MAHARASHTRA POLLUTION CONTROL BOARD

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Kalpataru Point, 2nd - 4th Floor, Opp. Cine Planet Cinema, Near Sion Circle, Sion (E) Mumbai - 400 022

Red/LSI

Consent No: Format 1.0/BO/CAC-CELL/EIC No. - PN -25359 - 15/R/CAC- 3915

To,

M/s. Shivratna Udyog Pvt. Ltd., Village - Karkamb, Tal. – Pandharpur, Dist- Solapur.

Subject : Renewal of Consent to Operate of 2500 TCD Sugar & 12 MW Co-generation unit under RED category.

Ref

- 1. Earlier Consent to operate for sugar unit granted vide No. BO/CAC-CELL/EIC No. - PN -20544 - 14/O/CAC- 10196 dated 07.11.2014.
 2. Minutes of CAC matrix is a subscription of the subscription of the
 - 2. Minutes of CAC meeting held on 06.10.2015.

Your application: CR1504000468. Dated: 07/04/2015.

For: Renewal of Consent to Operate of 2500 TCD Sugar & 12 MW Co-generation unit 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 & IV annexed to this order:

1. The consent is granted for a period from **01.05.2014 to 31.01.2016**.

2. The actual capital investment of the industry is Rs. 103.63 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 in MT/M
1	Sugar	9000
2	Bagasse	27200
3	Press mud	3600
4	Molasses	3600
5	Co-Generation	12 MW

(The cane crushing Capacity of Sugar Industry shall not exceed 2500 TCD)

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

Sr. no.	Description	Permitted quantity of discharge (CMD)	Standards to be achieved	
1.	Trade effluent	375 (Sugar 260 + Co- gen 115)	As per Schedule -I	115 CMD shall be recycle & remaining 260 CMD on
2.	Domestic effluent	60	As per Schedule -I	land for irrigation On land for irrigation

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5.

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

Sr. no.	Description of stack / source	Number of Stack	
1.	Boiler (75 TPH)	1	
	DG Set of 320 KVA	1	As per Schedule – II
-	DG Set of 625 KVA	1	As per Schedule – II
		1	As per Schedule – II

 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	5.1/5.2	10	Kg/D	Reuse in own
				0 -	boiler as fuel

7. Non-Hazardous Solid Wastes:

		UOM	Treatment	Disposal
Boiler Ash	10.0	MT/D	-	Sale to Bricks manufacturers
TP Sludge	02.0	MT/M		Used as Manure.
	P Sludge	P Sludge 02.0	P Sludge 02.0 MT/M	P Sludge 02.0 MT/M -

- 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.

For and on behalf of the Maharashtra Pollution Control Board

(Dr. P. Anbalagan, IAS)

Member Secretary

Re	ceived	1 Consent :	fee	of –
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Sr. No.	Amount (Rs.)	DD. No.	Date	Drawn On
1	Rs. 1,25,000/-	087290	03.03.2015	
As per the C	Consented granted vide	dtd 07 11 2014 6	05.05.2015	State Bank of India.

As per the Consented granted vide dtd. 07.11.2014 fees of Rs. 83,305/- is balance with the Board & same and is considered during this Renewal of Consent, hence there is no any balance fees with the Board.

Copy to:

- 1. Regional Officer MPCB Pune He is directed to return the BGs of Rs. Rs. 1 Lakh, 10 Lakh, 5 Lakh, 2 Lakh & Rs. 10000/- which are obtained towards installation of flow meter at inlet of ETP, provision of separate primary ETP for DM plant effluent & cooling water, arrangement to cover the effluent collection system to avoid ingress of baggasse, provision of adequate land for disposal of treated effluent, submission of plans for utilization of fly ash & bottom ash as industry has complied these conditions. Also directed to forfeit the BG of Rs. 2.5 Lakh out of 5 Lakh obtained towards O & M of pollution control systems as JVS results are exceeding the Consented limits.
- Sub -Regional Officer Solapur, MPCB, They are directed to ensure the compliance of the consent conditions.
- 3. Chief Accounts Officer, MPCB, Mumbai.
- 4. CC/CAC desk- for record & website updation purposes.

Schedule-I

I) Terms & Conditions for compliance of Water Pollution Control

- 1) A] As per your application, you have provided Effluent Treatment Plant (ETP).
 - **B]** The Applicant shall operate the effluent treatment plant (ETP) to treat the trade effluent so as to achieve the following standards prescribed by the Board or under EP Act, 1986 and Rules made there under from time to time, whichever is stringent.

Sr. No.	Parameters	Standards prescribed by Board
		Limiting Concentration in mg/l, except for pH
01	pH	5.5-9.0
02	Oil & Grease	10
03	BOD (3 days 27oC)	100
04	Sulphate	1000
05	Suspended Solids	100
06	COD	250
07	Chloride	600
08	Total Dissolved Solids	2100

C] The treated effluent 375 CMD shall be disposed on land for irrigation on 92 acres of own land & as per the bilateral agreement with farmers. In no any case treated / untreated effluent shall find it's way outside the factory premises directly or indirectly.

D] The treated effluent 115 CMD shall be 100% recycle in process.

