P-31-SASWADMALI-SUGAR-32018

SUMMARY ENVIRONMENTAL IMPACT ASSESSMENT (EIA) REPORT

(IN ENGLISH AND MARATHI)

FOR

EXPANSION OF SUGAR FACTORY FROM 4500 TCD TO 5000 TCD, CO-GENRATION PLANT FROM 14.8 MW TO 18 MW & MOLASSES BASED DISTILLERY UNIT FROM 30 KLPD TO 50 KLPD

BY

THE SASWAD MALI SUGAR FACTORY LTD. (TSMSFL)

MALINAGAR, TEHSIL: MALSHIRAS, DIST.: SOLAPUR, MAHARASHTRA

PREPARED BY

Equinox Environments (India) Pvt. Ltd.

EQUINOX ENVIRONMENTS (I) PVT. LTD.

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An ISO 9001 : 2015 & QCI - NABET Accredited Organization

NOVEMBER - 2020

The Saswad Mali Sugar Factory Ltd.

THE SASWAD MALI SUGAR FACTORY LTD. MALINAGAR 1932

Successfully Moving Towards Centenary

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Website: www.saswadmalisugar.in

• Molasses Based Distillery • Grain Based Distillery • Ethanol Plant • Co-generation • Hotel Central Park, Pune

Ref. No. : 1804

Date : 13 NOV 2020

To,
The Member Secretary,
Maharashtra Pollution Control Board (MPCB);
3rd & 4th Floor, Kalpataru Point,
Sion Circle, Sion (E),
Mumbai - 400 022

Sub.: Application for **'Public Hearing** 'to be conducted for expansion of **Sugar Factory** from**4500 TCD to 5000 TCD, Co-generation** from **14.8 MW to 18 MW &molasses based distillery** from **30 KLPD to 50 KLPD** by –**The Saswad Mali Sugar Factory Ltd.,**located at- Malinagar, Tal.: Malshiras, Dist.: Solapur.

Ref.: 'Terms of Reference' (ToR) granted vide letter no. J-11011/227/2006-IA-II (I) dated 26.10.2020. Copy enclosed at **Enclosure – I**.

Dear Sir,

This has reference to an online Form- I application submitted for grant of ToRs to MoEFCC; New Delhi on 13.10.2020. The same was in respect of expansion of Sugar Factory from 4500 TCD to 5000 TCD, Co-generation from 14.8 MW to 18 MW & Molasses based distillery from 30 KLPD to 50 KLPD by – **The Saswad Mali Sugar Factory Ltd., Solapur.**

Subsequently, standard ToRs were recommended to industry. Refer **Enclosure – I** for copy of ToR letter. Therein, directions were given to conduct Public Hearing w.r.t. our expansion project. Now, in order to conduct Public Hearing, we hereby are submitting all the relevant documents and information to your office.

Along with the Public Hearing application, a draft EIA Report as per the generic structure stipulated in MoEF Notification No. S.O.1533 (E) dated 14.09.2006 amendments thereto; and Executive Summary Report in two languages (English and Marathi) are enclosed separately. The same provide details of Pollution Control Facilities, Production Processes and Raw Materials as well as Finished Products and Environmental Management Plan (EMP) etc. regarding the existing and proposed expansion unit.

'Twenty Sets' of various documents, as mentioned above and equivalent number of soft copies of same have been submitted for your information and necessary further action. Also, a Demand Draft of Rs.25000 /- (Rs. Twenty Five Thousand Only) bearing No. drawn on dated towards the Public Hearing charges, as decided by the govt., has been presented herewith.

Please do the needful and oblige.

Thanking you.

Yours faithfully

Rajendra G. Girme
(Managing Director)

Encl.: 1. Executive Summary of Project
2. A Draft EIA Report
3. A D.D. bearing No. dated
drawn on ___ bank

Payee's Account Only

सेन्ट्रल बैंक ऑफ़ इंडिया
Central Bank of India

माळीनगर

सभी स्थानीय शाखाओं पर सममूल्य पर देय
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माँगे जानेपर The Sub Regional officer, Maharashtra Pollution Control Board या उनके आदेशपर
ON DEMAND PAY OR ORDER

रुपये Twenty five Thousand only
RUPEES

अदा करें। ₹ 25000 /-

मूल्य प्राप्त VALUE RECEIVED

ओटी OT	टीटी TT	एल	टीएल TL	ओसि OC	टीसि TC
		X			

अदाकर्ता शाखा
DRAWEE BRANCH 647 Sholapur

ह.न.क. .....

प्राधिकृत हस्ताक्षरी .....

S.S. Nos. .....

AUTHORISED SIGNATORIES
Please sign above

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A

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अ.क्र./SR. NO.

EM POODIV

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केवल तीन महीने के लिए वैध VALID FOR THREE MONTHS ONLY

D. S. SAVANT & SONS, MUMBAI / CTS 2010

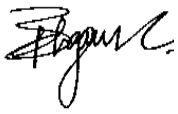
CERTIFICATE

Declaration by Expert contributing to the EIA in respect of proposed expansion of Sugar Factory from 4500 TCD to 5000 TCD, Co-generation from 14.8 MW to 18 MW & molasses based distillery from 30 KLPD to 50 KLPD by **The Saswad Mali Sugar Factory Ltd.,** located at Malinagar, Tal.: Malshiras, Dist.: Solapur, Maharashtra State.

We, hereby, certify that we were a part of the EIA team in the following capacities that developed the above EIA.

Project No. P-31-SASWADMALI-SUGAR-32018

EIA Coordinators

Name : Dr. Sangram Ghugare 

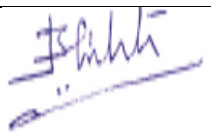
Period of Involvement : March 2019 – October 2020

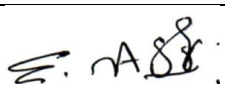
Contact Information : eia@equinoxenvi.com

Functional Area Expert:

Sr. No.	Functional Area	Name of the expert/s	Involvement (Period & Task)	Signature
1	**WP**	Dr. Sangram Ghugare	**March 2019 to October 2020** • Study of process and operations • Site visit and finalization of water sampling locations • Preparation of water balance and identification of wastewater generation. • Evaluation of water pollution & control management • Identification of impacts, suggestion and finalization of mitigation measures • Study on Treatment of effluents through existing ETP and to be upgraded under proposed expansion was contemplated and designs were done accordingly.	
2	**EB**	Prof. (Dr.) Jay Samant	**March 2019 to June 2019** • Selection of Site for conducting ecological & biodiversity status of the study region. • Interaction with Govt. offices and agencies for certain secondary data and information pertaining to region specific issues • Study of terrestrial fauna by sighting, noting pug-marks, calls, sounds, droppings, nests and burrows etc. • Interaction with local residents for obtaining information about various	

Sr. No.	Functional Area	Name of the expert/s	Involvement (Period & Task)	Signature
			species of animals and birds usually observed their existence and importance in the study region. • Review of rules, legislation and criteria towards knowing and understanding inclusion in the study region of any eco-sensitive zones, wild life sanctuary. • Collection, compilation and presentation of the data as well as incorporation of same in to the EIA report.	
3	**SE**	Dr. Anuradha Samant	**March 2019 to June 2019** • Collection of data on socio-economic aspects in study area through surveys. • Public opinions and recording of events for future industrialization in the study area. • Study of sociological aspects like human settlement, demographic and infrastructural facilities available in study area. • Compilation of primary and secondary data and its inclusion in EIA report.	
4	**AP**	Mr. Yuvraj Damugade	**March 2019 to October 2020** • Involved in detailed study of mass balance w.r.t. raw materials & products especially from view point of process emissions. • Site visit and finalization sampling locations. • Planning & identifying the most appropriate air pollution control equipment from view points of efficiencies, capital as well as O & M cost & suitability. • Identification of impact and suggesting the mitigation measures.	
5	**AQ**		**March 2019 to October 2020** • Designing of Ambient AQM network for use in prediction modeling and micro metrological data development. • Development and application of air quality models in prediction of pollutant dispersion. • Plotting of isopleths of GLCs, Worst case scenarios prediction w.r.t. source and receptors.	

Sr. No.	Functional Area	Name of the expert/s	Involvement (Period & Task)	Signature
6	**HG**	Dr. J.B. Pishte	**March 2019 – May 2019** • Hydro geological studies, data processing; analysis and evaluation, Ground water table measurement and monitoring network methodology preparation. • Planning and scheduling of groundwater sampling stations in the region. • Study of geology & general geological configuration of the region as well as sub-surface geology. • Determination of impact and suggesting mitigation measures.	
7	**GEO**			
8	**RH**	Mr. Vinod Sahasrabuddhe	**March 2019 to May 2019** • All the necessary literature for processes storage of hazardous chemicals was studied before visit. • Site visit and Verification of adequacy of on-site emergency preparedness plan for proposed unit was done. • Identification of probable emergencies and procedures for preparedness for handling the same was verified. • Worst case analysis by using ALOHA, Ware house safety measures, suggestion of mitigation measures.	
9	**NV**	Mr. Vinay Kumar Kurakula	**February 2019 to May 2019** • Verification of noise levels Monitoring (both work zone and ambient) in the industrial premises and study region • Finalization and verification of sampling locations, ambient noise monitoring stations and the data collected.	
10	**LU**		• Land use land cover mapping using NRSC Satellite image. • Satellite image processing, Image classification, Technical analysis and study for setting up of facility, planning of storage facility.	
11	**SHW**		• Detailed study of manufacturing process and mass balance. • Solid wastes generation in different steps of manufacturing was identified and their quantification done was checked. • Identification of various hazardous wastes generated through manufacturing process.	

Sr. No.	Functional Area	Name of the expert/s	Involvement (Period & Task)	Signature
			• Practices of storage and disposal of HW its impact and mitigation measures.	
12	**SC**	Mr. B. S. Lole	**March 2019 to May 2019** • Involvement physical analysis & characterization of the soils. • Identification of Impact and its mitigation measures. • Interpretation of soil analysis, results and data including comparison of same with standard soil classification. • Collection, study and evaluation of soil information from data obtained from secondary sources & its interpretation.	

Declaration by the Head of the Accredited Consultant Organization/authorized person:

I, **M/s. Equinox Environments (I) Pvt. Ltd. (EEIPL)**; **Kolhapur, Environmental & Civil Engineers, Consultants and Analysts**., hereby confirm that the above mentioned experts were involved in preparation of EIA report in respect of proposed expansion of Sugar Factory from 4500 TCD to 5000 TCD, Co-generation from 14.8 MW to 18 MW & molasses based distillery from 30 KLPD to 50 KLPD by **The Saswad Mali Sugar Factory Ltd.,** located at Malinagar, Tal.: Malshiras, Dist.: Solapur, Maharashtra State.

I also confirm that the consultant organization shall be fully accountable for any mis-leading information mentioned in this statement.

Signature: 

Name: Dr. Sangram Ghugare

Designation: Chairman & MD

Name of the EIA Consultant Organization: M/s. Equinox Environments (I) Pvt. Ltd. (EEIPL); Kolhapur.

NABET Certificate No. & Issue Date: NABET/EIA/1821/ RA 0135 dated 02.08.2019

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Summary of EIA Report For
The Expansion of Sugar Factory Crushing Capacity From 4500 to 5000 TCD, Co-gen from 14.8 MW to 18 MW & Molasses based Distillery from 30 KLPD up to 50 KLPD
By
The Saswad Mali Sugar Factory Ltd. (TSMSFL),
Malinagar, Tehsil: Malshiras, Dist.: Solapur, Maharashtra.

1) The Project

The Saswad Mali Sugar Factory Ltd. (TSMSFL) is located at Gat No. 1B, 13/1, 13/2 & 13/3A, A/p: Malinagar, Tal.: Malshiras, Dist.: Solapur, Maharashtra. Under expansion, crushing capacity will be increased from 4500 to 5000 TCD, Co-gen from 14.8 to 18 MW & Molasses based Distillery from 30 to 50 KLPD in existing sugar factory (4500 TCD), co-gen plant (14.8 MW) & distillery unit (30 KLPD) premises.

As per the provision of "EIA Notification No. S. O. 1533 (E)" dated 14.09.2006 as amended vide Notification No S.O. 3067 (E); dated 13.06.2019, the proposed expansion project is listed as activity ***5 (j), 1(d) & 5(g)(i)-Sugar, Cogen & Distillery resp***; **Category 'B'** at State Level. Proposed expansion project will be formulated in such a fashion and manner so that the utmost care of Safety Norms and Environment Protection shall be taken. Details of capital investment are given in table 1.

Table 1 Project Investment Details

No.	Industrial unit	Capital Investment (Rs. Cr.)		
		Existing	Expansion	Total
1	Sugar Factory	143.75	33.75	177.5
2	Co-generation Plant			--
3	Distillery	22.08		22.08
	Total	**165.83**	**33.75**	**199.58**

2) The Place

Proposed expansion of sugar factory, cogen plant & distillery unit, shall be carried out in existing premises of sugar factory, distillery unit and co-gen plant by TSMSFL. Total land acquired by the TSMSFL is 27.10 Ha. Out of this existing built up area of sugar factory, cogen plant & distillery unit is 5.52 Ha & that for expansion of sugar factory, cogen plant & distillery unit is 0.2 Ha. No Objection Certificate (NOC) for the proposed expansion project has been obtained from the Grampanchayat Malinagar. Same is presented at certificates and other documents of the EIA report. Detailed area break-up is presented at Table 2.

Table 2 Area Statement of TSMSFL

No.	List of area	Area (Sq. M.)		
		Existing	Expansion	Total
1	**Total Plot Area**			**2,71,021**
2	**Built-up Area**			
	i. Sugar, Cogen & Distillery Unit	55,269.64	2000	57,269.64
	ii. Area under Road	4330	--	4330.0
	Total Built-up Area	59,599.64	2000	**61,599.64**
3	Green Belt Area (40% of TPA)	1,08,408	--	1,08,408
4	Total Open Area			**1,01,013.36**

3) The Promoters

TSMSFL promoters are well experienced in the field of sugar and co-gen and have made a thorough study of entire project planning as well as implementation schedule. Names and designations of the promoters are as under-

Table 3 List of Promoters

No.	Name	Designation
1.	Shri Nandkumar G. Girme	Chairman
2.	Shri Rajendra G. Girme	Managing Director

4) The Products

Details of products that are manufactured under existing as well as expansion activities are represented in following table.

Table 4 List of Products & By-product for Integrated Complex

Industrial unit	Product& By-product	Quantity		
		Existing	Expansion	Total
Sugar Factory (4500 TCD to 5000 TCD)	Sugar (11-12%)*(MT/M)	15,525	1725	17,250
	By-Product			
	Bagasse (30%)*(MT/M)	40,500	4500	45,000
	Press Mud (4-5%)* (MT/M)	6075	600	6675
	Molasses (4%)*(MT/M)	5400	600	6000
Co-gen (14.8 MW to 18 MW)	Electricity (MW/Hr)	14.8	3.2	18
Distillery (30 KLPD to 50 KLPD)	Rectified Spirit/ ENA/ Ethanol/ Absolute Alcohol (AA) (KLPD)	30	20	50
	By-product			
	Fusel Oil (MT/M)	15	10	25
	CO_2 (MT/M)	666	444	1110
	Spentwash Dry Powder (MT/M)	--	1860	1860

NOTE: * - Percent of Cane Crushed

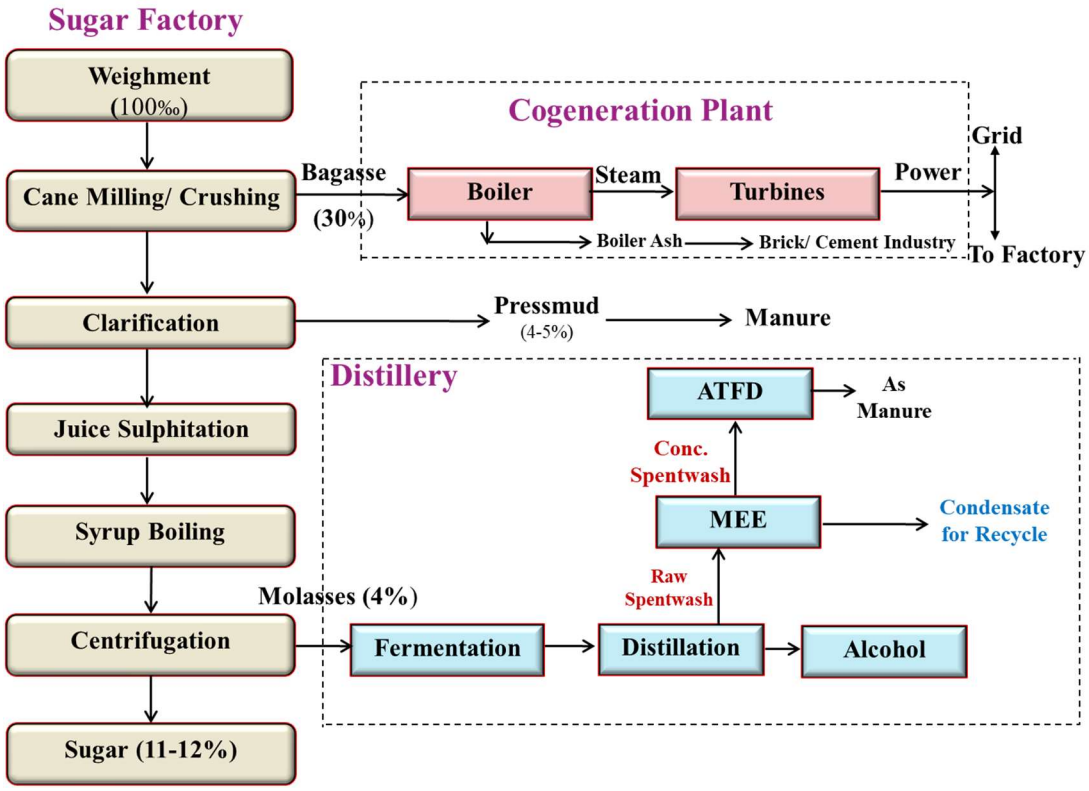
5) The Purpose

Sugarcane potential, agro-climatic conditions, cost of conversion & overheads etc are the major deciding factors for fixing the crushing capacity of sugar factory. Today, sugar factories cannot survive in healthy condition on a single product i.e. sugar. Thus, it is essential to develop sugar factory into an affiliated complex so as to utilize the valuable by-products more profitably. Bagasse based cogeneration of steam and electricity has been practiced since long time in sugar mills. Molasses is also another important by-product of the sugar industry. Alcohol has assumed very important place in the Country's economy. It is a vital raw material for a number of chemicals and also a renewable source of energy. It has been a source of a large amount of revenue by way of excise duty levied by the Govt. on alcoholic liquors. It has a potential as fuel in the form of power alcohol for blending with petrol. Also, the fermentation alcohol has great demand in countries like Japan, U.S.A., Canada, Sri Lanka etc., as the synthetic alcohol produced by these countries, from naphtha of petroleum crude, is not useful for beverages. Considering the above facts as well as availability of raw material, management of TSMSFL decided to go for expansion.

6) Manufacturing Process

Detailed manufacturing process and flow diagram for sugar factory, distillery unit & co-gen plant are given in Chapter 2 of EIA report. Manufacturing process of integrated project complex is presented at Figure 1.

Figure 1 Integrated Manufacturing Process Operations



7) Environmental Aspects

TSMSFL has implemented an effective 'Environmental Management Plan' and various aspects of the same are as follows:-

A) Water use and Effluent generation:

a. Water use

- Total water requirement for TSMSFL integrated project complex after expansion shall be to the tune of 2896.5 M^3/Day.
- The water requirement for expansion of sugar factory and co-gen plant will be 2361.5 M^3/Day out of which 2284.5 M^3/Day will be cane condensate, 15 M^3/Day STP treated water & 62 M^3/Day fresh water taken from Nira Right Canal.
- The water requirement for expansion of distillery will be 535 M^3/Day. Out of this, 453 M^3/Day CPU treated water, 1 M^3/Day STP treated water & remaining 81 M^3/Day shall be taken from Nira Right Canal.
- Total water required for domestic purpose will be 20M^3/Day. Out of this, 16 M^3/Day will be treated water from STP & 4 M^3/Day will be fresh water. For more details refer Section 2.7.1.3 of Chapter 2

Details of water usage in existing as well as expansion activities are as follows-

Table 5 Water Consumption in Sugar Factory & Co-gen Plant

No.	Description	Quantity(M^3/Day)	
		Existing (4500 TCD & 14.8 MW)	**After Expansion (5000 TCD & 18MW)**
1	Domestic	15#	17(2#+15$)
2	Industrial		
a)	process	1375*	1528*
b)	Cooling	472*	525*
c)	Boiler feed	202*	225*
d)	DM Plant	54#	60#
e)	Lab & Washing	4*	5*
f)	Ash quenching	1*	1.5*
	Industrial Total	**2108** (2054*+54#)	**2344.5** (2284.5*+60#)
3	Green belt & Gardening	90*	--
	Grand Total	**2213** (2144*+69#)	**2361.5** (2284.5*+62#+15$)
	Fresh Water Consumption (Norm:100 lit./ MT of cane)	12	12

Notes: # - Fresh Water from Nira Right Canal * - Cane Condensate, $ - Treated water from STP

Table 6 Details of Water Consumption in Distillery Unit
(During Sugarcane Crushing & Non- Crushing Season Days)

No	Description	Quantity (M^3/Day)		
		Existing (30 KLPD)	**After Expansion**	
			Crushing Season (180 Days)	**Non-Crushing Season (150 Days)**
1	Domestic	2	3 (2#+1$)	3 (2#+1$)
2	Industrial			
a)	Process	225	396♣	396♣
b)	Cooling Make up	42	70 (57♣ +13#)	70 (57♣ +13#)
c)	Boiler Make up	--	53*	53#
d)	Lab & Washing	1	2#	2#
e)	DM Plant	--	10(7* +3#)	10#
f)	Ash quenching	--	1#	1#
	Ind. Total	**268**	**532 (453♣+60*+19#) 96% Recycle**	**532 (453♣+79#) 85% Recycle**
	Grand Total	**270**	**535 (453♣+60*+21#+1$)**	**535 (453♣+81#+1$)**
	Fresh Water Consumption(Norm: 10 KL/KL of Alcohol)	--	1.3	1.3

Notes: # - Fresh Water from Nira Right Canal , * - Cane Condensate, ♣ - Distillery CPU Treated water, $ - Treated water from STP

For more details about water budget refer Chapter 2 Section 2.7.1 of EIA report.

b. Effluent Treatment-

Effluent generated from existing & expansion activities is given in following table-

Table 7 Effluent Generation in Sugar Factory & Co-gen Plant

Description	Quantity(M^3/Day)		Disposal
	Existing	After Expansion	
Domestic	14	16	Existing - Septic tank followed by soak pit Expansion– Proposed STP
Industrial			Treated in existing ETP having primary, secondary & tertiary treatment units.
a)Process	165	183	
b)Cooling	47	52	
c)Boiler	43	46	
d)DM Plant	54	60	
e)Lab & Washing	4	5	
Industrial Total (a+b+c+d+e)	**313**	**346**	
Norm:100 lit./ MT of cane	**70**	**69**	

Table 8 Details of Effluent Generation in Distillery

Description	Quantity(M^3/Day)		Treatment	
	Existing	After Expansion	Existing	After Expansion
Domestic	1	2	Septic tank followed by soak pit	Proposed STP under sugar factory
Industrial			Sp. wash forwarded to bio-digester followed by concentration in MEE & forwarded to composting.	Sp. Wash forwarded to bio-digester followed by concentration in MEE & dried to form powder or forwarded for incineration.
Process	Raw Sp. wash-240	Raw Sp. wash - 400		
	Conc. Sp. wash – 48	Conc. Sp. wash - 80		
	MEE Condensate-189	Condensate-362 (316 MEE+ 46 ATFD)	Other effluent treated in existing distillery CPU. Treated effluent will be fully recycled in process to achieve ZLD.	
	Spent Lees – 44	Spent Lees – 70		
Cooling blowdown	4	7		
Boiler blowdown	--	11		
Lab & Washing	1	2		
DM Plant	--	10		
Ind. Total	Conc. – 48 Other – 238	Conc. – 80 Other – 462		

i) Domestic Effluent

The domestic effluent from existing activities of TSMSFL sugar factory and co-gen plant is to the tune of 14 M^3/ Day whereas from existing distillery is to the tune of 1 M^3/ Day. Total domestic effluent from existing activity of TSMSFL is 15 M^3/ Day. Same is being treated in Septic tank followed by soak pit. After implementation of expansion project, total domestic effluent from TSMSFL campus shall be 18 M^3/ Day (domestic effluent from sugar factory & co-gen plant - 16 M^3/ Day and to that of distillery 2 M^3/ Day). Same shall be treated in proposed STP and the treated effluent shall be reused for flushing and also used for gardening.

ii) Industrial Effluent

From existing sugar factory & co-gen plant operations, trade effluent @ 313 CMD is generated. Subsequent to implementation of expansion, total effluent generated from sugar factory and co-gen plant activities @ 346 M^3/Day shall be forwarded to the existing ETP in the TSMSFL premises. The existing ETP is having capacity of 700 CMD & sufficient for treatment of effluent after expansion too. The treated water from ETP will be used to gardening & green belt development in own premises.

Presently, raw spentwash @240 CMD from existing 30 KLPD distillery unit is digested & concentrated in MEE. This concentrated spentwash @ 48 CMD is forwarded for composting.

After expansion of distillery unit composting will not be done. Total raw spentwash generated @ 400 M^3/D will be concentrated in MEE. This concentrated spentwash @ 80 M^3/D will be dried in ATFD for powder formation/incinerated. Other effluents viz. spent lees @ 70 M^3/D, condensate @ 362 M^3/D (316 MEE+ 46 ATFD), cooling & boiler blow down @ 18 M^3/D and lab-wash & DM backwash @ 12 M^3/D will be treated in existing distillery CPU having capacity 1032 M^3/D. Treated water from CPU will be reused for industrial operations, thereby achieving Zero Liquid Discharge (ZLD) for process effluent.

B) Air Emissions:

Under existing sugar factory, cogen plant & distillery unit 90 TPH boiler is installed. Bagasse or Bio-gas @915 MT/D or 14,440 M^3/D is used as fuel. Existing boiler is provided with ESP as APC, preceding the stack of 72 M height.

Steam required for the proposed expansion activities of sugar & cogen will be taken from existing 90 TPH Boiler. Under distillery expansion unit 22 TPH boiler will be installed. Bagasse/Coal @ 240 MT/D or 32 MT/D will be used as fuel. ESP/bag filter will be provided as APC preceding the stack of 60 M.

