composting.

7. Non-Hazardous Solid Wastes:

Sr. No.	Type of Waste	Quantity	UOM	Treatment	Disposal
1	Yeast Sludge	676	MT/A	Bio composting	As a manure
2	Boiler Ash	120	MT/M	NA	Sale to brick manufacture

- 8. This Board reserves the right to review, amend, suspend, revoke etc. this consent and the same shall be binding on the industry.
- 9. This consent should not be construed as exemption from obtaining necessary NOC/permission from any other Government agencies.
- 10. Industry shall comply the conditions of EC granted by MoEF vide no. J-11011/137/2014-IA II(I) dtd. 25.06.2015.
- 11. Spent grain shall not be stored for more than 24 hrs. & moisture content should be less than 5 % by dry basis, it should not cause any nuisance in the surrounding area.
- 12. This Consent is granted with the overriding effect to the earlier Consent granted by the Board vide no. BO/CAC -CELL/EIC No. AD-17309-15/R/CAC-395 dated 21.01.2015.

- 13. Industry shall operate online monitoring system which is installed as per the directions of CPCB/MPCB & shall connect and upload the data to CPCB/MPCB server.
- 14. Industry has installed 45 KLPD Ethanol Plant without obtaining Consent from the Board and violated the Environmental Laws. Hence industry shall submit the resolution from the industry's Board within a 15 days stating that they have installed 45 KLPD Ethanol Plant without obtaining Consent from the Board and violated the provisions of Environmental Laws & in future they will not do such violations.

For and on behalf of the Maharashtra Pollytion Control Board

> (Dr. P. Anbalagan, IAS) Member Secretary

Received Consent fee of -

Sr. No.	Amount (`)	DD. No.	Date	Drawn On
01	Rs. 1,29,932/-	571103	04.07.2015	SBI Bank
02	Rs. 12,24,220/-	571271	17.12.2015	SBI Bank

Copy to:

- 1. Regional Officer MPCB Aurangabad, and Sub-Regional Officer Aurangabad, MPCB, They are directed to ensure the compliance of the consent conditions.-
- 2. Chief Accounts Officer, MPCB, Mumbai.
- 3. CC/CAC desk- for record & website updation purposes.

Schedule-I

I) Terms & Conditions for compliance of Water Pollution Control

- A] For Molasses Base: You have provided comprehensive treatment for volume reduction consisting of Bio-digester followed by Multiple Effect Evaporator followed by Bio-Composting on 16 acrs compost yard.
- B] For Grain base: You have provided comprehensive treatment for achieving zero discharge consisting of collection tank followed by Multiple Effect Evaporator followed by DWGS dryer.

C] Conditions for Aerobic Composting:

i. 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 filler material such as press mud, bagasses, agricultural, biological waste as required for effective composting system.

iii. Composted material shall meet the following specifications—

 Moisture
 ... 30 to 35%

 C/N
 ... Below 17

 Nitrogen
 ... 1.5 to 2%

 Phosphorous
 ... 1.5 to 2%

 Potassium
 ... 3 to 4%

iv. The composting site shall be prepared as per the guideline enclosed. Composting shall be such that it includes mechanical mixing and spraying of spent wash along with 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) Filterate shall conform to the following limit.

pH Between 7.5 to 8.0 BOD 3 days 27 Deg. C. Not to exceed 30 mg/1

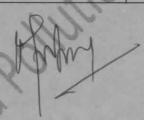
- vi. A pucca leak proof guard pond of 30 days holding capacity as per (i) above shall cope up with the effluent discharge during short term process disturbances. In case of prolonged disturbance in effluent treatment and disposal system, distillery shall be shut down and shall not be restarted without rectifying the system.
- vii. The composting site/pits 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 overturning of compost material in windrows 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 be 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.

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.

Top pulloyer impervious sheets shall be provided for entire compost yard, press mud

- xii. The operation of distillery should be restricted to 330 days as per condition of Environmental Clearance granted by MoEF vide dtd. 25.06.2015.
- 1) The industry shall create Environmental Cell by appointing an Environmental Engineer, Chemist and Agriculture expert for looking after day to day activities related to Environment and irrigation field where treated effluent is used for irrigation.
- 2) The Applicant shall provide Specific Water Pollution control system as per the conditions of EP Act, 1986 and rule made there under from time to time/ Environmental Clearance / CREP guidelines if applicable.
- II) Conditions under Water (Prevention & Control of Pollution) CESS Act, 1977 as amended
 The Applicant shall comply with the provisions of the Water (Prevention & Control of Pollution)
 Cess Act, 1977 and as amended, by installing water meters, filing water cess returns in Form-I and other provisions as contained in the said act.

Sr. No.	Purpose for water consumed	Water consumption quantity (CMD)
1.	Industrial Cooling, boiler feed etc.,	2111
2.	Domestic purpose	9.0
3.	Processing whereby water gets polluted & pollutants are easily biodegradable	0 1867
4.	Processing whereby water gets polluted & pollutants are not easily biodegradable and are toxic	7 -



Schedule-II

Terms & conditions for compliance of Air Pollution Control

1. As per your application, you have provided the Air pollution control (APC) system and also proposed to erect/erected following stack (s) to observe the following fuel pattern-

Sr. No.	Stack Attached to	APC System	Height in meter	Type of Fuel	Quantity	UoM	s %	SO ₂ Kg/ Day
	Boiler (30	ECD	50	Bagasse	100	MT/day	0.2%	400
1	TPH)	ESP	50	Biogas	54000	M ³ /D		
2	D.G. Set 1000 KVA		7				6.	
3	DG set of 1000 KVA		7	HSD	100	Litrs./D	1%	2.0
4	DG set of 750 KVA		7			18	7	

- 2. The Applicant shall obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or replacement/alteration well before its life come to an end or erection of new pollution control equipment.
- 3. The Board reserves its rights to vary all or any of the condition in the consent, if due to any technological improvement or otherwise such variation (including the change of any control equipment, other in whole or in part is necessary).
- 4. The applicant shall operate and maintain above mentioned air pollution control system, so as to achieve the level of pollutants to the following standards:

Particulate matter	Not to exceed	150 mg/Nm ³

- 5. The Applicant shall obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or replacement/alteration well before its life come to an end or erection of new pollution control equipment.
- 6. The Board reserves its rights to vary all or any of the condition in the consent, if due to any technological improvement or otherwise such variation (including the change of any control equipment, other in whole or in part is necessary).

