

# JAWAHAR SHETKARI SAHAKARI SAKHAR KARKHANA LTD., HUPARI

Shri Kallappa Awadenagar, Hupari-Yalgud 416 203, Tal.: Hatkanangale, Dist.: Kolhapur (Maharashtra)

Phone (0230) 2450402 (5 Lines), Fax (0230) 2450401, E-mail : kprjsssk@gmail.com

Ref. No.MFG/ETP/4658/2020-21

Date: 27/08/2020

To,  
The Member Secretary,  
Expert Appraisal Committee (Ind.-2),  
MoEFCC, Indira Paryavaran Bhavan,  
2<sup>nd</sup> Floor, Vayu Wing,  
Aliganj, Jorbagh Road,  
New Delhi - 110003

Sub. : Regarding **Additional Details Sought(ADS)** in respect of Proposed Expansion of Sugar Factory from 12,000 TCD to 16,000 TCD by **Jawahar Shetkari Sahkari Sakhar Karkhana Ltd.**, Hupari-Yalgud, Tal.: Hathkanangale, Dist.: Kolhapur, Maharashtra State.  
(Proposal No. : IA/MH/IND2/38479/2014)

Ref. : 1. Online EIA Report submitted on 04.02.2020  
2. Minutes of 21<sup>st</sup> EAC Meeting held on 14.07.2020

Dear Sir,

This has reference to an Online EIA report submitted to MoEFCC; New Delhi on 04.02.2020. The same was regarding Proposed Expansion of Sugar Factory from 12,000 TCD to 16,000 TCD by **Jawahar Shetkari Sahkari Sakhar Karkhana Ltd.**, Hupari-Yalgud, Tal.: Hathkanangale, Dist.: Kolhapur, Maharashtra State.

Subsequently, the case was considered in 21<sup>st</sup> EAC Meeting held on **14.07.2020**. During the same, certain additional details were sought by the Committee Members. Accordingly; we, hereunder, are presenting a pointwise compliance / clarification for the ADS –

**Point No. 1:** Revised Water balance with complete Zero Liquid Discharge Plan. PP can drop the fresh water requirement by utilizing water from harvested rain water, cane condensate and reuse of treated water.

**Clarification:**

The revised water balance with complete Zero Liquid Discharge Plan is presented at **Annexure-I**. The same may please be referred.

**Point No. 2 :** Current status of court case. Details of action taken by SPCB along with copies/CTO etc.

**Clarification:**

Initially on 23.11.2016 a Case was filed by MPCB against Jawahar Shetkari Sahkari Sakhar Karkhana Ltd., Hupari-Yalgud, Tal.: Hathkanangale, Dist.: Kolhapur (MS) in the Court of "Chief Judicial Magistrate, Kolhapur". Subsequently; it was transferred in the "Civil Court Senior Division, Ichalkaranji" (Taluka Hathkanangale). Thereat, the hearings under Court Case (Reg. No.244/2018) are going on. A summary sheet showing status of chronology of the hearings that took place from 13.12.2018 till 22.07.2020 is appended at **Annexure-II**. As on date, no decision in said case is done.

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**Point No.3:** Commitment that no treated/untreated waste water shall be discharged outside the plant premises.

**Clarification:**

A firm commitment is given by the Management of Jawahar Shetkari Sahakari Sakhar Karkhana Ltd. that - no any treated or untreated wastewater (trade or domestic) from the existing as well as proposed expansion projects of the Sugar Factory shall be discharged outside the Industrial premises. In fact, as directed by Hon. Committee Members in the EAC meeting of 14.07.2020; the Industry shall achieve ZLD w.r.t. its effluents while minimizing fresh water requirement substantially. More details about this planning have been presented under explanation of Point No. 1. The same may please be referred.

**Point No. 4:** Plan for rain water harvesting.

**Clarification:**

A detailed report on Rain Water Harvesting (RWH) from the Jawahar Shetkari S.S.K.L.Project has been prepared which takes in to account both roof top and surface harvesting. Further, the RWH structures and allied details are shown on the Industry's Master Layout Plan. The rainwater endowment is estimated for rooftop, paved and unpaved surface areas in the factory premises. Calculations are made for monthly and annual rainwater yield. Total building roof top surface area is 71,419 Sq. M, area of paved surfaces is 32,863 Sq. M and that of the unpaved surfaces is 92,137 Sq. M. The runoff coefficient for roof top, paved surface and unpaved surface area is 0.8, 0.6 and 0.5 respectively. The results reveals that total available quantity of rain water from the area is 1,17,513 Cu. M / Yr. out of which 54,621 Cu. M. is from rooftop surface area, 18,850.22 Cu. M. is from paved surface area and 44,041.49 Cu. M. is from unpaved surface area. The RWH Report & Layout have been enclosed at **Annexure-III**.

**Point No.5:** Committee sought the plan for green energy viz. solar power generation (at least 2.5 MW for use in the unit).

**Clarification:**

The management of Jawahar S.S.S.K.Ltd. has taken due cognizance of the directions given by Hon. Committee Members towards installation of 2.5 MW capacity Solar Photovoltaic Power Plant for generation & utilization of Green Energy. The infrastructure under this ambitious project will be installed on Industry's land as well as outside premises as per the feasibility towards space / land availability. Thus, both centralized as well as decentralized propositions are under way. It is contemplated that entire planning, designing, ordering, installation and commissioning of infrastructure under the proposed Solar Photovoltaic Power System shall take about 2 Years in view of the Sugar Factory's present financial condition and situation of country's economy in light of the ongoing COVID-19 pandemic.

**Point No.6:** Commitment for employment to the local people along with details.

**Clarification:**

As informed during the EAC meeting of 14.07.2020; the management of Jawahar S.S.S.K. Ltd. hereby gives a firm commitment that - after the proposed sugar factory expansion project implementation; the industry would need about 100 people under new employment generation. There under, skilled and semi-skilled persons shall be required prominently. The Industry shall give 90% of the Jobs to locals under primary employment. In present sugar factory also there are 1283 employees out of which 85% are from nearby villages in a radius of 15 Km from the Industry.

# JAWAHAR SHETKARI SAHAKARI SAKHAR KARKHANA LTD., HUPARI

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**Point No. 7:** Issues raised during public hearing, action plan, and as committed for utilization of Rs. 5 Crore for CER, revised action plan.

**Clarification:**

There were no nay specific issues raised by the Public during Public Hearing. All the persons attended the hearing unanimously supported the expansion project while appreciating steps taken by the Industry towards community welfare and its contributions in social development of villages in the Sugar Factory's command area. A detailed description of issues raised by the Public during Public Hearing and response by PP along with action plan, time line and budget is presented at **Annexure-IV**. This was also presented during EAC meeting of 14.07.2020. Further, a planning towards expenditure of Rs.5 Cr on CER activities has also been given in the above annexure. During EAC meeting, the Committee Members directed the Industry to enhance expenditures on CER from Rs.2.6 Cr to Rs.5 Cr, which was accepted by PP at once.

**Point No. 8 :** Earlier EC was granted in 2016. The Committee noted that there is Schedule-I species in the study area and PP has still not taken the approval of conservation plan.

**Clarification:**

The Wildlife Conservation Plan for Schedule-I species has been prepared and submitted to CWW; Nagpur (MS) for approval under the Sugar Factory's present expansion proposal. However, at the time of earlier EC granted in 2016; this compliance missed out inadvertently for which the PP begs pardon and commits that such things will not happen anytime in future.

**Point No. 9 :** Consultant needs to upload all the required details in Form 2 (Parivesh Portal), [for eg. Letter of SPCB forwarding the Public Hearing to MoEFCC at S No. 7.1 has not uploaded; In S No. 6, in place of TOR, minutes uploaded etc.]

**Clarification:**

A cognizance of the directions under above point has been taken. The letter related to SPCB forwarding the Public Hearing documents to MoEFCC is uploaded at Sr. No. 7.1. Also, ToRs letter w.r.t. Proposed Expansion of Sugar Factory from 12,000 TCD to 16,000 TCD is uploaded at Sr. No.. 6 of the Form 2. The same is also attached at **Annexure-V** for reference.

Sir, we hope that the details presented above are in accordance with your requirements. Kindly consider our proposal at the earliest for grant of EC.

Thanking you.

Yours faithfully,  
For Jawahar SSSK Ltd., Hupari



(M.G.Joshi)  
Managing Director

Enclosed: As above

**Annexure – I**  
**Revised Water Balance with ZLD**



**Water Budget under ZLD Proposal for Integrated Project Complex of  
Jawahar Shetkari Sahkari Sakhar Karkhana Ltd., A/P:  
Hupari, Tal: Hatkanangale, Dist: Kolhapur, MS**

**I. Qty. of Actual Cane Condensate becoming available from Sugar Factory**

**Table No. 1**

1	Daily Sugarcane Crushing	16,000 TCD
2	Water Content of Cane crop @ 68% by weight	10,880 MT
3	Actual Cane Condensate that becomes available for reuse is to the tune of <b>50% on cane weight (i.e. 8000 CMD)</b> after considering losses as - (1) moisture in press mud (70% on dry weight basis), (2) bagasse (50%), (3) sugar (5%), (4) molasses (60%) as well as (5) losses during juice heating, concentration in pans etc. Out of this 8000 CMD; 3840 CMD is utilized as Imbibition Water. Hence, net condensate becoming available for reuse is $8000 - 3840 = 4160$ <b>CMD</b> .	<b>4,160 CMD</b>
4	Treated Effluent available for Reuse / Recycle (Out of Sugar Factory effluent 1430 CMD; a quantity of 730 CMD shall go for sprinkling on ash hips, cane yard, bagasse & press mud yard as well as open areas prone to fugitive dust emissions).	<b>700 CMD</b>
5	Treated sewage from Sugar Factory STP available for Recycle	<b>125 CMD</b>
	<b>Total (3+4+5)</b>	<b>4,985 CMD</b>

**II. Water Budget for Sugar Factory & Co-gen (CMD) :Operation 180 Days**

**Table No. 2**

No	Description	After Expansion (16,000 TCD & 28.5 MW)	Remarks
<b>A</b>	<b>Domestic</b>	#328	
<b>B</b>	<b>Industrial</b>		
	Process	*2050	
	Cooling	*700	
	Boiler Makeup	*421	
	Lab & Wash	*270	
	DM Backwash + Ash	*25	
	<b>Industrial Total</b>	<b>*3466</b>	
<b>C</b>	<b>Green Belt</b>	<b>*1450</b>	The Total Green Belt Area after Expansion shall be 39.37 Ha (98.5 Acres). This will be 40% of Total Plot Area of 99.57 Ha. The Water requirement is @ 15 CMD / Acre in light of type of soil, age & type of

No	Description	After Expansion (16,000 TCD & 28.5 MW)	Remarks
			trees and climatic conditions like ambient temperature & humidity
D	Total Requirement; (A + B + C)	5,244 (#328 + *4916)	
E	Net Requirement [(D – 328; Fresh Water)]	4,916	328; Fresh Water
F	Total availability (from Table No. 1 above)	4,985	
G	Net Balance Water (F - E)	$4,985 - 4,916 = 69$	This 69 CMD of Excess Water available from Sugar Factory to be exported to Proposed 100 KLPD Molasses Distillery (Distillery will need 1430 CMD of Water) for Reuse (TORS granted by MoEFCC vide letter No. IA-J-11011/326/2019-IA-II (I) dated 11.11.2019. <b>Thus the Sugar Factory becomes a Total ZLD Project.</b>
H	Fresh Water Requirement in Sugar Factory	328 CMD	6% (i.e. for Domestic Purpose only) of Total Requirement of 5244 CMD

Note :# - Fresh water, \*- Recycle Water from Cane Condensate, Treated ETP & STP Effluents

**Annexure – II**  
**Current Status of Court Case & CTOs**

**Civil Court Senior Division , Ichalkaranji****Case Details**

Case Type	: R.C.C. - Regular Criminal Case		
Filing Number	: 2437/2018	Filing Date:	03-09-2018
Registration Number	: 244/2018	Registration Date:	04-09-2018
CNR Number	: MHKO05-002937-2018		

**Case Status**

First Hearing Date	: 20th October 2018
Next Hearing Date	: 22nd July 2020
Stage of Case	: Filing of Say on Exh Ready
Court Number and Judge	: 15-6th jt civil judge jr.dn and JMFC Ichalkaranji

**Petitioner and Advocate**

1) maharashtra Pollution control Board Kolhapur  
Advocate- A.P.P.

**Respondent and Advocate**

1) Jawahar S. S. K. Ltd. Ichalkaranji  
Advocate - R. V. Mudgal

**Acts**

Under Act(s)	Under Section(s)
WATER (PREVENTION AND CONTROL OF POLLUTION) ACT, 1974	15,16

**History of Case Hearing**

Registration Number	Judge	Business On Date	Hearing Date	Purpose of hearing
244/2018			13-12-2018	Appearance
244/2018	Jt.Civil Judge Jr.Dn. Ichalkaranji		28-01-2019	Filing of Say on Exh Ready
244/2018	Jt.Civil Judge Jr.Dn. Ichalkaranji		22-03-2019	Filing of Say on Exh Ready
244/2018	Jt.Civil Judge Jr.Dn. Ichalkaranji		29-04-2019	Filing of Say on Exh Ready
244/2018	Jt.Civil Judge Jr.Dn. Ichalkaranji		02-07-2019	Filing of Say on Exh Ready
244/2018	Jt.Civil Judge Jr.Dn. Ichalkaranji		03-09-2019	Filing of Say on Exh Ready
244/2018	Jt.Civil Judge Jr.Dn. Ichalkaranji		04-11-2019	Filing of Say on Exh Ready
244/2018	Jt.Civil Judge Jr.Dn. Ichalkaranji		23-12-2019	Filing of Say on Exh Ready
244/2018	6th jt civil judge jr.dn and JMFC Ichalkaranji		07-02-2020	Filing of Say on Exh Ready
244/2018	6th jt civil judge jr.dn and JMFC Ichalkaranji		13-03-2020	Filing of Say on Exh Ready
244/2018	6th jt civil judge jr.dn and JMFC Ichalkaranji		04-04-2020	Filing of Say on Exh Ready
244/2018	6th jt civil judge jr.dn and JMFC Ichalkaranji		27-04-2020	Filing of Say on Exh Ready
244/2018	6th jt civil judge jr.dn and JMFC Ichalkaranji		16-05-2020	Filing of Say on Exh Ready
244/2018	6th jt civil judge jr.dn and JMFC Ichalkaranji		22-07-2020	Filing of Say on Exh Ready

# MAHARASHTRA POLLUTION CONTROL BOARD

Tel: 24010706/24010437  
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Kalpataru Point, 2nd and 4th  
floor, Opp. Cine Planet  
Cinema, Near Sion Circle, Sion  
(E), Mumbai-400022

No:- Format1.0/CAC/UAN No.MPCB-  
CONSENT-0000074209/CR - 2002001182

Date: 26/02/2020

To,  
Jawahar Shetkari Sahakari Sakhar Karkhana Ltd., Hupari  
315/7 to 315/15, 925/9, Yelgud-Hupari  
Hatkanangale, Kolhapur-Kolhapur

**Sub: Renewal of Consent for 12000 TCD sugar unit & 28.5 MW Co-generation unit. Under L.S.I RED Category**

**Ref: 1. Renewal of Consent granted by the Board vide No. BO/CAC-CELL/UAN No. 0000048678/R/CAC-1906000937 dtd 19.06.2019.**  
**2. Minutes of CAC Meeting dtd. 24.10.2019.**

Your application No.MPCB-CONSENT-0000074209 Dated 19.06.2019

For: grant of Consent to Renewal for 12000 TCD sugar unit & 28.5 MW Co-generation unit 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 6 of the Hazardous & Other Wastes (Management & Transboundary Movement) Rules 2016 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:

- The Consent to Renewal is granted upto: 31.07.2020**
- The capital investment of the industry is Rs.310.7079 Crs. (As per C.A Certificate submitted by industry).**
- Consent is valid for the manufacture of:**

Sr No	Product	Maximum Quantity	UOM
1	Sugar	52050.00	MT/M
2	Molasses	14400.00	MT/M
3	Pressmud	14400.00	MT/M
4	Bagasse	105500.00	MT/M
5	Electric Power (Co-Generation)	28.50	MW

**(The Cane crushing capacity of Sugar Industry shall not exceed 12000 TCD.)**

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

Sr No	Description	Permitted in CMD	Standards to	Disposal
1.	Trade effluent	1200	As per Schedule -I	200 CMD Recycle & 1000 CMD on land for irrigation.
2.	Domestic effluent	125	As per Schedule - I	onland for gardening / irrigation



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

Stack No.	Description of stack / source	Number of Stack	Standards to be achieved
1	Boiler. (75 TPH)	1	As per Schedule -II
2	Boiler (90 TPH)	1	As per Schedule -II
2	Boiler (20 TPH)	1	As per Schedule -II
3	DG Set (515 KVA)	1	As per Schedule -II
3	DG Set (1320 KVA)	1	As per Schedule -II

6. Conditions about Non Hazardous Wastes:

Sr No	Type of Waste	Quantity	UoM	Treatment	Disposal
1	ETP Sludge	3000	Kg/Day	Sludge drying Beds	Used as a manure
2	Ash	35	MT/Day	Stored in ash yard	Partially used i press mud compost and remaining giving to farmers as a soil conditioning

7. Conditions under Hazardous & Other Wastes (M & T M) Rules 2008 for treatment and disposal of hazardous waste:

Sr No	Type of Waste	HW Category.	Quantity & UoM	Treatment	Disposal
1	5.1 Used or spent oil	5.1	200 Kg/Day	Recycle	Sale to authorized recycler.

The applicant shall ensure disposal to the Actual user having permissions under Rule 9 of Hazardous and other Waste (M & TM) Rules, 2016.

a. The applicant shall properly collect, transport & regularly dispose of the hazardous waste to CHWTSDf, in compliance of the Hazardous & Other Wastes (Management & Transboundary Movement) Rules, 2016 and keep proper manifest thereof.

8. The 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 authorities.
10. Industry shall connect online CMS data as per CPCB guidelines to CPCB & MPCB Servers.
11. Industry shall stop production activity voluntarily in case of failure of operation and maintenance of the ETP system as preventive measures.
12. Industry shall extend all existing BGs towards O&M of pollution control systems and towards compliance of the Consent conditions.



- 13 This consent is issued as per the Consent Appraisal Committee meeting dated. 24.10.2019
- 14 The applicant shall make an application for renewal of the consent at least 60 days before the date of the expiry of the consent.

For and on behalf of the  
Maharashtra Pollution Control  
Board.

(E. Ravendiran IAS),  
Member Secretary

**Received Consent fee of -**

Sr.No	Amount(Rs.)	Transaction/DR.No.	Date	Transaction Type
1	621416.00	5451890	19/06/2019	RTGS
2	50000.00	5454041	31/08/2019	RTGS

0

**Copy to:**

1. Regional Officer, MPCB, Kolhapur and Sub-Regional Officer, MPCB, Kolhapur  
- They are directed to ensure the compliance of the consent conditions.
2. Chief Accounts Officer, MPCB, Sion, Mumbai
3. CC/CAC desk - For record and website updation purpose.



#### **SCHEDULE-I**

##### **Terms & conditions for compliance of Water Pollution Control:**

- 1) A] As per your application, you have Provided Effluent Treatment Plant (ETP) of designed capacity of 3000.00 CMD consisting of Primary, Secondary, Tertiary for the treatment of 1200.00 CMD industrial effluent
- 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.

<b>Sr. No.</b>	<b>Parameters</b>	<b>Limiting concentration not to exceed in mg/l, except for pH</b>
(1)	pH	5.5-9.0
(2)	Oil & Grease	10
(3)	BOD (3 days 27 <sup>°C</sup> )	100
(4)	Sulphate	1000
(5)	Suspended Solids	100
(6)	COD	250
(7)	Chloride	600
(8)	Total Dissolved Solids	2100

C] The treated effluent 1000.00 CMD shall be disposed on land for irrigation on 36.42 hectares of own land /as per the bilateral agreement with farmers. In no any case treated/untreated effluent shall find its way outside the factory premises directly or indirectly.

D] Trade effluent of 200.00 CMD generated from Co-gen shall be 100% recycle in process.

**E] CREP conditions for Sugar Factory**

- 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 reduced to 100 liters per tone 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 during no demand for irrigation.

F] Industry to make necessary arrangement to cover the effluent collection system and to avoid the ingress of Bagasse and other material.

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

H] The unit shall optimize water use in industrial process & maintain records.

- 2) A) As per your application, you have provided septic tank and soak pit for the treatment of 125.00 CMD sewage.

B) The applicant shall operate sewage treatment system to treat sewage so as to achieve the following standards/ prescribed under EP Act 1986 and rules made under time to time, whichever is stringent.

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

C) The treated sewage shall be 100% reused/recycled for gardening purpose within premise. In no any case, sewage shall find its way outside Company's premises.

- 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 at least 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.
- 7) 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.