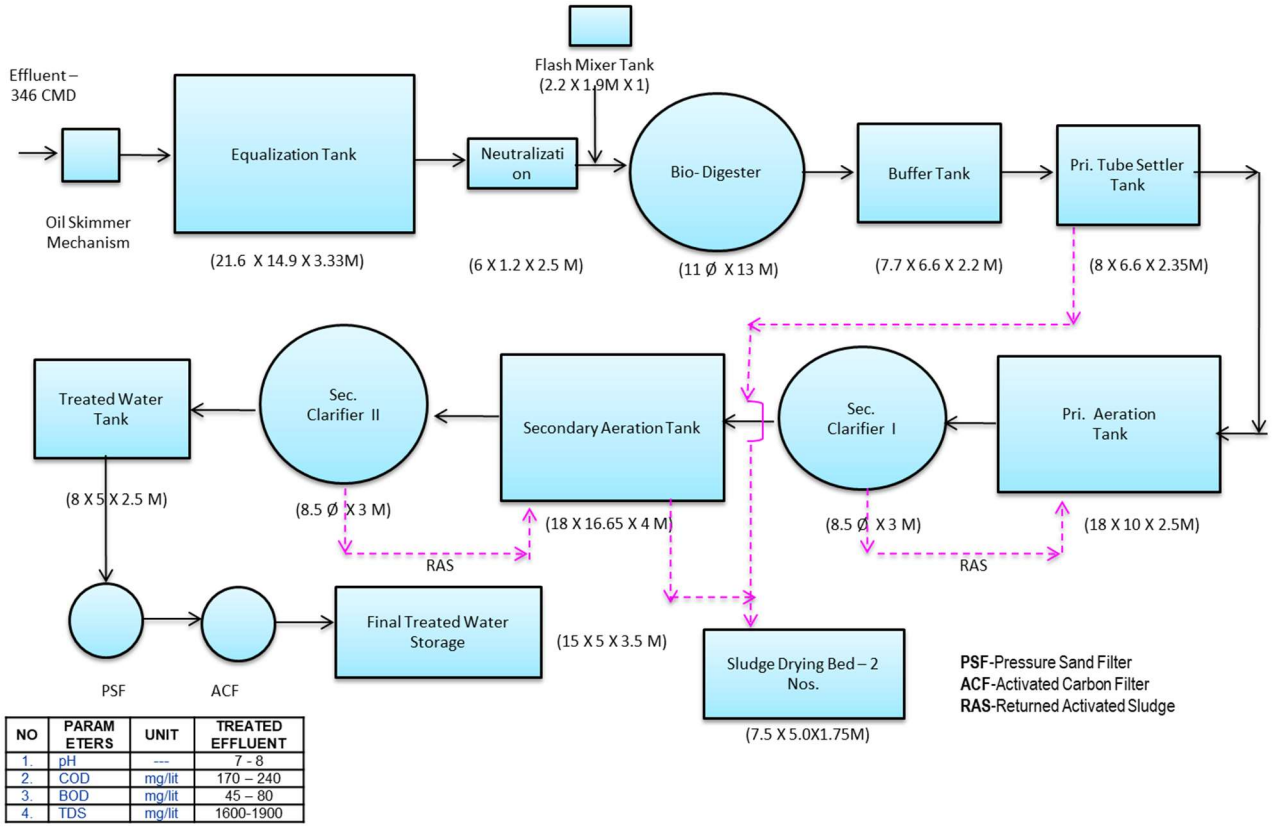
3 No. of D.G. Sets with 1250 KVA and 500 KVA (2 no.) capacity are provided with the stack of 5 M height. Diesel about 250Lit./Hr. and 60 Lit./Hr. resp., is used as fuel.
Details of Boilers are presented at table.

Table 9 Details of Boiler and Stack in TSMSFL

No.	Description	Existing		Proposed
1.	Boiler Capacity	90 TPH	1250 & 500 KVA (2 Nos.)	22 TPH
2.	Fuel type	Bagasse or Bio-gas	Diesel	Bagasse or Coal
3.	Fuel quantity	915 MT/D or 14,440 M^3/D	310 Lit/hr	240 MT/D or 32 MT/D
4.	MOC	RCC	MS	MS
5.	Shape	Round	Round	Round
6.	Height, AGL	72 M	5 M (ARL)	60 M
7.	Diameter	1.8 M	--	1.5 M
8.	Pollution Control equipment	ESP	--	ESP/Bag Filter

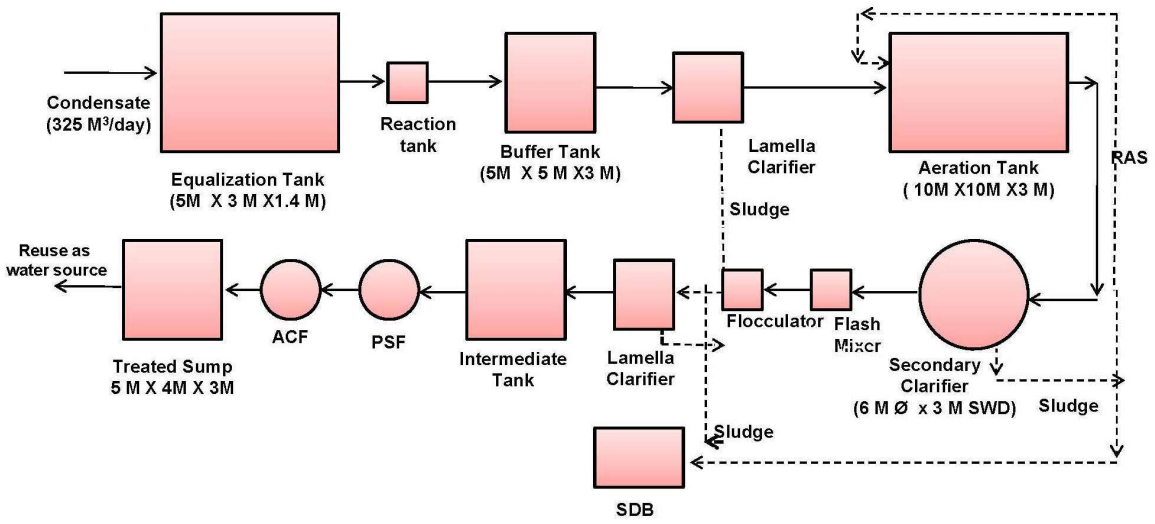
Details of air pollution aspect and the control measures are given in Chapter 2, Section 2.7.2.

Figure 2 Flow Chart of Existing Sugar Factory ETP



NO	PARAMETERS	UNIT	TREATED EFFLUENT
1.	pH	---	7 - 8
2.	COD	mg/lit	170 – 240
3.	BOD	mg/lit	45 – 80
4.	TDS	mg/lit	1600-1900

Figure 2.6 Flow Chart of Existing CPU in Distillery



NO.	PARAMETERS	UNIT	RAW EFFLUENT
1.	pH	---	5-6
2.	COD	mg/lit	2800 - 3000
3.	BOD	mg/lit	1500 – 1800
4.	TDS	mg/lit	1500-1800

Note:-
RAS:- Return Activated Sludge
SDB:- Sludge Drying Bed

Figure 2.9 Existing Sugar Factory ETP Units

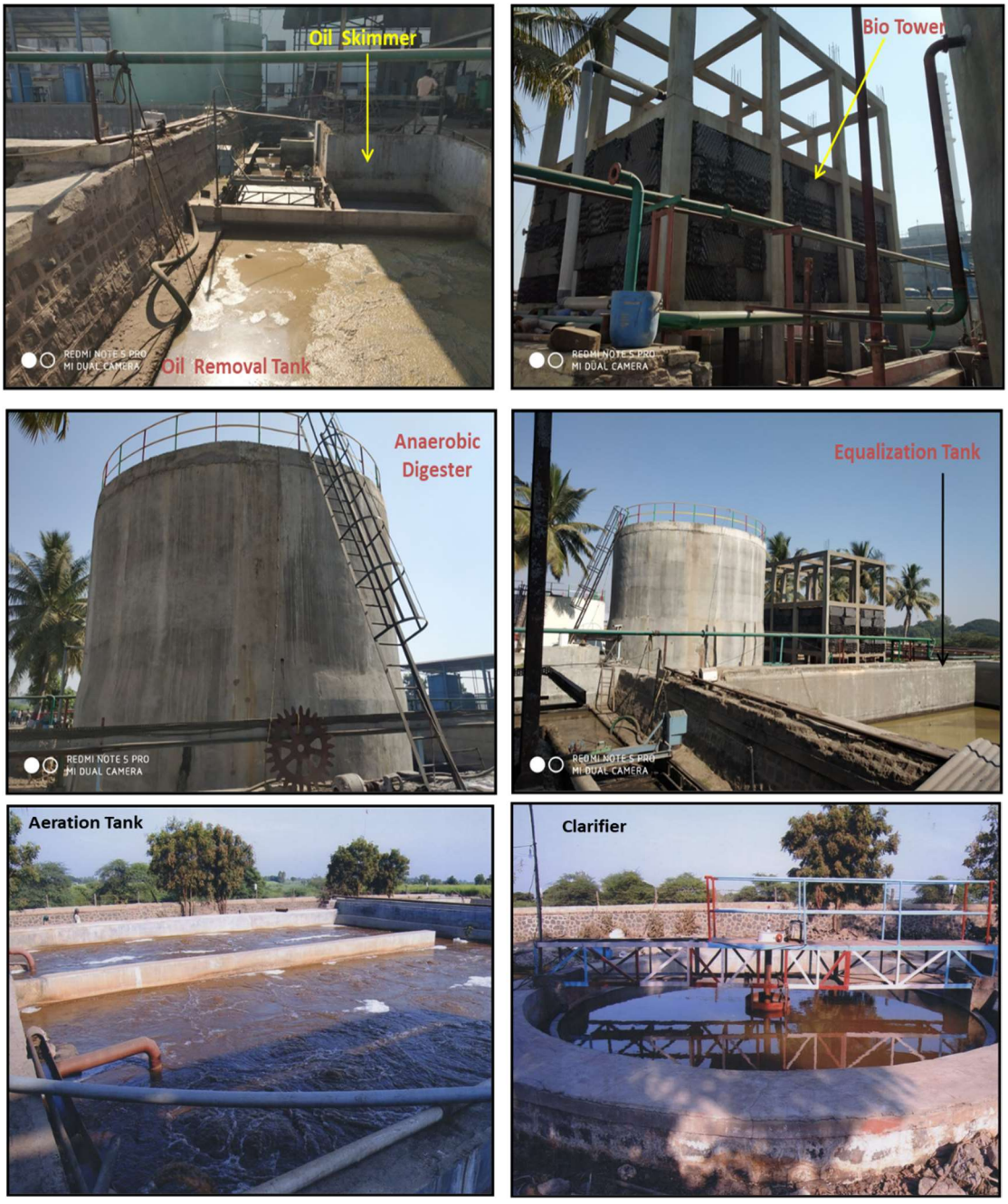
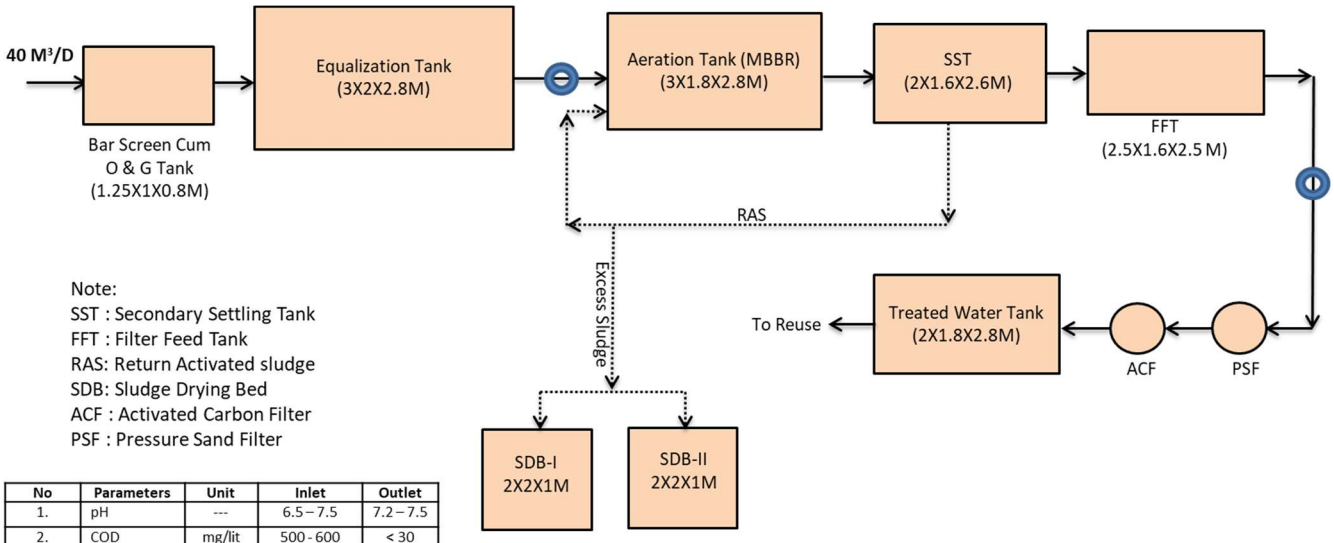


Figure 2.10 Existing Distillery CPU Units

Figure 2.11 Process Flow Diagram of STP (Proposed)



Note:
SST : Secondary Settling Tank
FFT : Filter Feed Tank
RAS: Return Activated sludge
SDB: Sludge Drying Bed
ACF : Activated Carbon Filter
PSF : Pressure Sand Filter

No	Parameters	Unit	Inlet	Outlet
1.	pH	---	6.5 – 7.5	7.2 – 7.5
2.	COD	mg/lit	500 - 600	< 30
3.	BOD	mg/lit	250 - 300	< 10
4.	TSS	mg/lit	250 - 400	< 5
5.	O & G	mg/lit	25 - 50	< 10

Figure 2.15 Existing Boiler & APC Equipments

Figure 2.16 Online Continuous Monitoring System

C) Noise Pollution Aspect

1. Sources of Noise

i. In the existing distillery unit, very high noise generating sources does not exist. Noise levels in the section about 70 dB (A) or so. Adequate noise abatement measures like silencer & maintenance of pumps, motors, and compressors will be carried out and enclosures will be provided to abate noise levels at source. Moreover, enclosures to the machinery will be provided wherever possible.

ii. Fermentation section & distillation section would be the other minor noise generating sources. The expected noise levels in these sections would be in range of 70 to 80 dB(A).

iii. In existing sugar factory and co-gen; noise-generating sources are the boiler house, turbine rooms, cane crushing section and mill house, etc.

iv. Adequate green is developed in phase wise manner in and around the industry. So that it further attenuate the noise levels.

2. Control Measures

Control through isolation, separation and insulation techniques. PPEs like earmuffs, earplugs etc. will be provided to workers. D.G. Sets are enclosed in a separate canopy to reduce the noise levels.

D) Hazardous Wastes

Different types of hazardous wastes being generated from existing & expansion unit alongwith disposal methods are presented in Table 10.

Table 10 Details of Hazardous Waste

No.	Industrial Unit	Category	Quantity (MT/Yr.)		Disposal
			Existing	After Expansion	
1	Sugar, Co-gen & Distillery	Spent Oil – Cat.5.1	0.16	0.2	Forwarded to authorized reprocessor
		Contaminated Cotton Waste- Cat. 33.3	0.2	0.3	
		Empty Containers- Cat. 33.1	25	30	Forwarded to authorized re-seller

E) Solid Wastes

Table 11 Details of Solid Waste & Disposal

No.	Unit	Type	Quantity (MT/D)		Disposal
			Existing	After Expansion	
1	Sugar & Co-gen Unit	ETP Sludge	0.8	1.0	Used as Manure
		Boiler Ash (Bagasse)	18	18	
2	Distillery Unit	Boiler Ash(Bagasse/ Coal)	--	5	Supplied to Brick / Cement Industry
		Yeast Sludge	5	8	Used as Manure
		CPU Sludge	0.3	0.5	

F) Odour Pollution

There are number of odour sources such as molasses handling and storage, fermentation and distillation, secondary effluent treatment, and storage of effluents, stale cane, bad mill sanitation, bacterial growth in interconnecting pipes & unattended drains. Measures adopted under existing unit for controlling same are proper housekeeping, sludge management in biological ETP units, steaming of major pipe lines, regular use of bleaching powder in the drains, efficient handling, prompt & proper disposal of press mud. Under expansion project, spentwash shall be carried through closed pipeline for spentwash storage and handling activity shall be entirely eliminated.

G) Compliance with the Norms

All the relevant acts, rules and guidelines with respect to effluent treatment and disposal, solid & hazardous wastes handling and disposal as well as in respect of emission handling and disposal, wherever applicable, as specified by the Maharashtra Pollution Control Board (MPCB) or any other concerned authority are strictly followed in the existing set up. Same practice shall be continued after expansion.

H) Environmental Management Cell

Industry is already having an EMC functioning under its existing sugar, cogen & distillery unit. Members of the EMC are well qualified and experienced in their concerned fields. This cell shall be further augmented suitably under expansion project. The existing EMC members are as under.

Table 12 Environmental Management Cell

No.	Name of Member	Designation	Number (s)
1	Shri Nandkumar G. Girme	Chairman	1
2	Shri Suresh Jagtap	Works Manager/Chief Engineer	1
3	Shri Avinash Gaikwad	Distillery Manager	1
4	Shri Sanjay Pandhare	Co-gen Manager	1
5	Shri Nawaz Shaik	Environmental Officer	1
6	Shri Vitthal Adat	Chief Chemist	1
7	--	Lab Chemist	2
8	--	ETP Operators & supporting staff	5
		Total	**13**

Details of capital as well as O & M costs towards environmental aspects under the existing sugar, co-generation setup & expansion project are as follows –

Table 13 Capital as well as O & M Cost

No.	Description	Cost Component (Rs. Lakhs)	
		Capital	O & M / Year
1	Air Pollution Control : ESP & Stack (72M)	325	40
2	Water Pollution Control- ETP & CPU	400	60
3	Noise Pollution Control	25	5
4	Solid Waste Management	25	5
5	Occupational Health and Safety	30	5
6	Environmental Monitoring & Management	30	5
7	Green Belt Development & Rain water harvesting	100	30
	Total (6% of Existing Investment of Rs. 165.83Cr)	**935**	**150**
	Expansion Project		
1	APC - Stack of 60 M along with ESP (22 TPH incineration boiler)	2500	50
2	Installation of MEE, ATFD & STP	200	30
3	Noise Pollution Control	10	3
4	Occupational Health & Safety	20	5
5	Environmental Monitoring & Management	15	5
	Total (81% of Expansion Investment of Rs. 33.75Cr)	**2745**	**93**

I) Rainwater Harvesting Aspect

- Total area of Plot –2,71,021M^2
- Total Open Space –1,01,013.36M^2
- Average annual rainfall in the area= 450 mm

A Roof Top Harvesting-

RWH Quantity = 14,985 M^2 X 0.45 M X 0.8
= 5394.6 M^3

B Surface Water Harvesting –

1.RWH Quantity from Green Belt = 1,08,408M^2 X 0.45 M X 0.3
= 14,635.0 M^3

2.RWH Quantity from Roads = 4330M^2 X 0.45 M X 0.5

= 974.25 M^3

3. RWH Quantity from Open Space = 1,01,013.36M^2 X 0.45 M X 0.3

= 13,636.8 M^3

Total RWH from Surface Area = 14,635+ 974.25 + 13,636.8

= **29,246.0 M^3**

Hence, the total water becoming available after rooftop and land harvesting would be

Rooftop Harvesting	+	Surface Harvesting	=	Total RWH
5395	+	29,246	=	34,641 M^3
			=	34 ML

J) Green Belt

Table 14 Area Details

No.	List of area	Area (Sq. M.)		
		Existing	**Expansion**	**Total**
1	**Total Plot Area**			**2,71,021**
2	**Built-up Area**			
	iii. Sugar, Cogen & Distillery Unit	55,269.64	2000	57,269.64
	iv. Area under Road	4330	--	4330.0
	Total Built-up Area	59,599.64	2000	**61,599.64**
3	Green Belt Area (40% of TPA)	1,08,408	--	1,08,408
4	Total Open Area			**1,01,013.36**

The Criteria for Proposed Greenbelt Development Plan

Emission of SPM, SO_2 is the main criteria for consideration of green belt development. Plantation under green belt is provided to abate effects of the above emissions. Moreover, there will also be control on noise from the industry to surrounding localities as considerable attenuation would occur due to the barrier of trees provided in the green belt.

Figure 9 Plantation in TSMSFL Premises

K) Socio-Economic Development

Socio economic study was carried out in villages within 10 Km radius of the study area was carried out with the help of a structured close ended interview schedule, comprising of questions in Marathi. The schedule was administered by using Simple Random Disproportionate Sampling Technique. Refer Socio – economic profile in Chapter 3, Section 3.11 of EIA report for detailed information of socio-economic aspect. Observations and conclusions after the socio-economic study are as follows-

i. Industry should contribute towards providing health facility under CER for locals at least through a mobile health van.
ii. Employment should be given to the people from nearby villages considering the TSMSFL environmental impacts on their traditional livelihood and agricultural land.
iii. Good rate to farmers for sugarcane.
iv. ZP / Gram panchayat should make provision for infrastructure like roads, toilets in public places with the help of the factory.
v. To provide radium strips/ flags to sugarcane transportation vehicles by industry to reduce accidents on road.

Company has to make proper plan and budget and implement for community development.

8) ENVIRONMENTAL MONITORING PROGRAM

Reconnaissance of the study area was undertaken in the month of February 2019. Field monitoring for measuring meteorological conditions, ambient air quality, water quality, soil quality and noise levels was initiated in March 2019. Report incorporates data monitored during the period from March 2019 to May 2019 and secondary data collected from various

sources which include Government Departments related to ground water, soil, agriculture, forest etc.

A. Land Use

Land use study requires data regarding topography, zoning, settlement, industry, forest, roads and traffic etc. Collection of this data was done from various secondary sources viz., Census books, Revenue records, State and Central Government Offices, Survey of India toposheets as well as high resolution satellite image and through primary field surveys.

B. Land Use/ Land Cover Categories of Study Area

Table 15 Land Use/ Land Cover

Sr. No.	Class	Area (Ha)	Percentage (%)
1	Built Up Area	2550	8.12
2	Crop Land	13600	43.29
3	Fallow Land	7465	23.76
4	Water Bodies	650	2.07
5	Grass Land with open Scrub	7150	22.76
	Total	31415	100

C. Meteorology

Methodology adopted for monitoring surface observations is as per the norms laid down by Bureau of Indian Standards (BIS) and the India Meteorology Department (IMD). On-site monitoring was undertaken for various meteorological variables in order to generate the data. Further, certain secondary meteorological data like temperatures, relative humidity, rainfall intensity etc. have been taken from IMD, Solapur.

Meteorological parameters were monitored during the period March 2019 to May 2019. Details of parameters monitored, equipments used and the frequency of monitoring have been given in Chapter 3 of the Draft EIA report.

D. Air Quality

This section describes the selection of sampling locations, includes the methodology of sampling and analytical techniques with frequency of sampling. Presentation of results for the March 2019 to May 2019 survey is followed by observations. All the requisite monitoring assignments, sampling and analysis was conducted through the laboratory - Green Enviro safe Engineers & Consultant Pvt. Ltd., Pune which is NABL accredited and MoEFCC; New Delhi approved organization. Further, same has received certifications namely ISO 9001-2015 and OHSAS 18001–2007 from DNV.

Ambient air monitoring was conducted in the study area to assess the quality of air for PM_{10}, $PM_{2.5}$, SO_2, NO_x and CO. The various monitoring stations selected are shown in following table.

Table 16 Ambient Air Quality Monitoring (AAQM) Locations

AAQM Station Code	Name of the Station	Distance from Site (km)	Direction w.r.t. Site
A1	Industrial Site	--	--
A2	Lumewadi	3.21	NW
A3	Bijwadi	2.25	N
A4	Mahalung	3.34	SE
A5	Shreepur	6.7	SSE
A6	Shivajinagar	5.6	WS
A7	Tambave	4.6	SW
A8	Malinagar	0.33	E

Table 17 Summary of the AAQM Levels for Monitoring Season [March – April – May 2019]

Parameter		Location							
		Industrial Site	Lumewadi	Bijwadi	Mahalung	Shreepur	Shivajinagar	Tambave	Malinagar
PM_{10} ($\mu g/M^3$)	Max.	50.1	59.6	45.1	48.6	45.3	48.9	56.2	53.4
	Min.	40.1	52.8	40.1	44.5	42.3	43.8	50.9	46.8
	Avg.	44.4	56.0	43.0	46.8	43.8	46.4	53.1	50.2
	98%	47.9	58.5	44.9	48.2	45.1	48.8	55.4	53.2
$PM_{2.5}$ ($\mu g/M^3$)	Max.	16.1	19.2	13.7	17.8	14.5	21.5	18.5	18.7
	Min.	12.2	14.8	10.2	15.7	12.3	17.1	15.8	15.8
	Avg.	14.1	17.2	11.8	17.0	13.2	19.5	17.1	17.1
	98%	15.9	18.8	13.2	17.6	14.1	21.3	18.3	18.5
SO_2 ($\mu g/M^3$)	Max.	20.8	29.8	16.0	19.7	22.8	19.3	25.7	24.5
	Min.	10.1	18.6	9.1	13.2	12.2	12.4	14.7	15.6
	Avg.	14.9	24.0	13.0	16.9	18.7	16.1	19.9	20.1
	98%	18.7	29.2	15.7	19.5	22.6	18.8	23.8	23.8
NOx ($\mu g/M^3$)	Max.	40.8	44.5	24.7	33.5	30.4	29.9	43.7	35.2
	Min.	22.1	21.5	20.1	24.8	13.4	22.0	29.4	26.7
	Avg.	31.2	37.7	22.5	29.0	25.8	26.0	36.1	30.9
	98%	37.2	42.8	24.4	32.9	29.6	29.2	40.9	34.7
CO (ppm)	Max.	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
	Min.	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
	Avg.	0.02	0.01	0.01	0.01	0.01	0.01	0.02	0.02
	98%	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02

Notes: PM_{10}, $PM_{2.5}$, SO_2 and NO_x are computed based on 24 hourly values. ,CO is computed based on 8 hourly values.

Table 18 National Ambient Air Quality Standards (NAAQS) by CPCB

(Notification No. S.O.B-29016/20/90/PCI-L by MOEFCC; New Delhi dated 18.11.2009)

Zone Station	PM_{10} $\mu g/M^3$		$PM_{2.5}$ $\mu g/M^3$		SO_2 $\mu g/M^3$		NOx $\mu g/M^3$		CO mg/M^3	
	24 Hr	A.A.	24 Hr	A.A	24 Hr	A.A.	24 Hr	A.A.	8 Hr	1 Hr
Industrial, Rural & Residential Area	100	60	60	40	80	50	80	40	4	4
Eco-sensitive Area Notified by Govt.	100	60	60	40	80	20	80	30	4	4

Note: A.A. represents Annual Average

The results observed after monitoring for above locations are well within the limits as per NAAQS. Refer Chapter 3 of EIA report for monitoring results.

A. Water Quality

Sampling and analysis of ground water and surface water samples for physical, chemical and heavy metals were undertaken through the laboratory of M/s. Green Enviro safe Engineers & Consultant Pvt. Ltd., Pune (MS).