E] CREP conditions for Sugar Factory

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- i. Operation of ETP shall be started at least one month before starting of cane crushing to achieve desired MLSS. So as to meet prescribed standards from day one the operation of mill.
- ii. Waste water generation shall be maintained as 100 liters per ton of cane crushed.
- iii. Industry shall achieve zero discharge into in land surface water bodies.
- iv. 15 days storage capacity tank shall be provided for treated effluent to take care of no demand for irrigation.
- F] Industry shall maintain properly the arrangement provided for covering the effluent collection system and to avoid the ingress of Bagasse other material.

G] The unit shall operate ETP even after completion of the crushing season so that any effluent generated during washing & maintenance is discharged after proper treatment.

H] The unit shall optimize water use in industrial process & maintain records of water consumption & waste water generation.

- A] As per your consent application, for the 60 CMD sewage generation you have provided the septic tank & soak pit.
 - **B]** The Applicant shall operate the sewage treatment system to treat the sewage so as to achieve the following standards.

(1)	Suspended Solids	Not to exceed	100	mg/1.
(2)	BOD 3 days 27°C	Not to exceed	100	mg/l.

C] The treated sewage 60 CMD shall be disposed on land for gardening/irrigation.

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- 3) The industry shall have bilateral agreement with the farmers on whose land the treated effluent is used for irrigation purposes and a copy of the agreements with validity shall be submitted to the Regional/Sub- Regional Office of the Board.
- 4) 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.

5) CONDITIONS FOR MOLASSES STORAGE:

- (i) The molasses shall be properly collected and stored in steel tanks which shall be leak proof. At no stage of handling of molasses, there shall be leakage or spillage.
- (ii) The capacity of tanks for storage of molasses shall be such that it will take care of bumper production of sugar, non-lifting of molasses etc.
- (iii) 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.
- (iv) 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 tonnes shall be displayed prominently near /on the tank.
- (vi) The above conditions shall be in addition to and not in derogation of the provisions contained in the "Bombay Molasses Rules, 1955" and "Maharashtra Molasses Storage and Supply Regulation, 1965".
- 6) 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) <u>Conditions under Water (Prevention & Control of Pollution) CESS Act, 1977 as</u> <u>amended</u>

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.,	240.00
2.	Domestic purpose	80.00
3.	Processing whereby water gets polluted & pollutants are easily biodegradable	500.00
4.	Processing whereby water gets polluted & pollutants are not easily biodegradable and are toxic	

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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 erected following stack (s) to observe the following fuel pattern-

Sr. No.	Stack Attached to	APC System	Height in meter	Type of Fuel	Quantity	S %	SO2 Kg/ Day
1.	Boiler (75 TPH)	ESP	79	Bagasse	400 MT/D	0.2%	1600
2.	DG Set of 320 KVA		3.5		100		2
3.	DG Set of 625 KVA		3.5	HSD	Ltrs./Hr.	1 %	48

- 2. The Applicant shall provide ESP/ Bag filter/ Wet scrubber to the Bagasse fired boiler and Dust Collector to Sugar bagging section as an Air Pollution control equipments OR as per the conditions of EP Act, 1986 and rule made there under from time to time / Environmental Clearance / CREP guidelines.
- 3. 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

- 4. 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.
- 5. 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).

<u>Schedule-III</u> Details of Bank Guarantees

BG History

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Sr. No.	Consent (C to E/O/R)	Amt of BG Imposed	Amount of BG forfeited from the imposed BG	Purpose of BG forfeiture
1	C to R	Rs. 5.0 Lakh	Rs. 2.5 Lakh	 As JVS results of trade effluent & stack monitoring are exceeding the Consented limits.

Sr. No.	Consent (C to E/O/R)	Amt of BG Imposed	Submission Period	Purpose of BG	Compliance Period	Validity Date
1	Renewal of Consent	Rs. 9.0 Lakh	To be extended	The industry shall reduce waste water generation to 100 litrs. Per ton of cane crushed.	Monitoring purpose	31.08.2015
2	Renewal of Consent	Rs. 2.5. Lakh	To be extended	 0 & M for achieving consented standards of Effluent. 0 & M for achieving consented standards of Stack emission, 	31.07.2016	30.11.2016
2		Rs. 5.0 Lakh (Top-up of forfeited)	15 days			

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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.
- Industry should monitor effluent quality, stack emissions and ambient air quality monthly.
- 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 at least 60 days before the date of the expiry of the consent.
- 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) The industry shall constitute an Environmental cell with qualified staff/personnel/agency to see the day to day compliance of consent condition towards Environment Protection.
- 13) 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.
- 14) Neither storm water nor discharge from other premises shall be allowed to mix with the effluents from the factory.
- 15) 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.
- 16) 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

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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
- 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.
 h) The applicant shall comply with the potification of MoDE 1 and 12 and 14 a
- h) The applicant shall comply with the notification of MoEF dated 17.05.2002 regarding noise limit for generator sets run with diesel.
 17) The induction of MoEF dated 17.05.2002 regarding noise limit
- 17) The industry should not cause any nuisance in surrounding area.
- 18) 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.
- 19) The applicant shall maintain good housekeeping.
- 20) 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.
- 21) 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.
- 22) 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.
- 23) 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.
- 24) 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).
- 25) The industry shall submit official e-mail address and any change will be duly informed to the MPCB.
- 26) The industry shall achieve the National Ambient Air Quality standards prescribed vide Government of India, Notification dt. 16.11.2009 as amended.
- 27) 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.
- 28) 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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