- 8) 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.
- 9) The Applicant shall comply with the provisions of the Water (Prevention & Control of Pollution) Act, 1974 and as amended, by installing water meters, and other provisions as contained in the said act:

<b>Sr. No.</b>	<b>Purpose for water consumed</b>	<b>Water consumption quantity (CMD)</b>
1.	Industrial Cooling, spraying in mine pits or boiler feed	100.00
2.	Domestic purpose	328.00
3.	Processing whereby water gets polluted & pollutants are easily biodegradable	30.00
4.	Processing whereby water gets polluted & pollutants are not easily biodegradable and are toxic	0.00
5.	Grandening	00

- 10) 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.





**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 erected following stack(s) and observe the following fuel pattern-

Stack No.	Stack Attached To	APC System	Height in Mtrs.	Type of Fuel	Quantity & UoM	S%	SO <sub>2</sub>
1	Boiler (75 TPH)	ESP	72	Bagasse	888 MT/Day	0.20	3552.00
2	Boiler (90 TPH)	ESP	75	Bagasse	1080 MT/Day	0.20	4320.00
2	Boiler (20 TPH)	ESP	75	Bagasse	240 MT/Day	0.20	960.00
3	DG Set 515 KVA	Acoustic enclosure	13	HSD	90 Ltr/Hr	1.00	43.20
3	DG Set 1320 KVA	Acoustic enclosure	13	HSD	180 Ltr/Hr	1.00	86.40

- 2) The Applicant shall provide Specific Air Pollution control equipments as per the conditions of EP Act, 1986 and rule made there under from time to time/ Environmental Clearance / CREP guidelines.

1 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.

2 The applicant shall operate and maintain above mentioned air pollution control system, so as to achieve the level of pollutants to the following standards:

Total Particulate matter	Not to exceed	150 mg/Nm <sup>3</sup>
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- 3 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.
- 4 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).
- 5 Industry should not use auxiliary fuel more than 15 % (as per amendment in EIA Notification 2009, power plant upto 15 MW based on Bio-mass and using auxiliary fuel as coal upto 15% are exempt.) as co-gen capacity is below 15 MW.
- 3) 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.
- 4) 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(C2E/C2O/C2R)	Amt of BG Imposed	Submission Period	Purpose of BG	Compliance Period	Validity Date
1	C to R	1500000	15 days/ To be extended	Towards compliance of Consent conditions & O & M of pollution control system.	31.07.2020	30.11.2020
2	C to R	2500000	15 Days/ to be extended	Towards not to carry out excess crushing more than the consented capacity.	31.07.2020	30.11.2020

**BG Forfeiture History**

Srno.	Consent (C2E/C2O/C2R)	Amount of BG Imposed	Submission Period	Purpose of BG	Amount of BG Forfeiture	Reason of BG Forfeiture
			NA			

#### SCHEDULE-IV

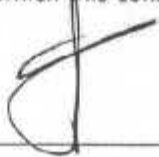
##### General Conditions:

- 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 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.
- 3 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 equipment, the production process connected to it shall be stopped.
- 4 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.
- 5 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.
- 6 The industry should comply with the Hazardous & Other Wastes (M & TM) Rules, 2016 and submit the Annual Returns as per Rule 6(5) & 20(2) of Hazardous & Other Wastes (M & TM) Rules, 2016 for the preceding year April to March in Form-IV by 30th June of every year.
- 7 An inspection book shall be opened and made available to the Board's officers during their visit to the applicant.
- 8 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.
- 9 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.
- 10 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.
- 11 The industry shall submit official e-mail address and any change will be duly informed to the MPCB.
- 12 Industry should monitor effluent quality, stack emissions and ambient air quality monthly/quarterly.





- 13 The industry shall recycle/reprocess/reuse/recover Hazardous Waste as per the provision contain in the H&OW(M&TM) Rules 2016, 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.
- 14 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](http://www.mpcb.gov.in)).
- 15 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.
- 16 Neither storm water nor discharge from other premises shall be allowed to mix with the effluents from the factory.
17. 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 siting 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 MoEFCC, India on Environment (Protection) second Amendment Rules vide GSR 371(E) dated 17.05.2002 and its amendments regarding noise limit for generator sets run with diesel.
- 18 The industry should not cause any nuisance in surrounding area.
- 19 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.
- 20 The applicant shall maintain good housekeeping.
- 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 equipment 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 achieve the National Ambient Air Quality standards prescribed vide Government of India, Notification dtd. 16.11.2009 as amended.





# MAHARASHTRA POLLUTION CONTROL BOARD

Tel: 24010437/24020781/24014701

Fax: 24024068 /24023515

Website: <http://mpcb.gov.in>

E-mail: [mpcb@vsnl.net](mailto:mpcb@vsnl.net)



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

Red/LSI

Date: 19/06/2019.

Consent No: Format 1.0/BO/CAC-CELL/UAN No. 0000048678/R/CAC-1906000937

To,

M/s. Jawahar Shetkari SSK Ltd.,  
G. No. 315/7 to 315/15, Shri Kallappana Awadenagar,  
Hupri - Yalgud, Tal. Hatkanangale,  
Dist. Kolhapur.

**Subject : Renewal of Consent to Operate of 12000 TCD Sugar & 28.5 MW Co-generation unit under RED category.**

**Ref : 1.** Consent to Establish for expansion granted by the Board vide No. BO/CAC-CELL/ UAN No. 0000006985 & 0000013320/R/CAC-1702000538 dtd: 10.02.2017  
**2.** Minutes of CAC meeting held on 08.01.2019.

Your application: UAN No. 0000048678

Dated: 12.05.2018.

**For: Renewal of Consent to Operate of 12000 TCD Sugar & 28.5 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 6 of the Hazardous & Other Wastes (M & T M) Rules 2016 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 01.08.2018 to 31.07.2019.
2. The actual total investment of the industry is Rs. 298.59 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	52050
2	Molasses	14400
3	Pressmud	14400
4	Bagasse	105500
5	Electric Power (Cogeneration)	28.5 MW

**(The cane crushing Capacity of Sugar Industry shall not exceed 12000 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	Disposal
1.	Trade effluent	1200 (Sugar 1000 + Co-gen 200)	As per Schedule -I	200 CMD 100% recycle & 1000 CMD recycle & on land for irrigation
2.	Domestic effluent	125	As per Schedule -I	On land for irrigation

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

Sr. no.	Description of stack / source	Number of Stack	Standards to be achieved
1.	Boiler (75 TPH)	1	As per Schedule - II
2.	Boiler (90 TPH)	1	As per Schedule - II
3.	Boiler (20 TPH)		As per Schedule - II
4.	DG Set of 500 KVA	1	As per Schedule - II
5.	DG Set of 1320 KVA	1	As per Schedule - II

6. Conditions under Hazardous & Other Wastes (M & T M) Rules, 2016 for treatment and disposal of hazardous waste:

Sr. No.	Type of Waste	Category	Quantity	UOM	Disposal
1	Used /Spent Oil	5.1	200	Kg/D	Reuse in own boiler as fuel
2	ETP Sludge	35.3	2500	Kg/D	Used as Manure

7. Non-Hazardous Solid Wastes:

Sr. No.	Type of Waste	Quantity	UOM	Treatment	Disposal
1.	Fly/Boiler Ash	30	MT/D	-	Used as Soil conditioner.

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 operate online monitoring system which is installed as per the Directions of CPCB and shall connect/ upload the online monitoring data at MPCB and CPCB server.
11. Industry shall extend existing bank guarantee of Rs. 15 lakh submitted towards O & M of pollution control systems.
12. Industry shall extend existing bank guarantee of Rs. 25 lakh submitted towards excess crushing in future.

For and on behalf of the  
Maharashtra Pollution Control Board

(E. Ravendran IAS)  
Member Secretary

Received Consent fee of -

Sr. No.	Amount (Rs.)	DR. No.	Date	Drawn On
1	Rs. 5,97,197/-	NSBI6315875732	18.05.2018	State Bank of India

Copy to:

1. Regional Officer - MPCB Kolhapur.
2. Sub-Regional Officer - Kolhapur, MPCB, He is directed to ensure the compliance of the consent conditions.
3. Chief Accounts Officer, MPCB, Mumbai.
4. CC/CAC desk- for record & website up-dation purposes.

**Schedule-I**

**I) Terms & Conditions for compliance of Water Pollution Control**

- 1) A] As per your application, you have provided Effluent Treatment Plant with capacity 3000 CMD, comprising of Grit Chamber, Oil & Grease Trap, Neutralization Tank, Equalization Tank, Primary Clarifier, Aeration Tank, Secondary Clarifier & SDB's

- 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 27°C)	100
04	Sulphate	1000
05	Suspended Solids	100
06	COD	250
07	Chloride	600
08	Total Dissolved Solids	2100

- C] The treated effluent 1000 CMD generated from Sugar unit shall recycle up to maximum extent and remaining shall be disposed on land for irrigation on 90 acres of own land /as per the bilateral agreement with farmers. **In no any case treated/untreated effluent shall find its way outside the factory premises directly or indirectly.**

- D] Trade effluent of 200 CMD generated from Co-gen shall be 100% recycle in process.

- E] CREP conditions for Sugar Factory

- 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.
- Waste water generation shall be maintained as 100 liters per ton of cane crushed.
- Industry shall achieve zero discharge into in land surface water bodies.
- 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.**

- 2) A] As per your consent application, for the 80 CMD sewage generation you have provided septic tank & soak pit for the treatment of sewage.



- 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/l. |
| (2) | BOD 3 days 27°C  | Not to exceed | 100 | mg/l. |
- C] The treated sewage shall be disposed on land for gardening/irrigation.
- 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:**
- 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.
  - 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.
  - 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 at least 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.
  - 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.
  - 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) Water Consumption of the Unit:-**

Sr. No.	Purpose for water consumed	Water consumption quantity (CMD)
1.	Fresh water i.e. one time intake	192.0
2.	Industrial Cooling, boiler feed etc.,	92 (make up water)
2.	Domestic purpose	301.0
3.	Processing whereby water gets polluted & pollutants are easily biodegradable	100.0 (Make up water)
4.	Processing whereby water gets polluted & pollutants are not easily biodegradable and are toxic	—
5.	Total effluent Recycle	10000

## 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 %	SO <sub>2</sub> Kg/ Day
1.	Boiler (75 TPH)	Wet Scrubber	72	Bagasse	888 MT/D	0.2 %	3552.0
2.	Boiler (90 TPH)	Wet Scrubber	75	Bagasse	1080 MT/D	0.2 %	4320.0
3.	Boiler (20 TPH)	Wet Scrubber		Bagasse	240 MT/D	0.2 %	960.0
4.	DG Set of 500 KVA	Acoustic enclosure	....	....	....	....	....
5.	DG Set of 1320 KVA	Acoustic enclosure	....	....	....	....	....

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 <sup>3</sup>
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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).



**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	C to R	Rs. 15.0	To be extended	O & M for achieving consented standards of Effluent & Stack emission.	31.07.2019	30.11.2019
2		Rs. 25.0 Lacs	To be extended	Not to do excess crushing in future.	31.07.2019	30.11.2019

**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.
- 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 30<sup>th</sup> day of September every year, the Environmental Statement Report for the financial year ending 31<sup>st</sup> 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 H& OW (M&TM) Rules 2016, 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 & Other Wastes (M & TM) Rules, 2016 and submit the Annual Returns as per Rule 6 (5) & 20(2) of Hazardous & Other Wastes (M & TM) Rules, 2016 for the preceding year April to March in Form-IV by 30<sup>th</sup> 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.**
- 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](http://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 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 siting 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.
- 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 be 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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# MAHARASHTRA POLLUTION CONTROL BOARD

Tel: 24010437/24020781/24014701

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Website: <http://mpcb.gov.in>

E-mail: [mpcb@vsnl.net](mailto:mpcb@vsnl.net)



Kalpaturu Point, 2<sup>nd</sup> - 4<sup>th</sup> Floor,

Opp. Cine Planet Cinema,

Near Sion Circle, Sion (E)

Mumbai - 400 022

Red/LSI

Date: 07/04/2018.

Consent No: Format 1.0/BO/CAC-CELL/UAN No. 0000028341/R/CAC-

1804000346

To,

M/s. Jawahar Shetkari SSK Ltd.,

G. No. 315/7 to 315/15, Shri Kallappana Awadenagar,

Hupri - Yalgud, Tal. Hatkanangale,

Dist. Kolhapur.

**Subject : Renewal of Consent to Operate of 12000 TCD Sugar & 28.5 MW Co-generation unit under RED category.**

**Ref : 1.** Consent to Establish for expansion granted by the Board vide No. BO/CAC-CELL/ UAN No. 0000006985 & 0000013320/R/CAC-1702000538 dtd: 10.02.2017  
**2.** Minutes of CAC meeting held on 31.10.2017.

Your application: UAN No. 0000028341

Dated: 0000028341.

For: Renewal of Consent to Operate of 12000 TCD Sugar & 28.5 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 6 of the Hazardous & Other Wastes (M & T M) Rules 2016 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 01.08.2017 to 31.07.2018.
2. The actual total investment of the industry is Rs. 310.54 Cr. (Existing CI is Rs. 282.47 Cr. & CI of Expansion is Rs. 28.06 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	52050
2	Molasses	14400
3	Pressmud	14400
4	Bagasse	105500
5	Electric Power (Cogeneration)	28.5 MW

(The cane crushing Capacity of Sugar Industry shall not exceed 12000 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	Disposal
1.	Trade effluent	1200 (Sugar 1000 + Co-gen 200)	As per Schedule -I	200 CMD 100% recycle & 1000 CMD recycle & on land for irrigation
2.	Domestic effluent	125	As per Schedule -I	On land for irrigation

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

Sr. no.	Description of stack / source	Number of Stack	Standards to be achieved
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1.	Boiler (75 TPH)	1	As per Schedule - II
2.	Boiler (90 TPH)	1	As per Schedule - II
3.	Boiler (20 TPH)		As per Schedule - II
4.	DG Set of 500 KVA	1	As per Schedule - II
5.	DG Set of 1320 KVA	1	As per Schedule - II

**6. Conditions under Hazardous & Other Wastes (M & T M) Rules, 2016 for treatment and disposal of hazardous waste:**

Sr. No.	Type of Waste	Category	Quantity	UOM	Disposal
1	Used /Spent Oil	5.1	200	Kg/D	Reuse in own boiler as fuel
2	ETP Sludge	35.3	2500	Kg/D	Used as Manure

**7. Non-Hazardous Solid Wastes:**

Sr. No.	Type of Waste	Quantity	UOM	Treatment	Disposal
1.	Fly/Boiler Ash	30	MT/D	-	Used as Soil conditioner.
2.	Lime Kenkar	1.30	MT/D	-	Landfill.

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 operate online monitoring system which is installed as per the Directions of CPCB and shall connect/ upload the online monitoring data at MPCB and CPCB server.

11. Industry shall not carry out excess crushing above the threshold limit as prescribed in Environment Clearance and Consent granted by the Board i.e. above 12000 TCD.

12. Industry should not exceed the threshold limit of overall pollution load accorded in Environmental Clearance and Consent granted by the Board.

For and on behalf of the  
Maharashtra Pollution Control Board

(Dr. P. Anbalagan, IAS)  
Member Secretary

Received Consent fee of -

Sr. No.	Amount (Rs.)	DR. No.	Date	Drawn On
1	Rs. 4,67,410/-	KALJH17 16400013 1	13.06.2017	Kallappa Anna Awade Ichalkaranji Janta Sah Bank
As per the Consent granted vide dtd. 10.02.2017 fees of 1,45,860/- is balance with the Board, same is considered during this Renewal of Consent. Therefore no more pending fee with Board now.				

Copy to:

1. Regional Officer – MPCB Kolhapur.
2. Sub -Regional Officer – Kolhapur, MPCB, He is directed to ensure the compliance of the consent conditions.
3. Chief Accounts Officer, MPCB, Mumbai.
4. CC/CAC desk- for record & website up-dation purposes.

A handwritten signature in black ink, consisting of stylized letters and a long horizontal stroke extending to the right.

**Schedule-I**

**D) Terms & Conditions for compliance of Water Pollution Control**

- 1) A] As per your application, you have provided Effluent Treatment Plant with capacity 3000 CMD, comprising of Grit Chamber, Oil & Grease Trap, Neutralization Tank, Equalization Tank, Primary Clarifier, Aeration Tank, Secondary Clarifier & SDB's
- 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 27°C )	100
04	Sulphate	1000
05	Suspended Solids	100
06	COD	250
07	Chloride	600
08	Total Dissolved Solids	2100

- C] The treated effluent 1000 CMD generated from Sugar unit shall recycle up to maximum extent and remaining shall be disposed on land for irrigation on 90 acres of own land /as per the bilateral agreement with farmers. **In no any case treated/untreated effluent shall find its way outside the factory premises directly or indirectly.**
- D] Trade effluent of 200 CMD generated from Co-gen shall be 100% recycle in process.
- E] CREP conditions for Sugar Factory
- 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.
  - Waste water generation shall be maintained as 100 liters per ton of cane crushed.
  - Industry shall achieve zero discharge into in land surface water bodies.
  - 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.**
- 2) A] As per your consent application, for the 80 CMD sewage generation you have provided septic tank & soak pit for the treatment of sewage.



- 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/l. |
| (2) | BOD 3 days 27°C  | Not to exceed | 100 | mg/l. |
- C] The treated sewage shall be disposed on land for gardening/irrigation.
- 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:**
- 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.
  - 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.
  - 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 at least 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.
  - 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.
  - 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) 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.	Fresh water i.e. one time intake	192.0
2.	Industrial Cooling, boiler feed etc.,	92 (make up water)
2.	Domestic purpose	301.0
3.	Processing whereby water gets polluted & pollutants are easily biodegradable	100.0 (Make up water)
4.	Processing whereby water gets polluted & pollutants are not easily biodegradable and are toxic	—
5.	Total effluent Recycle	10000

## 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 %	SO <sub>2</sub> Kg/ Day
1.	Boiler (75 TPH)	Wet Scrubber	72	Bagasse	888 MT/D	0.2 %	3552.0
2.	Boiler (90 TPH)	Wet Scrubber	75	Bagasse	1080 MT/D	0.2 %	4320.0
3.	Boiler (20 TPH)	Wet Scrubber		Bagasse	240 MT/D	0.2 %	960.0
4.	DG Set of 500 KVA	Acoustic enclosure	....	....	....	....	....
5.	DG Set of 1320 KVA	Acoustic enclosure	....	....	....	....	....

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:

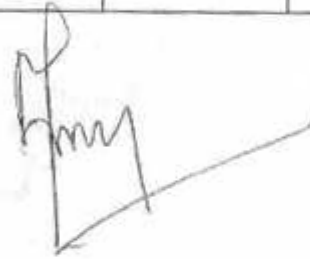
Particulate matter	Not to exceed	150 mg/Nm <sup>3</sup>
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4. The Applicant shall obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or replacement/alteration 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).



**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	C to R	Rs. 15.0	To be extended	O & M for achieving consented standards of Effluent & Stack emission	31.07.2018	30.11.2018
2		Rs. 25.0 Lacs	Already submitted.	Not to do excess crushing in future.	31.07.2018	30.11.2018



**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.
- 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 30<sup>th</sup> day of September every year, the Environmental Statement Report for the financial year ending 31<sup>st</sup> 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 H& OW (M&TM) Rules 2016, 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 & Other Wastes (M & TM) Rules, 2016 and submit the Annual Returns as per Rule 6 (5) & 20(2) of Hazardous & Other Wastes (M & TM) Rules, 2016 for the preceding year April to March in Form-IV by 30<sup>th</sup> 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.**
- 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](http://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 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 siting 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.
- 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 31<sup>st</sup> 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 be 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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# MAHARASHTRA POLLUTION CONTROL BOARD

Tel: 24010437/24020781/24014701

Fax: 24024068 /24023515

Website: <http://mpcb.gov.in>

E-mail: [mpcb@vsnl.net](mailto:mpcb@vsnl.net)



Kalpataru Point, 2<sup>nd</sup> - 4<sup>th</sup> Floor,

Opp. Cine Planet Cinema,

Near Sion Circle, Sion (E)

Mumbai - 400 022

Red/LSI

Date: 10/02/2017.

Consent No: Format 1.0/BO/CAC-CELL/UAN No. 0000006985 & 0000013320 /R/CAC-1702000538

To,

M/s. Jawahar Shetkari SSK Ltd.,

G. No. 315/7 to 315/15, Shri Kallappana Awadenagar,

Hupri - Yalgud, Tal. Hatkanangale,

Dist. Kolhapur.

**Subject** : 1<sup>st</sup> Consent to Operate of 4500 TCD and Renewal of Consent to Operate of existing 7500 TCD Sugar & 28.5 MW Co-generation unit alongwith their amalgamation under RED category.

**Ref** : 1. Consent to Establish for expansion granted by the Board vide No. BO/CAC-CELL/ KP-155001-14/CAC-12005 dtd: 15/12/2014  
2. Consent to Operate granted by Board to the existing unit vide No. BO/CAC-CELL/EIC No. KP-16970-15/R/CAC-424 dtd. 08.01.2016.  
3. Minutes of CAC meeting held on 16.12.2016 & 24.01.2017.