As per standard ToRs samples from 8 locations shall be monitored. But, during monitoring period of March – April– May 2019 only one sample from Lavang was collected & monitored. Since, no surface water source is available due to summer season.
One location for surface water and 4 locations for ground water were selected. The locations are mentioned below-

Table 19 Monitoring Locations for Ground Water

Station Code	Co-ordinates	
	Latitude	Longitude
GW1	17°53'44.82"N	75° 2'45.17"E
GW2	17°53'58.03"N	75° 2'43.65"E
GW3	17°53'28.77"N	75°3'11.75"E
GW4	17°53'51.70"N	75° 3'44.69"E

Table 20 Monitoring Locations for Surface Water

Station Code	Location	
SW1	Lavang	Upstream

Results observed after monitoring ground water locations and surface water locations are mentioned in Chapter 3 of the EIA report.

B. Noise Level Survey

Study area of 10 Km radius with reference to the expansion project site has been covered for noise environment. Four zones viz. Residential, Commercial, Industrial and Silence Zones have been considered for noise monitoring. Some of the major arterial roads were covered to assess the noise due to traffic. Noise monitoring was undertaken for 24 hours at each location. Details of noise monitoring stations are given in following table -

Table 21 Noise Sampling Locations

Station	Station Location	Distance (Km)	Direction
N1	Industrial Site	--	--
N2	Savatgaon	0.92	N
N3	Tambave	4.6	SW
N4	Lavang	7.3	SE
N5	Mahalung	3.34	SE
N6	Lumewadi	3.21	NW
N7	Akluj	3.5	SW
N8	Sangramnagar	1.8	SW

Table 22 Ambient Noise Levels

No.	Location	Average Noise Level in dB(A)					
		L_{10}	L_{50}	L_{90}	$L_{eq(day)}$	$L_{eq(night)}$	L_{dn}
1	N1	49.28	55.98	58.59	67.71	47.86	65.93
2	N2	38.16	41.08	45.39	51.50	32.46	49.77
3	N3	34.91	40.08	43.48	52.22	31.52	50.40
4	N4	37.72	41.53	46.03	52.90	33.52	51.15
5	N5	37.48	41.33	44.01	51.71	32.57	49.98
6	N6	35.29	41.58	43.41	52.80	33.22	51.04
7	N7	32.98	39.93	42.54	53.84	30.71	51.93
8	N8	34.76	40.63	43.04	51.63	32.62	49.91

C. Socio-Economic Profile

Socio-economic status of the population is an indicator for the development of the region. Any developmental project of any magnitude will have a bearing on the living conditions and on the economic base of population in particular and the region as a whole. Chapter 3 may be referred for details of this aspect.

D. Ecology

Field survey was carried out according to random sampling method for flora, and opportunistic sighting method, and standard point count method for fauna were followed. In general visual observation and estimation method was used for qualitative study of the biota. Birds and fish were studied being good indicators of local environmental change. Flora, mainly major tree species, was focused on identification and species abundance.

9) ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

A. Impact on Topography

No major topographical changes are envisaged in the acquired area as land was kept vacant for expansion project in existing premises.

B. Impact on Climate

Impact on the climate conditions due to the expansion project activities is not envisaged, as emissions to the atmosphere of flue gases with very high temperatures are not expected.

C. Impact on Air Quality

An area of 10 Km radius with project site at its center was considered to determine the impacts.

i. Baseline Ambient Air Concentrations

24 hourly average concentrations of PM_{10}, $PM_{2.5}$, SO_2 and NOx in Ambient Air, recorded during the field study conducted for the season March – April – May 2019 is considered as baseline values. They represent impact due to operations of existing nearby industries on this region. Average concentrations of above mentioned parameters, at this location, are considered to be the 'Baseline Concentrations' to determine the impact of industrial operations on ambient air quality. Existing baseline concentrations are summarized in following table-

Table 23 Baseline Concentrations (98 Percentile)

Parameter	PM_{10}	$PM_{2.5}$	SO_2	NO_X	CO
98 percentile	65.55µg/m^3	22.57µg/m^3	27.51µg/m^3	31.52µg/m^3	0.754mg/m^3
NAAQS	100 µg/m^3	60 µg/m^3	80 µg/m^3	80 µg/m^3	4 mg/m^3

ii. Air Polluting Sources

As discussed above, under existing sugar factory, cogen plant & distillery unit 90 TPH boiler is installed. Bagasse or Bio-gas @915 MT/D or 14,440 M^3/D is used as fuel. Existing boiler is provided with ESP as APC, preceding the stack of 72 M height.

Bagasse/Coal @ 240 MT/D or 32 MT/D will be used as fuel for proposed 22 TPH boiler under distillery. ESP/bag filter will be provided as APC preceding the stack of 60 M.

D. IMPACT ON WATER RESOURCES

i. Impact on Surface Water Resources & Quality

Total water requirement for existing & expansion activities will be 2896.5 M^3/D. Fresh water taken from Nira Right Canal. More details about water budget are presented at Chapter 2 under Section 2.7.1

Total effluent generated from sugar factory and co-gen plant activities after expansion @ 346 M^3/Day shall be forwarded to the existing ETP in the TSMSFL premises.

Raw Spentwash generated about 400 M^3/D, will be forwarded to evaporation and concentration in MEE. Further, concentrated spentwash of 80 M^3/D will be dried in ATFD for powder formation/incinerated. Other industrial effluent generated will be 462 M^3/D, treated in CPU & recycled back in process to achieve Zero Liquid Discharge (ZLD) for process effluent.

Domestic effluent generated will be 18 M^3/D, treated in proposed STP.

No process effluent will be discharged in nearby river or nalla. Hence, there will not be any impact on surface water quality.

ii. Impact on Ground Water Resources & Quality

Water required for the industry will be obtained from Nira Right Canal. Permission for water lifting has been obtained from competent authority. No ground water will be extracted for existing as well as expansion project. Moreover, there will not be any discharge of untreated effluent so there will not be any impact on ground water level and quality.

E. IMPACT ON SOIL

Impact on the soil characteristics is usually attributed to air emissions, wastewater discharges and solid waste disposal. Under expansion as well as existing project, as mentioned above, there will not be discharge of any untreated effluent on land. For existing boilers Wet scrubber are installed. Boiler ash from boiler is given to brick manufacturers/used as manure whereas ETP sludge is used as manure. CPU sludge and yeast sludge from distillery will be used as manure. Domestic effluent will be treated in proposed STP. Hence, there will not be any major increase in chemical constituents of soil through deposition of air pollutants/ discharge of wastewater.

G. IMPACT ON NOISE LEVELS

Probable sources of noise are mill, compressors, boiler, distillation assembly, turbine & D.G. Sets etc. Workers could get annoyance and can lose concentration during operation. Workers working near the source need risk criteria for hearing damage while people residing near industry lead annoyance and psychological damage. It is obvious that the acceptable noise level for the latter case is less than the former case. Noise can affect health of workers, can cause loss of hearing and can disturb during working which may lead to accidents.

H. IMPACT ON LAND USE

Present use of the project land is for industrial wherein the sugar factory, distillery unit and cogeneration plant have already been established. Expansion project will be implemented in existing premises, an area was kept vacant for expansion of sugar factory, cogen plant & distillery unit. Hence, no change in the land use pattern is expected. Therefore, impact on land use is insignificant.

H. IMPACT ON FLORA AND FAUNA

Discharge of the untreated wastewater from the industry in surrounding area can also cause significant environmental impact on the aquatic habitats and affect dependent biodiversity. In case of air pollution, the industry is going to contribute in SPM pollution load in the nearby area. This may have negative impact particularly on avifauna, surrounding crop yields and local population. The details in respect of impacts on ecology and biodiversity are described.

I. IMPACT ON HISTORICAL PLACES

A Yamaidevi temple having Hemadpanthi structure is located in Mhalunge about 5 Km from factory site. The place is not notified. There is no adverse impacts were observed during survey.

10) ADDITIONAL STUDIES & INFORMATION

Risks Assessment –

Risk to human health is inherent. It is safe only when the installation is dismantled at the end of its useful life. The following principles should be used as guidelines for the selection of risk criteria -

1. Increase in risk, caused by the presence of the plant to local community (i.e. neighboring public) should be negligible in comparison to the risk they already have in their daily life.
2. Work force on the plant should be expected to accept a potentially greater risk than the members of the local community since the work force have been trained to protect themselves from the possible hazards and thus reducing the actual risk to themselves.

The risk criteria considered by Green A.G. (1982) are given as below:

1. Risk to Plant: This risk is to be given priority only when it is proved beyond doubt that the risk to life is so low that reducing this risk may not be justified. Under this consideration, the risk to economic damage may be considered.
2. Risk to Public and Employees: Scale used for risk to employee and public is Fatal Accident Rate (F.A.R.) or more commonly Fatal Accident Frequency Rate. (F.A.F.R.). F.A.R. and F.A.F.R. is defined as number of deaths from industrial injury expected in a group of 1000 men during their working period.

For more details, w.r.t. this aspect, Chapter 7 may be referred.

11) SALIENT FEATURES OF EMP

Following routine monitoring programme as detailed in Table 24 shall be implemented at site. Besides to this monitoring, the compliances to all Environmental Clearance (EC) conditions and regular permissions from CPCB /MoEFCC shall be monitored and reported periodically.

Table 24 Plan For Monitoring of Environmental Attributes within Industrial Premises

No.	Description	Location	Parameters	Frequency	Conducted by
1.	Air Emissions	Upwind – 1, Downwind - 2 (Near main gate, Fermentation section, Distillation section)	PM_{10}, $PM_{2.5}$, SO_2, NOx, CO	Monthly	MoEFCC & NABL Approved External Lab
		Study area – (Industrial Site, Lumewadi, Bijvadi, Mahalung, Shreepur, Shivaji Nagar, Tambave & Malinagar)		Quarterly	
2.	Stack Emissions	Boiler – 2 No., D.G Set – 3 Nos.	SO_2, SPM, NOx	Monthly	
3.	Noise	Workzone 5 Locations - (Near Main Gate, Near Fermentation Section Distillation section, Boiler, DG set, Turbine)	Spot Noise Level recording; Leq(n), Leq(d), Leq (dn)	Monthly	
		Ambient Noise location - 8		Quarterly	
4.	Drinking water	Canteen	Parameters as per drinking water Std IS10500	Monthly	
5.	Soil	8 locations	pH, Salinity, Organic Carbon, Nitrogen, Phosphorous and Potash	Quarterly	
6.	Water Quality (Ground Water & Surface Water)	Locations in study area - Ground Water and Surface Water	Parameters as per CPCB guideline for water quality monitoring – MINARS/27/2007-08	Quarterly	
7.	Effluent	Treated, Untreated	pH, SS, TDS, COD, BOD, Cl, Sulphates, Oil & Grease.	Monthly	
8.	Waste management	Implement waste management plan that Identifies and characterizes every waste associated with proposed and existing activities and which identifies the procedures for collection, handling & disposal of each waste arising.	Records of Solid Waste Generation, Treatment and Disposal shall be maintained	Twice in a year	By TSMSFL
9.	Emergency Preparedness such as fire fighting	Fire protection & safety measures to take care of fire & explosion hazards, to be assessed & steps taken for their prevention.	On site Emergency Plan, Evacuation Plan, fire fighting mock drills	Twice a year	By TSMSFL
10.	Health Check up	Employees and migrant Labour health check ups	All relevant health check-up parameters as per factories act.	Twice a Year	By TSMSFL
11.	Green Belt	Within Industry premises as well as nearby villages	Survival rate of planted sapling	In consultation with DFO.	By TSMSFL
12.	CER	As per activities	--	Six Monthly	By TSMSFL

दि शासवड माळी शुगर फॅक्टरी लि.

(दि.सा.मा.शु.फॅ.लि.)

मु.पो.ः माळीनगर, ता.ः माळशिरस, जि.ः सोलापूर, महाराष्ट्र राज्य

यांच्या

सध्याच्या साखर कारखान्याची गाळप क्षमता ४५00 टन प्रतिदिन पासून ५000 टन प्रतिदिन, सहवीज प्रकल्प १४.८ मे.वॅट पासून १८ मे.वॅट व मोलॅसिस आधारित आसवनी प्रकल्प ३0 के.एल.पी.डी. पासुन ५0 के.एल.पी.डी. पर्यंत विस्तारीकरण

प्रकल्पाबाबतच्या अहवालाचा सारांश

१)<u>प्रकल्पाविषयी थोडक्यात</u>

दि शासवड माळी शुगर फॅक्टरी लिमिटेड (दि.सा.मा.शु.फॅ.लि.), प्रकल्पगट क. १B, १३/१, १३/२ व १३/३, मु.पो.ः माळीनगर, ता.ः माळशिरस, जि.ः सोलापूर, महाराष्ट्र राज्य येथे उभारणेत आलेला आहे. विस्तारीकरणांतर्गत साखर कारखान्याची ऊस गाळप क्षमता ४५00 टन प्रतिदिन पासून ५000 टन प्रतिदिन, सहवीज प्रकल्प १४.८ मे.वॅट पासून १८ मे.वॅट व मोलॅसिस आधारित आसवनी प्रकल्प ३0 के.एल.पी.डी. पासुन ५0 के.एल.पी.डी. करणेचे नियोजन केले आहे. सदर विस्तारीकरण प्रकल्प हा सध्याच्या ४५00 टन प्रतिदिन साखर कारखाना, आसवनी प्रकल्प ३0 के.एल.पी.डी. व १४.८ मे.वॅट सहवीज प्रकल्पाच्या आवरात उभारण्यात येणार आहे.

हा प्रकल्प अहवाल वने, पर्यावरण व हवामान बदल मंत्रालय, नवी दिल्ली यांच्या दि.१४.0९.२00६ रोजीच्या इन्व्हायरमेंटल इंपॅक्ट असेसमेंट (EIA) नोटीफिकेशन नं.S.O.1533 (E) व त्यानंतरील बदल [दि.१३.0६.२0१९ रोजीच्या नोटीफिकेशन नं.S.O.1960(E)] यानुसार तयार केला आहे. दि.सा.मा.शु.फ.लि.यांचे सदर प्रकल्प ५ (j), 1(d), ५ (g) (i) या व श्रेणी 'ब' मध्ये येतो. प्रस्तावित प्रकल्प राबविताना सुरक्षिततेचे नियम व पर्यावरणाचे संरक्षण करण्याच्या सर्व गोष्टींची खबरदारी घेतली जाईल.

खालील तक्त्यामध्ये गुंतवणुकीचे तपशील दिलेले आहेत.

तक्ता १ गुंतवणुक

क्र	विभाग	भांडवली गुंतवणुक (रू. करोडमध्ये)		
		सध्याची	विस्तारीकरण	एकुण
१	साखर कारखाना	१४३.७५	३३.७५	१७७.५
२	सहवीज प्रकल्प			--
३	आसवनी प्रकल्प	२२.0८		२२.0८
	एकुण	**१६५.८३**	**३३.७५**	**१९९.५८**

२) <u>प्रकल्पाची जागा</u>

दि.सा.मा.शु.फॅ.लि.द्वारे प्रकल्पगट क. १B, १३/१, १३/२ व १३/३A, मु.पो.ः माळीनगर, ता.ः माळशिरस, जि.ः सोलापूर, महाराष्ट्र राज्य येथे २७.१0 हेक्टर एवढी जागा संपादित करणेत आली आहे. सध्याच्या जागेमध्येच साखर कारखाना, सहवीज प्रकल्प व आसवनी प्रकल्पाचे विस्तारीकरण होणार आहे. साखर

कारखाना, आसवनी प्रकल्प व सहवीज प्रकल्प यांचे विस्तारीकरणानंतर एकुण बांधकाम क्षेत्र ५.७२ हे. इतके आहे. जागेचा ले-आऊट प्लॅन **ॲपेन्डीक्स – ब** येथे जोडला आहे. प्रस्तावित विस्तारीकरण प्रकल्पासाठी आवश्यक असणारे ना हरकत प्रमाणपत्र ग्रामपंचायत माळीनगर यांच्याकडून प्राप्त झालेले आहे व ते ई.आय.ए रिपोर्टमध्ये जोडले आहे. जागेसंदर्भातील माहिती खालीलप्रमाणे आहे.

तक्ता २ विविध विभागांच्या क्षेत्राचा तपशील(चर्ग.मी)

क्र.	तपशील	क्षेत्र (चर्ग.मी)		
		साध्याची	प्रस्तावित	एकूण
१	**एकुण क्षेत्र**			**२,७१,०२१**
२	बांधकाम क्षेत्र			
	i. साखर कारखाना, सहवीज प्रकल्प व आसवनी प्रकल्प	५५,२६९.६४	२,000.0	५७,२६९.६४
	ii. रस्ता क्षेत्र	४,३३0.0	--	४,३३0.0
	एकूण	५९,५९९.६४	२,000.0	६१,५९९.६४
३	हरित पट्टा	१,0८,४0८.0	--	१,0८,४0८.0
४	एकुण खुले क्षेत्र			**१,0१,0१३.३६**

३) <u>प्रकल्प प्रवर्तकांची ओळख</u>

दि.सा.मा.शु.कॅ.लि. च्या प्रवर्तकांना साखर कारखाना, आसवनी प्रकल्प व सहवीज प्रकल्प क्षेत्रामधील चांगला अनुभव आहे. प्रवर्तकांनी प्रकल्प नियोजन तसेच अंमलबजावणी योजनेचा सखोल अभ्यास केला आहे. प्रकल्प प्रवर्तकांचे नाव आणि हुद्दा खालीलप्रमाणे -

तक्ता ३ प्रकल्प प्रवर्तकांचे नाव व हुद्दा

क्र.	प्रवर्तकाचे नाव	हुद्दा
१.	श्री. नन्दकुमार गिरमे	अध्यक्ष
२.	श्री.राजेंद्र गिरमे	व्यवस्थापकीय संचालक

४)<u>उत्पादनां विषयी माहिती</u>

दि.सा.मा.शु.कॅ.लि. यांच्या सध्याच्या आणि विस्तारिकरण प्रकल्पामधून तयार होणारी उत्पादने व त्यांचे परिमाण खालीलप्रमाणे आहे.

तक्ता ४ साखर कारखाना, सहवीज आणि आसवनी प्रकल्पांची उत्पादने

प्रकल्प	उत्पादने व उपउत्पादनांची नावे	क्षमता		
		सध्याची गाळप क्षमता (४५०० टि.सी.डी)	**प्रस्तावित गाळप क्षमता (५०० टि.सी.डी)**	**एकूण गाळप क्षमता (५००० टि.सी.डी)**
साखर कारखाना	साखर (११-१२%)*	१५,५२५ मे.टन/म.	१७२५ मे.टन/म.	१७,२५० मे.टन/म.
	उपउत्पादने			
	बगॅस (३०%)*	४०,५०० मे.टन/म.	४५०० मे.टन/म.	४५,००० मे.टन/म.
	प्रेसमड (४%)*	६०७५ मे.टन/म.	६०० मे.टन/म.	६६७५ मे.टन/म.
	मोलॅसिस (४%)*	५४०० मे.टन/म.	६०० मे.टन/म.	६००० मे.टन/म.
सहवीज	वीज	१४.८ मे. वॅट/तास	३.२ मे. वॅट/तास	१८ मे. वॅट/तास
आसवनी	**उत्पादने व उपउत्पादनांची नावे**	**सध्याची (३० के.एल.पी.डी)**	**प्रस्तावित (२० के.एल.पी.डी)**	**एकूण (५० के.एल.पी.डी)**
	रेक्टीफाइड स्पिरिट (आर.एस.)/एक्स्ट्रा न्युट्रल अल्कोहोल (इ.एन.ए.)	९०० कि. लि./म.	६०० कि. लि./म.	१५०० कि. लि./म.
	उपउत्पादने			
	फ्युजल ऑईल	१५ मे.टन/म.	१० मे.टन/म.	२५ मे.टन/म.
	कार्बन डायऑक्साईड	६६६ मे.टन/म.	४४४ मे.टन/म.	१११० मे.टन/म.
	स्पेंटवॉश पावडर	--	१८६० मे.टन/म.	१८६० मे.टन/म.

टिप : *उस गाळपाच्या टक्केवारीत

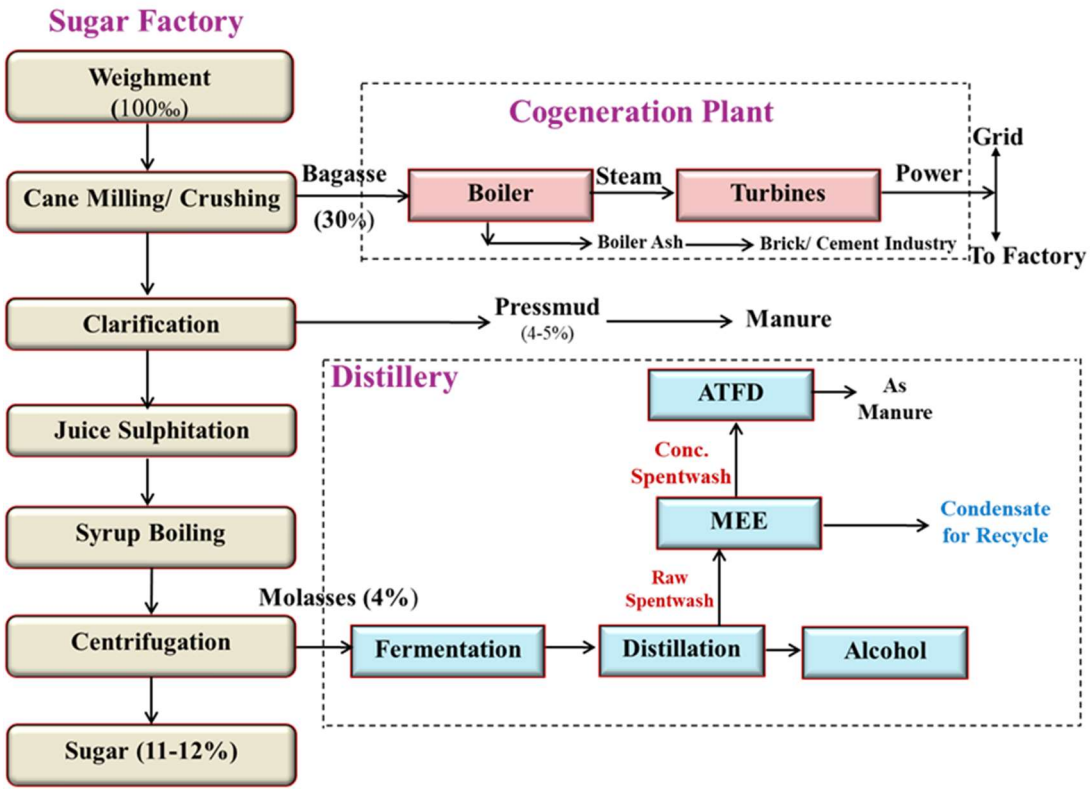
साखर कारखाना, आसवनी प्रकल्प व सहवीज प्रकल्प संदर्भातील उत्पादन प्रक्रिया आणि फ्लोचार्ट ई.आय.ए.रिपोर्ट मध्ये प्रकरण -२ येथे जोडलेला आहे.

५) <u>प्रकल्पाचे उद्दिष्ट</u>

- साखर उद्योग हा देशातील दुसरा सर्वात मोठा शेती आधारित उद्योग आहे.
- साखर उद्योग हा रोजगार निर्मिती, उत्पन्न निर्मिती आणि कार्यक्षेत्रामध्ये पायाभुत घटक तयार करण्यासाठी महत्वपूर्ण आहे.
- अल्कोहोलयुक्त पेयांच्या उत्पादनांसाठी ऊसरस, मोलॅसिस, कडधान्ये व इतर कृषी उत्पादने आसवनी उद्योग वापरतो. जगभर वापरल्या जाणा-या फरमेंटेड व डिस्टीलड पेयांचे उत्पादन स्थानिक उत्पादित व उत्तम वातावरणीय परिस्थितीत वाढलेल्या कच्या मालांवर आधारित आहे. इथिल अल्कोहोल हे फरमेंटींग मोलॅसिस पासून तयार केले जाते. मोलॅसिस हे साखर कारखान्यामधुन मिळते.
- अल्कोहोल उद्योगाची देशाच्या अर्थव्यवस्थेमधे महत्वाची जागा आहे. अल्कोहोल हे खुप रसायनांमध्ये कच्चा माल म्हणुन वापरले जाते. त्याबरोबरच या व्यवसायामुळे सरकारला मोठया प्रमाणात अबकारी कर वसुल होतो.
- पेट्रोलबरोबर अल्कोहोलचे ब्लेंडींग केलेस पॉवर अल्कोहोल यास्वरूपात अल्कोहोल मध्ये इंधन म्हणुन क्षमता आहे.
- तसेच जपान, यु.एस.ए., कॅनडा, श्रीलंका, इ. देशांमध्ये पेट्रोलियम क्रुड पासुनच्या नॅप्थापासुनचे सिंथेटिक अल्कोहोल शिल्हरेजीससाठी उपयुक्त नसलेने या देशांमधे फरमेंटेड अल्कोहोलला खुप मोठया प्रमाणामध्ये मागणी आहे.

६) उत्पादन प्रक्रिया

आकृती १ उत्पादन प्रक्रिया



७) <u>पर्यावरणविषयक दृष्टिकोन</u>

दि.सा.मा.शु.कॅ.लि.यांनी अत्यंत प्रभावी व परिणामकारक अशी पर्यावरण व्यवस्थापन योजना (EMP) राबविणेचे नियोजन केले आहे.त्यातील विविध घटक खालीलप्रमाणे आहेत.

अ) पाण्याचा वापर, सांडपाण्याची निर्मिती व त्याची प्रक्रिया

i) पाण्याचा वापर

दि.सा.मा.शु.कॅ.लि. यांच्या सध्याच्या व प्रस्तावित प्रकल्पामध्ये होणा-या पाण्याच्या वापराविषयी सविस्तर तपशील खालीलप्रमाणे -

प्रस्तावित विस्तारीकरणानंतर दि.सा.मा.शु.कॅ.लि. च्या साखर कारखाना व सहवीज प्रकल्पासाठीची पाण्याची एकूण गरज २३६१.५ घन मी प्रतिदिन इतकी असेल. यापैकी २२८४.५ घनमी./दिन इतके पाणी हे ऊसामधून व १५ घनमी./दिन इतके पाणी घरगुती सांडपाणी प्रकल्पात प्रक्रिया केलेले व ६२ घनमी./दिन इतके पाणी हे नीरा नदीच्या उजव्या कालव्यामधुन घेतले जाईल.