Schedule-III Details of Bank Guarantees

Sr. No.	Consent (C to E/O/R)	Amt of BG Imposed	Submission Period	Purpose of BG	Compliance Period	Validity Date
1	Amendm	Rs. 5.0 Lacs	Already submitted.	O & M of pollution control systems & compliance of Consent Conditions.	31.08.2018.	31.12.2018.
2	ent in Existing Consent.	Rs. 10.0 Lacs	Already submitted.	Not to discharge any effluent outside the factory premises.	31.08.2018.	31.12.2018.
3		Rs. 2.0	15 Days	Submission of BR as	Within 15	One year

Schedule-IV

General Conditions

1) The applicant shall provide facility for collection of environmental samples and samples of trade and sewage effluents, air emissions and hazardous waste to the Board staff at the terminal or designated points and shall pay to the Board for the services rendered in this behalf.

2) Industry should monitor effluent quality, stack emissions and ambient air quality

monthly/quarterly.

- 3) 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.
- 4) Whenever due to any accident or other unforeseen act or even, such emissions occur or is apprehended to occur in excess of standards laid down, such information shall be forthwith Reported to Board, concerned Police Station, office of Directorate of Health Services, Department of Explosives, Inspectorate of Factories and Local Body. In case of failure of pollution control equipments, the production process connected to it shall be stopped.

5) The applicant shall provide an alternate electric power source sufficient to operate all pollution control facilities installed 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

and conditions of this consent.

6) 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 per the provisions of rule 14 of the Environment (Protection) (Second Amendment) Rules, 1992.

- 7) The industry shall recycle/reprocess/reuse/recover Hazardous Waste as per the provision contain in the HW (MH&TM) Rules 2008, which can be recycled /processed /reused /recovered and only waste which has to be incinerated shall go to incineration and waste which can be used for land filling and cannot be recycled/reprocessed etc should go for that purpose, in order to reduce load on incineration and landfill site/environment.
- 8) The industry should comply with the Hazardous Waste (M, H & TM) Rules, 2008 and submit the Annual Returns as per Rule 5(6) & 22(2) of Hazardous Waste (M, H & TM) Rules, 2008 for the preceding year April to March in Form-IV by 30th June of every year.

9) An inspection book shall be opened and made available to the Board's officers during their visit to the applicant.

10) The applicant shall make an application for renewal of the consent before 60 days from the date of the expiry of the consent.

11) Industry shall strictly comply with the Water (P&CP) Act, 1974, Air (P&CP) Act, 1981 and Environmental Protection Act, 1986 and industry specific standard under EP Rules 1986 which are available on MPCB website (www.mpcb.gov.in).

- 12) Separate drainage system shall be provided for collection of trade and sewage effluents. Terminal manholes shall be provided at the end of the collection system with arrangement for measuring the flow. No effluent shall be admitted in the pipes/sewers downstream of the terminal manholes. No effluent shall find its way other than in designed and provided collection system.
- 13) Neither storm water nor discharge from other premises shall be allowed to mix with the effluents from the factory.
- 14) The applicant shall install a separate 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.

15) 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) 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.
- d) Installation of DG Set must be strictly in compliance with recommendations of DG Set manufacturer.
- e) 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.
- f) D.G. Set shall be operated only in case of power failure.
- g) The applicant should not cause any nuisance in the surrounding area due to operation of D.G. Set.
- h) The applicant shall comply with the notification of MoEF dated 17.05.2002 regarding noise limit for generator sets run with diesel.
- 16) The industry should not cause any nuisance in surrounding area.
- 17) 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.
- 18) The applicant shall maintain good housekeeping.
- 19) The applicant shall bring minimum 33% of the available open land under green coverage/plantation. The applicant shall submit a yearly statement by 30th September every year on available open plot area, number of trees surviving as on 31st March of the year and number of trees planted by September end.
- 20) 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 of solid waste.
- 21) The applicant shall not change or alter the 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. The industry will not carry out any activity, for which this consent has not been granted/without prior consent of the Board.
- 22) The industry shall ensure that fugitive emissions from the activity are controlled so as to maintain clean and safe environment in and around the factory premises.
- 23) The industry shall submit quarterly statement in respect of industries obligation towards consent and pollution control compliance's duly supported with documentary evidences (format can downloaded from MPCB official site).
- 24) The industry shall submit official e-mail address and any change will be duly informed to the MPCB.
- 25) The industry shall achieve the National Ambient Air Quality standards prescribed vide Government of India, Notification dt. 16.11.2009 as amended.
- 26) The Board reserves its rights to review plans, specifications or other data relating to plant setup for the treatment of waterworks for the purification thereof & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions. The Applicant shall obtain prior consent of the Board to take steps to establish the unit or establish any treatment and disposal system or an extension or addition thereto.
- 27) The industry shall ensure replacement of pollution control system or its parts after expiry of its expected life as defined by manufacturer so as to ensure the compliance of standards and safety of the operation thereof.

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