Your application: UAN No. 0000006985 & 0000013320

Dated: 08.06.2016 & 17.09.2016.

For: 1<sup>st</sup> Consent to Operate of 4500 TCD and Renewal of Consent to Operate of existing 7500 TCD Sugar & 28.5 MW Co-generation unit alongwith their amalgamation 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 6 of the Hazardous & Other Wastes (M & T M) Rules 2016 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 up to 31.07.2017.
2. The actual total investment of the industry is Rs. 310.54 Cr. (Existing CI is Rs. 282.47 Cr. & CI of Expansion is Rs. 28.06 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	52050
2	Molasses	14400
3	Pressmud	14400
4	Bagasse	105500
5	Electric Power (Cogeneration)	28.5 MW

(The cane crushing Capacity of Sugar Industry shall not exceed 12000 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	Disposal
1.	Trade effluent	1200 (Sugar 1000 + Co-gen 200)	As per Schedule -I	200 CMD 100% recycle & 1000 CMD recycle & on land for irrigation
2.	Domestic effluent	125	As per Schedule -I	On land for irrigation

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

Sr. no.	Description of stack / source	Number of Stack	Standards to be achieved
1.	Boiler (75 TPH)	1	As per Schedule - II
2.	Boiler (90 TPH)	1	As per Schedule - II
3.	Boiler (20 TPH)		As per Schedule - II
4.	DG Set of 500 KVA	1	As per Schedule - II
5.	DG Set of 1320 KVA	1	As per Schedule - II

6. Conditions under Hazardous & Other Wastes (M & T M) Rules, 2016 for treatment and disposal of hazardous waste:

Sr. No.	Type of Waste	Category	Quantity	UOM	Disposal
1	Used / Spent Oil	5.1	200	Kg/D	Reuse in own boiler as fuel
2	ETP Sludge	35.3	2500	Kg/D	Used as Manure

7. Non-Hazardous Solid Wastes:

Sr. No.	Type of Waste	Quantity	UOM	Treatment	Disposal
1.	Fly/Boiler Ash	30	MT/D	-	Used as Soil conditioner.
2.	Lime Kenkar	1.30	MT/D	-	Landfill.

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 operate online monitoring system which is installed as per the Directions of CPCB and shall connect/ upload the online monitoring data at MPCB and CPCB server.
11. Industry shall not carry out excess crushing above the threshold limit as prescribed in Environment Clearance and Consent granted by the Board i.e. above 12000 TCD.
12. Industry should not exceed the threshold limit of overall pollution load accorded in Environmental Clearance and Consent granted by the Board.
13. Industry shall submit the Board Resolution within a period of 7 days stating that industry has carried out excess crushing without obtaining Environmental Clearance and Consent from the Board thus violated the Environmental Rules and in future they will not do such violation in future.
14. This Consent is issued without prejudice to the order passed or being passed in the application bearing no. 1120/2016 filed against the industry before the Chief Judicial Magistrate Kolhapur.
15. Industry shall comply the Revoke Directions issued by CPCB vide dtd. 13.12.2016.

16. This Consent is issued as per the office order issued by Environment Department, GoM vide no. vide no. सकिर्ण २०१७/प्र.क २६/आस्थापना Dated 23/01/2017.

For and on behalf of the  
Maharashtra Pollution Control Board

*(P. K. Mirashe)*

Assistant Secretary (Technical)

Received Consent fee of -

Sr. No.	Amount (Rs.)	DR. No.	Date	Drawn On
1	Rs. 75,000/-	0190100	29.09.2016	Kallappa Anna Awade Ichalkaranji Janta Sah Bank
2	Rs. 500/-	0189828	06.06.2016	

As per the Consent granted vide dtd. 08.01.2016 fees of Rs. 7,10,800/- is balance with the Board. Out of this fees of Rs. 5,64,940/- is deducted towards Renewal up to 31.08.2017. Therefore, fees of Rs. 1,45,860/- is balance with the Board & same will be considered during next Renewal of Consent.

Fees mentioned at sr. no. 1 is paid towards Expansion.

Copy to:

1. Regional Officer - MPCB Kolhapur - *He is directed to forfeit BGs of Rs. 10 Lakh submitted towards not to do excess crushing as industry has carried out excess crushing. He is also directed to strictly monitor the unit on weekly basis and submit compliance report to CAC CELL including source and ambient air quality monitoring reports.*
2. Sub-Regional Officer - Kolhapur, MPCB, He is directed to ensure the compliance of the consent conditions.
3. Chief Accounts Officer, MPCB, Mumbai.
4. CC/CAC desk- for record & website up-dation 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 27°C )	100
04	Sulphate	1000
05	Suspended Solids	100
06	COD	250
07	Chloride	600
08	Total Dissolved Solids	2100

C] The treated effluent 1000 CMD generated from Sugar unit shall recycle up to maximum extent and remaining shall be disposed on land for irrigation on 90 acres of own land /as per the bilateral agreement with farmers. **In no any case treated/untreated effluent shall find its way outside the factory premises directly or indirectly.**

D] Trade effluent of 200 CMD generated from Co-gen shall be 100% recycle in process.

E] CREP conditions for Sugar Factory

- 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.

2) A] As per your consent application, for the 80 CMD sewage generation you have provided septic tank & soak pit for the treatment of sewage.

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

- C] The treated sewage shall be disposed on land for gardening/irrigation.
- 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 at least 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) 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.	Fresh water i.e. one time intake	192.0
2.	Industrial Cooling, boiler feed etc.,	92 (make up water)
2.	Domestic purpose	301.0
3.	Processing whereby water gets polluted & pollutants are easily biodegradable	100.0 (Make up water)
4.	Processing whereby water gets polluted & pollutants are not easily biodegradable and are toxic	—
5.	Total effluent Recycle	10000



## 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 %	SO <sub>2</sub> Kg/ Day
1.	Boiler (75 TPH)	Wet Scrubber	72	Bagasse	888 MT/D	0.2 %	3552.0
2.	Boiler (90 TPH)	Wet Scrubber	75	Bagasse	1080 MT/D	0.2 %	4320.0
3.	Boiler (20 TPH)	Wet Scrubber		Bagasse	240 MT/D	0.2 %	960.0
4.	DG Set of 500 KVA	Acoustic enclosure	....	....	....	....	....
5.	DG Set of 1320 KVA	Acoustic enclosure	....	....	....	....	....

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 <sup>3</sup>
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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).



**Schedule-III**  
**Details of Bank Guarantees**

**BG History**

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. 10.0 Lakh	Rs. 10.0 Lakh	• Industry has carried out excess crushing from 7500 TCD to 9000 TCD without obtaining Consent from the Board.

**NEW BG**

Sr. No.	Consent (C to E/O/R)	Amt of BG Imposed	Submission Period	Purpose of BG	Compliance Period	Validity Date
1	1st C to O for expansion & Renewal of C to O alongwith their amalgamation.	Rs. 15.0	To be extended	1) O & M for achieving consented standards of Effluent. 2) O & M for achieving consented standards of Stack emission, Submission of Board Resolution as per Consent condition no. 12.	31.07.2017	30.11.2017
2		Rs. 2.0 Lacs	05 days		15 days	One Year
3		Rs. 25.0 Lacs	Already submitted.	Not to do excess crushing in future.	31.07.2017	30.11.2017

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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.
- 2) 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 30<sup>th</sup> day of September every year, the Environmental Statement Report for the financial year ending 31<sup>st</sup> 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 H& OW (M&TM) Rules 2016, 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 & Other Wastes (M & TM) Rules, 2016 and submit the Annual Returns as per Rule 6 (5) & 20(2) of Hazardous & Other Wastes (M & TM) Rules, 2016 for the preceding year April to March in Form-IV by 30<sup>th</sup> 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.
- 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.mpch.gov.in](http://www.mpch.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 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 siting 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.
- 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 31<sup>st</sup> 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 be 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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# MAHARASHTRA POLLUTION CONTROL BOARD

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

Red/LSI

Date: 8 / 01 / 2016,

Consent No: Format 1.0/BO/CAC-CELL/EIC No. KP-16970-15 /R/CAC- 424

To,  
M/s. Jawahar Shetkari SSK Ltd.,  
G. No. 315/7 to 315/15, Shri Kallappana Awadenagar,  
Hupri - Yalgud, Tal. Hatkanangale,  
Dist. Kolhapur.

**Subject : Renewal of Consent to Operate of 7500 TCD Sugar & 28.5 MW Co-generation unit under RED category.**

**Ref :** 1. Consent to operate granted by the Board vide No. BO/RO/CAC-CELL/EIC No. -KP-16082-14/R/CAC-10199 dtd. 07.11.2014.  
2. Minutes of CAC meeting held on 09.12.2015.

Your application: CO1504000074.

Dated: 09.03.2015.

For: Renewal of Consent to Operate of 7500 TCD Sugar & 28.5 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 01.05.2015 to 31.07.2016.
2. The actual total investment of the industry is Rs. 266.40 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	34500
2	Molasses	9000
3	Pressmud	9000
4	Bagasse	28.5
5	Electric Power (Cogeneration)	28.5 MW

**(The cane crushing Capacity of Sugar Industry shall not exceed 7500 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	Disposal
1.	Trade effluent	750 (Sugar 550 + Co-gen 200)	As per Schedule -I	200 CMD 100% recycle & 550 CMD on land for irrigation
2.	Domestic effluent	200	As per Schedule -I	On land for irrigation

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

Sr. no.	Description of stack / source	Number of Stack	Standards to be achieved
1.	Boiler (75 TPH)	1	As per Schedule - II
2.	Boiler (90 TPH)	1	As per Schedule - II
3.	Boiler (20 TPH)		As per Schedule - II
4.	DG Set of 500 KVA	1	As per Schedule - II
5.	DG Set of 1320 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	200	Kg/D	Reuse in own boiler as fuel
2	ETP Sludge	34.4	2500	Kg/D	Used as Manure

7. Non-Hazardous Solid Wastes:

Sr. No.	Type of Waste	Quantity	UOM	Treatment	Disposal
1.	Fly/Boiler Ash	30	MT/D	-	Used as Soil conditioner.
2.	Lime Kenkar	1.30	MT/D	-	Landfill.

8. This Board reserves the right to review, amend, suspend, revoke etc. this consent and the same shall be binding on the industry.

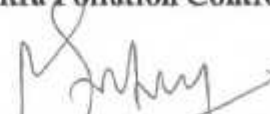
9. This consent should not be construed as exemption from obtaining necessary NOC/permission from any other Government agencies.

10. Industry shall comply the directions issued by CPCB for online monitoring system.

11. Consent is issued without prejudice to the directions issued and being issued by CPCB.

12. As per the report of Sub-Regional Officer, industry has carried out excess crushing from 7500 TCD to 9000 TCD without obtaining Consent from the Board and violated the Environmental Laws. Hence industry shall submit Resolution from the industry's Board within a period of 15 days stating that they have carried out excess crushing from 7500 TCD to 9000 TCD without obtaining Consent from the Board, thus violated the provisions of Environmental Laws & in future they will not do such violations.

For and on behalf of the  
Maharashtra Pollution Control Board

  
(Dr. P. Anbalagan, IAS)  
Member Secretary

Received Consent fee of -

Sr. No.	Amount (Rs.)	DD. No.	Date	Drawn On
1	Rs. 100/-	276258	20.02.2015	Ratnakar Bank

As per the Consent granted vide dtd. 07.11.2014 fees of Rs. 13,76,400/- is balance with the Board out of which fees of Rs. 6,65,600/- is deducted towards the Renewal upto 31.07.2016. Hence fees of Rs. 7,10,800/- is balance with the Board & same will be considered during next Renewal of Consent.

Copy to:

1. Regional Officer - MPCB Kolhapur - *He is directed to forfeit BGs of Rs. 5 Lakh & 5 Lakh out of 10 Lakh submitted towards excess crushing till obtaining EC & Consent from the Board & O & M of pollution control system respectively as industry has carried out excess crushing & JVS results are exceeding the limit.*
2. Sub -Regional Officer - Kolhapur, MPCB, He is directed to ensure the compliance of the consent conditions.
3. Chief Accounts Officer, MPCB, Mumbai.
4. CC/CAC desk- for record & website up-dation purposes.



Schedule-I

**D) 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 27°C )	100
04	Sulphate	1000
05	Suspended Solids	100
06	COD	250
07	Chloride	600
08	Total Dissolved Solids	2100

- C) The treated effluent 550 CMD generated from Sugar unit shall be disposed on land for irrigation on 90 acres of own land /as per the bilateral agreement with farmers. **In no any case treated/untreated effluent shall find its way outside the factory premises directly or indirectly.**
- D) **Trade effluent of 200 CMD generated from Co-gen shall be 100% recycle in process.**
- E) CREP conditions for Sugar Factory
- 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.
  - Waste water generation shall be maintained as 100 liters per ton of cane crushed.
  - Industry shall achieve zero discharge into in land surface water bodies.
  - 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.**
- 2) A) As per your consent application, for the 200 CMD sewage generation you have provided septic tank & soak pit for the treatment of sewage.
- 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/l. |
| (2) | BOD 3 days 27°C  | Not to exceed | 100 | mg/l. |
- C) The treated sewage shall be disposed on land for gardening/irrigation.



- 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) 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.,	300.0
2.	Domestic purpose	460.0
3.	Processing whereby water gets polluted & pollutants are easily biodegradable	2050.0
4.	Processing whereby water gets polluted & pollutants are not easily biodegradable and are toxic	—

## 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 %	SO <sub>2</sub> Kg/ Day
1.	Boiler (75 TPH)	Wet Scrubber	72	Bagasse	888 MT/D	0.2 %	3552.0
2.	Boiler (90 TPH)	Wet Scrubber	75	Bagasse	1080 MT/D	0.2 %	4320.0
3.	Boiler (20 TPH)	Wet Scrubber		Bagasse	240 MT/D	0.2 %	960.0
4.	DG Set of 500 KVA	Acoustic enclosure	....	....	....	....	....
5.	DG Set of 1320 KVA	Acoustic enclosure	....	....	....	....	....

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 <sup>3</sup>
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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).

**Schedule-III**  
**Details of Bank Guarantees**

**BG History**

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. 10.0 Lakh	Rs. 5.0 Lakh	• As JVS results of trade effluent & stack monitoring are exceeding the Consented limits.
2	C to R	Rs. 5.0 Lakh	Rs. 5.0 Lakh	• Industry has carried out excess crushing from 7500 TCD to 9000 TCD without obtaining Consent from the Board.

**NEW BG**

Sr. No.	Consent (C to E/O/R)	Amt of BG Imposed	Submission Period	Purpose of BG	Compliance Period	Validity Date
1	C to R	Rs. 5.0 Lacs	To be extended	1) O & M for achieving consented standards of Effluent.	31.07.2016	30.11.2016
		Rs. 10.0 Lakh (Top-up of forfeited)	15 days	2) O & M for achieving consented standards of Stack emission,		
2	C to R	Rs. 2.0 Lacs	05 days	Submission of Board Resolution as per Consent condition no. 12.	15 days	One Year
3	C to R	Rs. 10.0 Lacs (Top-up of forfeited)	15 days	Not to do excess crushing in future.	31.07.2016	30.11.2016

#### Schedule-IV

##### General Conditions

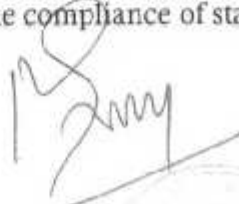
- 1) The applicant shall provide facility for collection of environmental samples and samples of trade and sewage effluents, air emissions and hazardous waste to the Board staff at the terminal or designated points and shall pay to the Board for the services rendered in this behalf.
- 2) Industry should monitor effluent quality, stack emissions and ambient air quality monthly.
- 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 30<sup>th</sup> day of September every year, the Environmental Statement Report for the financial year ending 31<sup>st</sup> 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 30<sup>th</sup> 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.**
- 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](http://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.
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  - 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 siting and control measures.
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- h) The applicant shall comply with the notification of MoEF dated 17.05.2002 regarding noise limit for generator sets run with diesel.
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- 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 31<sup>st</sup> March of the year and number of trees planted by September end.
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- 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 be 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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# MAHARASHTRA POLLUTION CONTROL BOARD

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Mumbai - 400 022

Red/LSI

Date: 07/11/2014.

Consent No: Format 1.0/BO/CAC-CELL/EIC No. KP-16982-14 /R/CAC-10999

To,  
M/s. Jawahar Shetkari SSK Ltd.,  
G. No. 315/7 to 315/15, Shri Kallappana Awadenagar,  
Hupri - Yalgud, Tal. Hatkanangale,  
Dist. Kolhapur.

Subject : Renewal of Consent of Sugar & Co-generation unit under RED category.

Ref : 1. Consent to operate for sugar & Co-Gen unit granted by the Board vide No. BO/RO/PCI-III/EIC -KP-3287-09/O/CC-152 dtd. 06.06.2011.  
2. Minutes of CAC meeting held on 07.10.2014.

Your application: CR1409000263.

Dated: 21.07.2014.

For: Renewal of Consent of Sugar & Co-generation unit.

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 Waste Management & Handling 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 01.11.2014 to 30.04.2015.
2. The actual total investment of the industry is Rs. 266.40 Cr. (Existing 225.08 Cr. & Proposed 41.32 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	34500
2	Molasses	9000
3	Pressmud	9000
4	Bagasse	28.5
5	Electric Power (Cogeneration)	28.5 MW

(The cane crushing Capacity of Sugar Industry shall not exceed 7500 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	Disposal
1.	Trade effluent	750 (Sugar 550 + Co-gen 200)	As per Schedule -I	On land for irrigation
2.	Domestic effluent	200	As per Schedule -I	On land for irrigation

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

Sr. no.	Description of stack / source	Number of Stack	Standards to be achieved
1.	Boiler (75 TPH)	1	As per Schedule - II
2.	Boiler (90 TPH)	1	As per Schedule - II
3.	Boiler (20 TPH)		As per Schedule - II
4.	DG Set of 500 KVA	1	As per Schedule - II
5.	DG Set of 1320 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	200	Kg/D	Reuse in own boiler as fuel
2	ETP Sludge	34.4	2500	Kg/D	Used as Manure

7. Non-Hazardous Solid Wastes:

Sr. No.	Type of Waste	Quantity	UOM	Treatment	Disposal
1.	Fly/Boiler Ash	30	MT/D	-	Used as Soil conditioner.
2.	Lime Kenkar	1.30	MT/D	-	Landfill

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



(Rajeev Kumar Mittal, IAS)  
Member Secretary

Received Consent fee of -

Sr. No.	Amount (Rs.)	DD. No.	Date	Drawn On
1	Rs. 15,98,726/-	028321	07.07.2014	Kallappana Awade Ichalkaranji Janta Sah. Bank.
2	Rs. 75,000/-	276149	15.09.2014	Ratnakar Bank

Industry has paid the above mentioned fees at sr. no. 1 for 36 months, however Board has granted Consent to the industry up to 30.04.2014 i.e. for 5 months, hence fees for 31 months i.e. Rs. 13,76,400/- is balance with the Board & same will be considered during next Renewal of Consent. Fees paid at sr. no. 2 is against C to E for increase in CI.

Copy to:

1. Regional Officer - MPCB Kolhapur, and Sub -Regional Officer - Kolhapur, 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 up-dation purposes.



Schedule-I

**D) 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 27°C)	100
04	Sulphate	1000
05	Suspended Solids	100
06	COD	250
07	Chloride	600
08	Total Dissolved Solids	2100

- C) The treated effluent 750 CMD shall be disposed on land for irrigation on 90 acres of own land & as per the bilateral agreement with farmers.
- D) CREP conditions for Sugar Factory
- 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.
  - Waste water generation shall be maintained as 100 liters per ton of cane crushed.
  - Industry shall achieve zero discharge into in land surface water bodies.
  - 15 days storage capacity tank shall be provided for treated effluent to take care of no demand for irrigation.
- E) Industry shall maintain properly the arrangement provided for covering the effluent collection system and to avoid the ingress of Bagasse other material.
- F) 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.
- G) The unit shall optimize water use in industrial process & maintain records of water consumption & waste water generation.

- 2) A) As per your consent application, for the 200 CMD sewage generation you have provided septic tank & soak pit for the treatment of sewage.

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

- C) The treated sewage shall be disposed on land for gardening/irrigation.





- 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) 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.,	300.0
2.	Domestic purpose	460.0
3.	Processing whereby water gets polluted & pollutants are easily biodegradable	2050.0
4.	Processing whereby water gets polluted & pollutants are not easily biodegradable and are toxic	—



## 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 %	SO <sub>2</sub> Kg/ Day
1.	Boiler (75 TPH)	Wet Scrubber	72	Bagasse	888 MT/D	0.2 %	3552.0
2.	Boiler (90 TPH)	Wet Scrubber	75	Bagasse	1080 MT/D	0.2 %	4320.0
3.	Boiler (20 TPH)	Wet Scrubber		Bagasse	240 MT/D	0.2 %	960.0
4.	DG Set of 500 KVA	Acoustic enclosure	....	....	....	....	....
5.	DG Set of 1320 KVA	Acoustic enclosure	....	....	....	....	....