तक्ता ५ साखर कारखाना व सहवीज प्रकल्पासाठी पाण्याचा वापर

क्र.	तपशील	पाण्याचा वापर (घन मी./दिन)	
		सध्याचा प्रकल्प (४५00 मे.टन/दिन व १४.८ मे. वॅट)	**एकूण विस्तारीकरणानंतर** (५000 मे.टन/दिन व १८ मे. वॅट)
१.	**घरगुती**	**१५#**	**१७(२#+१५$)**
२.	**औद्योगिक**		
a.	प्रोसेस	१३७५*	१५२८*
b.	कुलिंग	४७२*	५२५*
c.	बॉयलर मेकअप	२0२*	२२५*
d.	डी.एम. प्लांट	५४#	६0#
e.	लॅब व वॉशिंग	४*	५*
f.	ॲश क्वेंचिंग	१*	१.५*
	औद्योगिक वापर (a+b+c+d+e+f)	**२१0८ (२0५४*+५४#)**	**२३४४.५ (२२८४.५*+६0#)**
३.	**बाग + हरितपट्टा**	**९0***	--
	एकूण(१+२+३)	**२२१३ (२१४४*+६९#)**	**२३६१.५ (२२८४.५*+६२#+१५$)**
ताज्या पाण्याचा वापर (प्रमाण १00 लि./मे.टन ऊसगाळप)		१२ लि./मे.टन	१२ लि./मे.टन

टीप: #नीरा नदीच्या उजव्या कालव्यामधुन, *ऊसामधील कंडेनसेट, $सांडपाणी प्रक्रिया प्रकल्पातून प्रक्रिया केलेले पाणी

तक्ता क्र.६ मोलॅसिस आसवनी प्रकल्पासाठी पाण्याचा वापर

क्र.	तपशील	पाण्याची गरज (घनमीटर/दिन)		
		सध्याची ३0 के.एल.पी.डी	**एकूण विस्तारीकरणानंतर ५0 के.एल.पी.डी**	
			ऊस गळित हंगाम दरम्यान	**विना ऊस गळित हंगाम**
१.	घरगुती	२	३(२#+१$)	३(२#+१$)
२.	औद्योगिक			
	i. प्रोसेस	२२५	३९६♣	३९६♣
	ii. कुलिंग	४२	७0 (५७♣+१३#)	७0 (५७♣+१३#)
	iii. बॉयलर मेकअप	--	**५३***	**५३#**
	iv. लॅब व वॉशिंग	१	**२#**	**२#**
	v. डी.एम. प्लांट	--	**१0(७*+३#)**	**१0#**
	vi. ॲश क्वेंचिंग	--	१#	१#
	एकूण औद्योगिक वापर	**२६८**	**५३२ (४५३♣ + ६0*+१९#)**	**५३२ (४५३♣ + ७९#)**
	एकूण (१+२)	**२७0**	**५३५ (४५३♣ + ६0*+२१#+१$)**	**५३५ (४५३♣ + ८१#+१$)**
	पुनर्वापर (%)	--	९६	८५
	ताज्या पाण्याचा वापर (प्रमाण १0 कि. लि./ कि. लि. अल्कोहोल)	--	१.३ कि. लि.	१.३ कि. लि.

टीप :# नीरा नदीच्या उजव्या कालव्यामधुन , $ सांडपाणी प्रक्रिया प्रकल्पातून प्रक्रिया केलेले पाणी.
*ऊसामधून मिळणारे कंन्डेंसेट. ♣आसवनी सी.पी.यु. मधील पुर्नप्रक्रियित केलेले पाणी.

प्रस्तावित विस्तारीकरणानंतर आसवनी प्रकल्पासाठीची पाण्याची एकूण गरज ऊस गळित हंगाम चालू असताना ५३५ घन मी. प्रतिदिन इतकी असेल. ज्यापैकी ४५३ घन मी. प्रतिदिन पाणी सी.पी.यु. मध्ये प्रक्रिया केलेले असेल, ६० घन मी. प्रतिदिन ऊसामधील कंडेनसेट असेल, १ घन मी. प्रतिदिन पाणी शांडपाणी प्रक्रिया प्रकल्पातून व ८१ घन मी. प्रतिदिन इतके ताजे पाणी नीरा नदीच्या उजव्या कालव्यामधुन घेतले जाईल.

प्रस्तावित आसवनी प्रकल्पासाठी ऊस गळित हंगाम बंद असताना ५३५ घन मी. प्रतिदिन इतके पाणी लागेल ज्यापैकी ४५३ घन मी. प्रतिदिन पाणी सी.पी.यु. मध्ये प्रक्रिया केलेले असेल, १ घन मी. प्रतिदिन पाणी शांडपाणी प्रक्रिया प्रकल्पातून व ८१ घन मी. प्रतिदिन इतके ताजे पाणी नीरा नदीच्या उजव्या कालव्यामधुन घेतले जाईल.

ख. शांडपाणी प्रक्रिया

१. घरगुती शांडपाणी

दि.सा.मा.शु.कॅ.लि. प्रकल्पामधील सध्याचा साखर कारखाना आणि सहवीज प्रकल्पामधुन १४ घनमीटर प्रतिदिन व सध्याचा आसवनी प्रकल्पामधुन १ घनमीटर प्रतिदिन घरगुती शांडपाणी तयार होते. विस्तारीकरणानंतर प्रकल्पामधुन १८ घनमीटर प्रतिदिन घरगुती शांडपाणी तयार होइल. सध्या तयार होणारे घरगुती शांडपाणी हे सेप्टीक टँक नंतर सोकपीटमध्ये प्रक्रिया केले जाते. विस्तारीकरणानंतर घरगुती शांडपाण्यावर; प्रस्तावित घरगुती शांडपाणी प्रक्रिया प्रकल्पामध्ये (एस.टी.पी) प्रक्रियीत केले जाईल व हरित पट्टा विकासासाठी वापरले जाईल.

२. औद्योगिक शांडपाणी

दि.सा.मा.शु.कॅ.लि. प्रकल्पामधील साखर कारखाना आणि सहवीज प्रकल्पामधुन ३१३ घन मीटर प्रतिदिन शांडपाणी तयार होईल. विस्तारीकरणानंतर साखर कारखाना आणि सहवीज प्रकल्पामधुन ३४६ घन मीटर प्रतिदिन शांडपाणी तयार होईल. हे शांडपाणी साखर कारखान्याच्या सध्याच्या औद्योगिक शांडपाणी प्रक्रिया प्रकल्पामध्ये (ई.टी.पी.) मध्ये पाठवले जाईल. प्रक्रिया केलेले शांडपाणी स्वतःच्या परिसरातील बागेसाठी व हरितपट्टा विकासासाठी वापरले जाईल.

प्रस्तावित विस्तारीकरणानंतर आसवनी प्रकल्पांतर्गत तयार होणारे शांडपाणी ४६२ घन मीटर प्रतिदिन हे स्पेंटलीक्स, एम.ई.ई. मधील कंडेनसेट, बॉयलर ब्लो डाऊन, कुलिंग ब्लो डाऊन आणि लॅब, वॉशिंग व स्क्रबर च्या स्वरूपात असेल. सर्व शांडपाणी सध्याच्या कंडेनसेट पॉलिशिंग युनिटमध्ये प्रक्रियीत केले जाईल. प्रक्रियीत शांडपाणी हे मोलॅसिस डायल्युशन व कुलिंग टॉवर मेकअपसाठी वापरले जाईल.

एकुण ४00 घन.मी.प्रतिदिन इतका रॉ स्पेंटवॉश तयार होईल. स्पेंटवॉश एम.ई.ई.मध्ये इव्हॅपोरेट व कॉन्सनट्रेट केला जाईल. कॉन्सनट्रेटेड स्पेंटवॉश ८0 घन.मी.प्रतिदिन ड्राय करून पावडर केला जाईल. ही पावडर खत म्हणून वापरली जाते.अथवा कॉन्सनट्रेटेड स्पेंटवॉश इनसिनरेट केला जाईल.

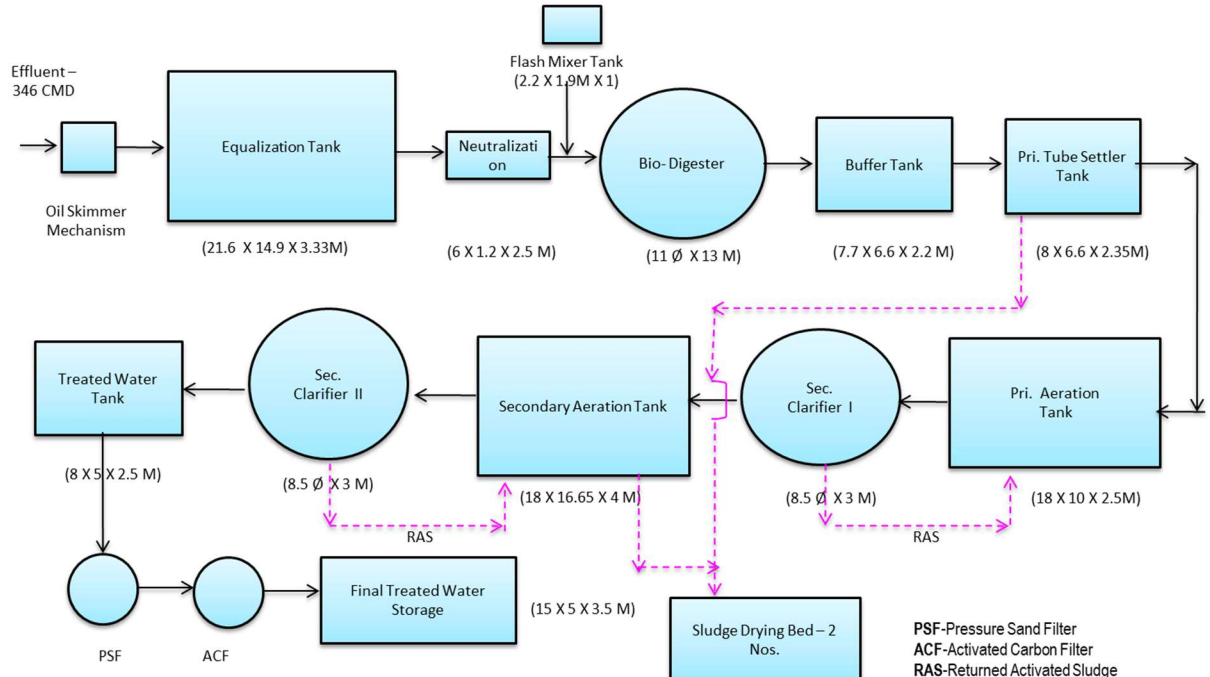
तक्ता ७ साखर कारखाना व सहवीज प्रकल्पामधुन तयार होणारे सांडपाणी

क्र.	तपशील	सांडपाणी(घन. मी. / दिन)		प्रक्रिया
		सध्याचा प्रकल्प	एकूण विस्तारीकरणानंतर	
१.	**घरगुती**	१४	१६	प्रस्तावित एस. टी. पी. मध्ये प्रक्रिया
२.	**औद्योगिक**			
a.	प्रोसेस	१६५	१८३	कारखान्याच्या सध्याच्या ई.टी.पी. मध्ये प्रक्रिया
b.	कुलिंग	४७	५२	
c.	बॉयलर	४३	४६	
d.	डी.एम.बेकवॉश	५४	६0	
e.	लॅब / वॉशिंग	४	५	
	औद्योगिक एकूण	**३१३**	**३४६**	
	सांडपाणी प्रमाण: १00 लि./मे.टन गाळप	**७0**	**६९**	

तक्ता ८ आसवनी प्रकल्पाचे सांडपाणी

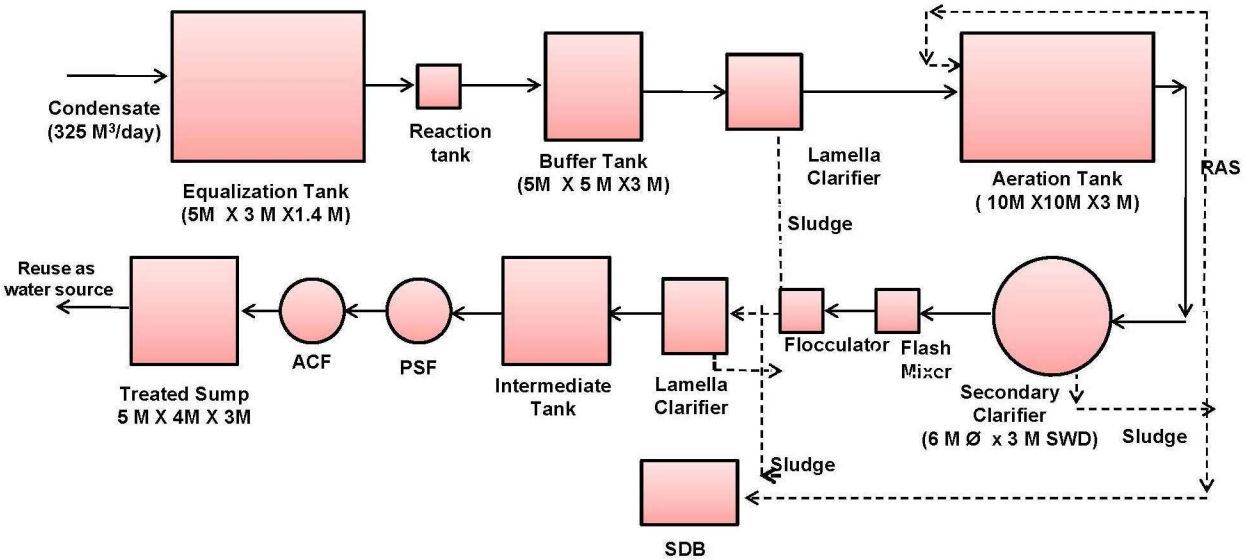
क्र.	तपशील	सांडपाणी घन मी. प्रतिदिन		प्रक्रिया	
		सध्याची ३0 के.एल.पी.डी	एकूण विस्तारीकरणानंतर ५0 के.एल.पी.डी	सध्याची	विस्तारीकरणानंतर
१.	घरगुती	१	२	सेप्टीक टँक नंतर सोकपीटमध्ये प्रक्रिया केले जाईल	प्रस्तावित घरगुती सांडपाणी प्रक्रिया प्रकल्पामध्ये (एस.टी.पी.) प्रक्रियीत केले जाईल
२.	औद्योगिक				
	प्रोसेस	वॉ स्पेंटवॉश- २४0 कॉन्स. स्पेंटवॉश- ४८	वॉ स्पेंटवॉश- ४00 कॉन्स. स्पेंटवॉश- ८0	वॉ स्पेंटवॉश डायजेस्ट करून एम.ई.ई.मध्ये इव्हॅपोरेट व कॉन्सनट्रेट केला जातो. कॉन्सनट्रेटेड स्पेंटवॉश काम्पोस्टिंगसाठी पाठविला जातो.	वॉ स्पेंटवॉश डायजेस्ट करून एम.ई.ई.मध्ये इव्हॅपोरेट व कॉन्सनट्रेट केला जाईल. कॉन्सनट्रेटेड स्पेंटवॉश ड्राय करून पावडर/इनक्सिनरेट केला जाईल.
		कंडेनसेट - १८९	कंडेनसेट - ३६२ (३१६ MEE+ ४६ ATFD)	सर्व सांडपाणी कंडेनसेट पॉलिशिंग युनिटमध्ये प्रक्रियीत केले जाईल.	
		स्पेंट लीक्स - ४४	स्पेंट लीक्स - ७0		
	कुलिंग ब्लोडाऊन	४	७		
	बॉयलर ब्लोडाऊन	--	११		
	लॅब वॉशिंग	१	२		
	डि.एम.बेकवॉश	--	१0		
	एकुण	कॉन्स. स्पेंटवॉश - ४८ **इतर सांडपाणी-२३८**	कॉन्स. स्पेंटवॉश - ८0 **इतर सांडपाणी-४६२**		

आकृती २ साखर कारखान्यातील सध्याचा ई.टी.पी. चा फ्लो चार्ट



NO	PARAM ETERS	UNIT	TREATED EFFLUENT
1.	pH	---	7 - 8
2.	COD	mg/lit	170 – 240
3.	BOD	mg/lit	45 – 80
4.	TDS	mg/lit	1600-1900

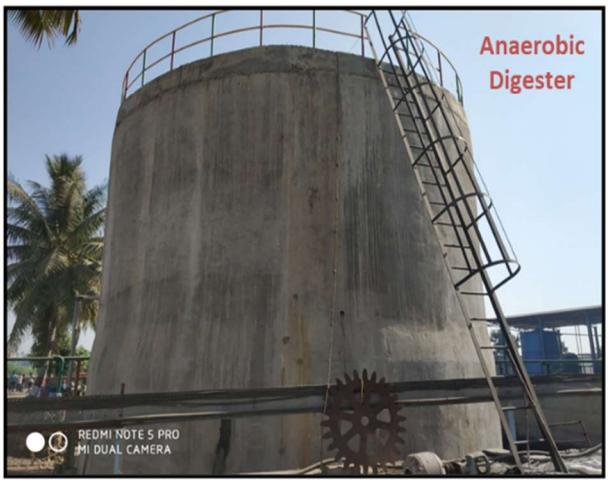
आकृती ३ आसवनी मधील सध्याचा सी.पी.यु. चा फ्लो चार्ट

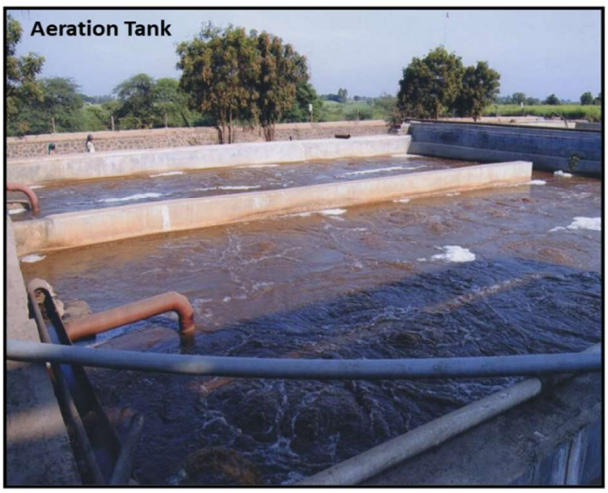


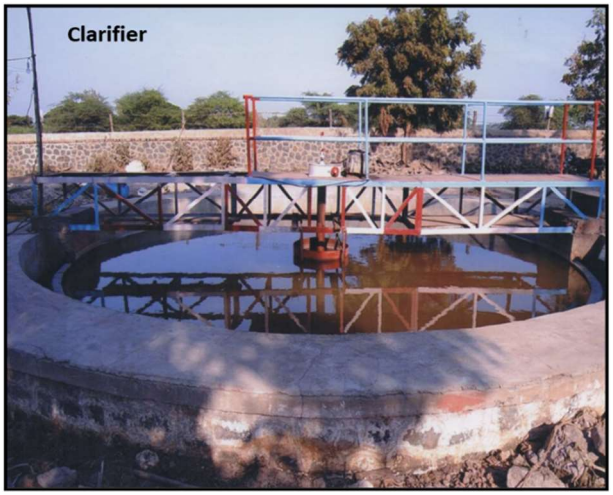
NO.	PARAMETERS	UNIT	RAW EFFLUENT
1.	pH	---	5-6
2.	COD	mg/lit	2800 - 3000
3.	BOD	mg/lit	1500 – 1800
4.	TDS	mg/lit	1500-1800

Note:-
RAS:- Return Activated Sludge
SDB:- Sludge Drying Bed

आकृती ४ साखर कारखान्यातील सध्याचा ई.टी.पी.

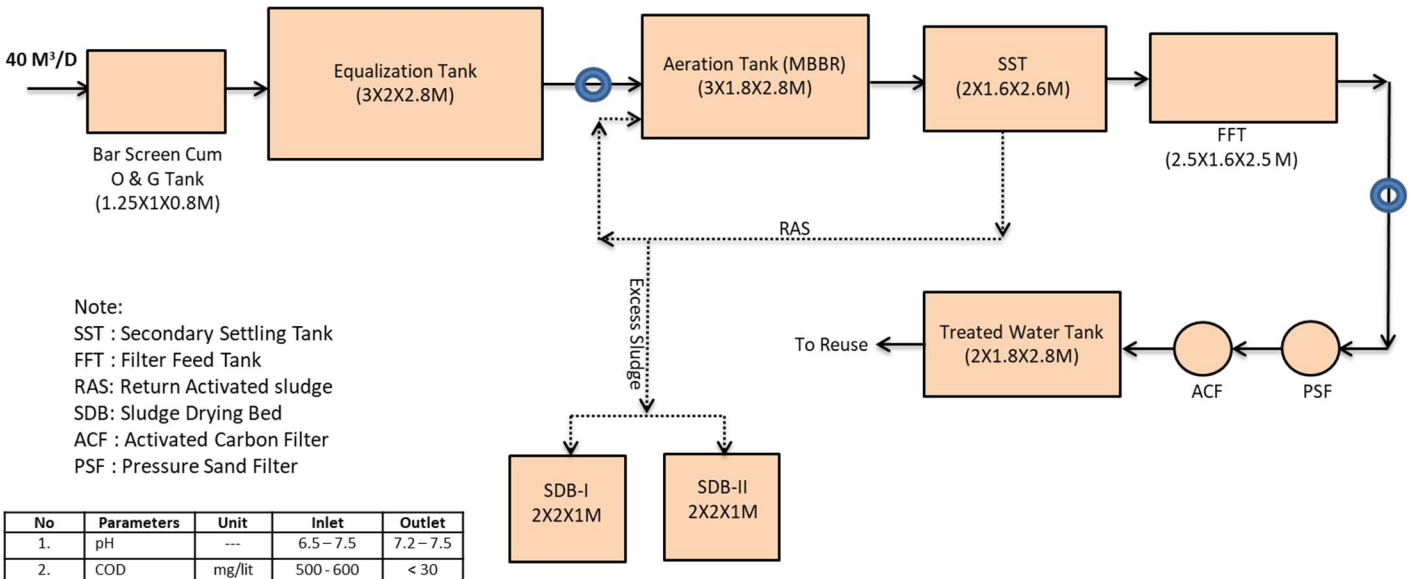






आकृती ५ आस्थापनी मधील सध्याचा सी. पी.यु.

आकृती ६ प्रस्तावित एस्.टी.पी. चा फ्लो चार्ट



Note:
SST : Secondary Settling Tank
FFT : Filter Feed Tank
RAS: Return Activated sludge
SDB: Sludge Drying Bed
ACF : Activated Carbon Filter
PSF : Pressure Sand Filter

No	Parameters	Unit	Inlet	Outlet
1.	pH	---	6.5 – 7.5	7.2 – 7.5
2.	COD	mg/lit	500 - 600	< 30
3.	BOD	mg/lit	250 - 300	< 10
4.	TSS	mg/lit	250 - 400	< 5
5.	O & G	mg/lit	25 - 50	< 10

अ. वायु उत्सर्जने

दि.सा.मा.शु.कॅ.लि. मध्ये सध्याच्या साखर कारखाना, सहवीज प्रकल्प आणि आसवनी प्रकल्पामध्ये ९० टन प्रति तास क्षमतेचा बॉयलर कार्यरत आहे ज्यासाठी ९१५ मे.टन.प्रतिदिन बगॅस /१४४४० घन मी. प्रतिदिन बायोगॅस इंधन म्हणून वापरले जाते. या बॉयलरना ई.एस.पी. हे प्रदूषण नियंत्रक उपकरण असवले आहे. प्रदूषण नियंत्रण करण्यासाठी बॉयलरला ७२ मी. उंचीची चिमणी असवली आहे.

विस्तारीकरण प्रकल्पांतर्गत २२ टन प्रति तास क्षमतेचा बॉयलर असविला जाईल. ज्यासाठी २४० मे.टन.प्रतिदिन बगॅस / ३२ मे.टन.प्रतिदिन कोळसा इंधन म्हणून वापरला जाईल. त्यासाठी ६० मी. उंचीच्या चिमणी सहित ई.एस.पी. / बॅग फिल्टर हे वायु प्रदुषण नियंत्रक उपकरण म्हणून वापरले जाईल.

सध्या कारखान्यामध्ये १२५० के.व्ही.ए.(१) व ५०० के.व्ही.ए. क्षमतेचे २ डी.जी. सेट कार्यरत आहेत. विस्तारीकरणांतर्गत कोणताही नवीन डी.जी. सेट असविला जाणार नाही. हवा प्रदुषण व त्यासंबंधीच्या इतर बाबींची माहीती खालील तक्त्यात दिली आहे.

तक्ता ९ बॉयलरचा व चिमणीचा तपशील

क्र.	तपशील	सध्याचे		प्रस्तावित
१	जोडले आहे-	**बॉयलर**	**डी.जी.सेट**	**बॉयलर**
२	क्षमता	९० टन/तास	१२५० व ५०० के.व्ही.ए.(२)	२२ टन/तास
३	इंधनाचा प्रकार	बगॅस/ बायोगॅस	डीझेल	बगॅस/कोळसा
४	इंधन (मे.टन/दिन)	९१५/१४४४० घन मी. प्रतिदिन	३१० लि./तास	२४०/३२
५	बांधणीसाठी वापरलेले मटेरीयल	आर.सी.सी	एम.एस.	एम.एस.
६	आकार (गोल/चौरस)	गोल	गोल	गोल
७	उंची, मी (जमीनीच्या वर)	७२ मी.	५ मी.	६० मी.
८	चिमणीला असलेले प्रदूषण नियंत्रणाचे उपकरण	ई.एस.पी.	--	ई.एस.पी. / बॅग फिल्टर

सभोवतालची हवा व चिमणीमधुन होणारे उत्सर्जन यांचे नियमित परिक्षण कारखान्याने केले आहे व सर्व गोष्टी मर्यादेमध्ये आहेत.

आसवनी प्रकल्पामध्ये फरमेंटर्स मधुन ३७ मे.टन प्रति दिन इतका CO_2 उत्सर्जित होईल जो एकत्रित, शुद्ध करून सिलिंडर्स मध्ये भरला जाईल आणि शीतपेयांच्या उत्पादनांसाठी वापरला जाईल.

आकृती ७ सध्याचा बॉयलर व प्रदूषण नियंत्रक उपकरण

ड. ध्वनी प्रदुषण

१. ध्वनी निर्माण करणारे स्त्रोत

- साखर कारखाना प्रकल्पामध्ये बॉयलर हाऊस, टर्बाईन रूम्स, केन कशिंग सेक्शन, मील हाऊस, डी.जी.सेट हे आवाजनिर्माण करणारे स्त्रोत आहेत. आसवनी प्रकल्पामध्ये बॉयलर फरमेंटेशन सेक्शन डिस्टीलेशन असेम्बली हे आवाज निर्माण करणारे स्त्रोत असतील. डी.जी.सेट हा ध्वनी प्रदुषणाचा एकस्त्रोत ठरू शकतो पण सदरील डी.जी.सेटस फक्त नेहमीचा वीज पुरवठा खंडित असताना कार्यरत राहतील. डी. जी. सेट असणा-या विभागातील ध्वनी चीपातळी ७0 ते ८0 डी बी (ए) इतकी अपेक्षित आहे.
- पंप्स, कॉप्रेसर्स, बॉयलर हाऊस, ट्रक वाहतूक इत्यादीमुळे आवाजाचे प्रदुषण होईल.

२. नियंत्रण उपाय

- ध्वनी नियंत्रणासाठी आयसोलेशन, सेपरेशन आणि इन्स्युलेशन तंत्रे वापरली जातील. इअरमफ्स, ई. स्वरूपात कामगारांना वैयक्तीक सुरक्षा साधने (PPE) पुरविण्यात येतील. तसेच ध्वनीची पातळी कमी करण्यासाठी डी. जी. सेट स्वतंत्र कॅनॉपी मध्ये बंदीस्त करण्यात आले आहेत.

इ. घातक स्वरूपाचा कचरा

तक्ता १0 घातक स्वरूपाच्या कच-याचा तपशील

क्र.	प्रकल्प	कच-याचा प्रकार	परिमाण (मे.टन /वर्ष)		विल्हेवाट पद्धत
			सध्याचा	विस्तारीकरणानंतर	
१.	साखर कारखाना, आसवनी व सहवीज	५.१ स्पेंट ऑईल	0.१६	0.२	आधिकृत पुनर्विकेता
		३३.३ कंटामिनेटेड कॉटन वेस्ट	0.२	0.३	आधिकृत पुनर्विकेता
		३३.१ एम्टी कंटेनर	२५	३0	आधिकृत पुनर्विकेता

फ. घन स्वरूपाचा कचरा

तक्ता ११ घन स्वरूपाच्या कच-याचा तपशील

क्र.	प्रकल्प	कच-याचा प्रकार	परिमाण (मे.टन /दिन)		विल्हेवाट पद्धत
			सध्याचा	विस्तारीकरणानंतर	
१.	साखर कारखाना व सहवीज प्रकल्प	ई.टी.पी. स्लज	0.८	१.0	खत म्हणून वापरले जाईल
		बॉयलरची राख (अगॅस)	१८	१८	
२.	आसवनी प्रकल्प	बॉयलरची राख (कोळसा+अगॅस)	--	५	वीट निर्मितीसाठी /सिमेंट फॅक्टरी साठी
		यीस्ट स्लज	५	८	खत म्हणून वापर
		सी.पी.यु. स्लज	0.३	0.५	

ब. वासाचा उपद्रव

सध्याच्या प्रकल्पांतर्गत पाईप लाईन्स, सांडपाणी साठवणूक, खराब मील सॅनिटेशन आणि दुर्लक्षित ड्रेन्स इ. वासाच्या उपद्रवाचे स्त्रोत असतील. सध्याची पद्धत जसे की नीटनेटके हाऊस किपींग, ई.टी.पी. युनिट मधील मैला व्यवस्थापन, ड्रेन्ससाठी ब्लिचींग पावडरचा वापर हे विस्तारिकरणांतर्गत पाळली जाईल.

भ. नियम व अटींचे पालन

सध्याच्या प्रकल्पाअंतर्गत महाराष्ट्र प्रदुषण नियंत्रण मंडळ (MPCB) किंवा तत्सम संस्थेमार्फत सांडपाणी प्रक्रिया व विल्हेवाट, घातक स्वरूपाचा कचरा व घन कचरा हाताळणी व विल्हेवाट तसेच वायु ऊत्सर्जने इ. संबंधित घालुन देण्यात आलेल्या सर्व कायदयांचे व नियमांचे काटेकोरपणे पालन केले जाते. सदर कार्यपद्धती प्रस्तावित विस्तारीकरण प्रकल्पांतर्गतही पाळली जाईल.

म. पर्यावरण व्यवस्थापन विभाग

दि.सा.मा.शु.फ.लि.मध्ये पर्यावरण व्यवस्थापन विभाग कार्यरत आहे. या विभागातील सर्व सदस्य उच्च शिक्षित आणि संबंधीत क्षेत्रातील योग्य तो अनुभव असलेले आहेत. सध्याच्या व प्रस्तावित पर्यावरण व्यवस्थापन विभागामधील सदस्य खालीलप्रमाणे–

तक्ता १२ पर्यावरण व्यवस्थापन विभाग

क्र.	नावे	पद	संख्या
१	श्री. नन्दकुमार गिरमे	अध्यक्ष	१
२	श्री.सुरेश जगताप	चिफ इंजिनीयर	१
३	श्री.अविनाश गायकवाड	आसवनी प्रभारी	१
४	श्री. संजय पांढरे	सहयोज व्यवस्थापक	१
५	श्री. नवाज शेख	पर्यावरणीय अधिकारी	१
६	श्री. विठ्ठल आडत	मुख्य रसायनतज्ञ	१
७	--	लॅबोरेटरी रसायनतज्ञ	२
८	--	ई.टी.पी.ऑपरेटर व इतर स्टाफ	५
		एकुण	**१३**

सध्याच्या व विस्तारीकरण प्रकल्पांमधील पर्यावरण घटकांसाठी व त्यांच्या देखभालीसाठी लागणा-या खर्चाचा तपशील खालीलप्रमाणे:-

तक्ता १३ देखभाली साठीच्या खर्चाचा तपशील

क्र.	तपशील	खर्च (रू. लाख मध्ये)	
		भांडवली गूंतवणूक	वार्षिक देखभाल व दुरूस्ती
अ	**सध्याच्या प्रकल्पासाठी**		
१.	हवा प्रदुषण नियंत्रणासाठी ई.एस.पी., ७२ मी. उंचीची चिमणी	३२५.०	४०.०
२.	जल प्रदुषण नियंत्रण ई.टी.पी. व सी.पी.यु.	४००.०	६०.०
३.	ध्वनी प्रदुषण नियंत्रण	२५.०	५.०
४.	घन कचरा मॅनेजमेंट	२५.०	५.०
५.	व्यवसायविषयक आरोग्य व सुरक्षीतता	३०.०	५.०
६.	एन्व्हायरमेंटल मॉनिटरींग व मॅनेजमेंट	३०.०	५.०
७.	हरित पट्टा विकास व रेन वॉटर हार्वेस्टिंग	१००.०	३०.०
	एकुण	**९३५.०**	**१५०.०**
ब	**विस्तारीकरण प्रकल्पासाठी**		
१.	२२ टन प्रति तास बॉयलर, ई.एस.पी., ६० मी. उंचीची चिमणी	२५००.०	५०.०
२.	जल प्रदुषण नियंत्रण STP, MEE व ATFD	२००.०	५०.०
३.	ध्वनी प्रदुषण नियंत्रण	१०.०	३.०

क्र.	तपशील	खर्च (रू. लाख मध्ये)	
		भांडवली गूंतवणूक	वार्षिक देखभाल व दुरूस्ती
४.	व्यवसायविषयक आरोग्य व सुरक्षीतता	२०.०	५.०
५.	एन्व्हायरमेंटल मॉनिटरींग व मॅनेजमेंट	१५.०	५.०
	एकुण	**२७४५.०**	**९३.०**

य) रेनवॉटर हार्वेस्टिंग संकल्पना

- प्रकल्पाचे एकुण क्षेत्र - २,७१,०२१ चर्ग मी.
- एकुण शिकामे क्षेत्र - १,०१,०१३.३६ चर्ग मी.
- सरासरी वार्षिक पाऊस - ४५० मिमी.

➢ रुफटॉप हार्वेस्टिंग

- रुपटॉप हार्वेस्टिंग क्षेत्र - १४,९८५ चर्ग मी.
- रुपटॉप हार्वेस्टिंग मधून मिळणारे पाणी - ५,३९४.६ घन मी.

➢ सरफेस हार्वेस्टिंग

- सरफेस हार्वेस्टिंग क्षेत्र - २,१३,७५१.३६ चर्ग मी.
- सरफेस हार्वेस्टिंग मधून मिळणारे पाणी - २९,२४६ घन मी.

रुपटॉप हार्वेस्टिंग आणी सरफेस हार्वेस्टिंग मधून उपलब्ध होणारे पाणी -

५,३९५ + २९,२४६ = ३४,६४१ घन मी.

म्हणजेच ३४ दशलक्ष लिटर्स (ML)

र) हरित पट्टा माहिती

तक्ता १४ क्षेत्रफळाची माहिती

क्र.	तपशील	क्षेत्र (चर्ग.मी)		
		साध्याची	प्रस्तावित	एकूण
१	**एकुण क्षेत्र**			**२,७१,०२१**
२	बांधकाम क्षेत्र			
	i. साखर कारखाना, सहवीज प्रकल्प व आसवनी प्रकल्प	५५,२६९.६४	२,०००.०	५७,२६९.६४
	ii. रस्ता क्षेत्र	४,३३०.०	--	४,३३०.०
	एकूण	५९,५९९.६४	२,०००.०	६१,५९९.६४
३	हरित पट्टा	१,०८,४०८.०	--	१,०८,४०८.०
४	एकुण खुले क्षेत्र			**१,०१,०१३.३६**

हरित पट्टा विकसित करण्यासाठी SPM, SO_2 चे उत्सर्जन या बाबी प्रामुख्याने विचारात घेतल्या आहेत. SPM, SO_2 यांच्या उत्सर्जनांमुळे होणारे परिणाम कमी करण्यास उपयुक्त असा हरित पट्टा विकास कार्यक्रम राबविला आहे. तसेच नियोजित हरित पट्टयातील झाडांमुळे इंडस्ट्रीमध्ये तयार होणा-या ध्वनीची तीव्रता कमी होऊन परिसरात होणारे ध्वनी प्रदुषण कमी होण्यास मदत होते. यानुसार SO_2 आणि ध्वनी प्रदुषण नियंत्रण इ. बाबी लक्षात घेऊन हरित पट्टा विकास कार्य क्रमाअंतर्गत विविध जातीच्या झाडांची लागवड केली आहे.

आकृती ८ सध्याच्या प्रकल्पातील हरित पट्टा

ल) सामाजिक व आर्थिक विकास

सामाजिक व आर्थिक विकास अंतर्गत प्रकल्पास केंद्रस्थानी मानुन १० कि. मी. परीघ क्षेत्रामधील गावांचे सर्वेक्षण केले गेले. या अंतर्गत वैयक्तिकरित्या लोकांच्या मुलाखती मराठी प्रश्नावलीद्वारे घेण्यात आल्या. अधिक माहीतीसाठी EIA रिपोर्ट मधील प्रकरण – ३ सामाजिक व आर्थिक विकास मुद्दा पहा. सामाजिक व आर्थिक विकास अभ्यासामधील निरीक्षण आणि निष्कर्ष पुढील प्रमाणे

- अभ्यास क्षेत्रातील बहुतांश गावांमध्ये मुलभूत सुविधा जसे की; पिण्याचे पाणी, प्राथमिक शिक्षण सुविधा, शौचालये, बीज, चांगली वाहतुक सुविधा व समाधानकारक शैक्षणिक सुविधा उपलब्ध आहेत.
- अभ्यास क्षेत्रातील बहुतांश लोकसंख्या चांगली कमाई असलेली आहे याचे मुख्य कारण ऊस शेती आहे.
- कारखान्याद्वारे स्थानिक लोकांना प्रत्यक्ष आणि अप्रत्यक्षपणे रोजगार पुरविला जातो.
- बहुतांश गावांमध्ये जलनिःसारण सुविधेचा अभाव, खुली गटारे तसेच विखुरलेला घन कचरा व आरोग्य सुविधा यांचा अभाव आहे.
- अपुरी व दुर अंतरावर असणा-या आरोग्यसुविधा ही स्थानिकांपुढील सर्वात मोठी समस्या आहे.

८) पर्यावरण विषयक तपासणी कार्यक्रम

अभ्यासासाठी निवडलेल्या भागाची पूर्वपाहणी फेब्रुवारी २०१९ मध्ये करण्यात आली होती. प्रस्तावित प्रकल्पाच्या सभोवतालच्या हवामान परिस्थीतीच्या माहितीसाठी हवा, पाणी व माती स्वरूप इ. गोष्टींचा अभ्यास मार्च २०१९ ते मे २०१९ मध्ये केला गेला होता. या प्रस्तावामध्ये मार्च २०१९ ते मे २०१९ या दरम्यानच्या कालावधीमध्ये गोळा केलेली माहीती नमूद केली आहे. या संबंधीची द्वितीय स्तरावरील माहिती ही सरकारी विभागांकडून घेण्यात आली आहे ज्यामध्ये भुर्गभीय पाणी, माती, शेती आणि वने इ. समावेश आहे.

अ. जमीनीचा वापर

जमीन वापराच्या अभ्यासामध्ये भागाची रचना, कारखाने, जंगल, रस्ते आणि रहदारी इ. गोष्टींचा विचार केला जातो. संबंधीत माहिती ही विविध द्वितीय स्तरांवरून जसे की जनगणनापुस्तिका, सरकारी कार्यालये, सर्वे ऑफ इंडिया टोपोशिटस्, याच बरोबर सॅटेलाईट इमेजीस् व जागेवरील प्राथमिक सर्वे इ. मधुन घेण्यात आली आहे.

ब. अभ्यासासाठी निवडलेल्या जमीनीचा वापर / व्यापलेलीजमीन

तक्ता १५ जमीनीचा वापर / व्यापलेलीजमीन

क्र.	जमीनीचा वापर/व्यापलेलीजमीन	क्षेत्र (हेक्टर)	टक्केवारी(%)
१.	बांधकामाखालील जमीन	२५५०	८.१२
२.	लागवडीखालील जमीन	१३,६००	४३.२९
३.	ओसाड जमीन	७४६५	२३.७६
४.	पाण्याचे ठिकाण	६५०	२.०७
५.	गवताळ व खुरटी जमीन	७१५०	२२.७६
	एकुण	**३१४१५.००**	**३१,४१५**

क. हवामानमाहिती

सदर पाहणीसाठी ब्यूरो ऑफ इंडियन स्टॅन्डर्ड (BIS) आणि इंडियन मेट्रोलॉजी डिपार्टमेंट (IMD) यांनी नमूद केलेली मानके वापरली आहेत. हवामान परिस्थितीच्या माहितीसाठी वेगवेगळया हवामान घटकांचा अभ्यास प्रत्यक्ष जागेवरती केला गेला आहे. यासंबंधीची द्वितीय स्तरावरील अधिक माहिती ही हवामान विभाग, सोलापूर येथून घेण्यात आली आहे. त्यामध्ये तापमान, आर्द्रता, पर्जन्यमान इ. बाबींचा समावेश आहे.

वेगवेगळया हवामान घटकांचा अभ्यास हा मार्च २०१९ ते मे २०१९ यादरम्यान केला गेला होता. या अभ्यासातील परिमाणे, उपकरणे व वारंवारता यांचा तपशील ई.आय.ए. रिपोर्टच्या प्रकरण क्र. ३ मध्ये देणेत आला आहे.

ड) हवेचा दर्जा

या विभागामधून नमुने घेतलेल्या ठिकाणांची निवड, नमुना घेण्याची पद्धत, पृथःकरणाची तंत्रे आणि नमुना घेण्याची वारंवारता इ. गोष्टींची माहिती दिली आहे. मार्च २०१९ ते मे २०१९ या कालावधी मधील निरीक्षणानंतरचे निकाल सादर केले आहेत. सर्व मॉनिटरींग असाइनमेंटस्, नमुने घेणे व त्यांचे पृथःकरण NABL व MoEFCC, New Delhi मान्यता प्राप्त तसेच ISO ९००१ -२०१५ व OHSAS १८००१ – २००७ मानांकित मे. ग्रीन एन्वायरोसेफ इंजिनीअर्स अँड कन्सल्टंटस् प्रा. लि., पुणे या

प्रयोग शाळेमार्फत केले आहे. अभ्यास क्षेत्रातील हवेच्या गुणवत्तेचे मूल्यमापन करण्यासाठी PM_{10}, $PM_{2.5}$, SO_2, NO_X व CO. या घटकांचे वेगवेगळया स्थानाकांवर मॉनिटरींग केले गेले.मॉनिटरींगची वेगवेगळी स्थानके खाली दिलेल्या तक्त्यामध्ये दाखवली आहेत.

तक्ता १६ सभोवतालची हवागुणवत्ता परिक्षणाची (AAQM) स्थानके

AAQM केंद्र आणि संकेतांक	स्थानकाचे नाव	साईट पासूनचे अंतर (कि.मी.)	साईटला अनुसरुन दिशा
A1	साईट	-	-
A2	लुमेवाडी	३.२१	NW
A3	भिजवडी	२.२५	N
A4	म्हाळुंग	३.३४	SE
A5	श्रीपूर	६.७	SSE
A6	शिवाजीनगर	५.६	WS
A7	ताम्हवे	४.६	SW
A8	माळीनगर	०.३३	E

तक्ता १७ सभोवतालची हवा गुणवत्ता परिक्षणाची (AAQM) स्थानकांचा सारांश (मार्च २०१९ ते मे २०१९)

घटक		स्थानकाचे नाव							
		साईट	लुमेवाडी	भजवडी	म्हाळुंग	श्रीपूर	शिवाजी नगर	ताम्हवे	माळीनगर
PM_{10} ($\mu g/M^3$)	Max.	५०.१	५९.६	४५.१	४८.६	४५.३	४८.९	५६.२	५३.४
	Min.	४०.१	५२.८	४०.१	४४.५	४२.३	४३.८	५०.९	४६.८
	Avg.	४४.४	५६.०	४३.०	४६.८	४३.८	४६.४	५३.१	५०.२
	98%	४७.९	५८.५	४४.९	४८.२	४५.१	४८.८	५५.४	५३.२
$PM_{2.5}$ ($\mu g/M^3$)	Max.	१६.१	१९.२	१३.७	१७.८	१४.५	२१.५	१८.५	१८.७
	Min.	१२.२	१४.८	१०.२	१५.७	१२.३	१७.१	१५.८	१५.८
	Avg.	१४.१	१७.२	११.८	१७.०	१३.२	१९.५	१७.१	१७.१
	98%	१५.९	१८.८	१३.२	१७.६	१४.१	२१.३	१८.३	१८.५
SO_2 ($\mu g/M^3$)	Max.	२०.८	२९.८	१६.०	१९.७	२२.८	१९.३	२५.७	२४.५
	Min.	१०.१	१८.६	९.१	१३.२	१२.२	१२.४	१४.७	१५.६
	Avg.	१४.९	२४.०	१३.०	१६.९	१८.७	१६.१	१९.९	२०.१
	98%	१८.७	२९.२	१५.७	१९.५	२२.६	१८.८	२३.८	२३.८
NOx ($\mu g/M^3$)	Max.	४०.८	४४.५	२४.७	३३.५	३०.४	२९.९	४३.७	३५.२
	Min.	२२.१	२१.५	२०.१	२४.८	१३.४	२२.०	२९.४	२६.७
	Avg.	३१.२	३७.७	२२.५	२९.०	२५.८	२६.०	३६.१	३०.९
	98%	३७.२	४२.८	२४.४	३२.९	२९.६	२९.२	४०.९	३४.७
CO (ppm)	Max.	०.०२	०.०२	०.०२	०.०२	०.०२	०.०२	०.०२	०.०२
	Min.	०.०१	०.०१	०.०१	०.०१	०.०१	०.०१	०.०१	०.०१
	Avg.	०.०२	०.०१	०.०१	०.०१	०.०१	०.०१	०.०२	०.०२
	98%	०.०२	०.०२	०.०२	०.०२	०.०२	०.०२	०.०२	०.०२

Note: PM_{10}, $PM_{2.5}$, SO_2 and NO_x are computed based on 24 hourly values.

तक्ता १८ National Ambient Air Quality Standards (NAAQS) by CPCB

(Notification No. S.O.B-29016/20/90/PCI-L by MOEFCC; New Delhi dated 18.11.2009)

Zone Station	PM_{10} µg/M^3		$PM_{2.5}$ µg/M^3		SO_2 µg/M^3		NOx µg/M^3		CO mg/M^3	
	24 Hr	A.A.	24 Hr	A.A	24 Hr	A.A.	24 Hr	A.A.	8 Hr	1 Hr
औद्योगिक आणि मिश्रित भाग	100	60	60	40	80	50	80	40	4	4
पर्यावरणदृष्ट्या संवेदनशिल भाग	100	60	60	40	80	20	80	30	4	4

Note: A.A. represents "Annual Average

इ) पाण्याची गुणवत्ता

पाण्याच्या भौतिक, रासायनिक गुणधर्मांची आणि त्यातील जड धातूंची तपासणी करण्यासाठी MoEFCC, New Delhi मानांकित मे.ग्रीन एन्वायरोसेफ इंजिनीअर्स अँड कन्सल्टंटस प्रा. लि., पुणे यांच्यामार्फत नमुने घेऊन त्यांचे पृथःकरण केले.
स्टॅंडर्ड ToRs नुसार ८ samples चाचणी करणे अनिवार्य आहे. पण मार्च २०१९ ते मे २०१९ या कालावधी मध्ये नदी व इतर पाण्याचे स्त्रोत उपलब्ध नसल्याने भूगर्भातील पाण्याच्या चाचणीसाठी ४ ठिकाणे व भूपृष्ठीय पाण्याच्या चाचणीसाठी १ नमुना घेतला आहे.

तक्ता १९ पृष्ठभागावरील पाण्यासाठी निवडलेली ठिकाणे

स्थानक संकेतांक	ठिकाण	
SW1	लवंग	प्रवाहाच्या वरील दिशेने

तक्ता २० भूगर्भातील पाण्यासाठी निवडलेली ठिकाणे

स्थानक संकेतांक	को-ऑर्डिनेटस्	
	अंक्षांश	रेखांश
GW1	१७°५३'४४.८२'' उ	७५°२'४५.१७''पू
GW2	१७°५३'५८.०३'' उ	७५°२'४३.६५''पू
GW3	१७°५३'२८.७७'' उ	७५°३'११.७५''पू
GW4	१७°५३'५१.७०'' उ	७५°३'४४.६९''पू

फ) ध्वनी पातळीचे सर्वेक्षण

ध्वनी पातळीचे सर्वेक्षणसाठी कारखाना परिसरास केंद्र मानून त्यापासून १० कि.मी. अंतराच्या परिघामध्ये येणारा भाग हा अभ्यास क्षेत्र म्हणून विचारात घेण्यात आला होता. ध्वनी पातळीचे मॉनिटरींग साठी रहिवाशी, व्यावसायिक, औद्योगिक, शांतता विभाग असे चार विभाग विचारात घेण्यात आले होते. अभ्यासामध्ये काही महत्वाच्या रस्त्यांवर वाहतुकीमुळे होणारा आवाज सुद्धा समाविष्ट केला होता. प्रत्येक ठिकाणी २४ तासासाठी ध्वनी पातळीचे मॉनिटरींग करण्यात आले. ध्वनी पातळीचे मॉनिटरींगची वेगवेगळी स्थानके खाली दिलेल्या तक्त्यामध्ये दाखवली आहेत.

तक्ता २१ ध्वनी नमुना ठिकाणे

स्थानक सांकेतांक	स्थानकाचे नाव	साईट पासुनचे अंतर (कि.मी.)	साईट पासुनची दिशा
N1	साईट	--	--
N2	सवतगाव	०.९२	N
N3	ताम्बोळे	४.६	SW
N4	लवंग	७.३	SE
N5	म्हाळुंग	३.३४	SE
N6	लुमेवाडी	३.२१	NW
N7	अकलुज	३.५	SW
N8	संग्रामनगर	१.८	SW

तक्ता २२ ध्वनी पातळी

ठिकाणे	सरासरी ध्वनी पातळी (डेसिबल)					
	L_{10}	L_{50}	L_{90}	$L_{eq\ (day)}$	$L_{eq\ (night)}$	L_{dn}
N1	४९.२८	५५.९८	५८.५९	६७.७१	४७.८६	६५.९३
N2	३८.१६	४१.०८	४५.३९	५१.५०	३२.४६	४९.७७
N3	३४.९१	४०.०८	४३.४८	५२.२२	३१.५२	५०.४०
N4	३७.७२	४१.५३	४६.०३	५२.९०	३३.५२	५१.१५
N5	३७.४८	४१.३३	४४.०१	५१.७१	३२.५७	४९.९८
N6	३५.२९	४१.५८	४३.४१	५२.८०	३३.२२	५१.०४
N7	३२.९८	३९.९३	४२.५४	५३.८४	३०.७१	५१.९३
N8	३४.७६	४०.६३	४३.०४	५१.६३	३२.६२	४९.९१

ग) सामाजिक - आर्थिक रचना

सामाजिक व आर्थिक स्तरावरून त्याभागातील प्रगती दर्शनास येते. कोणत्याही प्रकारच्या विकास प्रकल्पामुळे कार्यक्षेत्रात राहणा-या लोकांच्या राहणीमानावर, सामाजिक व आर्थिक स्तरावर प्रभाव पडतो. याबद्दलची सविस्तर माहिती ई.आय. ए. रिपोर्ट मधीलप्रकरण ३ मध्ये आहे.

ष) पर्यावरण

Random Sampling व Oppurtunistic Method या पध्दतीचा वापर करून त्या भागातील जैवविविधतेचा अभ्यास करणेत आला.

दृच्छिक नमुना पध्दतीने वनस्पतींसाठी आणि संधीयुक्त ठिकाण पाहणी पध्दती व मानक ठिकाण गणती पध्दतीप्रमाणे प्राण्यांसाठी कार्यक्षेत्र सर्वेक्षण करण्यात आले. बायोटाच्या गुणात्मक अभ्यासासाठी ढोबळ निरीक्षण पाहणी आणि अंदाज पध्दतीचा अवलंब करण्यात आला. स्थानिक पर्यावरण बदलाचे माप्ते व पक्षी हे चांगले निदर्शक असल्यामुळे त्यांचा अभ्यास करणेत आला. वनस्पती मुख्यतः मोठया वर्गातील झाडांची ओळख व त्यांचे प्रमाण यांच्याकडे अभ्यास केंद्रित होता.

८) <u>इतर अभ्यास</u>

आपत्ती व्यवस्थापन

आपत्ती व्यवस्थापन करताना, खालील बाबींचा विचार केला जातो

१. प्रकल्पाच्या शेजारी राहणा-या लोकांना प्रकल्पामुळे कमीतकमी धोका असावा.
२. प्रकल्पामध्ये काम करणा-या कामगारांना शेजारी राहणा-या लोकांपेक्षा जास्त धोका अपेक्षित आहे, यामुळे प्रकल्पामध्ये काम करणा-या कामगाराना संभाव्य धोक्यापासून रक्षणाचे ट्रेनिंग दिले गेले पाहिजे जेणेकरून संभाव्य धोके कमी होतील.

ग्रीन ए. जी. (१९८२) यांनी आपत्ती व्यवस्थापन करताना विचारात घेतलेल्या बाबी -

१. प्रकल्पास धोकाः जेव्हा जिवीतास कमीतकमी धोका असतो व तो धोका पुढे कमी करणे शक्य होत नाही यावेळी ह्या धोक्यास प्राथमिकता दिली गेली पाहिजे. या अंर्तगत संभावित वित्तीय नुकसानी च्या धोक्याचा विचार केला जातो.
२. खामगार व जनतेस धोकाः फेटल ॲक्सिडेंट रेट (एफ. ऐ. आर) किंवा फेटलॲक्सिडेंट फिक्वेंन्सी रेट (एफ.ऐ.एफ.आर) याचा वापर कामगार व जनतेस धोके यांचा अभ्यास करताना वापर केला जातो. एफ.ऐ.आर व एफ.ऐ.एफ.आर म्हणजेच औद्योगिक अपघातांमध्ये १000 लोकांमागे होणा-या अपेक्षित मृतांची संख्या होय.

या संबंधीची अधिक माहिती ई.आय.ए. रिपोर्ट मधीलप्रकरण ७ येथे जोडली आहे.

९) पर्यावरणावर होणारे परिणाम आणि त्यासाठीच्या उपाययोजना

अ. भौगोलिक रचनेवर परिणाम

सदर प्रकल्पांतर्गत सध्याच्या प्रकल्पामध्ये विस्तारीकरण होणार असलेने संपादित जागेच्या भौगोलिक रचनेवर परिणाम अपेक्षित नाही. सदर औद्येगिक प्रकल्पामुळे काही सकारात्मक फायदे जसे की जमिन विकसिकरण, व झाडे लावणे अपेक्षित आहे.