2. The Applicant shall provide ESP/ Bag filter/ Wet scrubber to the Bagasse fired boiler and Dust Collector to Sugarbagging section as in 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 <sup>3</sup>
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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).



**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	Renewal of Consent	Rs. 5.0 Lacs	To be extended	O & M for achieving consented standards of Effluent. O & M for achieving consented standards of Stack emission,	30/03/2015	31/08/2015



*[Handwritten signature]*



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.
- 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 30<sup>th</sup> day of September every year, the Environmental Statement Report for the financial year ending 31<sup>st</sup> 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 30<sup>th</sup> 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.**
- 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](http://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



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 siting 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.
- 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 31<sup>st</sup> 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 be 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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# MAHARASHTRA POLLUTION CONTROL BOARD

Tel: 24010437/24020781/24014701

Fax: 24024068 / 24023516

Website: <http://mpcb.gov.in>

E-mail: [enquiry@mpcb.gov.in](mailto:enquiry@mpcb.gov.in)

Red/LSI



Kalpataru Point, 2<sup>nd</sup> - 4<sup>th</sup> Fl.

Opp. Cine Planet Cinema,

Near Sion Circle, Sion (E)

Mumbai-400 022.

Consent No. BO/RO/PCI-III/EIC-KP-3287-09/O/CC-152

Date: 06/06/2011

Consent to Operate 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 / Renewal of Authorization under Rule 5 of the Hazardous Wastes (Management, Handling & Transboundary Movement) Rules 2008. [To be referred as Water Act, Air Act and HW (M, H & T) Rules respectively].

CONSENT is hereby granted to,

M/s Jawahar Shetkari SSK Ltd.,  
At. Yaigud-Hupari, Tal. Hatkanangle,,  
Dist. Kolhapur

located in the area declared under the provisions of the Water Act, Air act and Authorization under the provisions of HW(M, H & T) 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 Operate is granted for a period up to 30.11.2014.
2. The Consent is valid for the manufacture of -

Sr	Products	Max. Qty.
1	Sugar	28,000 MT/M
2	Molasses	9000 MT/M
3	Bagasse	65000 MT/M
4	Press Mud	9000 MT/M
5	Electricity	28.5 MW/Hr

### 3. CONDITIONS UNDER WATER ACT :

- (i) The daily quantity of trade effluent from the factory should not exceed 750 M<sup>3</sup>/day (Waste water generation shall be 100 liters per tone of cane crushed)
- (ii) The daily quantity of sewage effluent from the factory should not exceed 200 M<sup>3</sup>/day.

#### (iii) Trade Effluent :

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

1	pH	Between	6.0 to 9
2	Suspended Solids	Not to exceed	100 mg/l
3	BOD 3 days 27 Deg C	Not to exceed	30 mg/l
4	COD	Not to exceed	250 mg/l
5	Oil & Grease	Not to exceed	10 mg/l
6	T.D.S	Not to exceed	2100 mg/l
7	Sulphates	Not to exceed	1000 mg/l
8	Chlorides	Not to exceed	600 mg/l

- (iv) **Trade Effluent Disposal :** The treated trade effluent should be used on land for gardening or irrigation only.

- (v) **Sewage Effluent Treatment** : The applicant should operate comprehensive treatment system as is warranted with reference to influent quality 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 27 Deg. C | Not to exceed | 30  | mg/l. |
- (vi) **Sewage Effluent Disposal** : The treated sewage effluent should be soaked into soak pit which should be got cleaned periodically. Overflow, if any be used on land for gardening only.
- (vii) **Non-Hazardous Solid Wastes:**
- | Type of Waste       | Quantity     | Disposal                                      |
|---------------------|--------------|---|
| Boiler ash/ Fly ash | 1755 MT/Year | Sale to brick manufacturer/ Soil conditioning |
| Kankar Lime         | 195 MT/Year  | By land fill                                  |
- (viii) **Other conditions** : The industry should monitor effluent quality regularly from MoEF approved laboratory.

#### 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 or 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 kutch pits. Adequate space storage capacity shall be available to take care of bumper production of sugar, non-lifting of molasses etc.
  - iii) All the area on which molasses are stored and handled shall 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 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".
  - vii) The industry shall monitor effluent quality regularly.
4. The applicant should comply with the provisions of the Water (Prevention & Control of Pollution) Cess Act, 1977 ( to be referred as Cess Act ) and Rules there under. The daily water consumption for the following categories is as under:

i	Domestic	676	CMD
ii	Industrial Processing	1450	CMD
iii	Industrial Cooling / Boiler	1025	CMD
iv	Agriculture/Gardening	---	CMD

The applicant should 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.



## 5. CONDITIONS UNDER AIR ACT :

- (i) The applicant should operate a comprehensive control system consisting of control equipments as is warranted with reference to generation of emission and maintain the same continuously so as to achieve the level of pollutants to the following standards :

**Control Equipment :**

1. Wet scrubber / Multi cyclone separator shall be provided to Bagasse fired boiler.
2. Dust collector of sufficient capacity shall be provided to sugar bagging section and any other source of SPM.

**CREP Conditions for Sugar Factory :-****(A) Water Management :-**

- (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 reduced to 100 liter per tone 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.

- (B) Emission Control : ESP/ Bag Filter/ Ventury Scrubber shall be installed to comply with standards for particulate matter emission to < 150 mg/Nm<sup>3</sup>.

**Standards for Emissions of Air Pollutants :**

1	SPM/TPM	Not to exceed	150 mg/Nm <sup>3</sup>
2	SO <sub>2</sub>	Not to exceed	5800 Kg/Day

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

Sr	Fuel Type	Quantity
1	Bagasse	1450 MT/day

- (iii) The applicant should erect the chimney(s) of the following specifications :-

Sr.	Chimney attached to	Height in mt.
1	Boiler (90 MT/hr.)	65 mtrs.
2	Boiler (55 MT/hr.)	46 mtrs.
3	Boiler (20 MT/hr.)	41 mtrs.
4	DG Set (515 KVA)	4.0 (above roof)
5	DG Set (1320 KVA)	6.3 (above roof)

- (iv) The applicant should provide ports in the chimney/(s) and facilitates such as ladder, platform etc. For monitoring the air emissions and the same should be open for inspection to/and for use of the Board's Staff. The chimney(s) vents attached to various sources of emission should be designated by numbers such as S-1, S-2, etc. And these should be painted / displayed to facilitate identification.
- (v) The industry should take adequate measures for control for 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 p.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 from MoEF approved laboratory.





### Conditions for D.G. Set -

- 1] Noise from the D.G. Set should be controlled by providing an acoustic enclosure or by treating the room acoustically.
- 2] 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 metres from acoustic enclosure/room and then average.
- 3] 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.
- 4] Industry should make efforts to bring down noise level due to DG set, outside industrial premises, within ambient noise requirements by proper siting and control measures.
- 5] Installation of DG Set must be strictly in compliance with recommendations of DG Set manufacturer.
- 6] 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.
- 7] D.G. Set shall be operated only in case of power failure.
- 8] The applicant should not cause any nuisance in the surrounding area due to operation of D.G. Set.

### 6. CONDITIONS UNDER HAZARDOUS WASTE (Management ,Handling & Transboundary Movement) RULES, 2008 :

The applicant should handle hazardous wastes as specified below:

Sl.	Item No (Sch-I)	Type of Waste	Quantity	Disposal
1	5.1/5.2	Used/Spent Oil	200 Kg/Day	As fuel along with Bagasse in boiler
2	34.4	ETP Sludge	2500 Kg/Day	

7. 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 should 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 should be stopped.

### 8. General Conditions:

- (i) The applicant should bring minimum 33% of the available open land under green coverage/ plantation. The applicant should submit a yearly statement by 30<sup>th</sup> September every year on available open plot area, no. of trees surviving as on 31<sup>st</sup> March of the year and no. of trees planted by September end.
- (ii) The applicant should provide for an alternate electric power source sufficient to operate all pollution control facilities installed by he applicant and operate the same in case of power failure to maintain compliance with the terms and conditions of the consent. In the absence of same, the applicant should stop, reduce or otherwise, control production to abide by terms & conditions of this consent regarding pollution levels.
- (iii) The applicant should make an application for renewal of the consent at least 60 days before the date of the expiry of the consent. The applicant should 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.
- (iv) The firm should submit MPCB, the Environmental Statement Report for the financial year ending 31<sup>st</sup> March in the prescribed Form-V as per the provisions of rule 14 of the Environment (Protection) (Second Amendment) Rules, 1992 before 30<sup>th</sup> September every year.



- (v) The applicant should 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 should be maintained. The applicant should also submit a comparative statement of designed power and chemical consumptions vis-a vis actual power and chemical consumption along with Environmental statement.
- (vi) Separate drainage system should be provided for collection of trade and sewage effluents. Terminal manholes should be provided at the end of collection system with arrangement for measuring the flow. No effluent should be admitted in the pipes/sewers down- stream of the terminal manholes. No effluent should find its way other than in designed and provided collection system. Neither storm water nor discharge from other premises should be allowed to mix with the effluents from the factory.
- (vii) The applicant should 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 should pay to the Board for the services rendered in this behalf. An inspection book should be opened and made available to the Board's officers during their visit to the applicant.
- (viii) The industry should ensure that fugitive emissions from the activity are controlled so as to maintain clean and safe environment in and around the factory premises.
- (ix) The applicant should maintain good house keeping and take adequate measures for control of pollution from all sources so as not to cause nuisance to surrounding area / inhabitants.
9. **This consent shall not be construed as any exemption from obtaining necessary No Objection Certificate from other Government agencies as may deemed fit necessary.**

10. The capital investment of the industry is Rs. 225.08 Crore.

11. This Consent is issued as per the decision taken in the meeting of the Consent Committee of the Board held on 20/11/2010.

For and on Behalf of the  
Maharashtra Pollution Control Board,



*(Signature)*  
(Radheshyam Mopalwaar)  
Member Secretary

To  
M/s Jawahar Shetkari SSK Ltd.,  
At. Yalgud-Hupari, Tal. Hatkanangle,,  
Dist. Kolhapur

Copy to: RO, MPCB, Kolhapur / SRO, MPCB, Kolhapur / CAO / HWM Wing - HQ  
Received Consent fee of -

Amount	D.D. No.	Date	Bank
11,25,386/-	378793	05/09/2009	The Ratnakar Bank Ltd.

# MAHARASHTRA POLLUTION CONTROL BOARD

☎ :24010437

☎ :24024068

Visit us at: <http://mpcb.mah.nic.in>

Email: [mpcb@vsnl.net](mailto:mpcb@vsnl.net)

[mpcbson@bom.nic.in](mailto:mpcbson@bom.nic.in)



**KALPATARU POINT, 3<sup>rd</sup> & 4<sup>th</sup> Floor,**  
Opp. Cineplanet, Near Sion Circle  
Sion East, MUMBAI 400 022

Red / LSI

Consent No. BO/WPAE/KP-364-05/335/R/CC- 319

Date: 19/10/2005

**Consent to Operate 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 / Renewal of Authorization under Rule 5 of the Hazardous Wastes (Management & Handling) Rules 1989 and Amendment Rules, 2003.**

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

CONSENT is hereby granted to

**M/s. Jawahar Shetkari SSK Ltd.,  
At. Yalgud-Hupari, Tal. Hatkanangle,  
Dist. Kolhapur.**

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 Operate is granted for a period upto: 30.11.2009**
2. **The Consent is valid for the manufacture of -**

<u>Sr.No.</u>	<u>Product</u>	<u>Maximum Quantity</u>
1	Sugar	18,000 MT/M
2	Molasses	6400 MT/M
3	Bagasse	43500 MT/M
4	Pressmud	6700 MT/M
5	Electricity (Co-Generation unit)	24.00 MW (576000 Units/day)

3. **CONDITIONS UNDER WATER ACT :**

- (i) The daily quantity of trade effluent from the factory shall not exceed **690 M<sup>3</sup>**.  
(Waste water generation shall be 100 litres per tone of cane crushed)
- (ii) The daily quantity of sewage effluent from the factory shall not exceed **306 M<sup>3</sup>**.

(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)	pH	Between	6 to 8.5
2)	Suspended Solids	Not to exceed	100 mg/l.
3)	BOD 3 days 27 Deg. C.	Not to exceed	30 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.

- (iv) **Trade Effluent Disposal** : The treated effluent shall be used on own land for gardening or irrigation only.



- (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 27° C.	Not to exceed	30	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 only.

- (vii) **Non-Hazardous Solid Wastes :**

Type of waste	Quantity	Treatment	Disposal
Boiler ash/ Fly ash	1755 MT/Year	Sale to brick manufacturer/soil conditioning Landfilling	
Kankar Lime	195 MT/Year		

- (viii) **Other conditions :** The industry shall monitor effluent quality regularly.

**Molasses Conditions :**

- 1] 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.
- 2] 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.
- 3] 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 discharge of molasses from the tanks shall be provided to contain the same within factory premises.
- 4] 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 at least 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.
- 5] 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.
- 6] The above conditions shall be in addition to and not in derogation of the provision contained in the " Bombay Molasses Rules, 1955" and " Maharashtra Molasses Storage and Supply Regulation, 1965."
- 7] The industry shall monitor effluent quality regularly.

4. The applicant shall comply with the provisions of the Water ( Prevention & Control of Pollution) Cess Act, 1977 ( to be referred as Cess Act ) and Rules thereunder:

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

(i) Domestic	...	676	CMD
(ii) Industrial Processing	...	1450	CMD
(iii) Industrial Cooling	...	1025	CMD
(iv) Agriculture/Gardening	...	--	CMD

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.





5. **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 :

**Control Equipment :**

1. Wet scrubber / Multi cyclone separator shall be provided to bagasse fired boiler.
2. Dust collector of sufficient capacity shall be provided to sugar bagging section and any other source of SPM.

**CREP conditions --**a) **Water management :**

- i) Operation of ETP shall be started atleast one month before starting of cane crushing to achieve desired MLSS . So as to meet prescribed standards from day one of the operation of mill .
- ii) Waste water generation shall be reduced to 100 litres per tone of cane crushed.
- iii) Industry shall achieve zero discharge into in land surface water bodies.
- v) 15 days storage capacity tank shall be provided for treated effluent to take care of no demand for irrigation.

b) **Emission Control :**

ESP/Bag filter/Ventury scrubber shall be installed to comply with standards for particulate matter emission to < 150 mg/NM<sup>3</sup>.

**Standards for Emissions of Air Pollutants :**

(i)	SPM/TPM	Not to exceed	150 mg/Nm <sup>3</sup>
(ii)	SO <sub>2</sub>	Not to exceed	5800 Kg/Day.

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

<u>Sr.No.</u>	<u>Type of Fuel</u>	<u>Quantity</u>
1]	Bagasse	1450 MT/day

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

<u>Sr.No.</u>	<u>Chimney attached to</u>	<u>Height in Mtrs.</u>
1]	Boiler (90 MT/hr.)	65
2]	Boiler (55 MT/hr.)	56
3]	Boiler (20 MT/hr.)	41
2]	D.G.Set (320 KVA)	4 *
3]	D.G.Set (1000 KVA)	6.3 *

(\*above the roof of bldg. in which it is installed)

- (iv) The applicant shall provide ports in the chimney/(s) and facilities such as ladder, latorm 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.
- (v) The industry shall take adequate measures for control of noise levels from itsown 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.



**6. CONDITIONS UNDER HW (M&H) RULES, 1989 & AMENDMENT RULES, 2003 :**

(i) The applicant shall handle hazardous wastes as specified below:

Sr. No	Item No. of Process generating HW as per Schedule-I	Type of Waste	Quantity	Disposal
1	5.1/5.2	Used /spent oil	10000 Kg/season	as fuel along with bagasse in boiler
2	34.4	ETP sludge	510 MT/season	Shall be used as manure

7. 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.
8. The applicant shall comply with the conditions as stipulated under Annexure - I & II enclosed.
9. **The applicant shall comply with the CREP Conditions.**
10. **This is issued subject to Post Facto approval of Consent Approval Committee of the Board.**



*(Signature)*  
( D. B. Boralkar ) 19/05  
Member Secretary

To,  
✓ M/s. Jawahar Shetkari SSK Ltd.,  
At. Yalgud-Hupari, Tal. Hatkanangle,  
Dist. Kolhapur

Copy to:

- 1) Regional Officer, MPCB, Kolhapur
- 2) Sub-Regional Officer, MPCB, Kolhapur
- 3) Chief Accounts Officer, MPCB, Mumbai

Received Consent fee of -

Amount	D.D.No.	Date	Drawn on
Rs. 11,51,502/-	060244	25.09.2004	Ichalkaranji Urban Co-op. Bank Ltd.
Rs. 7500/-	060245	25.09.2004	Ichalkaranji Urban Co-op. Bank Ltd.

4] Cess Branch, MPCB.

5] Master file.

**Annexure – III**  
**Rainwater Harvesting Plan**  
(Report & Layout)



A report on

## PROPOSED RAIN WATER HARVESTING SCHEME

For

***M/s Jawahar Shetakari  
Sahakari Sakhar Karkhana  
Ltd.***

**At.: Hupari, Tal.: Hatkanangale, Dist.:  
Kolhapur, Maharashtra**

Prepared by

**Anup Gargate**  
Msc. NET

**EQUINOX ENVIRONMENTS (I) PVT. LTD.,**  
ENVIRONMENTAL; CIVIL & CHEMICAL ENGINEERS,  
CONSULTANTS & ANALYSTS,  
KOLHAPUR (MS)

**June 2019**



**A report on**

**PROPOSED RAIN WATER HARVESTING SCHEME**

**For**

***M/s Jawahar Shetakari Sahakari Sakhar Karkhana Ltd.***

***(JSSSKL)***

**At.: Hupari, Tal.: Hatkanangale, Dist.: Kolhapur, Maharashtra**

**For the partial fulfilment of**

**ToR dt. 30/03/2019**

**for proposed expansion of Sugar factory**

**from 12000 TCD to 16000 TCD**

**June 2019**

## **Index**

**A) Preamble**

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**D) Local Climate and Rainfall**

**E) Fresh Water Requirement at Site**

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**G) Utilization of Available Rainwater**

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**I) Do's and Don'ts of Rainwater Harvesting**

**Annexure**

## **A) Preamble :**

**Rainwater harvesting (RWH)** is receiving increased attention worldwide as an alternative source of water. In the water budget rainfall is the only free of cost input parameter while there are many output parameters and therefore this important economical resource must be valued and safeguarded. Rain water harvesting is a process of collecting, conveying, and storing the rainfall in an area for the beneficial purposes. Considering the problems of severe water shortage, pollution in existing surface water bodies and floods during rainy seasons in India, the adoption of rainwater harvesting practices is quite necessary and need of the hour.

In India southwest monsoon season is the main rain producing season which gives around 75-80% of annual rainfall. The rainfall itself has high temporal and spatial variability resulting drought in some year and flood in another year over an area. Even within the monsoon season there is high intra seasonal variability resulting prolong dry spell and wet spell. There are many areas where deficient rainfall has been received for consecutive 2-3 years or more. Water scarcity is becoming very serious problem over these areas leading to affect human life in almost every sector. If rain water is harvested, the scarcity of water can be eliminated altogether. This is an ideal solution to overcome water supply problem quantitatively and qualitatively where surface and ground water sources are inadequate and insufficient.

In the context of climate change several research studies including scientists of Indian Meteorological Department have reported rainwater harvesting through rooftops as an optimistic method of water conservation. The methods involved in this practice are simple and can be maintained at a minimal cost. Besides this, rainwater harvesting is also very attractive because India is having a good potential for harvesting rains. Being a tropical – monsoonal country, India's rains are sufficient to cater the need of its people, if there is judicious use of it. Rainwater harvesting does not only improve the water usage practices, rather it is also helpful in the groundwater recharge. Considering the depletion of groundwater resources due to excessive pumping of water, and its pollution from the leachate of waste dumping sites and agricultural lands, replenishment of groundwater resources is also necessary.

Rainwater harvesting is a way to capture water when it rains, and either store that water above ground or recharge it underground for later use. Rainwater harvesting is

useful for supplementing water needs locally, recharging bore wells and reducing dependence on external sources of water. Any man-made facility that adds water to an aquifer may be considered as artificial recharge. Artificial recharge aims at augmenting the natural replenishment of ground water storage by some method of construction, spreading of water, or by artificially changing natural conditions. It is useful for reducing overdraft, conserving surface run-off, and increasing available ground water supplies.

Rainwater harvesting technologies are simple to install and operate. Local people can be easily trained to implement such technologies, and construction materials are also readily available. Rainwater harvesting is convenient in the sense that it provides water at the point of consumption, and the users have full control of their own systems, which greatly reduces operation and maintenance problems. Running costs, also, are almost negligible. Water collected from roof catchments usually is of acceptable quality for domestic purposes. As it is collected using existing structures not specially constructed for the purpose, rainwater harvesting has few negative environmental impacts compared to other water supply project technologies.