ब.वातावरणावरील परिणाम

प्रस्तावित प्रकल्पामुळे हवामानावर परिणाम अपेक्षित नाही कारण जास्त तापमान असणा-या वायुंचे उत्सर्जन अपेक्षित नाही.

क. हवेच्या दर्जावरील परिणाम

प्रकल्पामुळे होणा-या परिणामांची छाननी करण्यासाठी कारखाना परिसरास केंद्र मानून त्यापासून १0 कि.मी. अंतराच्या परिघामध्ये येणारा भाग विचारात घेतला गेला आहे.

१.मुलभूत ॲम्बिएंट वायू प्रमाणके

मार्च २0१९ ते मे २0१९ मध्ये करण्यात आलेल्या कार्यक्षेत्र सर्वेक्षणा दरम्यान नोंद करण्यात आलेली २४ तासामधील ९८ पर्सेंटाईल प्रमाणके आणि PM_{10}, $PM_{2.5}$, SO_2 व NO_X यांची सभोवतालच्या हवेमधील सरासरी यानुसार मिळालेल्या प्रमाणांना मुलभूत प्रमाणके मानण्यात आली आहेत. सदर प्रमाणके परिसरामध्ये होणारा परिणाम दर्शवितात.सध्याचीमुलभूत प्रमाणके ई.आय.ए. रिपोर्ट मधीलप्रकरण ४ तसेच पुढील तक्त्यामध्ये मांडण्यात आली आहेत.

तक्ता २३ मुलभूत प्रमाणके

तपशील	PM_{10}	$PM_{2.5}$	SO_2	NO_X	CO
98 percentile	६५.५५ $\mu g/m^3$	२२.५७ $\mu g/m^3$	२७.५१ $\mu g/m^3$	३१.५२ $\mu g/m^3$	०.७५४ mg/m^3
NAAQS	१०० $\mu g/m^3$	६० $\mu g/m^3$	८० $\mu g/m^3$	८० $\mu g/m^3$	४ mg/m^3

२. हवा प्रदुषणस्त्रोत

सदर प्रकल्पामध्ये २२ टन प्रति ताश क्षमतेचा बॉयलर बसविण्यात येईल. प्रस्तावित व सध्याच्या सर्व बॉयलर्स साठी ई.एस.पी. हे प्रदूषण नियंत्रक उपकरण असणार आहे.

ड. जलस्त्रोतावरील परिणाम

१. भुपृष्ठीय जलस्त्रोतावरील परिणाम

सध्याच्या व विस्तारीकरण प्रकल्पांसाठी लागणारे पाणी हे भुपृष्ठीय जलस्त्रोतांमधुन घेण्यात येईल.विस्तारीकरणानंतर साखर कारखाना, आसवनी प्रकल्प व सहवीज प्रकल्पामधुन तयार होणारे एकुण १८ घन मी. प्रतिदिन एवढे सांडपाणी सध्याच्या सांडपाणी प्रक्रिया केंद्रात प्रक्रियीत केले जाईल. घरगुती सांडपाण्यावर प्रस्तावित सांडपाणी प्रक्रिया केंद्रात प्रक्रिया केली जाईल. कोणत्याही प्रकारचे प्रक्रिया न केलेले सांडपाणी नदी अथवा नाल्यामध्ये विसर्जीत करणार नाही.अधिक माहितीई.आय.ए. रिपोर्ट मधील प्रकरण क्र. २ मध्ये देण्यात आली आहे.

२. भूगर्भिय पाण्याच्या गुणवत्तेवर होणारा परिणाम

प्रकल्पांसाठी लागणारे जरूरी पाणी हे नीरा नदीच्या उजव्या कालव्यामधुन घेण्यात येईल. प्रस्तावित विस्तारीकरणा अंतर्गत भूजलाचा वापर होणार नाही. या शिवाय कारखान्यामधुन कोणत्याही प्रकारचे अप्रक्रियीत सांडपाणी विसर्जीत होणार नाही त्यामुळे भूजल पाणी पातळीवर व गुणवत्तेवर कोणताही परिणाम होणार नाही.

इ. माती वर होणारे परिणाम

मातीच्या गुणधर्मावर होणारे परिणाम हे साधारणपणे वायू उत्सर्जन, सांडपाण्याचे आणि घनकचरा विनियोग यांमुळे होत असतात.सध्याच्या साखर कारखाना व सहवीज प्रकल्पातून वर उल्लेख केलेले घटक विसर्जीत होणार नाहीत.बॉयलर्सना ई.एस.पी. व वेट स्क्रबर बसविले आहेत. बॉयलरची राख व ई.टी.पी. स्लजरूपात घनकचरा निर्माण होईल. बॉयलरची राख वीट निर्मितीसाठी दिली जाईल व ई.टी.पी. स्लज वृक्षारोपनासाठी खत म्हणून वापरली जाईल.घरगुती सांडपाण्यावर प्रस्तावित सांडपाणी प्रक्रिया केंद्रात प्रक्रिया केली जाईल. त्यामुळे वायु प्रदुषके अथवा सांडपाण्यामुळे जमिनीच्या रासायनिक घटकांमध्ये कोणताही मोठा बदल होणार नाही.

फ. ध्वनी मर्यादेवर होणारा परिणाम

अतिध्वनी निर्माण करणा-या यंत्रावर काम करीत असणा-या कामगारांचे संतुलन बिघडुन कामावर परिणाम होण्याची शक्यता असते. ध्वनी निर्माण होणाऱ्या स्त्रोताजवळ असणाऱ्या लोकांची ऐकण्याची क्षमता कमी होऊ शकते. सदर प्रकल्पामध्ये मुख्यत: साखर कारखान्यातील मील, कॉम्प्रेसर, बॉयलर, टर्बाइन व

डि.जी. सेट हे ध्वनी प्रदूषणाचे मुख्य स्त्रोत ठरतील.सदर प्रकल्प हा ध्वनी प्रदुषण करणारा नाही.

ग. जमीन वापरावर होणारा परिणाम

साखर कारखाना, सहवीज व आसवनी प्रकल्पाचे विस्तारीकरण हे सध्याच्या साखर कारखाना, आसवनी प्रकल्प व सहवीज प्रकल्पामध्ये करण्यात येणार आहे. सदर जागेचा औद्योगिक कारणांसाठी वापर करण्यात येत आहे यामुळे जमीन वापरामध्ये बदल अपेक्षित नाही.

ष. झाडांवर व प्राण्यांवर होणारा परिणाम

प्रकिया न केलेले सांडपाणी कारखान्याच्या सभोवताली विसर्जित केल्यास पाणी संस्था व त्यावर अवलंबून असलेली जैवविविधतेवर परिणाम संभोवतो. SPM च्या स्वरूपात प्रदुषण होऊ शकते. याचा विपरीत परिणाम अंशतः पक्षी, सभोवतालची पीके आणि स्थानिक लोकांवर होऊ शकतो.झाडांवर व प्राण्यांवर होणारा परिणामांची माहिती ई.आय.ए. रिपोर्ट मधीलप्रकरण३ मध्ये देण्यात आलेली आहे.

द. ऐतिहासिक ठिकाणावर होणारा परिणाम

म्हाळुंग येथील हेमाडपंथी रचना असलेले यमाईदेवी मंदिर प्रकल्पाच्या ५ कि.मी. क्षेत्रात आहे.पण सरकारने सूचित केलेल्या यादीत समावेश नाही व या ऐतिहासिक ठिकाणावर कोणताही परिणाम अपेक्षित नाही.

११)पर्यावरणीय व्यवस्थापन आराखडयाची ठळक वैशिष्टये

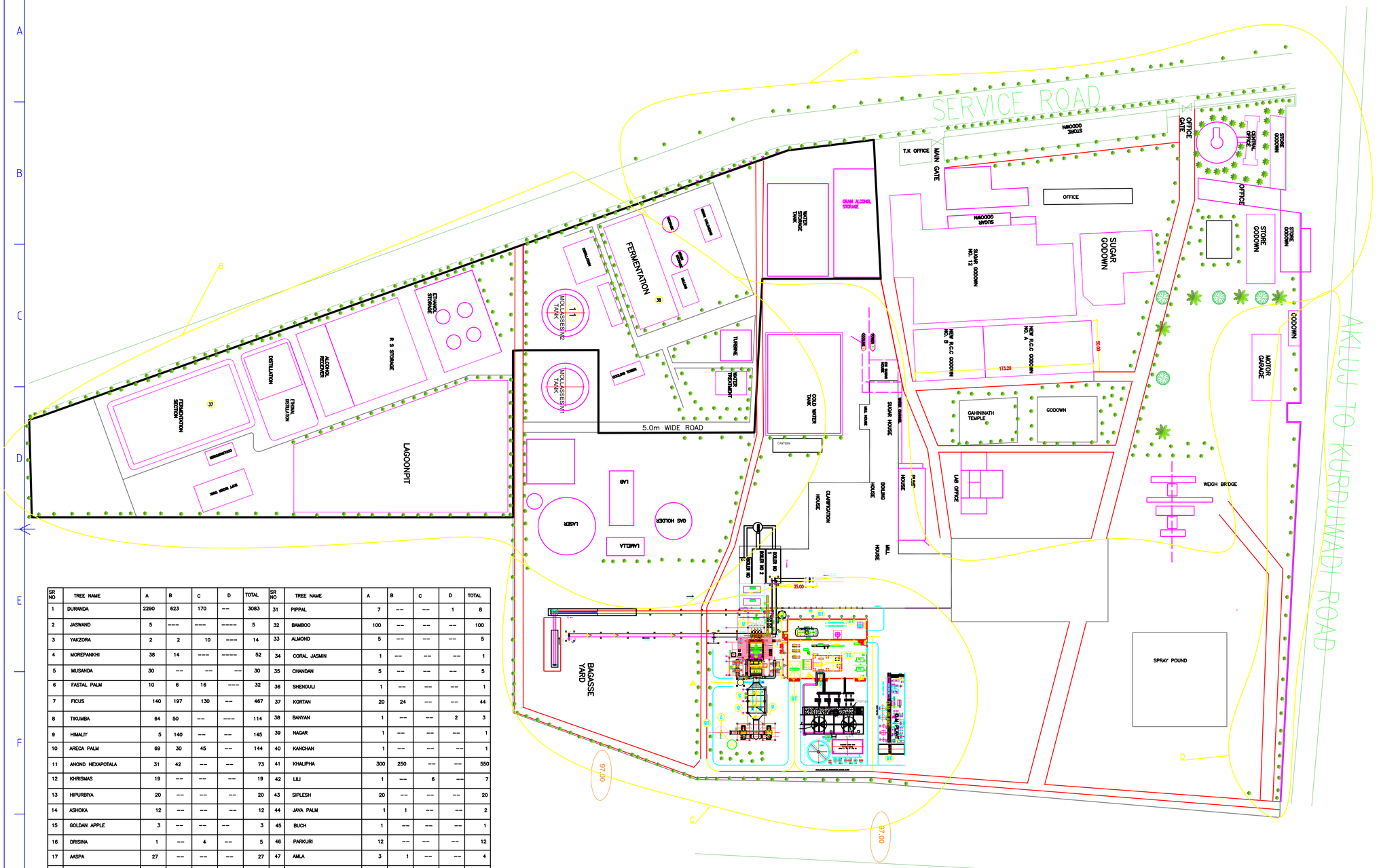
पर्यावरणीय व्यवस्थापन आराखडयाची ठळक वैशिष्टये खालील तक्त्यामध्ये दिलेली आहेत -

तक्ता २४ पर्यावरणीय व्यवस्थापन आराखडा

क्र.	तपशील	ठिकाण	परिमाणे	वारंवारता	तपासणी
१.	हवेची गुणवत्ता	अपविंड - १, डाऊनविंड - २ (मेनगेट जवळ , किण्वन विभाग, आसवनी प्रकल्पाजवळ)	PM_{10}, $PM_{2.5}$, SO_2, NOx, CO	मासिक	MoEFCC & NABL approved Laboratory मधुन
		कामाच्या ठिकाणाची हवेची गुणवत्ता - ८ ठिकाणे			
२.	चिमणीतुन होणारे उत्सर्जन	बॉयलरच्या २ चिमण्या, डी.जी. सेटची २ चिमण्या	SO_2, SPM, NOx	मासिक	
३.	ध्वनिगुणवत्ता	मेनगेट जवळ, किण्वन विभाग, साखर गोदाम, बॉयलर, डी. जी. सेट, टर्बाइन विभाग	Spot Noise Level, recording; Leq(n),Leq(d) , Leq(dn)	मासिक	
		अभ्यास क्षेत्रामधील ठिकाणे - ८ ठिकाणे			
४.	पिण्याचे पाणी	कारखान्याचे उपहारगृह / वसाहत	Parameters as drinking water	मासिक	

क्र.	तपशील	ठिकाण	परिमाणे	वारंवारता	तपासणी
			standards IS10500		
५.	जमीन	८ ठिकाणे	PH, Salinity, Organic Carbon, N.P.K.	मासिक	
६.	पाण्याचीगुणवत्ता	अभ्यास क्षेत्रामधील ठिकाणे (भुगर्भीय पाणी व पृष्ठभागावरील पाणी)	Parameters as per CPCB guideline for water quality monitoring – MINARS/27/ 2007-08	द्वैमासिक	
७.	सांडपाणी	प्रक्रिया न केलेले, प्रक्रिया केलेले	pH, SS, TDS, COD, BOD, Chlorides, Sulphates, Oil & Grease.	मासिक	
८.	कचरा व्यवस्थापन	प्रस्थापित कृतीतून तयार होणा-या कच-याचे वैशिष्टे आणि रुपानुसार व्यवस्थापन केले जाईल	कच-याचे निर्मिती, प्रकिया आणि विल्हेवाट यांची नोंद	वर्षातून दोनदा	दि.सा.मा.शु.फॅ.लि. यांचेकडून
९.	आपातकालीन तयारी जसे की आग व्यवस्थापन	प्रतिबंधात्मक उपाय म्हणून आगीच्या व स्फोट होणाऱ्या ठिकाणी आगीपासून संरक्षण आणि सुरक्षिततेची काळजी घेतली जाईल.	ऑनसाईट ई मरजन्सी व संकटकालीन बाहेर पडण्याचा आराखडा	वर्षातून दोनदा	दि.सा.मा.शु.फॅ.लि. यांचेकडून
१०.	आरोग्य	कारखाण्याचे कामगार आणी स्थलांतरीत कामगारांसाठी आरोग्य शीबीराचे आयोजन	सर्व आरोग्यविषयक चाचण्या	वर्षातून दोनदा	
११.	हरीतपट्टा	कारखान्याच्या परीसरामध्ये आणी शेजारील गावांमधला	झाडे जगण्याचा दर	तज्ञांनुसार	
१२.	सी.ई.आर.	निर्देशाप्रमाणे	--	सहा महिन्यातुन	

ALTERNATIVE–01



SR NO	TREE NAME	A	B	C	D	TOTAL	SR NO	TREE NAME	A	B	C	D	TOTAL
1	DURANDA	2290	623	170	--	3083	31	PIPPAL	7	--	--	1	8
2	JASWAND	5	---	---	----	5	32	BAMBOO	100	--	--	--	100
3	YAKZORA	2	2	10	---	14	33	ALMOND	5	--	--	--	5
4	MOREPANKHI	38	14	---	----	52	34	CORAL JASMIN	1	--	--	--	1
5	MUSANDA	30	--	--	--	30	35	CHANDAN	5	--	--	--	5
6	FASTAL PALM	10	6	16	---	32	36	SHENDULI	1	--	--	--	1
7	FICUS	140	197	130	--	467	37	KORTAN	20	24	--	--	44
8	TIKUMBA	64	50	--	---	114	38	BANYAN	1	--	--	2	3
9	HIMALIY	5	140	--	--	145	39	NAGAR	1	--	--	--	1
10	ARECA PALM	69	30	45	--	144	40	KANCHAN	1	--	--	--	1
11	ANOND HEXAPOTALA	31	42	--	--	73	41	KHALIPHA	300	250	--	--	550
12	KHRISMAS	19	--	--	--	19	42	LILI	1	--	6	--	7
13	HIPURBIYA	20	--	--	--	20	43	SIPLESH	20	--	--	--	20
14	ASHOKA	12	--	--	--	12	44	JAVA PALM	1	1	--	--	2
15	GOLDAN APPLE	3	--	--	--	3	45	BUCH	1	--	--	--	1
16	DRISINA	1	--	4	--	5	46	PARKURI	12	--	--	--	12
17	AASPA	27	--	--	--	27	47	AMLA	3	1	--	--	4
18	PAN PALM	2	--	--	--	2	48	UMBAR	6	--	--	--	6
19	OIL PALM	13	--	--	--	13	49	CYCUS	1	3	--	--	4
20	TAMARIND	4	--	--	6	10	50	MEHANDI	3	--	--	--	3
21	BOTTAL PALM	19	57	7	--	83	51	TABLE PAN PALM	--	18	--	--	18
22	JUNGLI	6	--	--	--	6	52	SURU	--	3	--	--	3
23	TAGAR	6	6	15	--	27	53	JASMINUM SAMBAC	--	7	--	--	7
24	ARECA NUT	1	--	--	--	1	54	AASPA GRASS	--	15	--	--	15
25	MANGO	20	2	2	--	24	55	PARKURYA	--	--	11	--	11
26	COCONUT	56	67	--	25	148	56	CHERI	--	--	1	--	1
27	BOGAN VEL	37	25	--	--	62	57	GULMAHAR	--	--	--	15	15
28	NEEM	28	10	--	20	58	58	KARANJI	--	--	--	4	4
29	TUTI	1	--	--	--	1							
30	SUBABAL	1	--	--	--	1		TOTAL	3450	1593	417	73	5533

LEGENDS :-

01)	—
02)	MILL HOUSE
03)	EVAPORATION HOUSE
04)	PAN HOUSE
05)	SUGAR HOUSE
06)	CLARIFICATION HOUSE
07)	BOILER HOUSE
08)	POWER HOUSE
09)	RETUEN BAGGASSE CARRIER
10)	—
11)	M2 MOLLASSES TANKS
12)	—
13)	SULPHUR HOUSE
14)	STORE GODOWN
15)	OPEN YARD
16)	FAN HOUSE
17)	—
18)	--
19)	--
20)	CANE OFFICE
21)	ADMINISTRATIVE BUILDING
22)	WEIGH BRIDGE
23)	SECURITY
24)	SUGAR GODOWN
25)	LIME & SULPHER GODOWN
26)	CHIEF CHEMIST & ENGINEER
27)	CHIMNEY
28)	G.S.R (30 LAC LIT.CAPACITY)
29)	--
30)	D. G. SET
31)	SWITCH YARD
32)	--
33)	GUNNY BAG GODOWN
34)	COGEN COOLING TOWER
35)	BAGGASE SHED
36)	COAL SHED
37)	MOLLASSE BASED DISTILLERY
38)	GRAIN BASED DISTILLERY

REVISIONS			
NO.	DATE	DESCRIPTIONS	

DRAWING TITLE

MASTER LAYOUT

SCALE		NAME	SIGN
1:1000	DRAWN	RANJEET	
DATE	CHECKED	PSB	
18/03/12	APPROVED	PSB	
JOB NO.	DRG. NO.		
12/03	EPSPL-SMSFL-001-R0		

THE SASWAD MALI SUGAR FACTORY LTD., MALINAGAR
MALSHIRAS, SOLAPUR, MAHARASHTRA

SMSFL

MAHARASHTRA POLLUTION CONTROL BOARD

Tel: 24010706/24010437
Fax: 24023516
Website: http://mpcb.gov.in
Email: cac-cell@mpcb.gov.in

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

RED/L.S.I
No:- Format1.0/CAC/UAN No.0000052237/CR - 1910001089

Date: 24/10/2019

To,
The Saswad Mali Sugar Factory Ltd
1B,Malinagar
Malshiras,Solapur-Solapur

Sub: **Renewal of Consent to Operate for 30 KLPD Distillery unit (molasses Base) under RED category.**

Ref:
1. Consent to Renewal accorded by Board vide No. Consent No:Format-1.0/BO/CAC-CELL/UAN No. 0000030662/R/CAC-1802001033 dtd 16.02.2018
2. CAC meeting held on 13.09.2019.

Your application No.MPCB-CONSENT-0000052237 Dated 13.07.2018

For: Consent to Renewal of 30 KLPD Distillery unit (Molasses Base) 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:

1. **The consent to renewal is granted for a period up to 31/08/2021**
2. **The capital investment of the project is Rs.22.0884 Crs. [(CI of Sugar Unit is 141.99 Cr)] (As per C.A Certificate submitted by industry).**
3. **Consent is valid for the manufacture of:**

Sr No	Product/Co-Product Name	Maximum Quantity	UOM
1	Rectified Spirit	900.00	KL/M
2	Ethanol	846.00	KL/M
3	Fusel Oil	15.00	KL/M
4	Impure Spirit	90.00	MT/M

(Distillery Capacity shall not Exceed 30 KLPD)

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

Sr No	Description	Permitted	Standards to	Disposal Path
1.	Trade effluent	300	As per Schedule -I	After volume reduction 210 CMD - Re-boiler followed by Bio-Methanisation followed by MEE & Bio-Composting.
2.	Domestic effluent	02	As per Schedule - I	On land for irrigation.

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

Stack No.	Description of stack / source	APCS	Number of Stack	Standards to be achieved
01	Boiler (from Sugar Unit)	90	1	As per Schedule -II

(As per previous consent of existing unit)

6. **Non-Hazardous Wastes:**

Sr No	Type of Waste	Quantity	UoM	Treatment	Disposal
1	Distillation residue	100	MT/M	Composting	Manure

Maharashtra Pollution Control Board MAHARASHTRA Mumbai

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

Sr No	Category No./ Type	Quantity	UoM	Treatment	Disposal
1	1.7 Spent catalyst and molecular sieve	10	MT/A	Landfill	CHWTSDF

8 Industry shall install online continuous monitoring system as per CPCB guidelines & data to be transmitted directly from Data Logger to Board server .

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

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

11 This consent is issued pursuant to the decision of the 9th Consent Committee Meeting held on 11.09.2019 & 13.09.2019

12 This Consent is issued subject to an order passed or may be passed by Hon'able NGT in application no. 368/2018 and other order related to this matter.

13 The applicant shall make an application for renewal of consent 60 days prior to date of expiry of the consent.

For and on behalf of the
Maharashtra Pollution Control Board.

Maharashtra Pollution Control Board MAHARASHTRA Mumbai

(E. Ravendiran IAS),
Member Secretary

Received Consent fee of -

Sr.No	Amount(Rs.)	Transaction/DR.No.	Date	Transaction Type
1	50000.00	5447656	28/02/2019	RTGS
2	100000.00	7608809	04/05/2018	RTGS
3	15100.00	7612542	13/07/2018	RTGS

Copy to:

1. Regional Officer, MPCB, Pune and Sub-Regional Officer, MPCB, Solapur
   - They are directed to ensure the compliance of the consent conditions.
2. Cheif 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.Conditions for Trade effluent:

A] You have provided comprehensive treatment plant of capacity 500 CMD including Re-boiler followed by Bio-digester, followed by MEE for volume reduction and Bio-Composting on 05 acres land for achieving zero discharge. In no any spent wash shall discharge outside factory premises / on land / into stream directly or indirectly.

B] Zero liquid discharge shall be ensured and no waste/treated water shall be discharged outside the premises. The non-process effluents, RO permeate, MEE condensate etc. shall be suitably treated and reused in the process.

2.Conditions for Sewage/ Domestic effluent:

i. You have provided septic tank and soak pit (for sewage below 20 CMD).

ii. The industry shall operate sewage treatment system to treat the sewage/ domestic effluent so as to achieve the standards as prescribed by the board/under EP Act, 1986 and rules made thereunder from time to time whichever is stringent.

Sr.No	Parameter	Concentration not to exceed(in mg/l except for pH
1.	pH	6.5-9.0
2.	BOD	30
3.	TSS	100

iii. The sewage shall be treated by using septic tank and soak pit and overflow if any shall be used on-land for gardening/irrigation.

3. Conditions for Aerobic composting:

i. The spent wash should be stored in impervious tanks. The spent wash tanks should have proper lining with HDPE and should be kept in proper condition to prevent ground water pollution. As per the CPCB recommendation and undertaking given by the company, storage should not exceed 30 days capacity.

ii. Applicant shall ensure availability of adequate filler material such as press mud, bagasses, agricultural, biological waste as required for effective composting system.

iii. Composted material shall meet the following specifications—

Moisture	30 to 35%
C/N	Below 17
Nitrogen	1.5 to 2%
Phosphorous	1.5 to 2%
Potassium	3 to 4%

iv. The composting site shall be prepared as per the guideline enclosed. Composting shall be such that it includes mechanical mixing and spraying of spent wash along with mechanical aeration to ensure thorough composting. Hand/ manual spraying of spent wash shall not be permitted.

v. The compost leachate (1 gr. of compost mixed with 100 ml. of distilled water and filtered) Filtrate shall conform to the following limit.

pH	Between	Between
BOD 3 days 27 Deg. C	Not to exceed	30 mg/l

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

vii. The composting site/pits shall be made leak proof by proper lining. A catch drain shall be provided around the composting site to collect the storage pond for application on compost depots. Arrangements for overturning of compost material in windrows and spraying of spent wash shall be made to ensure appropriate aeration and uniform distribution of spent wash.

Maharashtra Pollution Control Board MAHARASHTRA Mumbai

viii. In case of composting in open fields, the application of spent wash shall stop by end of April, so that compost is ready and the site is cleared of the composted manure before monsoon (i.e. 31st May). The manure shall be collected and stored on a raised platform with suitable rain cover so that the compost manure is not washed away by rain/runoff.

ix. Characteristic of soil, ground water and effect on crop yield should be monitored in the area where compost is used as manure and results thereof shall be compiled and reported in the Environment statement to be submitted every year.

x. The test wells shall be provided around the compost site for ground water monitoring. The well water quality has to be maintained at 2006 level.

xi. The operation of distillery should be restricted to 270 days in a year and that it will not operate during rainy season.

4. 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:

Sr. No.	Purpose for water consumed	Water consumption quantity (CMD)
1.	Industrial Cooling, spraying in mine pits or boiler feed	110.00
2.	Domestic purpose	15.00
3.	Processing whereby water gets polluted & pollutants are easily biodegradable	225.00
4.	Processing whereby water gets polluted & pollutants are not easily biodegradable and are toxic	0.00.
5.	Gardening	00

5. Industry shall install online monitoring system as per the guidelines of CPCB and data to be transmitted to Board's server.

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.

Maharashtra Pollution Control Board MAHARASHTRA Mumbai

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) to observe the following fuel pattern:

Stack No.	Stack Attached To	APC System	Height in Mtrs.	Type of Fuel	Quantity & UoM
01	Boiler (of Existing sugar unit)	ESP	72	Bagases	34440 MT/Day

2. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
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. 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/Nm3

6. Storage of raw materials, coal etc. shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
7. The industry shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules, 1986 and connected to MPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
8. The industry shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office MPCB.
9. 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).