To plan the appropriate rainwater harvesting mechanisms, study site features such as incident rainfall, subsurface strata and their storage characteristics, and design suitable storage or recharge structures accordingly.

Rainwater Harvesting has the following advantages and benefits

- Helps to recharge ground water table
- Allows use of rainwater for potable and non potable purposes
- Inexpensive and simple technology
- Saves money and energy
- Minimizes flooding in premises and nearby area
- Reduces dependency on other water resources

M/s. Jawahar Shetakari Sahakari Sakhar Karkhana Ltd. (JSSSKL), located At.: Hupari, Tal.: Hatkanangale, Dist.: Kolhapur, MS has submitted a proposal of expansion of Sugar factory from 12000 TCD to 16000 TCD to the Ministry of Environment, Forest and Climate Change to prescribe the Terms of Reference (TOR) for undertaking detailed EIA study for the purpose of obtaining Environmental Clearance in accordance with the provisions of the EIA Notification, 2006. In this regard, under the provisions of the EIA Notification 2006 as amended, the Standard TOR for the purpose of preparing



environment impact assessment report and environment management plan for obtaining prior environment clearance is prescribed with public consultation on 30 March 2019. As per clause 5(j)A.7.x of the ToR, the proponent should submit action plan for rainwater harvesting measures at plant site to harvest rainwater from the roof tops and storm water drains to recharge the ground water and also to use for the various activities at the project site to conserve fresh water and reduce the water requirement from other sources. Moreover the Maharashtra state government has made rainwater harvesting mandatory for all buildings that are being constructed on plots that are more than 1,000 sq.m in size.

Therefore herewith a report is prepared on the study of Rain Water Harvesting potential and measures for Jawahar SSSKL, Hupari. The proposed rain water harvesting scheme is designed to cover all the total plot area i.e. for the Roof top of buildings, paved surfaces and unpaved surfaces.

**B) Objective:**

The key objective of the present study is to estimate the potential of Rain Water Harvesting in the factory premises of Jawahar SSSKL, located at.: Hupari, Tal.: Hatkanangale, Dist.: Kolhapur, MS and to assess the measures for the designing and preparation of Rain Water Harvesting scheme from the roof tops and storm water drains to recharge the ground water and also to use for the various activities at the project site for conservation of precious fresh rainwater and reduce the water requirement from other sources by adopting various conventional and non-conventional methods, which could be suitable for the site. This is done by studying the regional rainfall data, topography, climatic conditions and built-up and open surface area available at factory premises for rainwater endowment and the measures are recommended based on these studies and observations.

### **C) Site Location and Area Breakup:**

The Jawahar SSSKL unit is located on the south side fringe of Hupari village, adjacent to a state road 129 surrounded by agriculture farms, fallow lands, grasslands and human settlements. The details of the site are as follows

**Co-Ordinates:** 16°36'16.22"N, 74°24'13.00"E

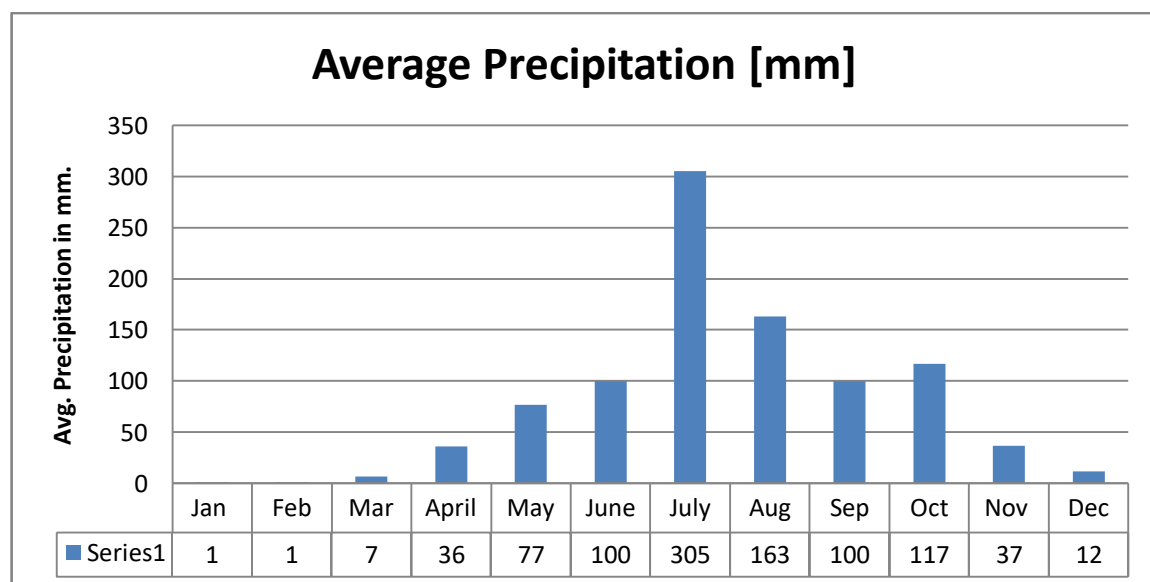
**Altitude:** 583 M above MSL

Area Details	Sq. M
Total Plot Area	995700.00
Total built up area	64926.37
Total building roof top surface area	71419.00
Area of paved surfaces:	32863.00
Area of unpaved surfaces	92137.00

#### D) Local Climate and Rainfall:

The climate of the area is classified as tropical and characterised by three distinct seasons i.e. October to January winter season, February to May summer season and monsoon season from June to September. The average minimum temperature ranges from 14°C to 16°C while the average maximum temperature is around 38°C. The area receives the rains from the South West Monsoon cycles starting from June to end of the October month. The rainfall frequency (no. of Rain Falls in seasons) is mostly even in the monsoon season. Though there are gaps between two rainfalls, sporadic rainfalls are common even in winter and summer season. The rainfall duration in the area is moderate. The rainfall data reveals that the total annual rainfall in the area is 956 mm while the average annual rainfall of the area is 813.6. The monthly average rainfall data of the area is given in table no. 1. **It is evident from data table that, 90% precipitation takes place from May to Oct.**

**Table No. 1. Monthly average rainfall data of the study area**



Data Source: [en.climate-data.org](https://en.climate-data.org)



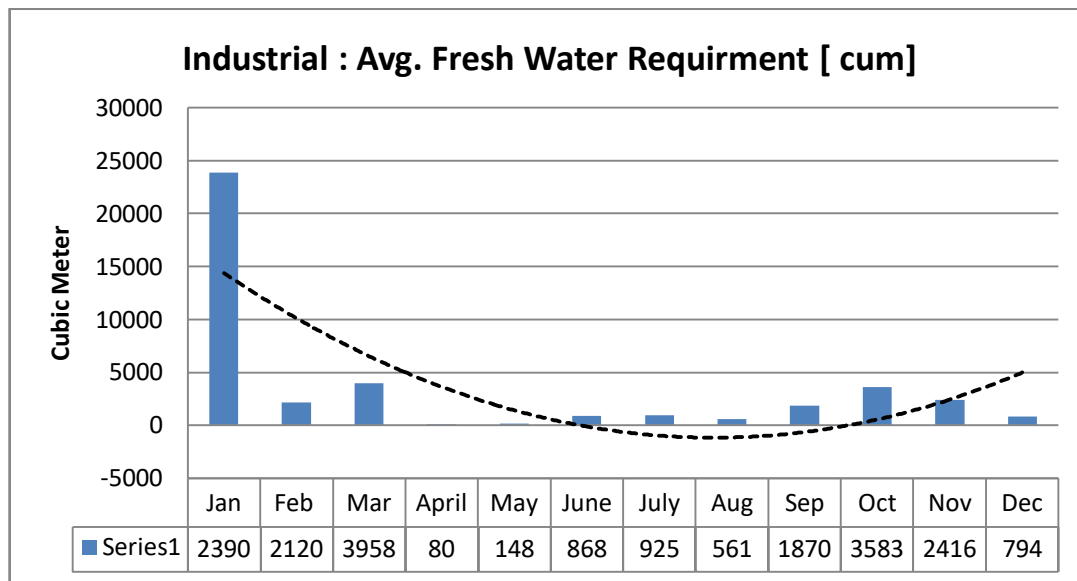
#### **E) Fresh Water Requirement at Site:**

The average annual water requirement of the Jawahar SSSKL is 2299071.8 cum out of which 1800000 CUM is recycled water and 499071.8 CUM is fresh water which includes Industrial water demand of 41223 CUM, Domestic water demand of 116151 Cum and for Irrigation purpose 341697.8 CUM. Details of monthly fresh water requirement for industrial, domestic and irrigation activities in the factory premises is given bellow.

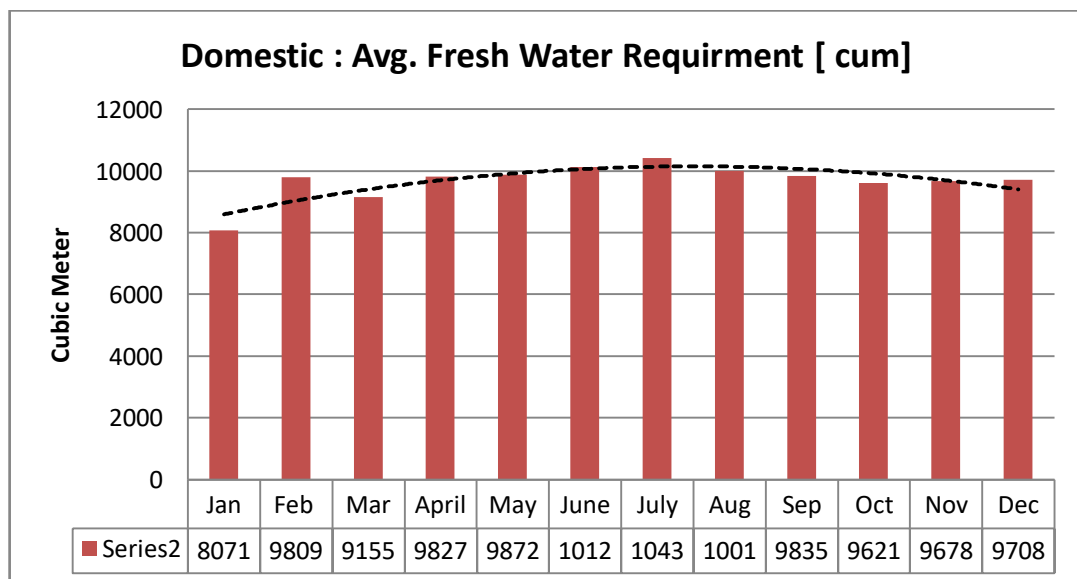
**Table No. 2. Monthly average fresh water requirement of Jawahar SSSKL (CUM)**

<b>Sr. No.</b>	<b>Month</b>	<b>Average fresh water requirement</b>			<b>Total</b>
		<b>Industrial</b>	<b>Domestic</b>	<b>Irrigation</b>	
1	January	23900	8071	1226.8	33198
2	February	2120	9809	31829	43758
3	March	3958	9155	39424	52537
4	April	80	9827	38377	48284
5	May	148	9872	28674	38694
6	June	868	10127	27454	38449
7	July	925	10432	12539	23896
8	August	561	10016	21127	31704
9	September	1870	9835	32017	43722
10	October	3583	9621	40221	53425
11	November	2416	9678	32052	44146
12	December	794	9708	36757	47259
<b>Total</b>		<b>41223</b>	<b>116151</b>	<b>341697.8</b>	<b>499071.8</b>

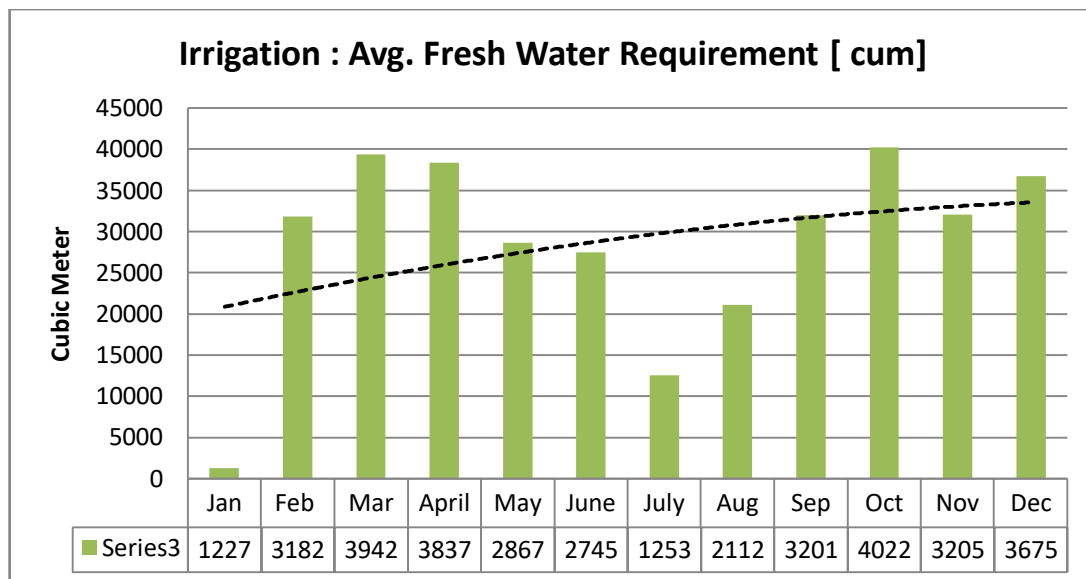
Data Source: Given by JSSSKL



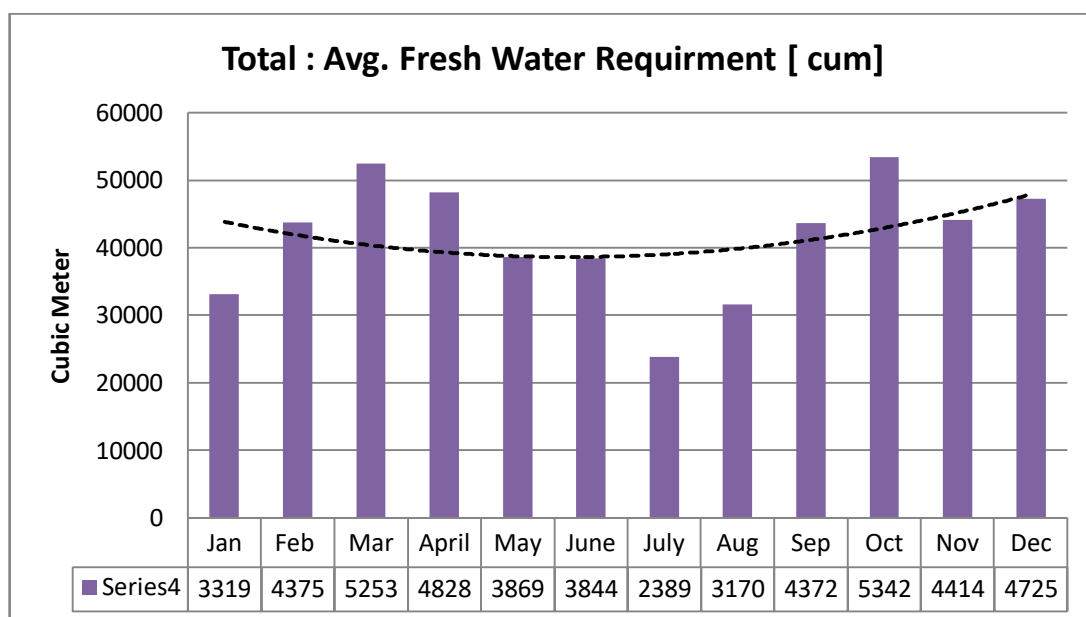
- Polynomial Trend line fitted for data clearly indicates dip in Industrial fresh water requirement in the months from May – Oct.
- From Table 1: 90 % of Precipitation takes place from May to Oct.



- Polynomial Trend line fitted for data clearly indicates Peak Demand for Domestic fresh water requirement in the months from May – Oct.



- Polynomial Trend line fitted for data clearly indicates Rising Demand for Irrigation fresh water requirement in the months from May – Oct.



- Polynomial Trend line fitted for data clearly indicates rising trend in TOTAL Demand for fresh water requirement in the months from June – Oct..
- Rain water can be best utilised for Domestic Demand which is at Peak during Maximum Precipitation period from May to Oct.**

#### **F) Rain Water Endowment:**

The rainwater endowment is estimated for rooftop, paved and unpaved surface areas in the factory premises. Calculations are made for monthly and annual rainwater yield. As given total building roof top surface area is 71419 Sq. M, area of paved surfaces is 32,863 Sq. M and area of unpaved surfaces is 92,137 Sq. M. The runoff coefficient applied for roof top surface area is 0.8, for paved surfaces 0.6 and for unpaved surfaces is 0.5. The results reveals that total available quantity of rain water from the area is 117513 CUM out of which 54621 CUM is from rooftop surface area (**Annexure A**), 18850.22 CUM is from paved surface area (**Annexure B**) and 44041.49 CUM is from unpaved surface area (**Annexure C**). The monthly detail results are given in the following table No. 3.

**Table No. 3. Monthly rainwater yield in the factory premises**

Sr. No.	Month	Rain Water Yield (CUM)			Monthly Total Rain Water yield (CUM)	Cumulative Rain Water yield (CUM)
		Roof Top	Paved Surfaces	Unpaved Surfaces		
1	January	57	19.72	46.07	123	123
2	February	57	19.72	46.07	123	246
3	March	400	138.02	322.48	860	1106
4	April	2057	709.84	1658.47	4425	5531
5	May	4399	1518.27	3547.27	9465	14996
6	June	5714	1971.78	4606.85	12292	27289
7	July	17426	6013.93	14050.89	37491	64780
8	August	9313	3214.00	7509.17	20036	84816
9	September	5714	1971.78	4606.85	12292	97108
10	October	6685	2306.98	5390.01	14382	111490
11	November	2114	729.56	1704.53	4548	116038
12	December	686	236.61	552.82	1475	117513
<b>Total</b>		<b>54621</b>	<b>18850.22</b>	<b>44041.49</b>	<b>117513</b>	<b>117513</b>

### G) Utilization of Available Rainwater:

The available rain water can be utilized for various purposes like for irrigation, domestic and industrial activities as well as for ground water recharge. The rain water yield from paved and unpaved surfaces may have more contaminations compare to the rain water from roof top so it can be used for irrigation purpose. Whereas, the rain water from roof top can be utilized for domestic or industrial activities. Refer Do's and Don'ts before utilizing the rain water. The excess rain water can be utilized for aquifer or ground water recharge i.e. recharge pits, dug or open well, tube or bore well, percolation pond and natural stream augmentation for future use.

It leads to three scenarios of utilisation, for available rain water from roof top / Paved / Unpaved surfaces

1. Use for Domestic Purpose
2. Use for Industrial Purpose
3. Use for Irrigation Purpose.

To work out further on these data series, we have decided to use co relation analysis. This is a very important statistical technique to find out relationship between two variables. It also provides suitable guidance to work out economical behaviour of variables.

Interpretation for Co relation coefficient

$r$  = Correlation coefficient

$R^2$  = Coefficient of Determination

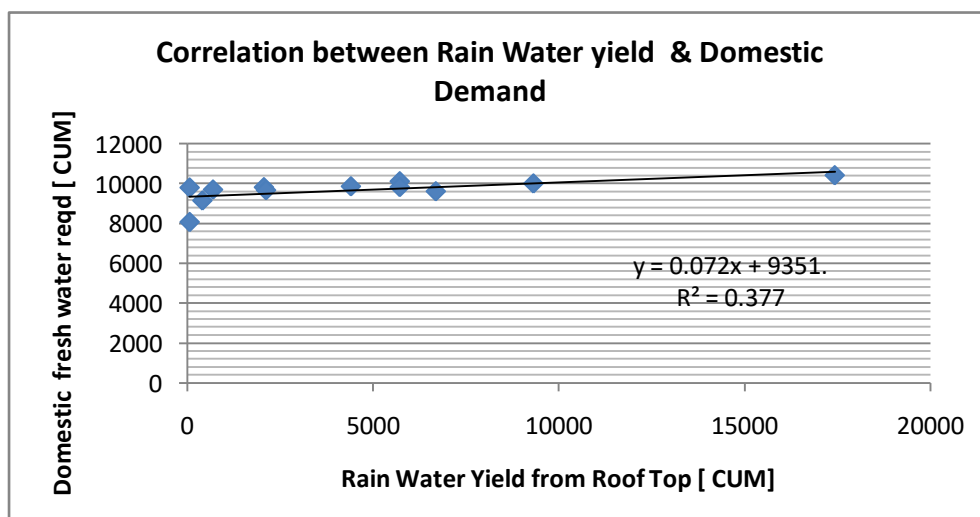
$IrI = 0$	No Correlation
$0.0 < IrI < 0.2$	Very weak correlation
$0.2 < IrI < 0.4$	Weak correlation
$0.4 < IrI < 0.6$	Moderately strong correlation
$0.6 < IrI < 0.8$	Strong correlation
$0.8 < IrI < 1.0$	Very Strong correlation
$IrI = 1.0$	Perfect Correlation



**Scenario 1:****Utilization of available rain water from roof top for domestic use****Table No. 4. Monthly Rainwater availability for domestic use**

Sr. No.	Month	Domestic fresh water requirement (cum)	Rain water yield (cum) from roof top area	Monthly deficit/ surplus (cum)	Correlation Coefficient
1	January	8071	57	-8014	<b>r= +0.61</b> [Strong Positive Correlation]  $R^2=0.377$ Determination Coefficient
2	February	9809	57	-9752	
3	March	9155	400	-8755	
4	April	9827	2057	-7770	
5	May	9872	4399	-5473	
6	June	10127	5714	-4413	
7	July	10432	17426	6994	
8	August	10016	9313	-703	
9	September	9835	5714	-4121	
10	October	9621	6685	-2936	
11	November	9678	2114	-7564	
12	December	9708	686	-9022	
<b>Total</b>		<b>116151</b>	<b>54621</b>	<b>-61530</b>	

The average annual fresh water requirement for domestic use is 1,16,151 CUM, while rainwater availability is 54,621 CUM. i.e. about half of this requirement (47.03%) can be full filled by available rain water. Moreover, from May to November, i.e. for 6 months when the precipitation is high the rainwater can fulfil more than 80% of the domestic water demand. While, in month of July, excess 6,994 CUM rainwater can be used for ground water recharge. The following graph shows the correlation between rain water yield from roof top area and domestic fresh water demand. It can be seen that there is strong positive correlation between these two variables which reveals that the rainwater can be used as a significant alternative source for domestic use.



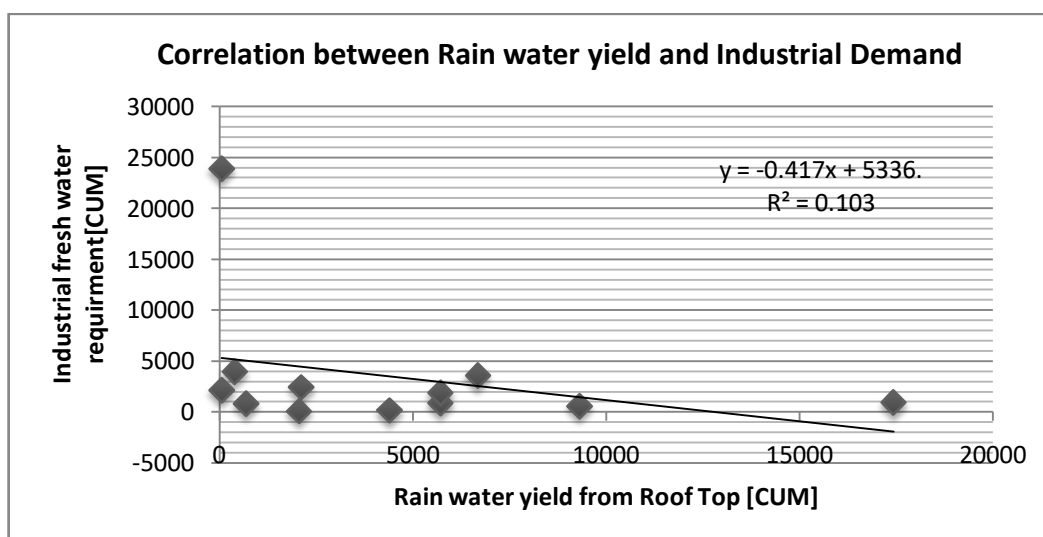
## Scenario 2:

### Utilization of available rain water from roof top for Industrial use

**Table No. 5. Monthly Rainwater availability for Industrial use**

Sr. No.	Month	Industrial fresh water requirement (cum)	Rain water yield (cum) from roof top area	Monthly deficit/ surplus (cum)	Correlation Coefficient
1	January	23900	57	-23843	<b>r= - 0.32</b> <b>[Weak Negative Correlation]</b>  $R^2=0.1032$ Determination Coefficient
2	February	2120	57	-2063	
3	March	3958	400	-3558	
4	April	80	2057	1977	
5	May	148	4399	4251	
6	June	868	5714	4846	
7	July	925	17426	16501	
8	August	561	9313	8752	
9	September	1870	5714	3844	
10	October	3583	6685	3102	
11	November	2416	2114	-302	
12	December	794	686	-108	
<b>Total</b>		<b>41223</b>	<b>54621</b>	<b>13398</b>	

The average annual fresh water requirement for industrial use is 41,223 CUM, while rainwater availability is 54,621 CUM. i.e. more than the requirement. Whereas, the month wise distribution of rainwater and industrial requirement does not tally. The following graph shows the correlation between industrial fresh water requirement and rain water yield from roof top area. It can be seen that there is weak negative correlation between these two variables as when the industrial requirement is more the rainwater availability is less and when the requirement is less the rainwater availability is more. So the rainwater cannot be a significant alternative source for industrial requirement.

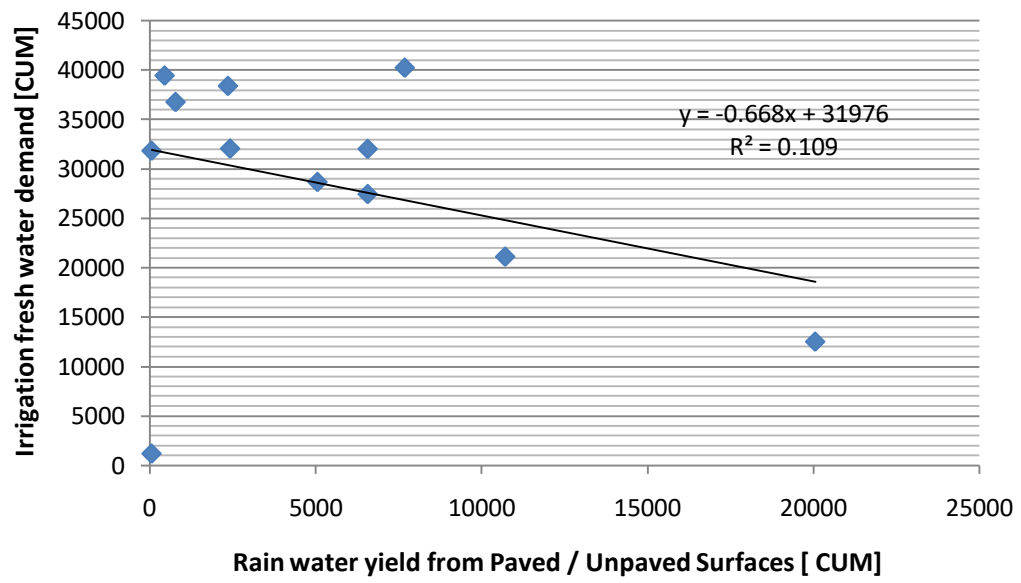


**Scenario 3:****Utilization of available rain water from paved and unpaved surface  
for Irrigation Purpose****Table No. 6. Monthly Rainwater availability for irrigation purpose**

Sr. No.	Month	Fresh water requirement (cum) for Irrigation	Rain water yield (cum) from paved & unpaved surfaces	Monthly deficit/surplus (cum)	Correlation Coefficient
1	January	1226.8	66	-1160.8	<b>r= - 0.33</b> <b>[Weak Negative Correlation]</b>  $R^2=0.1097$ Determination Coefficient
2	February	31829	66	-31763	
3	March	39424	461	-38964	
4	April	38377	2368	-36009	
5	May	28674	5066	-23608	
6	June	27454	6579	-20875	
7	July	12539	20065	7526	
8	August	21127	10723	-10404	
9	September	32017	6579	-25438	
10	October	40221	7697	-32524	
11	November	32052	2434	-29618	
12	December	36757	789	-35968	
<b>Total</b>		<b>341697.8</b>	<b>62892</b>	<b>-278805.8</b>	

The average annual fresh water requirement for irrigation purpose is 3,41,697.8 CUM, while rainwater availability is 62,892 CUM. i.e. only 16 % of this requirement can be full filled by available rain water. Moreover, in month of July execs 7,526 CUM rainwater can be used for ground water recharge. Though the overall rainwater availability and irrigation requirement does not tally, it can contribute to some extent. The following graph shows the correlation between fresh water requirement for irrigation purpose and rain water yield from paved and unpaved surface areas. It can be seen that there is weak negative correlation between these two variables, however it can fulfil 16% of the requirement. Therefore the rainwater can be a considerable alternative source for irrigation purpose.

**Correlation between Paved surace & Irrigation water demand**



## **H) Conclusion:**

The rain water harvesting scheme in the factory premises could be beneficial for the factory as it could be a significant alternative source for fresh water. Some of the key indicators supporting this conclusion are as follows

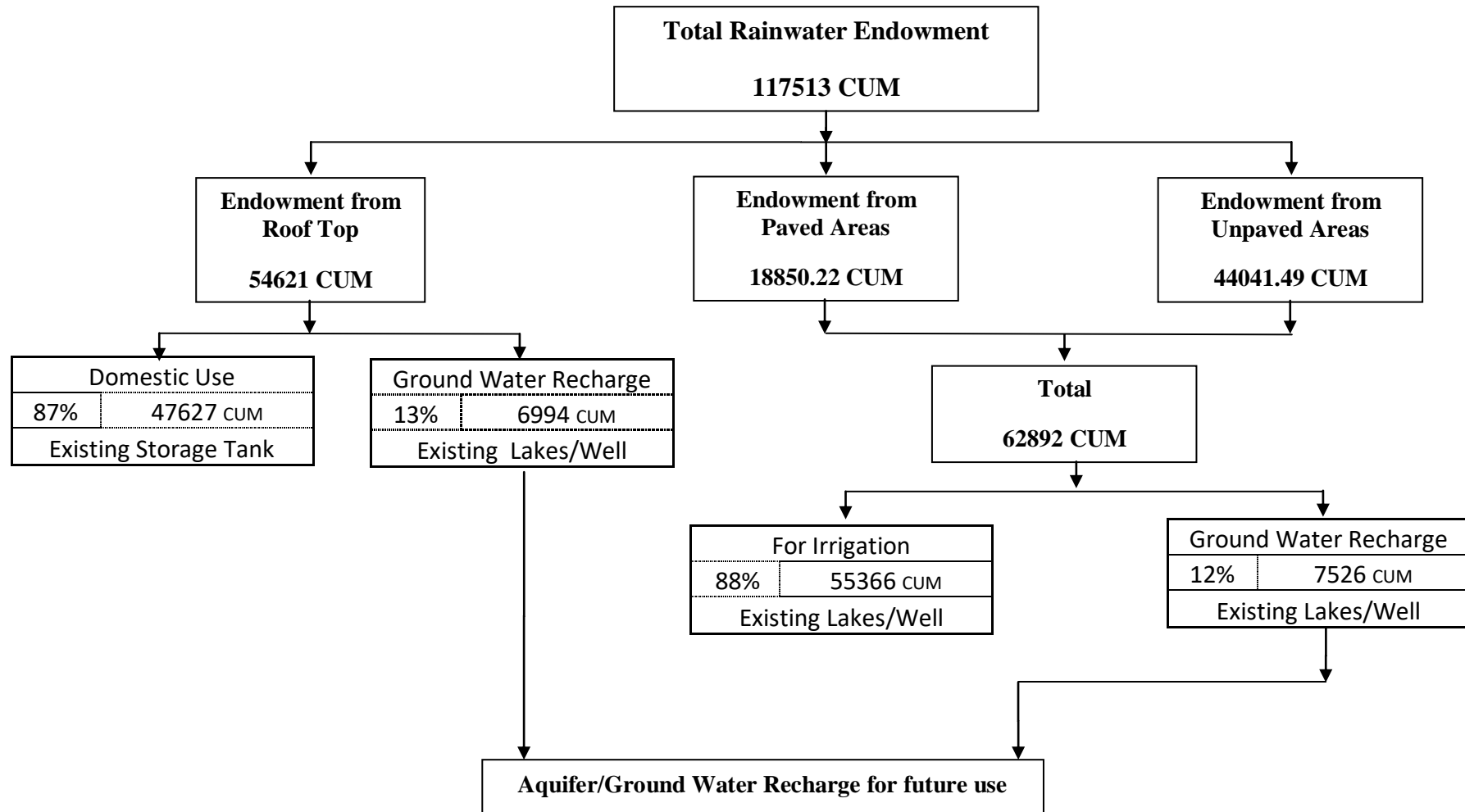
- Total Domestic fresh water requirement – 1,16,151 CUM
- Rain water endowment from roof top – 54,621 CUM
- Rain water quantity can be used for Domestic Purpose after RWH – 47627 CUM
- Rain water quantity can be used for Ground water recharge after RWH – 6994 CUM
- Rain water endowment from paved and unpaved surfaces - 62,892 CUM

From these key indicators it can be concluded that

- 41 % of the total domestic fresh water requirement can be fulfilled from the harvested rainwater from rooftop.
- Out of the total harvested rainwater from rooftop 87% can be used for domestic purpose. Remaining 13% of total harvested rainwater from rooftop can be used for ground water recharge.
- From the total harvested rainwater from paved and unpaved surfaces 88% can be used for irrigation purpose and remaining 12 % can be used for ground water recharge. However this could fulfil only 16% of the water demand for irrigation purpose.
- The highest amount of rain water availability for one day is 580 CUM in the month of July, whereas, the factory has a surface tank with storage capacity of 3000 CUM. Therefore no big storage facilities are required except two tanks shown in RWH Plan, with capacity 500 CUM for tank 1 and 20 CUM for tank 2.
- Total recharge of local ground water table by execs 14,520 CUM rainwater will be through the existing lakes, open well and ground water recharge pits at point no 3, 5 and 6 with capacity 1000, 60 and 900 CUM respectively. A sample diagram of recharge pit is given in annexure D.
- A first flush assembly has to be provided at the outlet of roof top drain. The RWH filters of required capacity should be provided after the outlet from the roof top, for the purification of water to be stored.



The flow chart of the rain water availability and its distribution is given in the following chart.



## **I) Do's and Don'ts of Rainwater Harvesting:**

### **• DO'S -**

1. The roof should be kept clean before rains.
2. Suitable filtration methods have to be adopted to filter rainwater.
3. Filters have to be regularly maintained /cleaned.
4. All plumbing works have to be done properly using appropriate materials.
5. Suitable clamps for all pipes and gutters have to be fixed time to time.
6. Storage devices like sumps/tanks/vessels need to be cleaned before storing filtered rainwater.
7. Rainwater storage devices must have proper manhole covers, which should not permit sunlight into the tank.
8. Paint the surfaces (inside and outside) of masonry tank/sump with lime every year.
9. Provide good quality, leak proof taps that are convenient for use.
10. Check the quality of stored rainwater for bacterial contamination every year if used for drinking.
11. The first flow of rainwater that contains contaminants from the roof must be allowed to drain out (first flush).
12. Sand bed filters need to be installed with properly cleaned riverbed sand and aggregates.
13. The sand, aggregates and plastic mesh of the filter used in infiltration gallery should be cleaned, washed and sun dried time to time before placing them in the infiltration gallery.
14. Rainwater is pure and can be used for drinking, cooking and all other purposes, as it is free from fluoride, arsenic, bacteria, etc., however, contaminants may get added over the collection surface like roof / open space.
15. The open wells have to be de-silted and cleaned before being used for ground water recharge.
16. Pump-in test has to be carried out for bore wells before adopting direct injection of rainwater for ground water recharge.

• **DONT'S -**

1. Rooftop rainwater or surface runoff should not be directly consumed without filtration and proper disinfection.
2. The tanks/sumps used for storing rainwater should not have any opening that permits sunlight inside as entry of sunlight into the sump/tank encourages bacterial and algal growth.
3. Collection of water by vessels/buckets from tanks/sumps through manholes has to be avoided and taps/pumps/hand pumps must be used.
4. Rainwater from the roof or open spaces must not be directly allowed to flow into the bore well casing pipe. Preferably an infiltration gallery method must be adopted for ground water recharge.
5. The rainwater should not get contaminate due to any industrial activity or waste, especially care should be taken in case of paved and unpaved surface runoff.

**Annexure:**

Rain water yield calculations:-

**A) For Roof Top -**

Sr. No.	Month	Monthly Precipitation (mm)	Roof Top Area (sq.mt.)	Coefficient	Monthly Rain Water yield (litter)	Monthly Rain Water yield (cum)
1	January	1	71419	0.8	57135	57
2	February	1	71419	0.8	57135	57
3	March	7	71419	0.8	399946	400
4	April	36	71419	0.8	2056867	2057
5	May	77	71419	0.8	4399410	4399
6	June	100	71419	0.8	5713520	5714
7	July	305	71419	0.8	17426236	17426
8	August	163	71419	0.8	9313038	9313
9	September	100	71419	0.8	5713520	5714
10	October	117	71419	0.8	6684818	6685
11	November	37	71419	0.8	2114002	2114
12	December	12	71419	0.8	685622	686
	<b>Total</b>	<b>956</b>	<b>71419</b>	<b>0.8</b>	<b>54621251</b>	<b>54621</b>

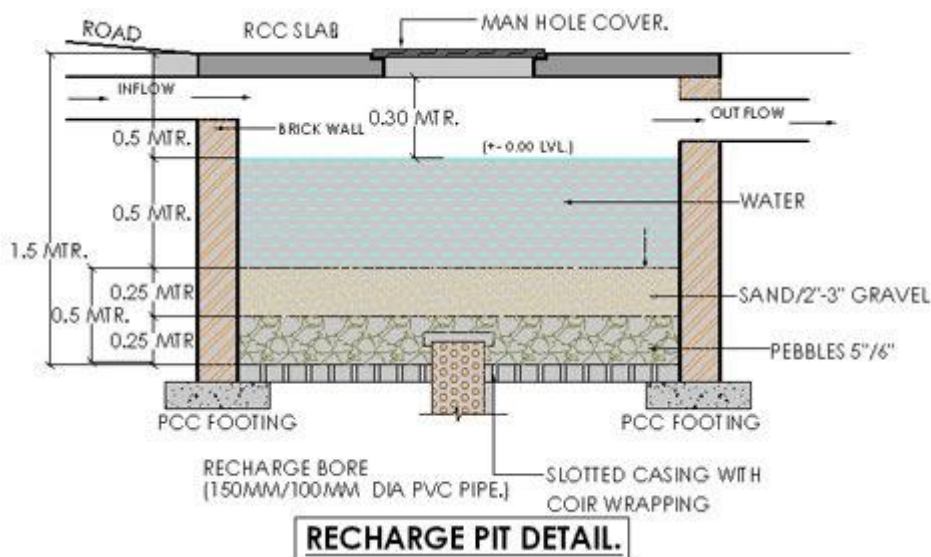
**B) For Paved Surfaces -**

Sr. No.	Month	Monthly Precipitation (mm)	Area of paved surfaces (sq.mt.)	Coefficient	Monthly Rain Water yield (litter)	Monthly Rain Water yield (cum)
1	January	1	32863	0.6	19717.8	19.7178
2	February	1	32863	0.6	19717.8	19.7178
3	March	7	32863	0.6	138024.6	138.0246
4	April	36	32863	0.6	709840.8	709.8408
5	May	77	32863	0.6	1518270.6	1518.2706
6	June	100	32863	0.6	1971780	1971.78
7	July	305	32863	0.6	6013929	6013.929
8	August	163	32863	0.6	3214001.4	3214.0014
9	September	100	32863	0.6	1971780	1971.78
10	October	117	32863	0.6	2306982.6	2306.9826
11	November	37	32863	0.6	729558.6	729.5586
12	December	12	32863	0.6	236613.6	236.6136
	<b>Total</b>	<b>956</b>	<b>32863</b>	<b>0.6</b>	<b>18850216.8</b>	<b>18850.2168</b>

### C) For Unpaved Surfaces -

Sr. No.	Month	Monthly Precipitation (mm)	Area of unpaved surfaces (sq.mt.)	Coefficient	Monthly Rain Water yield (litter)	Monthly Rain Water yield (cum)
1	January	1	92137	0.5	46068.5	46.0685
2	February	1	92137	0.5	46068.5	46.0685
3	March	7	92137	0.5	322479.5	322.4795
4	April	36	92137	0.5	1658466	1658.466
5	May	77	92137	0.5	3547274.5	3547.2745
6	June	100	92137	0.5	4606850	4606.85
7	July	305	92137	0.5	14050892.5	14050.8925
8	August	163	92137	0.5	7509165.5	7509.1655
9	September	100	92137	0.5	4606850	4606.85
10	October	117	92137	0.5	5390014.5	5390.0145
11	November	37	92137	0.5	1704534.5	1704.5345
12	December	12	92137	0.5	552822	552.822
	<b>Total</b>	<b>956</b>	<b>92137</b>	<b>0.5</b>	<b>44041486</b>	<b>44041.486</b>

### D) Sample Schematic Diagram of Ground Water Recharge Pit:







**Annexure – IV**  
**Public Hearing Compliance & Revised CER**

## **PUBLIC CONSULTATION**

As per EIA notification 14<sup>th</sup> September 2006 and standard ToR's issued by EAC, MoEFCC, New Delhi *Letter No.* IA-J-11011/38/2016-IA II (I) dated 30.03.2019; JSSSKL has conducted Public Hearing (PH) on 12.12.2019 for expansion of sugar factory from 12,000 TCD to 16,000 TCD.