Maharashtra Pollution Control Board MAHARASHTRA Mumbai

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	500000	15 days	towards O&M of pollution control systems and towards compliance of Consent conditions.	31.08.2021	30.12.2021

** The above Bank Guarantee(s) shall be submitted by the applicant in favour of Regional Officer at the respective Regional Office within 15 days of the date of issue of Consent.
 # Existing BG obtained for above purpose if any may be extended for period of validity as above.

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						

BG Return details

Srno.	Consent (C2E/C2O/C2R)	BG imposed	Purpose of BG	Amount of BG Returned
NA				

Maharashtra Pollution Control Board MAHARASHTRA Mumbai

SCHEDULE-IV

1. The Energy source for lighting purpose shall preferably be LED based
2. The PP shall harvest rainwater from roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial applications within the plant
3. Conditions for D.G. Set
   a) Noise from the D.G. Set should be controlled by providing an acoustic enclosure or by treating the room acoustically.
   b) Industry should provide acoustic enclosure for control of noise. The acoustic enclosure/ acoustic treatment of the room should be designed for minimum 25 dB (A) insertion loss or for meeting the ambient noise standards, whichever is on higher side. A suitable exhaust muffler with insertion loss of 25 dB (A) shall also be provided. The measurement of insertion loss will be done at different points at 0.5 meters from acoustic enclosure/room and then average.
   c) Industry should make efforts to bring down noise level due to DG set, outside industrial premises, within ambient noise requirements by proper sitting and control measures.
   d) Installation of DG Set must be strictly in compliance with recommendations of DG Set manufacturer.
   e) A proper routine and preventive maintenance procedure for DG set should be set and followed in consultation with the DG manufacturer which would help to prevent noise levels of DG set from deteriorating with use.
   f) D.G. Set shall be operated only in case of power failure.
   g) The applicant should not cause any nuisance in the surrounding area due to operation of D.G. Set.
   h) The applicant shall comply with the notification of 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.
4. The applicant shall maintain good housekeeping.
5. 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.
6. 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.
7. 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.
8. The industry shall submit quarterly statement in respect of industries obligation towards consent and pollution control compliance's duly supported with documentary evidences (format can downloaded from MPCB official site).
9. The industry shall submit official e-mail address and any change will be duly informed to the MPCB.
10. The industry shall achieve the National Ambient Air Quality standards prescribed vide Government of India, Notification No. B-29016/20/90/PCI-L dated. 18.11.2009 as amended.
11. 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.
12. 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.
13. The PP shall provide personal protection equipment as per norms of Factory Act
14. Industry should monitor effluent quality, stack emissions and ambient air quality monthly/quarterly.
15. 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.
16. 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.

Maharashtra Pollution Control Board MAHARASHTRA Mumbai

17. The industry shall recycle/reprocess/reuse/recover Hazardous Waste as per the provision contain in the Hazardous and Other Wastes (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.
18. An inspection book shall be opened and made available to the Board's officers during their visit to the applicant.
19. 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).
20. 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.
21. Neither storm water nor discharge from other premises shall be allowed to mix with the effluents from the factory.
22. The industry should not cause any nuisance in surrounding area.
23. 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.
24. The industry shall create the 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.
25. 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.
26. The industry should comply with the Hazardous and Other Wastes (M & TM) Rules, 2016 and submit the Annual Returns as per Rule 6(5) & 20(2) of Hazardous and Other Wastes (M & TM) Rules, 2016 for the preceding year April to March in Form-IV by 30th June of every year.
27. 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.
28. 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.
29. 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.
30. 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.
31. 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.
32. 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).
33. 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.

Maharashtra Pollution Control Board MAHARASHTRA Mumbai

MAHARASHTRA POLLUTION CONTROL BOARD

Tel: 24010706/24010437
Fax: 24023516
Website: http://mpcb.gov.in
Email: cac-cell@mpcb.gov.in

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-0000082731/CR-2007001681 **Date: 29/07/2020**

To,
The Saswad Mali Sugar Factory Ltd, Malinagar
13/1,13/2,13/3A,Malinagar
Malshiras,Solapur-Solapur

Sub: Renewal of sugar unit of 4500 TCD sugar unit & 14.8 MW Cogeneration unit, Under L.S.I RED Category

Ref: 1. Consent granted by the Board vide No. BO/CAC-CELL/UAN No. 0000037092/R/CAC-1804001134 dtd. 25.09.2018.
2. Minutes of CAC Meeting dtd. 04.05.2020.

Your application No.MPCB-CONSENT-0000082731 Dated 10.02.2020

For: grant of Consent to Renewal 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:

1. **The Consent to Renewal is granted upto: 31.07.2021**
2. **The capital investment of the industry is Rs.143.7569 Crs. (As per C.A Certificate submitted by industry).**
3. **Consent is valid for the manufacture of:**

Sr No	Product	Maximum Quantity	UOM
1	Sugar	15525	MT/M
2	Molasses	5400	MT/M
3	Bagasses	40500	MT/M
4	Pressmud	6075	MT/M
5	Electricity	14.8	MW

The Cane crushing capacity of Sugar unit shall not exceed 4500 TCD

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

Sr No	Description	Permitted in CMD	Standards to	Disposal
1.	Trade effluent	365	As per Schedule -I	65 CMD is recycled and 300 CMD on land for irrigation
2.	Domestic effluent	98	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
01	Boiler (90 TPH)	1	As per Schedule -II
02	D.G.Set (1250 KVA & 500 KVA)	1	As per Schedule -II

6. **Conditions about Non Hazardous Wastes:**

Sr No	Type of Waste	Quantity	UoM	Treatment	Disposal
1	ETP SLUDGE	01	MT/A	NA	Manuare

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 /spent oil	1	1 MT/M	Recycle	Sale to authorizd 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 & Transboundry 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. The Consnt is issued without prejudices to various orders passed and being passed by Hon'ble National Green Tribunal.
11. Industry shall connect online CMS data as per CPCB guidelines to CPCB & MPCB Servers.
12. Industry shall stop production activity voluntarily in case of failure of operation and maintenance of the ETP system as preventive measures.
13. This consent is issued as per the Consent Appraisal Committee meeting dated 04.05.2020.
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	1437569.00	5459136	10/02/2020	RTGS

Balance amount of Rs. 1150069 will be considered at the time of next renewal of consent.

Copy to:

1. Regional Officer, MPCB, Pune and Sub-Regional Officer, MPCB, Solapur
   - They are directed to ensure the compliance of the consent conditions.
   - They are directed to forfeit the bank guarantee of Rs 5 Lakh & obtain top up BG of Rs. 10 Lakh from the industry
2. Chief Accounts Officer, MPCB,Sion, Mumbai
3. CC/CAC desk - for record & website updation purposes.

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 700.00 CMD consisting of Primary, Secondary, Tertiary for the treatment of 365.00 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.

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

C] The treated effluent 300.00 CMD shall be disposed on land for irrigation on 40.00 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 65.00 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 98.00 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 there of & 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:

Sr. No.	*Purpose for water consumed*	*Water consumption quantity (CMD)*
1.	Industrial Cooling, spraying in mine pits or boiler feed	1665.00
2.	Domestic purpose	130.00
3.	Processing whereby water gets polluted & pollutants are easily biodegradable	1408.00
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_2
01	Boiler	ESP	72	Bagasse/biogas -	915 MT/Day	0.20	3660.00

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/Nm3

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	1000000	15 Days	Towards compliance of Consent conditions & O & M of pollution control system.	31.07.2021	30.11.2021

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
1	C to R	500000	----	Towards compliance of Consent conditions & O & M of pollution control system.	500000	JVS Exceedance

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).

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 sitting and control measures.

d) Installation of DG Set must be strictly in compliance with recommendations of DG Set manufacturer.

e) A proper routine and preventive maintenance procedure for DG set should be set and followed in consultation with the DG manufacturer which would help to prevent noise levels of DG set from deteriorating with use.

f) D.G. Set shall be operated only in case of power failure.

g) The applicant should not cause any nuisance in the surrounding area due to operation of D.G. Set.

h) The applicant shall comply with the notification of 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.

J-11011/227/2006-IA II (I)
Government of India
Ministry of Environment & Forests
IA Division

Email: plahujarai@yahoo.com
Tel No.: 2436 3973
Paryavaran Bhavan,
CGO Complex, Lodi Road,
New Delhi-110003
Dated: September 25, 2006

To

The Managing Director
M/s The Saswad Mali Sugar Factory Ltd; malinagar
Hotel Central Park, 1265,
Apte Raod, Deccan Gym,
Pune - 4
Maharashtra

Subject : Distillery unit (30 KLPD) by M/s The Saswad Mali Sugar Factory Ltd. At Malinagar Tehsil Malshiras District Solapur in Maharashtra.

Sir,

This has reference to your letter no. nil dated nil received in the Ministry on 19th June, 2006 seeking environmental clearance along with schedule-II application, questionnaire, EIA/EMP report, CD and subsequent communication dated 4th July, 2006 and 9th August, 2006 on the above mentioned project.

The Ministry of Environment and Forests has examined your application. It is noted that proposal is for 30 KLPD molasses based distillery unit in District Solapur in Maharashtra. It is proposed to manufacture 900KLPM of Rectified Spirit, 846 KLPM of Ethanol, 90 KLPM of impure spirit and 15 KLPM of fusel oil. Molasses and press mud requirement will be met from the company's own sugar unit of 2500TCD capacity. Land area required for the distillery unit is 22855m2. Project does not involve any forest land and displacement of people. Water requirement of 350 m^3/d will be met from the canal supply for which an agreement has been entered with Maharashtra Krishna Valley Development Corporation, a subsidiary of Irrigation Department, Govt of Maharashtra. The unit will adopt continuous ferementation technology. About 4 MTPD of ETP sludge will be generated. The ETP sludge will be used for composting and boiler ash would be supplied to the brick manufacturers. Public hearing panel has considered the project in the meeting held on 19.10.2004. Maharashtra Pollution Control Board has granted NOC on 10.3.2005. Total cost of the project is Rs. 9.5 Crores.

2.0. The Ministry of Environment and Forests hereby accords environmental clearance to above project under the provisions of EIA Notification dated 27th January, 1994 as amended subsequently subject to strict compliance of the following specific and general conditions :

A. SPECIFIC CONDITIONS:

i. The industry shall ensure that the treated effluent and stack emissions from the unit are within the norms stipulated under the EPA rules or SPCB whichever is more stringent. In case of process disturbances/failure of pollution control equipment adopted by the unit, the respective unit should be shut down and should not be restarted until the control measures are rectified to achieve the desired efficiency.

ii. The company shall adopt continuous fermentation technology. It is noted that spent wash generation shall be @ 7kl/kl of alcohol produced. No effluent shall be discharged outside the factory premises and zero discharge shall be strictly followed. Land and other requirements for treatment of spent wash with press mud shall be as per the CPCB guidelines. The company shall earmark an area of 15.0 acres for bio composting, storage of finished products etc. The compost yard shall be made impervious as per the CPCB guidelines. The domestic effluent (12m3/d) shall be treated in septic tank.

iii. The company shall install fly ash arrestors and stack height of 35 m to control the emissions from the bagasse fired boiler installed to achieve the particulate emissions within the prescribed standards.

iv. The spent wash shall be stored in impervious pucca lagoons. The spent wash lagoons shall have proper lining with HDPE and shall be kept in proper condition to prevent ground water pollution. As per the CPCB recommendation, storage shall not exceed 30 days capacity.

v. Adequate numbers of ground water quality monitoring stations by providing piezometers around the compost plant and the project area shall be set up. Sampling and trend analysis monitoring must be made on monthly a basis and report submitted to SPCB and this Ministry. The company shall carry out regular analysis of compost, leachate for BOD and pH.

vi. The operation of distillery shall be restricted to 270 days and that it will not operate during rainy season.

vii. As reflected in the EIA /EMP, green belt of adequate width and density in 40% of the plant area shall be provided to mitigate the effects of fugitive emissions all around the plant and compost yard as per the CPCB guidelines in consultation with the local DFO.

viii. Company shall adopt rainwater harvesting measures to recharge the ground water.

ix. Occupational health surveillance programme shall be undertaken as regular exercise for all the employees. The first aid facilities in the occupational health centre shall be strengthened and the medical records of each employee shall be maintained separately.

B. GENERAL CONDITIONS:

i. The project authorities must strictly adhere to the stipulations made by the Maharashtra Pollution Control Board and the State Government.

ii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.

iii. Ambient Air Quality Monitoring Stations shall be set up in the down wind direction as well as where maximum ground level concentration of SPM, SO2, NOx, are anticipated in consultation with the State Pollution Control Board.

iv. Adequate number of influent and effluent quality monitoring stations shall be set up in consultation with the State Pollution Control Board. Regular monitoring should be carried out for relevant parameters.

v. The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).

vi. The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA /EMP report.

vii. A separate environmental management cell equipped with full fledged laboratory facilities must be set up to carry out the environmental management and monitoring functions.

viii. The project authorities shall provide funds (Rs. 2 lakhs as mentioned in the questionnaire no.xix of the EIA/EMP report) for both recurring and non-recurring expenditure to implement the conditions stipulated by the non-recurring expenditure to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State government along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.

ix. The implementation of the project vis-à-vis environmental action plans will be monitored by Ministry's Regional Office at Bhopal /State Pollution Control Board/Central Pollution Control Board. A six monthly compliance status report alongwith the monitored data shall be submitted to the monitoring agencies.

x. The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the State Pollution Control Board/ Committee and may also be seen at Website of the Ministry of Environment and Forests at http:/envfor.nic.in. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the Regional office.

xi. The Project Authorities shall inform the Regional Office as well as the Ministry the date of financial closure and final approval of the project by the concerned authorities and the date of start of land development work.

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

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

5.0. The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act,1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules.

(Dr. P. L. Ahujarai)
Director

Copy to:

1. The Secretary, Department of environment and forests, Govt. of Maharashtra.
2. The Chief Conservator of Forests (Central), Ministry of Environment & Forests, Regional Office, E - 3 / 240 Arera Colony Bhopal - 462 016.
3. The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar New Delhi – 110 032.
4. The Chairman Maharashtra Pollution Control Board, Shri Chatrapati Shivaji Maharaj Municipal Market Building, 4th Floor, Mata Ramabai Ambedaker Road, Mumbai- 400 001.
5. JS(CCI-I), Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
6. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
7. Guard File.
8. Monitoring File.
9. Record File.

(Dr. P. L. Ahujarai)
Director

MAHARASHTRA POLLUTION CONTROL BOARD

Tel: 24010437/24020781/24014701
Fax: 24024068 /24023515
Website: http://mpcb.gov.in
E-mail: mpcb@vsnl.net

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

Red/LSI

Date: 03/09/2016

Consent No: Format -1.0/BO/CAC-CELL/UAN No. 0000003425/Auto Renewal/CAC- 0812

To,

M/s. The Saswad Mali Sugar Factory Ltd., (Grain base Distillery)
Malinagar, Tal. Malshiras,
Dist. Solapur.

Subject: Auto Renewal of Consent to Operate of 30 KLPD grain base Distillery Unit under RED category.

Ref : 1. Earlier Consent to Operate granted by the Board vide no. BO/CAC-CELL/EIC No. PN-26584-15/R/CAC-2132 dtd. 12.02.2016.
2. You application for grant of Auto Renewal vide no. 21.05.2016.

Your application: UAN No. 0000003425.
Dated: Received to HQ 24.08.2016.

For: Auto Renewal of Consent to Operate of 30 KLPD grain base Distillery 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 annexed to this order:

1. The consent is granted from a period 01.07.2016 to **31.08.2021.**

2. **The Capital investment of the Distillery Unit is Rs 29.55 Crs. & Capital investment of the Sugar & Co-gen unit is Rs. 140.11 Cr.**
(As per C.A. Certificate submitted by industry)

3. The Consent is valid for the manufacture of –

Sr. No.	Product / By-Product Name	Maximum Quantity	UoM
1.	Rectified Spirit or Extra Neutral Alcohol	900	KL/M

(Grain base distillery capacity shall not exceed 30 KLPD)

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	92	As per Schedule - I	Zero discharge, hence NA.
2.	Domestic effluent	6.0	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
Steam taken from existing Sugar unit.			

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
Industry shall not generate any hazardous waste.					

7. Non-Hazardous Solid Wastes:

Sr. No.	Type of Waste	Quantity	UOM	Treatment	Disposal
1	DDGS	200	Kg/D	-----	By sale as a cattle feed

8. **Board reserves the right to review, amend, suspend, revoke etc. this consent any time for any violation 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. **Spent grain shall not be stored for more than 24 hrs. & moisture content should be less than 5 % by dry basis, it should not cause any nuisance in the surrounding area.**

11. **Industry shall comply with the conditions of Environmental Clearance granted by MoEF, GOI vide F. No. J-11011/92/2009-IA II(I) dtd. 13.04.2009.**

12. **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.**

13. **This Consent is issued under the auto renewal Consent policy of the Board vide letter no. 5088 dtd. 03.12.2015 as per self-certificate submitted by Mr. Rajendra G. Girme, Managing Director, authorized signatory.**

14. **The applicant shall inform the Board in each financial year about the change in Capital investment of the industry. In case, if the Capital investment is increased by an amount upto 10% then industry shall make payment of the corresponding fees for Consent to establish and also difference in Consent to Operate fees for the corresponding block year. In case, if there is increase in Capital investment by 10% then the industry shall submit a fresh application in prescribed form.**

For and on behalf of the
Maharashtra Pollution Control Board

(Dr. P. Anbalagan, IAS)
Member Secretary

Received Consent fee of –

Sr. No.	Amount (`)	DD. No.	Date	Drawn On
01	Rs. 3,75,100/-	IBKLH16139028091	18.05.2016	IDBI Bank.
02	Rs. 4, 167/-	229213	25.08.2016	IDBI Bank.

As per the Consent granted vide dtd. 12.02.2016 fees of Rs. 8,333/- is balance with the Board and same is considered during this Renewal. Hence there is no any fees balance with the Board.

Copy to:

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

Schedule-I

I) Terms & Conditions for compliance of Water Pollution Control

A] You have provided comprehensive treatment for achieving zero discharge consisting of collection tank followed by Multiple Effect Evaporator followed by DDGS dryer.

1) **A] As per your consent application, you have provided septic tank & soak pit for the treatment of sewage generated from your industry.**

B] The Applicant shall operate the sewage treatment system to treat the sewage so as to achieve the following standards/ prescribed under EP Act, 1986 and Rules made there under from time to time, whichever is stringent.

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

C] The treated sewage 06 CMD shall be disposed on land for gardening.

2) 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.

3) 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.,	510.0
2.	Domestic purpose	06.0
3.	Processing whereby water gets polluted & pollutants are easily biodegradable	290.0
4.	Processing whereby water gets polluted & pollutants are not easily biodegradable and are toxic	—

Schedule-II

NA as steam taken from existing Sugar unit.

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	05/- Lakhs	To be extended.	O & M of Pollution control systems	31.08.2021	31.12.2021

Schedule-IV

General Conditions

1) The applicant shall provide facility for collection of environmental samples and samples of trade and sewage effluents, air emissions and hazardous waste to the Board staff at the terminal or designated points and shall pay to the Board for the services rendered in this behalf.
2) Industry should monitor effluent quality, stack emissions and ambient air quality monthly/quarterly.
3) The applicant shall provide ports in the chimney/(s) and facilities such as ladder, platform etc. for monitoring the air emissions and the same shall be open for inspection to/and for use of the Board's Staff. The chimney(s) vents attached to various sources of emission shall be designated by numbers such as S-1, S-2, etc. and these shall be painted/ displayed to facilitate identification.
4) Whenever due to any accident or other unforeseen act or even, such emissions occur or is apprehended to occur in excess of standards laid down, such information shall be forthwith Reported to Board, concerned Police Station, office of Directorate of Health Services, Department of Explosives, Inspectorate of Factories and Local Body. In case of failure of pollution control equipments, the production process connected to it shall be stopped.
5) The applicant shall provide an alternate electric power source sufficient to operate all pollution control facilities installed to maintain compliance with the terms and conditions of the consent. In the absence, the applicant shall stop, reduce or otherwise, control production to abide by terms and conditions of this consent.
6) The firm shall submit to this office, the 30th day of September every year, the Environmental Statement Report for the financial year ending 31st March in the prescribed Form-V as per the provisions of rule 14 of the Environment (Protection) (Second Amendment) Rules, 1992.
7) The industry shall recycle/reprocess/reuse/recover Hazardous Waste as per the provision contain in the HW (MH&TM) Rules 2008, which can be recycled /processed /reused /recovered and only waste which has to be incinerated shall go to incineration and waste which can be used for land filling and cannot be recycled/reprocessed etc should go for that purpose, in order to reduce load on incineration and landfill site/environment.
8) The industry should comply with the Hazardous Waste (M, H & TM) Rules, 2008 and submit the Annual Returns as per Rule 5(6) & 22(2) of Hazardous Waste (M, H & TM) Rules, 2008 for the preceding year April to March in Form-IV by 30th June of every year.
9) An inspection book shall be opened and made available to the Board's officers during their visit to the applicant.
10) **The applicant shall make an application for renewal of the consent 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).
12) Separate drainage system shall be provided for collection of trade and sewage effluents. Terminal manholes shall be provided at the end of the collection system with arrangement for measuring the flow. No effluent shall be admitted in the pipes/sewers downstream of the terminal manholes. No effluent shall find its way other than in designed and provided collection system.
13) Neither storm water nor discharge from other premises shall be allowed to mix with the effluents from the factory.
14) The applicant shall install a separate meter showing the consumption of energy for operation of domestic and industrial effluent treatment plants and air pollution control system. A register showing consumption of chemicals used for treatment shall be maintained.
15) Conditions for D.G. Set
    a) Noise from the D.G. Set should be controlled by providing an acoustic enclosure or by treating the room acoustically.
    b) Industry should provide acoustic enclosure for control of noise. The acoustic enclosure/ acoustic treatment of the room should be designed for minimum 25 dB (A) insertion loss or for meeting the ambient noise standards, whichever is on higher side. A suitable exhaust muffler with

insertion loss of 25 dB (A) shall also be provided. The measurement of insertion loss will be done at different points at 0.5 meters from acoustic enclosure/room and then average.

c) Industry should make efforts to bring down noise level due to DG set, outside industrial premises, within ambient noise requirements by proper sitting and control measures.

d) Installation of DG Set must be strictly in compliance with recommendations of DG Set manufacturer.

e) A proper routine and preventive maintenance procedure for DG set should be set and followed in consultation with the DG manufacturer which would help to prevent noise levels of DG set from deteriorating with use.

f) D.G. Set shall be operated only in case of power failure.

g) The applicant should not cause any nuisance in the surrounding area due to operation of D.G. Set.

h) The applicant shall comply with the notification of MoEF dated 17.05.2002 regarding noise limit for generator sets run with diesel.

16) The industry should not cause any nuisance in surrounding area.

17) The industry shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standard in respect of noise to less than 75 dB (A) during day time and 70 dB (A) during night time. Day time is reckoned in between 6 a.m. and 10 p.m. and night time is reckoned between 10 p.m. and 6 a.m.

18) The applicant shall maintain good housekeeping.

19) The applicant shall bring minimum 33% of the available open land under green coverage/ plantation. The applicant shall submit a yearly statement by 30th September every year on available open plot area, number of trees surviving as on 31st March of the year and number of trees planted by September end.

20) The non-hazardous solid waste arising in the factory premises, sweepings, etc. be disposed of scientifically so as not to cause any nuisance / pollution. The applicant shall take necessary permissions from civic authorities for disposal of solid waste.

21) The applicant shall not change or alter the quantity, quality, the rate of discharge, temperature or the mode of the effluent/emissions or hazardous wastes or control equipments provided for without previous written permission of the Board. The industry will not carry out any activity, for which this consent has not been granted/without prior consent of the Board.

22) The industry shall ensure that fugitive emissions from the activity are controlled so as to maintain clean and safe environment in and around the factory premises.

23) The industry shall submit quarterly statement in respect of industries obligation towards consent and pollution control compliance's duly supported with documentary evidences (format can downloaded from MPCB official site).

24) The industry shall submit official e-mail address and any change will be duly informed to the MPCB.

25) The industry shall achieve the National Ambient Air Quality standards prescribed vide Government of India, Notification dt. 16.11.2009 as amended.

26) The Board reserves its rights to review plans, specifications or other data relating to plant setup for the treatment of waterworks for the purification thereof & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions. The Applicant shall obtain prior consent of the Board to take steps to establish the unit or establish any treatment and disposal system or an extension or addition thereto.

27) The industry shall ensure replacement of pollution control system or its parts after expiry of its expected life as defined by manufacturer so as to ensure the compliance of standards and safety of the operation thereof.

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Annex - IX

जा.क्र. प्रशा-१/ बिगर सिंचन/ ८८६८ / सन २०१४

नीरा उजवा कालवा विभाग
फलटण. दि. २७-११-१४

प्रति,

जनरल मॅनेजर
शरयू माळी शुगर फॅक्टरी लि.
माळीनगर, ता.माळशिरस, जि.सोलापूर

विषय :- बिगर सिंचन पाणीवापर (पिण्यासाठी वापर) करारनामा करणेबाबत

कालावधी दिनांक १८/११/२०१४ ते १७/११/२०३०

महोदय,

आपले संस्थेस नीरा उजवा कालवा शाखा क्र. १ मधून पिण्यासाठी वापरासाठी ०.२४० दलघमी वार्षिक पाणी वापरास मंजूरी शासनाकडील अटीच्या अधिन राहून प्रदान करण्यात आली आहे. या मंजूरीच्या अनुषंगाने दिनांक १८/११/२०१४ रोजी बिगर सिंचन पाणीवापर करारनामा करण्यात आला असून या करारनाम्याचा कालावधी दिनांक १८/११/२०१४ ते १७/११/२०३० असा राहील.

या करारनाम्याची एक साक्षांकित प्रत सोबत आपले माहितीसाठी व पुढील कार्यवाहीसाठी पाठविण्यात येत आहे. करारनाम्यामध्ये नमूद केलेल्या अटी व शर्ती तसेच शासनाचे प्रचलित नियमानुसार पाणीपट्टी आकारण्यात येईल.

सहकार्याबद्दल धन्यवाद.

सोबत : करारनामा- १ प्रत.

कार्यकारी अभियंता
नीरा उजवा कालवा विभाग
फलटण.

प्रत : मा. अधीक्षक अभियंता, पुणे पाटबंधारे मंडळ, पुणे यांना उपरोक्त संदर्भानुसार माहितीसाठी सविनय सादर.
सोबत : करारनामा एक प्रत

प्रत : उपविभागीय अभियंता, माळशिरस पाटबंधारे उपविभाग, माळशिरस/ शाखाधिकारी, पाटबंधारे शाखा, मठाळूंग यांना माहितीसाठी व पुढील योग्य त्या कार्यवाहीसाठी.
सोबत : करारनामा प्रत्येकी एक प्रत.