### **Details of Public Hearing (PH)**

Date of PH : 12.12.2019  
Place of PH : At the Factory site - M/s. Jawahar Shetakari Sahakari Sakhar Karkhana Ltd. (JSSSKL) Gat No.: 315/7 to 315/15, Tal.-Hatkanangale, Dist.-Kolhapur, Maharashtra.  
Advertisement given : 08.11.2019  
News Paper : (Times of India and Dainik Pudhari)  
Copies of News Paper Enclosed at **Appendix - P**

### **Members Present**

:  
1 Mr. Bhausahab Galande Chairman/  
Additional District Magistrate, Kolhapur, MS President  
2 Mr. Ravindra Andhale Member  
Regional Officer (RO), MPCB, Kolhapur  
2 Mr. Prashant Gaikwad. Convener  
Sub-Regional Officer (SRO), MPCB, Kolhapur

### Minutes of Public Hearing :

No	Issues By Public	Points Represented	Response / Commitment of PP with Budget & time Line
1	Shri Dadaso Venkatrao Khanvilkar, resident from Rendal, Tal: Hatkanangale, Dist.: Kolhapur	From where will you make available raw material for the proposed project?	<b>Response</b> : MD of the industry told that farmers within working area supply sugarcane to this factory for crushing. This year sugarcane produced on 24,000 hectares of land has been supplied for crushing. After expansion, sugarcane produced in the working area of this factory only will be utilized for crushing. Therefore, there is no need to bring the same from outside the working area of the factory.
2	Shri Sujit Dhondiram Shinde, resident of Rendal, Tal: Hatkanangale, Dist.: Kolhapur	How much sugar will be produced from the proposed project?	<b>Response</b> : It was informed by MD that 16 lakh ton sugarcane will be crushed in 100 days and if the proposed project runs for 160 days, then upto 25 lakh ton sugarcane will be crushed. Presently the rate of sugar recovery has reached up to 12.75% which the factory has planned to increase up to 13%, until now the factory has produced 22 lakh tons of sugar. The sugar production will reach up to 30 to 32 lakh tons in 160 days with 13% recovery.
3	Shri Suresh Amgonda Bhojkar	What plans do industry have for planting trees in the working area and factory premises of the sugar factory?	<b>Response</b> : Factory has working area of about 100 hectares. Of these, tree plantation has been done on 34.5% of land. After expansion, additional tree plantation would be done on 5% area on remaining land is planned after the expansion. <b>Action Plan:</b> JSSSKL has already developed an area of about 34.3 Ha. (34.5% of total plot area) under green belt. There under, about 7376 trees are planted. After expansion of sugar factory, industry will augment 5% of area i.e. 4.9 Ha. under green belt. Hence, total Green belt after expansion will be 39.3 Ha. (39.5 % of total plot area). Under proposed green belt 9000 trees will be planted. Refer Chapter 2, Section 2.9 for details of green belt. <b>Budget</b> : A budget of Rs. 10 Lakhs is allocated for augmentation of greenbelt. <b>Timeline</b> : Proposed Greenbelt will be developed within 1 year after commissioning of expansion project.
4	Shri Vijay Eknath Joshi, resident of Hupari, Tal- Hatkanangale, Dist-	Which by-products will be produced after expansion?	<b>Response</b> : Byproducts to be generated from proposed expansion project are molasses, Bagasse and pressmud. Further, MD elaborated that at

No	Issues By Public	Points Represented	Response / Commitment of PP with Budget & time Line
	Kolhapur		<p>present, 27 MW of power generation plant is in operation. Out of that, 12 to 14 MW of electricity is used for the plant itself and the remaining power is sold to the State Electricity Board. Molasses is sold in the market at a good price. It is planned to build an additional storage tank to maintain the quality of the molasses. Due to the fact that the bagasse manufactured in our sugar factory is of good quality, the industries in Kagal Hatkangale Five Star MIDC as well as the boilers of textile processing industries at Ichalkaranji and around are well running on our sugar factory bagasse and are in good demand in the local market.</p> <p><b>Action Plan:</b> An additional molasses storage tank will be required. Refer Chapter 2, Section 2.6, table 2.6 for details of by-products generated from sugar factory.</p> <p><b>Budget :</b> A budget of Rs. 1 Cr. is allocated for molasses storage tank.</p> <p><b>Timeline :</b> Before commissioning of expansion project.</p>
5	Shri Appasaheb Patil, resident of Pattankodoli, Tal- Hatkanangale, Dist- Kolhapur.	What are the working days of the co-generation project?	<p><b>Response :</b> Working days for Cogen plant - 180 days. MD communicated that, back Pressure Turbine and Condensing Turbine are two types of generating power. In 1994, the factory management started producing electricity of 1.5 MW capacity through back pressure turbine type of power generation. In the year 2000, the factory management started producing electricity of 20 MW through back pressure turbine type of power generation. In the year 2007, electricity generation was increased by 3 MW with back pressure turbine generation of power. The advantage of back pressure turbine is that after consumption of electricity in our own plant, we can sold the remaining electricity to the state electricity board. Remaining bagasse can also be sold in the market. After expansion, the internal consumption of electricity will decrease and the excess electricity will be sold to the state electricity board.</p>
6	Shri Harun Sardar Mujawar, resident of Rendal, Tal- Hatkanangale, Dist- Kolhapur	How much will the proposed project cost?	<p><b>Response :</b> MD informed that the cost of proposed expansion will be approx. Rs. 34 crores which is very less capital expenditure</p>
7	Shri Vaman Bhaskar Kamble, resident of Rendal, Tal- Hatkanangale, Dist- Kolhapur	What will be the benefit of the proposed project to Rendal, Huprai, Yalgud, Rangoli and Jangamwadi villages adjacent to the sugar factory?	<p><b>Response :</b> MD replied that project is located at the boundries of three villages i.e. Rendal, Huprai and Yalgud. Most of the local employment has been generated in these three villages and from hereon also jobs will be generated. Treated wastewater of the factory is supplied to sugarcane</p>



No	Issues By Public	Points Represented	Response / Commitment of PP with Budget & time Line
			<p>production on 100 acres of land in Jangamwadi village, where river water could never be brought. If the geographical situation of the factory is taken into account, the factory has created big market by way of providing employment opportunities, impetus to cottage industry, growth in the industry etc. and there is good economic turnaround. There is minimal pollution and hence, no nuisance to villagers.</p> <p><b>Action Plan:</b> JSSSKL has already given employment to 1283 persons. Under existing sugar factory about expansion of sugar factory, about 99 Persons will be employed.</p> <p>Refer Chapter 2, table 2.1 for employment generation.</p> <p><b>Timeline :</b> Before Commissioning the expansion project</p>
8	Shri Appasaheb Patil, resident of Pattankodoli, Tal- Hatkanangale, Dist- Kolhapur	What kinds of polluted water will be generated from the proposed project and what will be its quantity?	<p><b>Response :</b> MD replied that at present, our factory produces about 93 liters of wastewater from crushing one ton of sugarcane our factory against the standards set by the Central Pollution Control Board of 200 litres of waste water can be generated from crushing of one ton sugarcane. After expansion, the waste water generation is likely to be reduced to 85-87 litres per ton of sugarcane crushing from process. This treated water is used for tree plantation and also provided for 100 to 125 acres of land for sugarcane crop at Jangamwadi village as per demand of the members. Same practices will be followed after expansion also. We have strictly adhered to the standards of the Central Pollution Control Board. Domestic effluent to the tune of 125 CMD, will be treated in proposed STP.</p> <p><b>Action Plan:</b> Effluent generated from sugar factory will be treated in existing ETP comprising of Primary-secondary-tertiary treatment. ETP consist of Bar screen, Oil &amp; Grease Chamber, Equalization Tanks (2 Nos.), Anaerobic Digester (2 Nos.), Surface Aeration Tank, Pri. Clarifier, Storage tank, Diffuse Aeration Tanks (2 Nos.), Sec. Clarifier (2 Nos.) Storage Tank, Pressure Sand Filter &amp; Treated water sump.</p> <p>Domestic effluent will be treated in proposed STP.</p> <p>Refer Chapter 2, section 2.7.1 for details of water pollution generated from JSSSKL and its disposal details.</p> <p><b>Budget :</b> Rs. 10 Lakhs is allocated for up-gradation of ETP, and Rs. 50 Lakhs allocated towards installation of STP.</p> <p><b>Timeline :</b> Before commissioning of expansion project.</p>

No	Issues By Public	Points Represented	Response / Commitment of PP with Budget & time Line
9	Shri Santkumar Paygonda Bhojkar, resident of Talandage, Tal- Hatkanangale, Dist- Kolhapur	We have attended this public hearing in response to the notice published by MPCB. Much information is given during the presentation, but most importantly, does the factory periodically check the waste water quality, air pollution, noise generated by the project? Will you continue to check the same from here on, and if so, through which agency are you going to monitor the same?	<p><b>Response :</b> MD answered that industry does not send the wastewater outside the factory premises and after treatment it is used for gardening in the factory premises. Industry has built two tanks in the factory premises to store rain water. Rain water is stored in these two tanks. The buzzer / horn sounds at the time of changing shifts and its sound does not go beyond the factory premises. Dust particles generate only if the system breaks down. Ash produced is used as fertilizer. Factory management has taken all precautionary measures to control air pollution, water pollution and noise pollution to avoid their impact on the citizens of the neighboring villages. We have appointed external agencies to check the pollution and their inspection report is submitted to the Government.</p> <p><b>Action plan :</b> The industrial effluent generated from expansion project will be treated in existing ETP and sewage will be treated in proposed STP. Also, ETP is equipped with Online Continuous Monitoring System (OCMS) and same is connected to CPCB server. Moreover, periodic checking and inspection is carried by MPCB to check the quality of effluent. Secondly, to control air pollution, ESP and adequate stack height is provided to boilers. Also, OCMS is installed to stacks and connected to CPCB server. Lastly, Ambient and Workzone noise monitoring is periodically carried out to check noise levels in and around industrial premises and noise control is done by through acoustic enclosures.</p> <p><b>Budget :</b> Rs. 10 Lakhs is allocated for up-gradation of ETP, and Rs. 50 Lakhs allocated towards installation of STP.</p> <p><b>Timeline :</b> Before commissioning of expansion project.</p>
10	Shri Ananda Dhondi Mali, resident of Yalgud, Tal- Hatkanangale, Dist- Kolhapur	First of all I congratulate the board of directors and thank them for the proposed project. Which pollution control equipment's are you going to provide after expansion?	<p><b>Response :</b> Pollution control equipment's under existing unit -</p> <ul style="list-style-type: none"> <li>a) To control air pollution ESP along with adequate height of stack.</li> <li>b) ETP with required treatment units for effluent treatment</li> <li>c) Noise control through acoustic enclosures</li> <li>d) Other requisite methodologies are followed for waste treatment.</li> </ul> <p>Pollution control equipment's under expansion unit -</p> <ul style="list-style-type: none"> <li>a) Upgradation of ETP with required treatment units for additional effluent treatment</li> <li>b) STP for treatment of domestic effluent</li> </ul> <p>MD briefed that Air pollution and water pollution are measured regularly.</p>

No	Issues By Public	Points Represented	Response / Commitment of PP with Budget & time Line
			<p>Maharashtra Pollution Control Board and Central Pollution Control Board monitor the system online and if it exceeds the limit, it is immediately communicated. The system is up to date and has been operating in the factory for the last four years.</p> <p>Dr. Ghugare said that in the Environmental Clearance issued or which is going to be issued, some conditions are laid out and reports of compliance with those conditions have to be submitted to the Ministry of Environment, Forests and Climate Change at Nagpur every six months. Thereafter, their officers visit the factory as well as MPCB officials visit the factory twice every month. In addition, the officers of Central Pollution Control Board visit factory without any notice and inspect whether the pollution control system is working properly or not. Hence, they are required to be operated properly. All records are checked.</p> <p><b>Action Plan:</b> Effluent will be treated in its existing ETP which will be duly upgraded under expansion. Domestic effluent will be treated in proposed STP. ESPs as APC equipment is installed to existing boilers to control air emissions from existing as well as expansion projects.</p> <p>Refer Chapter 2, section 2.7.1 for details of water pollution generated from JSSSKL and its disposal details.</p> <p><b>Budget :</b> A budget of Rs. 10 Lakhs is allocated for up-gradation of ETP, and Rs. 50 Lakhs allocated towards installation of STP. Also, it is decided to invest Rs. 15 lakhs for noise pollution control.</p> <p><b>Timeline :</b> Before commissioning of expansion project</p>
11	Shri Dhananjay Gopal Magdum, resident of Pattankodoli, Tal- Hatkanangale, Dist- Kolhapur	Will the proposed project have an impact on the health of the locals?	<p><b>Response :</b> MD communicated that due to planting of trees in our factory premises, there is sufficient oxygen in the premises and hence, the health conditions of the factory workers are good. Due to the fact that there is no pollution in the neighboring villages, no health problems has been arisen, and also precautions have been taken that there will be no such problems from hereon.</p> <p>Consultant said that our social scientists have randomly collected health data of the people in the study area age group wise and it was found that the health index of the people in this area is 70 to 72 percent which indicates good health. But the factory is not solely responsible for</p>

No	Issues By Public	Points Represented	Response / Commitment of PP with Budget & time Line
			<p>pollution, surrounding factors like river pollution, contaminated water etc. are also responsible.</p> <p><b>Action Plan:</b> JSSSKL has already developed an area of about 34.3 Ha. (34.5% of total plot area) under green belt. Thereunder about 7376 trees are planted. After expansion of sugar factory, industry will augment 5% of area i.e. 4.9 Ha. Under green belt. Total Green belt after expansion will be 39.3 Ha. (39.5 % of total plot area). Under proposed green belt 9000 trees will be planted. Refer Chapter 2, Section 2.9 for details of green belt.</p> <p><b>Budget :</b> Rs. 7 Lakhs allocated for augmentation of greenbelt.</p> <p><b>Timeline :</b> Proposed Greenbelt will be developed within 1 year after commissioning of expansion project</p>
12	Shri Vasant Mahadev Ghatage, resident of Jangamwadi, Tal- Hatkanangale, Dist- Kolhapur	How much liter water will be required for the proposed project and from where will it be made available?	<p><b>Response :</b> Total fresh water required after proposed expansion will be 513 CMD and the same would be taken from Dudhganga river. Permission towards water lifting (0.168 MM<sup>3</sup>) has been taken from Irrigation Dept. Pune.</p> <p>Dr. Ghugare elaborated that water within sugarcane will be used for the proposed project. For 1 ton crushing of sugarcane, 100 liters of river water (fresh water) is required which is prescribed by MPCB. We use less than 60 to 70% of water for which permission is given by Irrigation Dept.</p> <p><b>Action Plan:</b> Total water required to JSSSKL complex after expansion will be about 4394 CMD. Out of which 513 CMD will be fresh water taken from Dudhganga river, 3281 CMD will be cane condensate water and 600 CMD will be ETP treated water used for green belt. 88% requirement of water will be meet from recycle water. Refer Chapter 2, section 2.7.1 for details of water consumption. Refer <b>Appendix E</b> for water lifting permission.</p>
13	Shri Anil Chougule, member of district environmental committee Dist- Kolhapur	During the presentation, in a slide, there was mention of domestic waste water treatment plant and industrial waste water treatment plant, please explain about it. Have you set up Domestic Wastewater Treatment Plant to treat the domestic wastewater generated currently?	<p><b>Response :</b> Dr. Ghugare replied that domestic waste generated by staff, factory workers and the colonies will be treated in the domestic wastewater treatment plant and industrial wastewater will be processed at the industrial waste water treatment plant and the treated wastewater will be used on land for gardening. Presently, we have not set up domestic wastewater treatment plant. Domestic wastewater treatment plant is proposed as per the terms of the Ministry of Environment, Forests and Climate Change</p> <p><b>Action Plan :</b> Domestic effluent from existing sugar factory and co-gen plant is to the tune of 125 M<sup>3</sup>/D. After expansion project, there will not</p>

No	Issues By Public	Points Represented	Response / Commitment of PP with Budget & time Line
			<p>be increase in domestic effluent as no additional water will be required. Total domestic effluent will be treated in Proposed Sewage Treatment Plant (STP) after expansion.</p> <p>Refer Chapter 2, section 2.7.1 for details of water pollution generated from JSSSKL and its disposal details.</p> <p><b>Budget</b> : Industry has planned to allocate Rs. 50 Lakhs towards installation of STP.</p> <p><b>Timeline</b> : Before commissioning of expansion project</p>
14	Shri Vijay Patil, resident of Yalgud, Tal- Hatkanangale, Dist- Kolhapur	Will increased production provide employment opportunities?	<p><b>Response</b> : MD answered that capital expenditure of Rs. 34 crore will be incurred for proposed expansion and additional 99 jobs will generate.</p> <p><b>Action Plan</b>: JSSSKL has already given employment to 1283 persons. Under existing sugar factory about expansion of sugar factory, about 99 Persons will be employed.</p> <p>Refer Chapter 2, table 2.1 for employment generation.</p> <p><b>Timeline</b> : Before Commissioning the expansion project</p>
15	Shri Chandrakant Maruti Vadd, member of Huparigrampanchayat, Dist- Kolhapur	How much electricity will be generated from the proposed project ?	<p><b>Response</b> : MD explained that currently 27 MW electricity is being generated, the integrated project will require 14 to 15 MW electricity and the remaining power will be supplied to Maharashtra State Electricity Board.</p>
	<b>Suggestions &amp; Appreciations</b>		
16	Shri Subhash Annaso Gotkhinde, Ex Sarpach of Yalgud, Tal- Hatkanangale, Dist- Kolhapur	My agricultural land is located adjacent to the compound wall South direction of the factory. Sugarcane and vegetables grow in my field. I sincerely thank the factory management; this sugar factory has been operating from last 27 years and going for expansion for present 12000 TCD to 16000 TCD. My suggestion is that if 20000 metric tones of sugar per day was produced instead of 16000 metric tones per day, the factory would have completed crushing season within 90 days and overheads would have been reduced and the crops like soyabean, groundnut could be harvested. I have another	<p><b>Response</b>: MD welcomed the suggestion and said that the expansion of the sugar factory so far has been done step by step taking into account the economical results. Taking into consideration the command area of the sugarcane crop, the proposal regarding increase in crushing capacity up to 20000 TCD will be put up before the Board of Directors, and after their approval, further actions will be initiated. So far, the villages of Jangamwadi, Yalgud, Hupri, Rendal and Talandge have been given priority under CER/ CSR and in terms of employment opportunities. These villages will continue to be a priority.</p>



No	Issues By Public	Points Represented	Response / Commitment of PP with Budget & time Line
		suggestion, as the sugar factory completely comes in the boundary area of village Yalgud, priority should be given while giving help under CER/ CSR and also preference should be given to the villagers of Yalgud for newly generated jobs. Take note of my suggestions.	
17	Shri Kuber Patil resident of Yalgud, Tal- Hatkanangale, Dist- Kolhapur	My best wishes for expansion. Presently, the roads in this area are as it is from the time when factory started operations. The government and the factory management should undertake the work of widening these roads. In past, there was no less traffic, but due to expansion of the factory, there is increase in the traffic now. So the factory management should consider this problem.	<b>Response:</b> MD welcomed the suggestion and said that as the movement of vehicles coming to the factory has increased, the representatives of the people, the Collector's Office, and the State Government should take notice of this problem, start road widening work and they should be made tarred. The factory management will take follow up with the government in future also.
18	Shri. Vilas Khanvilkar, Former Member of Zilla Parishad, resident of village Rendal, Tal. Hatkanangale, Dist.: Kolhapur	The sugar factory is about to be expanded. In this area, if you consider the command area of thirteen villages, expansion of the factory is necessary. The question of environment and pollution was also raised at time of expansion from 2500 TCD to 12000 TCD. The Chairman of the factory and the board of directors had taken care of the environment and pollution since the factory started. Trees were planted before the factory was set up. At the time of expansion of 12000 TCD, we were saying that the smoke and ash emitted by the chimney would lead to pollution due to expansion, will cause diseases among the villagers, and also there will be pollution due to waste water of the factory. However, the factory did not release the sewage and provided 1 acre sugarcane at Jangamwadi	--

No	Issues By Public	Points Represented	Response / Commitment of PP with Budget & time Line
		where river water is not discharged waste water outside the factory premises. The treated waste water is used for irrigating 100 acres of sugarcane crop at village Jangamwadi, where there is no water supply from the river. I agree with Shri. Gotkhinde, the former sarpanch to go for expansion of 20,000 TCD. Taking into consideration the present situation, there is a need for expansion, so it should be approved.	
19	Sarpanch of Grampanchayat Talandge, Tal: Hatkanangale, Dist: Kolhapur	Our village is at a distance of 7 kms from the sugar factory. Our village has no nuisance from the factory. I request that our village should also be given help under CSR/CER program.	<p><b>Response:</b> MD welcomed the suggestion and said that the factory is implementing drip irrigation full automation scheme in village Talandge, and in future also such schemes will be implemented in 4 to 5 villages mentioned above.</p> <p><b>Action Plan:</b> Under proposed expansion project, industry will spend Rs. 260 lakhs under CER program. Out of that, Rs. 50 Lakhs are allocated for drip irrigation in surrounding 4-5 villages. Details of CER presented at Chapter 6, Table 6.5</p> <p><b>Budget:</b> A budget of Rs. 50 Lakhs is allocated towards Drip irrigation under CER activities.</p> <p><b>Timeline:</b> Same shall be implemented within 5 years after Commissioning the expansion project.</p>
20	Mrs. ShalanRavsaheb Patil, Sarpanch of Gram Panchayat Ingli, Tal. Hatkanangale, Dist.: Kolhapur	Our village is close to the factory, there is no nuisance to our village from this factory. Lot of laborers from our village are working in this factory. We have no complaints about the factory.	--

**Revised CER Plan with Activities and Budget**  
**Jawahar Shetkari Sahkari Sakhar Karkhana Ltd.,**  
**A/P:Hupari, Tal: Hatkanangale, Dist: Kolhapur, MS**

<b>Sr. No.</b>	<b>CER Activities</b>	<b>Cost (in Rs. Lakhs)</b>
1	<b>Water Conservation:</b> Promotion, Supply, Erection & Commissioning of “ <b>Drip Irrigation</b> ” system infrastructure to bring 200 Ha of Farm Land in Command Area within 3 Years.	Rs.200
2	<b>Sugarcane Development Schemes:</b> Funding for - development of better cane species (high recovery), Organic Fertilizers, Vermi Compost, Bio-fertilizers, improved harvesting practices, minimization of crop period etc. and motivation to farmers through Prizes for best crop with high yields .	Rs.100
3	<b>Afforestation in 5 Villages:</b> Plantation of 1000 Trees / Village including supplying the plant, its cultivation and maintenance for 18 months. 5 Villages X 1000 Trees / Village X Rs. 1000/ Tree = Rs. 50 Lakhs	Rs.50
4	<b>Clean &amp; Safe Drinking Water Supply:</b> Provision of Water Treatment & Dispenser Unit comprising of RO Module, Filtration System, Storage Tank, Piping, Control Panel, Dispensing and Metering System for water supply in 10 Villages. 20 Units X Rs. 2.5 Lakh/ Unit = Rs. 50 Lakhs.	Rs.50
5	<b>Non-Conventional Energy Promotion :</b> Providing Solar Street lights in 5 Villages; consisting of 1 MS Pole, 18-20 W LED Lamps, Battery, Solar Panel, Wiring and allied fittings etc. 100 Solar Street Lights x Rs. 0.3 Lakhs = Rs.30 Lakhs.	Rs.30
6	<b>Supply of MSW Management Infrastructure</b> in 5 Villages: Providing MS Containers (2 X 1.5 X 1.2 M) with Top / Side opening with 3 Containers / Village. Industry shall provide Tractor Trolley System with lifting arrangement & shall dump the containers at MSW Processing Site of each Village. MS Containers of 3.6 Cu.M. Cap., 15 Containers X Rs. 2 Lakhs / No. = Rs. 30 Lakh	Rs.30
7	<b>Cane Trash Management &amp; Awareness Program:</b> Training & Awareness to farmers for refraining them from “Cane Trash (Pachat)” burning to prevent sever ‘Air Pollution’, inculcating habits towards Eco-friendly Agricultural Practices	Rs.25
8	<b>Medical &amp; Healthcare Facilities:</b> Funding for Heart Surgeries, Cancer, Kidney Surgeries, Eye Operations etc.	Rs.15
	(15% of Capital Cost of Rs. 34 Cr.) <b>Total</b>	<b>Rs. 500 Lakhs</b>

**Annexure – V**  
**PH Letter from MS; SPCB to MoEFCC &**  
**ToR Letter**

# MAHARASHTRA POLLUTION CONTROL BOARD

Tel: 24024022/24020781 / 24010437,  
Fax: 24093814 / 24044532,  
website: <http://mpcb.gov.in>,  
E-mail: [jdwater@mpcb.gov.in](mailto:jdwater@mpcb.gov.in),



Kalpataru Point, 3<sup>rd</sup> Floor,  
Sion - Matunga Scheme Road No. 8,  
Near Sion Circle, Sion (E),  
Mumbai - 400 022

No: BO/JD (WPC)/PH/B- 200310-115-0099

Date: 18/01/2020

To,  
Ministry of Environment, Forests & Climate Change,  
Indira Paryavaran Bhavan, Jor Bagh Road,  
New Delhi-110 003.

Sub: Environmental Clearance - Proceedings of Public Hearing in respect of  
Proposed Expansion of Sugar Factory from 12000 TCD to 16000 TCD  
(Increase by 4000 TCD) Proposed by M/s. Jawahar Shetakar SSK Ltd  
(JSSSKL) at Hupari, S. No. 315/7 to 315/15, Tal: Hatkanangale, Dist:  
Kolhapur, Maharashtra.

Ref: Sub-Regional Office Kolhapur vide letter dt.17/01/2020 received on  
29/01/2020.

.....

Sir,

The Public Hearing for the Proposed Expansion of Sugar Factory from 12000 TCD to 16000 TCD (Increase by 4000 TCD) Proposed by M/s. Jawahar Shetakar SSK Ltd (JSSSKL) at Hupari, S. No. 315/7 to 315/15, Tal: Hatkanangale, Dist: Kolhapur, Maharashtra. Environmental public hearing extended on 12/12/2019 at 11:30 am at Jawahar Shetakar SSK Ltd (JSSSKL) at Hupari, S. No. 315/7 to 315/15, Tal: Hatkanangale, Dist: Kolhapur, Maharashtra. The minutes of the public hearing approved and duly signed by the Public hearing panel along with the proceedings are enclosed.

- Minutes of public hearing duly signed by the Chairman of public hearing panel in (English & Marathi)
  - Copy of Office Order
  - Video DVD and Photograph of Public Hearing.
  - List of participants.
  - Newspaper Notices for Environmental Public Hearing in English & Marathi.
- This is submitted for further necessary action please.

Yours Sincerely,

  
Dr. Y. B. Sontakke  
Joint Director (WPC)

Encl: As above

Copy submitted for Information to:

The Member Secretary, MPCB, Mumbai.

Copy for information & necessary action to:

- 1) The Regional Officer, MPCB, Kolhapur
- 2) The Sub Regional Office, MPCB, Kolhapur.
- 3) EIC, M P. C. Board, Mumbai - For information & display of Minutes on website.

Copy to the applicant of the project:

M/s. Jawahar Shetakar SSK Ltd (JSSSKL) at Hupari, S. No. 315/7 to 315/15, Tal: Hatkanangale, Dist: Kolhapur, Maharashtra.

**No.J-11011/38/2016-IA-II(I)**  
Government of India  
Minister of Environment, Forest and Climate Change  
Impact Assessment Division

\*\*\*

Indira Paryavaran Bhavan,  
Vayu Wing, 3rd Floor, Aliganj,  
Jor Bagh Road, New Delhi-110003  
30 Mar 2019

To,

M/s JAWAHAR SHETKARI SAHKARI SAKHAR KARKHANA LTD HUPARI  
Jawahar Shetkari Sahkari Sakhar Karkhana Ltd., Hupari Tal- Hatkanagale, Dist- Kolhapur,  
Kolhapur-416203  
Maharashtra

**Tel.No.230-2450402; Email:kprjsssk@gmail.com**

Sir/Madam,

This has reference to the proposal submitted in the Ministry of Environment, Forest and Climate Change to prescribe the Terms of Reference (TOR) for undertaking detailed EIA study for the purpose of obtaining Environmental Clearance in accordance with the provisions of the EIA Notification, 2006. For this purpose, the proponent had submitted online information in the prescribed format (Form-1 ) along with a Pre-feasibility Report. The details of the proposal are given below:

- |   |  |
|---|--|
| <b>1. Proposal No.:</b>                 | IA/MH/IND2/95416/2019  |
| <b>2. Name of the Proposal:</b>         | Expansion of Sugar factory from 12000 TCD to 16000 TCD by M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd. (JSSSKL), located At.: Hupari, Tal.: Hatkanangale, Dist.: Kolhapur, MS |
| <b>3. Category of the Proposal:</b>     | Industrial Projects - 2  |
| <b>4. Project/Activity applied for:</b> | 5(j) Sugar Industry  |
| <b>5. Date of submission for TOR:</b>   | 26 Feb 2019  |



In this regard, under the provisions of the EIA Notification 2006 as amended, the Standard TOR for the purpose of preparing environment impact assessment report and environment management plan for obtaining prior environment clearance is prescribed with public consultation as follows:

**STANDARD TERMS OF REFERENCE (TOR) FOR EIA/EMP REPORT FOR  
PROJECTS/ACTIVITIES REQUIRING ENVIRONMENT CLEARANCE**

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**5(j): STANDARD TERMS OF REFERENCE FOR CONDUCTING  
ENVIRONMENT IMPACT ASSESSMENT STUDY FOR SUGAR  
INDUSTRY INFORMATION TO BE INCLUDED IN EIA / EMP  
REPORT**

**A. STANDARD TERMS OF REFERENCE**

**1) Executive Summary**

**2) Introduction**

- i. Details of the EIA Consultant including NABET accreditation
- ii. Information about the project proponent
- iii. Importance and benefits of the project

**3) Project Description**

- i. Cost of project and time of completion.
- ii. Products with capacities for the proposed project.
- iii. If expansion project, details of existing products with capacities and whether adequate land is available for expansion, reference of earlier EC if any.
- iv. List of raw materials required and their source along with mode of transportation.
- v. Other chemicals and materials required with quantities and storage capacities
- vi. Details of Emission, effluents, hazardous waste generation and their management.
- vii. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract)
- viii. Process description along with major equipments and machineries, process flow sheet (quantative) from raw material to products to be provided.
- ix. Hazard identification and details of proposed safety systems.
- x. Expansion/modernization proposals:
  - a. Copy of all the Environmental Clearance(s) including Amendments thereto obtained for the project from MOEF/SEIAA shall be attached as an Annexure. A certified copy of the latest Monitoring Report of the Regional Office of the Ministry of Environment and Forests as per circular dated 30th May, 2012 on the status of compliance of conditions stipulated in all the existing environmental clearances including Amendments shall be provided. In addition, status of compliance of Consent to Operate for the ongoing Iexisting operation of the project from SPCB shall be attached with the EIA-EMP report.
  - b. In case the existing project has not obtained environmental clearance, reasons for not taking EC under the provisions of the EIA Notification 1994 and/or EIA Notification

## **STANDARD TERMS OF REFERENCE (TOR) FOR EIA/EMP REPORT FOR PROJECTS/ ACTIVITIES REQUIRING ENVIRONMENT CLEARANCE**

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2006 shall be provided. Copies of Consent to Establish/No Objection Certificate and Consent to Operate (in case of units operating prior to EIA Notification 2006, CTE and CTO of FY 2005-2006) obtained from the SPCB shall be submitted. Further, compliance report to the conditions of consents from the SPCB shall be submitted.

### **4) Site Details**

- xiv. Location of the project site covering village, Taluka/Tehsil, District and State, Justification for selecting the site, whether other sites were considered.
  - i. A toposheet of the study area of radius of 10km and site location on 1:50,000/1:25,000 scale on an A3/A2 sheet. (including all eco-sensitive areas and environmentally sensitive places)
  - ii. Details w.r.t. option analysis for selection of site
  - iii. Co-ordinates (lat-long) of all four corners of the site.
  - iv. Google map-Earth downloaded of the project site.
  - v. Layout maps indicating existing unit as well as proposed unit indicating storage area, plant area, greenbelt area, utilities etc. If located within an Industrial area/Estate/Complex, layout of Industrial Area indicating location of unit within the Industrial area/Estate.
  - vi. Photographs of the proposed and existing (if applicable) plant site. If existing, show photographs of plantation/greenbelt, in particular.
  - vii. Land use break-up of total land of the project site (identified and acquired), government/private - agricultural, forest, wasteland, water bodies, settlements, etc shall be included. (not required for industrial area)
  - viii. A list of major industries with name and type within study area (10km radius) shall be incorporated. Land use details of the study area
  - ix. Geological features and Geo-hydrological status of the study area shall be included.
  - x. Details of Drainage of the project upto 5km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based on peak rainfall data of the past 30 years. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided. (mega green field projects)
  - xi. Status of acquisition of land. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.
  - xii. R&R details in respect of land in line with state Government policy

### **5) Forest and wildlife related issues (if applicable):**

- i. Permission and approval for the use of forest land (forestry clearance), if any, and recommendations of the State Forest Department. (if applicable)

## STANDARD TERMS OF REFERENCE (TOR) FOR EIA/EMP REPORT FOR PROJECTS/ACTIVITIES REQUIRING ENVIRONMENT CLEARANCE

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- ii. Landuse map based on High resolution satellite imagery (GPS) of the proposed site delineating the forestland (*in case of projects involving forest land more than 40 ha*)
- iii. Status of Application submitted for obtaining the stage I forestry clearance along with latest status shall be submitted.
- iv. The projects to be located within 10 km of the National Parks, Sanctuaries, Biosphere Reserves, Migratory Corridors of Wild Animals, the project proponent shall submit the map duly authenticated by Chief Wildlife Warden showing these features vis-à-vis the project location and the recommendations or comments of the Chief Wildlife Warden-thereon
- v. Wildlife Conservation Plan duly authenticated by the Chief Wildlife Warden of the State Government for conservation of Schedule I fauna, if any exists in the study area
- vi. Copy of application submitted for clearance under the Wildlife (Protection) Act, 1972, to the Standing Committee of the National Board for Wildlife

### 6) Environmental Status

- i. Determination of atmospheric inversion level at the project site and site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall.
- ii. AAQ data (except monsoon) at 8 locations for PM10, PM2.5, SO<sub>2</sub>, NO<sub>x</sub>, CO and other parameters relevant to the project shall be collected. The monitoring stations shall be based CPCB guidelines and take into account the pre-dominant wind direction, population zone and sensitive receptors including reserved forests.
- iii. Raw data of all AAQ measurement for 12 weeks of all stations as per frequency given in the NAQQM Notification of Nov. 2009 along with - min., max., average and 98% values for each of the AAQ parameters from data of all AAQ stations should be provided as an annexure to the EIA Report.
- iv. Surface water quality of nearby River (100m upstream and downstream of discharge point) and other surface drains at eight locations as per CPCB/MoEF&CC guidelines.
- v. Whether the site falls near to polluted stretch of river identified by the CPCB/MoEF&CC, if yes give details.
- vi. Ground water monitoring at minimum at 8 locations shall be included.
- vii. Noise levels monitoring at 8 locations within the study area.
- viii. Soil Characteristic as per CPCB guidelines.
- ix. Traffic study of the area, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to proposed project, parking arrangement etc.
- x. Detailed description of flora and fauna (terrestrial and aquatic) existing in the study area shall be given with special reference to rare, endemic and endangered species. If Schedule-I fauna are found within the study area, a Wildlife Conservation Plan shall be prepared and furnished.
- xi. Socio-economic status of the study area.

## **STANDARD TERMS OF REFERENCE (TOR) FOR EIA/EMP REPORT FOR PROJECTS/ ACTIVITIES REQUIRING ENVIRONMENT CLEARANCE**

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### **7) Impact and Environment Management Plan**

- i. Assessment of ground level concentration of pollutants from the stack emission based on site-specific meteorological features. In case the project is located on a hilly terrain, the AQIP Modelling shall be done using inputs of the specific terrain characteristics for determining the potential impacts of the project on the AAQ. Cumulative impact of all sources of emissions (including transportation) on the AAQ of the area shall be assessed. Details of the model used and the input data used for modelling shall also be provided. The air quality contours shall be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any.
- ii. Water Quality modelling - in case of discharge in water body
- iii. Impact of the transport of the raw materials and end products on the surrounding environment shall be assessed and provided. In this regard, options for transport of raw materials and finished products and wastes (large quantities) by rail or rail-cum road transport or conveyor-cum-rail transport shall be examined.
- iv. A note on treatment of wastewater from different plant operations, extent recycled and reused for different purposes shall be included. Complete scheme of effluent treatment. Characteristics of untreated and treated effluent to meet the prescribed standards of discharge under E(P) Rules.
- v. Details of stack emission and action plan for control of emissions to meet standards.
- vi. Measures for fugitive emission control
- vii. Details of hazardous waste generation and their storage, utilization and management. Copies of MOU regarding utilization of solid and hazardous waste in cement plant shall also be included. EMP shall include the concept of waste-minimization, recycle/reuse/recover techniques, Energy conservation, and natural resource conservation.
- viii. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 2009. A detailed plan of action shall be provided.
- ix. Action plan for the green belt development plan in 33 % area i.e. land with not less than 1,500 trees per ha. Giving details of species, width of plantation, planning schedule etc. shall be included. The green belt shall be around the project boundary and a scheme for greening of the roads used for the project shall also be incorporated.
- x. Action plan for rainwater harvesting measures at plant site shall be submitted to harvest rainwater from the roof tops and storm water drains to recharge the ground water and also to use for the various activities at the project site to conserve fresh water and reduce the water requirement from other sources.
- xi. Total capital cost and recurring cost/annum for environmental pollution control measures shall be included.
- xii. Action plan for post-project environmental monitoring shall be submitted.

## **STANDARD TERMS OF REFERENCE (TOR) FOR EIA/EMP REPORT FOR PROJECTS/ACTIVITIES REQUIRING ENVIRONMENT CLEARANCE**

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- xiii. Onsite and Offsite Disaster (natural and Man-made) Preparedness and Emergency Management Plan including Risk Assessment and damage control. Disaster management plan should be linked with District Disaster Management Plan.

### **8) Occupational health**

- i. Plan and fund allocation to ensure the occupational health & safety of all contract and casual workers
- ii. Details of exposure specific health status evaluation of worker. If the workers' health is being evaluated by pre designed format, chest x rays, Audiometry, Spirometry, Vision testing (Far & Near vision, colour vision and any other ocular defect) ECG, during pre placement and periodical examinations give the details of the same. Details regarding last month analyzed data of above mentioned parameters as per age, sex, duration of exposure and department wise.
- iii. Details of existing Occupational & Safety Hazards. What are the exposure levels of hazards and whether they are within Permissible Exposure level (PEL). If these are not within PEL, what measures the company has adopted to keep them within PEL so that health of the workers can be preserved,
- iv. Annual report of health status of workers with special reference to Occupational Health and Safety.

### **9) Corporate Environment Policy**

- i. Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.
- ii. Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA.
- iii. What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions? Details of this system may be given.
- iv. Does the company have system of reporting of non compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism shall be detailed in the EIA report

### **10) Details regarding infrastructure facilities such as sanitation, fuel, restroom etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase.**

### **11) Enterprise Social Commitment (ESC)**

- i. Adequate funds (at least 2.5 % of the project cost) shall be earmarked towards the Enterprise



## **STANDARD TERMS OF REFERENCE (TOR) FOR EIA/EMP REPORT FOR PROJECTS/ ACTIVITIES REQUIRING ENVIRONMENT CLEARANCE**

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Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan shall be included. Socio-economic development activities need to be elaborated upon.

- 12) Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, details thereof and compliance/ATR to the notice(s) and present status of the case.
- 13) 'A tabular chart with index for point wise compliance of above TOR.

### **B. SPECIFIC TERMS OF REFERENCE FOR EIA STUDIES FOR SUGAR INDUSTRY**

1. Complete process flow diagram describing each unit, its processes and operation in production of sugar, along with material and energy inputs and outputs (material and energy balance).
2. Details on water balance including quantity of effluent generated, recycled & reused. Effort to minimize effluent is charge and to maintain quality of receiving water body.
3. Details of effluent treatment plant, inlet and treated water quality with specific efficiency of each treatment unit in reduction in respect to fall concerned / regulated environmental parameters.
4. Number of working days of the sugar production unit.
5. Details of the use of steam from the boiler.
6. Details of proposed source-specific pollution control schemes and equipments to meet the national standards.
7. Collection, storage, handling and transportation of molasses,
8. Collection, storage and handling of bagasse and press mud.
9. Flyash management plan for coal based and bagasse and action plan
10. Details on water quality parameters such as Temperature, Colour, pH, BOD, COD, Total Kjeldhal Nitrogen, Phosphates, Oil & Grease, Total Suspended Solids, Total Coli form bacteria etc.
11. Details on existing ambient air quality and expected, stack and fugitive emissions for PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>\*, NO<sub>x</sub>\*, etc., and evaluation of the adequacy of the proposed pollution control devices to meet standards for point sources and to meet AAQ standards. (\*-As applicable)

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