भारतीय गैर न्यायिक INDIA NON JUDICIAL

एक हजार रुपये

₹.1000

ONE THOUSAND RUPEES

Rs.1000

MAHARASHTRA

R 661116

दुय्यम निबंधक वि. सांगोला

29 OCT 2014

दस्तऐवज अंदाजित करणेत

AGREEMENT

(For non-Irrigation water supply Industrial & Drinking purpose)

An Agreement made on the ..18...day of November, Two Thousand Fourteen between The Saswad Mali Sugar Factory Ltd., Malinagar, Tal. Malshiras, Dist. Solapur the user such as Private Company / Industries/ Entrepreneur/ Organisation (which expression here in after referred to as **'the company'** shall, unless excluded by or it be repugnant to the context or meaning thereof be deemed to include its successors and assigns) registered under the Indian Companies Act, 1913 (VII of 1913), the Companies Act, 1956 (I for 1956) and having its registered Office at Malinagar, Tal. Malshiras, Dist. Solapur hereinafter referred to as 'the Company' of the one part and the Governor of Maharashtra

hereinafter referred to as 'the Government' (which expression shall unless excluded by or it be repugnant to the context or meaning thereof be deemed to include his successors and assigns) of the other part.

Whereas the company is desirous of constructing a pumping station on the Company's land at Malinagar for drawing water from the source N.R.B.C. Branch No. 1 Dy. No. 28 (hereinafter referred to as "the said Source") for the use by the Company's Sugar Factory Plant (hereinafter referred to as "the said plant") and laying underground and surface pipes and drains for discharge of the factory effluent.

AND whereas the company has applied to the Government for permission to draw 0.348 M. Cum of water per year from the said source (vide Maharashtra Krishna Valley Development Corporation, Pune's Memo No. MKVDC/ 498/ (1/98)/ PB-4 Dt.09/10/1998)

AND whereas the company has paid Rs.Nil/- (Rs. Nil only) to Government towards the proportional cost of capital outlay of the project.

AND whereas the Government has agreed to grant the aforesaid permission to the company on the terms and conditions hereinafter appearing.

AND WHEREAS UNDER the said terms and conditions the company has to deposit with the Executive Engineer, Neera Right Bank Canal Division, Phaltan to the Government a sum of Rs.661200/- as **'security' equivalent to 2 months company's probable annual water charges based on yearly sanctioned and as communicated in cash** (received amount Rs.186572/- vide T.R. No. 1569555 Dt. 20/3/1999, Rs.319084/- vide TR No. 1569619 Dt.28/2/2003, Rs.155544/- vide TR No.708372 Dt.31/10/2008) for the due observance and performance by the company of the terms and conditions of this Agreement AND WHEREAS the company has accordingly prior to the execution of these presents deposited with the Government Rs.661200/- as security for the due observance and performance by the company of the terms and conditions herein contained; AND WHEREAS it has been agreed that the said amount will not carry any interest if deposited in cash.

Definations :

Quota – Quota means demand sanctioned and communicated to — by the Executive Engineer.

Corporation -- Corporation means the River Basin corporations like Maharashtra Krishna Valley Development Corporation (MKVDC), Godavari Marathwada Irrigation Development Corporation (GMIDC), Tapi Irrigation Development

Corporation (TIDC), Konkan Irrigation Development Corporation (KIDC) & Vidharbha Irrigation Development Corporation (VIDC), Municipal Corporation, Municipalities etc.

MIDC – MIDC means Maharashtra Industrial Development Corporation.

MJP – MJP means Maharashtra Jeevan Pradhikaran.

Yearly Applicable Demand – Yearly Applicable Demand means the water demand communicated by the user for the period from 1st November to 31st October to the Executive Engineer and Sanctioned by Irrigation Department every year in the month of September along with its bifurcation for Industrial, domestic and agriculture use.

USER – User means water using agency like individual, Companies users/ Industry/ Entrepreneur.

NOW THIS AGREEMENT WITHNESSTH AS FOLLOWS :-

(a) In consideration of the company making payment to the Government as hereinafter specified and observing and performing the convenience and condition herein contained Government do hereby grants to the company permission to draw following quota of water for the specified purpose

Sr. No.	Description / Use	Quantity (M.Cum per year)
1	Total sanctioned quota	0.348
1.1	For Industry using potable water bottling plant	--
1.2	For other than water as raw material industrial use	0.348
1.3	For domestic use	--
1.4	For agricultural use (nursery/ gardening) within the company's premises	Nil

and use the same for the purpose of the Company's said plant or project for supply to residential colonies and for agricultural use (nursery/ gardening) for a term of Six years commencing from the 18.. day of November 2014 on the following terms and conditions.

(b) The quota assigned for domestic use and for agricultural use shall not exceed 10% each of the individual water demand. In the cases wherein the water used for Domestic / Agricultural use exceed 10% in each case the

excess use shall be charged at industrial applicable rate specified in clause 11 of this agreement.

(c) The industrial water requirement, the domestic water requirement and agricultural (nursery/ gardening) water requirement of the company as demanded deemed to be separate and independent for the sole purpose and water charges assessment shall be accordingly separate and independent for other clauses of this agreement.

The permission hereby granted shall be subject the provisions of the Maharashtra Irrigation Act, 1976 and the Bombay Canal Rules 1934 and subsequent revisions, if any, in force and any executive orders issued in this behalf by Government and any statutory amendment thereof from time to time and for the time being in force.

Nothing herein contained shall be deemed to imply any guarantee on the part of the Government as to the availability or otherwise of any specific quantity of water and Government shall not be responsible for the non-supply or in adequate supply of water on any account whatsoever.

However in case of inadequate or non supply due to shortage of water or reason beyond the control of the department, bill shall be charged as per actual quantity of water supplied during such period.

The company shall use the water drawn from the said canal for purpose of the Company's said plant and for supply to the residential colonies constructed by the company within the area of the said plant for providing housing to it's employees and workers (hereinafter referred to as "the said residential colonies"). The company shall not sell the water from the said canal to any other person, firm or company, corporation or other body. In the events of the Company selling water drawn from the said canal, then the Government without prejudice to its right will forthwith revoke the license, Government shall be entitled to recover from the Company the proceeds of any such sale made by the Company.

Government shall be entitled to utilise water or the said canal available after meeting the reasonable requirements of the Company; as to which matter the decision of the Government shall be final and binding on the Company, for such purpose as Government deem fit.

The permission hereby granted shall not in any manner prejudicially affect the existing water rights vested in the upstream riparian owners; nor shall it in any way, prejudice Government's right to here after launch or implement in public

interest any new schemes or scheme of its own, on or in connection with the present source of channel of water supply available to the Company, subject however to the safe guarding of its reasonable demand referred to in Clause (5) above.

The Company shall not construct the pick up weir in the Neera River bed of the said river unless the proposals, plans, drawings, specifications, estimates and all other details thereof are previously submitted to and approved in writing by an Officer authorised in that behalf by the Government and while granting its approval to the construction of the pick-up weir Government may impose such conditions as it may in its discreation think fit.

(a) For ascertaining the quantity of water drawn by the company the company shall forthwith at its own cost and after obtaining prior approval in writing thereto of the Executive Engineer, install independent pipe lines fitted with separate electronic water measuring devices for use of water for the said independent intention (hereinafter referred to as "the said electronic measuring device") at such place as is indicated by the Executive Engineer. All the pipe line showing locations of the metering equipment's from the said source for different purposes shall be got jointly verified and got approved from Executive Engineer, Irrigation Department. Layout from the said source shall be got approved from the Executive Engineer. No changes in the approved layout shall be made without prior written approval from the Executive Engineer. In the event of the Company failing to install and keep in proper working order the said electronic measuring devices for use of water for the said plant and supply to the said residential colonies as aforesaid the Company shall be liable to pay for the full sanctioned water quota as mentioned in clause 8(d) I and II. During such period 125% of the proportionate sanctioned quantity will be charged at the prevailing rates for the said plant. The said electronic measuring devices shall always be kept under the lock and seal of the Executive Engineer and the key of such lock shall at all times remain with the Executive Engineer. The Company shall at all times during the substance of this agreement at its own cost maintain the said electronic measuring devices in proper working order and condition.

(b) Readings for the water so drawn by the Company will be taken on the said electronic measuring devices, on the Last day of each month/ at agreed times, Jointly by the authorised representatives of the Executive Engineer and of the Company.

(c) If at any time in the opinion of the Executive Engineer the said electronic measuring device are found defective the same shall be tested for its accuracy and the cost of such testing shall be borne and paid by the Company. If

on such testing the said electronic measuring devices are found to be defective the Company shall forthwith get the same repaired and set right at its own cost, and in the event of Company failing to do so within 30 (Thirty) days thereafter the Executive Engineer may proceed to do so on account and at the cost of the Company.

(d) In the event of the said electronic measuring device going out of order and becoming defective the quantity of water drawn by the Company during the period when the meter was defective and not working shall be ascertained in the following manner.

(i) If the said electronic measuring device remain out of order for a period of less than thirty days then the quantity of water deemed to be drawn by the Company during the said period shall be taken to be 90% of the yearly sanctioned demand as communicated in clause 11 or average for the last six months whichever is higher.

(ii) If the said electronic measuring device remain out of order for a period exceeding 30 days then the quantity of water deemed to be drawn by the Company during the said period shall be taken to be 110% of the yearly sanctioned demand as communicated in clause II or average for the last six months whichever is higher This will be made applicable for the period during which the measuring device remained out of order.

The aforesaid provisions will also apply when the quantity of water drawn by the Company cannot be measured on account of removal of the said electronic measuring devices for repairs or the same in the opinion of the Executive Engineer not working properly.

(iii) If electronic meter meant for domestic or for agricultural use is not filled or remains out of order or is removed, the water charges will be levied as per the rates specified for the industrial use for the total quota as referred to in clause 1(a) of this agreement.

9. Billing should be done on bimonthly basis. The bill for the water drawn by the Company during the previous calendar month shall be sent in duplicate/ triplicate by the Executive Engineer to the Office of the Company within 15 days after the end of the water consumption month. The company shall thereafter duly pay the same by a demand draft drawn in the name of the Executive Engineer, Neera Right Bank Canal Division, Phaltan for and on behalf of the Government within a fortnight from the date of receipt of the bill and shall not allow the same to fail in arrears if the Company fails to pay the amount within this stipulated time (15 days from the date of receipt of the bill i. e. before the end of

the current month). Extra charges not exceeding 10% per annum of the amount due will be charged. If the delay in payment of water charges exceeds 6 (six) months, the Irrigation department reserves the right to terminate the water supply with a notice of 15 days in advance.

10. The cost of all works in connection with the arrangements for water supply including the cost of measuring devices and its installation and maintenance, shall be borne by the Company.

11. Subject to the provisions of clause (8) hereof, the Company shall pay to the Government at the time and in the manner specified in clause (12) here of water charges for the quantity of water drawn by the company from the said canal as measured by the said electronic measuring devices at the following rates namely

(Here rates which are going to apply to the company with mention of purpose of use of water, sanctioned quota and present rate (subject to its revision) may be specified) The water lifted by the company during rainy season from the river when Irrigation Department has not released the water, concessional rate as decided by Irrigation Department shall be charged).

i) Provided however that after the expiry of two year from the date the Company starts drawing water from the said canal if in any month the quantity of water drawn by the Company is less than 90 per cent of the quantity of water specified in clause (1) here of than the company shall pay to Government water charges calculated for 90 percent of the quantity of water specified in clause (1) hereof or for average of the quantity of water drawn by the Company during the period of previous three months including the month in question whichever is greater.

ii) For any unforeseen reasons, if the company / agency would like to reduce / increase the demand of water made earlier / entered in the agreement, they will be required to make the revised annual demand before the commencement of the year i.e. 1st day of November. On acceptance of such revised demand the company will by charged as per changed demand for period specified, other condition remaining same. A supplementary agreement on the hundred rupees stamp paper for this changed quantity which will from part of main agreement.

iii) No penal rate will be levied for the quantity limited to 10% in excess of the sanctioned one. For quantity used in excess of this 10% without

prior sanction a penal rate of 25% will be charged over the basic rate. The delay in payment on account of this also will be governed by clause (9) above.

iv) For any unforeseen reason (such as sudden closure of the units or sudden rise in production etc.) there could be abrupt fluctuations in the demand on both sides such cases will be decided at Government level only, by giving due consideration to the availability of water in particular sub-basin and so on.

v) In addition to the payment of water charges referred to above the Company shall also pay to the Government local fund cess at the rate of 20 paise per every rupee of Basic water charges

vi) Water bills – The bimonthly bills for the period from November to August (for 10 months) shall be prepared on the basis of actual quantity of water lifted at the prevailing rate. The bill for the months of September & October (11th & 12th month) shall be prepared by taking review of annual sanctioned demand and the terms and conditions of the agreement and then shall be adjusted and paid accordingly. While adjusting so it shall be considered that the 90% of the annual sanctioned demand has been lifted / used.

The water lifted in excess, up to 10% of sanctioned demand shall be charged at single rate and excess above 10% (without prior permission) will be charged at penal rate of 125 times of the normal rate as mentioned in the relevant clause. However the local cess shall be charged on single rate only.

12. (a) The Company shall pay to the Executive Engineer, water rates and local fund cess either in advance every alternate month on the basis of anticipated quantum of water to be drawn by it from the said source during the next two month or on monthly basis within 15 (fifteen) days, from the date of receipt of bimonthly demands by the company from the Executive Engineer. On default of the Company to pay the water rate or local fund cess as aforesaid vide clause 9 & 11, Government shall without prejudice to its any other rights & remedies be entitled to terminate this agreement forthwith as per clause 9.

(b) In the case of disputes regarding quantity of water billed or rate at which the bill is prepared the Company / Firm/ individual water user shall first pay the complete amount of the bill and then claim for refund of any excess bill charged giving the reasons / justification of wrong billing. However the decision of Superintending Engineer, Pune Irrigation Circle, Pune in this regard shall be final and binding on the Company.

13. Government hereby reserves to itself the right to revise from time to time the water rates and local fund cess and Company shall pay the

revised water rates and local fund cess as may be fixed by Government from time to time

14. The Company shall not discharge the effluent in any nalla or river and shall not pollute directly or indirectly any portion of the said nalla / river even by septic tank effluents. If any water sources are polluted by any industry as identified by Irrigation/ Pollution Control Board / MIDC/ MJP the company shall be charged with a penalty of Rs.5000/- per such incident per day till it is rectified. The opinion of Maharashtra Pollution Control Board in respect of degree of pollution will be binding on the Company.

The company shall recycle the effluent water for their use such as gardening, recreation, cooling, cleaning, washing and manufacturing process, etc. so that atleast 50% reduction in consumption of fresh water is achieved.

15. The effluent disposal arrangement made by the Company/ Industry shall be got approved by the Company from the Maharashtra Pollution Control Board / Environmental Department of the Government prior to commencing the operation of pumping / drawing water from the said source.

16. The Company shall at all the times allow an Officer of Irrigation Department of the Government authorised in that behalf to inspect the said works as well as the accounts and copies taken of entries from the records maintained by the Company.

17. Any notice or other document to be given to or served upon the Company may be given or served on behalf of the Government by the Executive Engineer, Neera Right Bank Canal Division, Phaltan and any such notice or document shall be deemed to have been duly given to or served upon the Company or sent by registered post to the registered Company if it is delivered at the registered office of the Company or sent by registered post to the registered address for the time being of the Company.

18. The said sum of Rs.661200/- deposited in Cash by the Company with the Executive Engineer, Neera Right Bank Canal Division, Phaltan to the Government as aforesaid shall be held by the Government as security for the due observance and performance by the Company of the convenants, terms and conditions herein Contained. In case of default on the part of the Company to perform and observe any of the said convenants terms and conditions it shall be lawful for the Government in its absolute discretion to forfeit the whole of the security deposit or any part thereof without prejudice nevertheless to any rights and remedies which the Government may have against the Company under these presents for such breach and the company shall forthwith pay up the amount so

forfeited and shall always maintain the original amount of deposit throughout the period of this agreement. On the expiry of the terms of this agreement, the said security deposits of Rs.661200/- or such part thereof as shall not have been appropriated as aforesaid shall be refunded to the Company.

19. All amounts due to the Government by the Company under this agreement shall be deemed to be arrears of land revenue and may without prejudice to any other rights and remedies of the Government be recovered from the Company as arrears of land revenue.

20. On the expiry of the terms of this agreement, Government may renew this agreement within 90 days for such further period and on such terms and conditions as Government may at its absolute discretion deem fit.

21. The costs incurred in the execution of the incidental charges for this agreement including stamp duty shall be borne and paid by Company.

22. Permission for extra water over and above the sanctioned quota will be granted only when written permission for expansion etc. is produced by the company from the Industrial Department.

23. The agreement supercedes all the previous agreement entered into by the Company with the Government in connection with the supply of water from N.R.B.C..

24. The Company should submit their water indent for every rotation to the Executive Engineer, Neera Right Bank Canal Division, Phaltan on or before starting of the rotation where the source is located on canal. The Company should also furnish the exact quantity of water actually drawn in each rotation after completion of the rotation.

25. The Company will have to make an agreement at it's own cost for adequate storage (Balancing Tank) of not less than Two months requirement of water in case of perennial canal, five months requirement in case of 8 monthly canal system, four months requirement in case of water source from seasonal river/ nalla and one month water requirement in case of perennial water source of river / nalla so as to take care of the closure period. But if unexpectedly the closure period increased by more than the specified period stipulated herein the company will have to make an alternative arrangement for its water requirement at its own cost.

26. IF THE COMPANY COMMITS A BREACH OF ANY OF THE TERMS AND CONDITIONS THEREOF GOVERNMENT SHALL BE ENTITLED TO CANCEL THIS PERMISSION AND DISCONTINUE THE SUPPLY OF

WATER WITHOUT PAYMENT OF ANY COMPENSATION WHATSOEVER TO THE COMPANY.

27. The Government hereby reserves to itself its right to change / amend / modify / cancel / revise any of the terms and conditions, rules and regulations of water management and Maharashtra Irrigation Act and rules laid under them which shall be applicable for this agreement.

IN WITNESS WHEREOF THE Common Seal of the The Saswad Mali Sugar Factory Ltd., Malinagar, Tal. Malshiras, Dist. Solapur has been hereunto affixed Shri. Rajendra Gopalrao Girme, Managing Director And Shri. D. V. Kokare, the Executive Engineer, Neera Right Bank Canal Division, Phaltan has for and on behalf of the Governor of Maharashtra hereto set his hand and affixed the seal of his office the day and year first herein above written. THE COMMON SEAL OF The Saswad Mali Sugar Factory Ltd., Malinagar, Tal. Malshiras, Dist. Solapur

was pursuant to a resolution of the Board of Directors of the company dated the
Hereto affixed in the presence of

For The Saswad Mali Sugar Factory Ltd.

Managing Director

Two directors of the Company who in token thereof have here to set their respective hand in the presence of ...

1. Shri. Vilasrao Damodar Inamke

2. Shri. Vasantrao Malhari Tamhane

SIGNED, SEALED AND DELIVERED

by the Executive Engineer Neera Right Bank Canal Division, Phaltan for and on behalf of the Governor of Maharashtra
In the presence of -

1) Shri. I. A. Shaikh, Sectional Engineer

2) Shri. K. S. Bhilare, D. K.

Executive Engineer
Neera Right Bank Canal Dn.
Phaltan

Certificate of Incorporation.

No. 1904 of 1932-1933.

I hereby certify that The Sasvad Mali Sugar Factory, Limited.

is this day incorporated under the Indian Companies' Act, VII of 1913, and that the Company is Limited.

Given under my hand at Bombay this Seventeenth day of November One thousand nine hundred and Thirty-two.

Registrar of Joint Stock Companies.

J. B. G. St.

DCTP—6MJSC.

Sugar

By registered Post
Amendment No. 2

No. 403/SIA/IMD/2014
Government of India
Ministry of Industry
Department of Industrial Policy & Promotion
Secretariat of Industrial Assistance
(Public Relation and Complaints Section)

New Delhi ,22/06/2015

To,

THE SASWAD MALI SUGAR FACTORY LTD.
MALINAGAR, MALSHIRAS
SOLAPUR-413108
MAHARASHTRA.

Subject : IEM application of THE SASWAD MALI SUGAR FACTORY LTD. for the manufacture of WHITE CRYSTAL SUGAR

Reference : This Ministry's IEM Acknowledgement No. 403/SIA/IMD/2014 dated 04/03/2014

Dear Sirs,

I am directed to refer to your letter(s) No nil dated 09/06/2015 on the above mentioned subject and to say that the following corrections-/modifications/amendments are made in the Ministry's IEM Acknowledgement No. 403/SIA/IMD/2014 dated 04/03/2014

	EXISTING	AMENDED
a. Name of the Company	THE SASWAD MALI SUGAR FACTORY LTD.	-
Registered Address	MALINAGAR, MALSHIRAS SOLAPUR-413108 MAHARASHTRA.	
b. NIC Codes / Items of Manufacture	1. 2060 : WHITE CRYSTAL SUGAR Falling under NIC broad description MANUFATURE AND REFINING OF SUGAR (VACUUM PAN SUGAR FACTORIES)	10721 : WHITE CRYSTAL SUGAR Falling under NIC broad description MANUFACTURE OR REFINING OF SUGAR (SUCROSE) FROM SUGARCANE
	2. 2079 : MOLASSES Falling under NIC broad description MANUFACTURE OF OTHER INDIGENOUS SUGAR - CANE / SUGARBEET / PALM JUICE PRODUCTS N.E.C.	10728 : MOLASSES Falling under NIC broad description MANUFACTURE OF MOLASSES
	3. 2079 : BAGASSE Falling under NIC broad description MANUFACTURE OF OTHER INDIGENOUS SUGAR - CANE / SUGARBEET / PALM JUICE PRODUCTS N.E.C.	10729 : BAGASSE Falling under NIC broad description MANUFACTURE OF SUGAR FROM OTHER SOURCES (JUICE OF PALM, SUGER BEET ETC.)
c. Proposed Capacity	1. 500.000 TCD	1. 1500.000 TCD.
Existing Capacity	3000.000 TCD	3500.000 TCD.
Total Capacity After Expansion	3500.000 TCD	5000.000 TCD.

C2

CE/CE/CC/Expansion

b.	Proposed Capacity	2.	21600.000 MT	2.	10400.000 M.T.
	Existing Capacity		0.000 MT		21600.000 M.T.
c.	Proposed Capacity	3.	151200.000 MT	3.	88800.000 M.T.
	Existing Capacity		0.000 MT		151200.000 M.T.
d.	Proposed Investment Rs.		120000000.00		-
	Existing Investment Rs.		470000000.00		Rs.559326735.00
e.	Location		MALINAGAR MALSHIRAS SOLAPUR(SHOLAPUR) MAHARASHTRA		- - - -
f.	Miscellaneous (any other)		-		-

2. This may be kept attached with the original Acknowledgement No. 403/SIA/IMO/2014 dated 04/03/2014

3. The receipt of this letter may please be acknowledged

Yours Faithfully

(PRAMOD KAPOOR)
UNDER SECRETARY TO THE GOVERNMENT OF INDIA

गाव अरळी-नगर

आवृत्ती तात्कालिक

भूमापन क्रमांक	भूमापन क्रमांकाचा उपविभाग	भूधारणा पद्धती
१३	१	टेवा

दिला-मा-शुगर फैक्टरी ली.

स्वामीचे स्थानिक नाव

आगावडीयोग्य क्षेत्र	हेक्टर	आर
.....	१	८४
.....		
.....		
एकूण ..	१	८४
पटलेराव (आगावडीयोग्य नसलेले)–		
वर्ग (अ) ..		
वर्ग (ब) ..		
एकूण ..	१	८४
..	रुपये	पैसे
अकरणी	२	८५
भूमी विक्री विशेष आकारणी ..		

000131

सेट्रल को-ऑप बँक मर्या नाशिक व इतर बोजा/हक्कसंबंध नोंद रद्द [illegible]

जमा झिल्हाधिकारी यांची मुदत पतसंस्था आकारणी

जमा झिल्हाधिकारी यांची मुदत [illegible]

सीमा आणि भूमापन चिन्हे

गाव नमुना बारा (पिकांची नोंदवही)

[महाराष्ट्र जमीन महसूल अधिकार अभिलेख आणि नोंदवहया (ठेवणे व सुस्थितीत ठेवणे) नियम, १९७१ यातील नियम २९]

वर्ष	हंगाम	पिकाखालील क्षेत्राचा तपशील											भोगवटादाराची उपलब्ध सामेसी आकारणी		जमा झिल्हाधिकारी यांचा आदेश		शेरा
		मिश्र पिकाखालील क्षेत्र			घटक पिके व प्रत्येक-खालील क्षेत्र			निर्भेळ पिकाखालील क्षेत्र									
		पिकाचा संकेतांक	खरीप लिहिला	रब्बी लिहिला	पिकाचे नाव	खरीप लिहिला	रब्बी लिहिला	पिकाचे नाव	खरीप लिहिला	रब्बी लिहिला	खरीप	रब्बी					
१	२	३	४	५	६	७	८	९	१०	११	१२	१३	१४		१५		१६
२००३/२००४			हे. आ.	हे. आ.		हे. आ.	हे. आ.		हे. आ.	हे. आ.		हे. आ.			खुद		१-८४/१
२००४/२००५								विगरोलीपिक							खुद		१-८४/१
२००५/२००६								विगरोलीपिक							खुद		१-८४/१
२००६/२००७								विगरोलीपिक							खुद		१-८४/१
२००७/२००८								विगरोलीपिक							खुद		१-८३/१
२००८/२००९								विगरोलीपिक							खुद		१-८३/१

मागे पाहा →

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गाव नमुना बारा – चालू

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१	२	३	४	५	६	७	८	९	१०	११	१२	१३	१४	१५	१६
			हे. आ.	हे. आ.		हे. आ.	हे. आ.		हे. आ.	हे. आ.		हे. आ.		१२	१६
2090/2039								बिगरशेती पड ९।८४						खुद	9
2092/2092								बिगरशेती पड ९–८४						खुद	9
2092/2093								बिगरशेती पड ९।८४						खुद	9
2093/2098								बिगरशेती पड ९।८४						खुद	9
2098/2094								बिगरशेती पड ९।८४						खुद	9

00013?

यणे प्रमाणे असे
ता.- 23/07/2014

गाव कामगार/तलाठी
मौजे:- मालेगाव

गाव मालेगार

तालुका मालेगाव

भूमापन क्रमांक	भूमापन क्रमांकचा उपविभाग	भूधारणा पद्धती	भोगवटादाराचे नाव	

गाव माढेगांव तालुका माळशिरस

भूमापन क्रमांक	भूमापन क्रमांकाचा उपविभाग	मुद्रांकाची पट्टी
१३	२	जो
शेताचे स्थानिक नाव		

भोगवटादाराचे नाव: १४८७ ६९९३ ७६९६ ६५४३ १००२ दि सा मा शुगर फॅक्टरीचे

लागवडीयोग्य क्षेत्र	हेक्टर	आर
.....	१	८३
.....		
.....		
एकूण ..	१	८३
वजा (अ) ..		
वजा (ब) ..		
एकूण ..	१	८३

पोटखराब (लागवडीयोग्य नसलेले)–

	रुपये	पैसे
आकारणी ..	२	८५
मुळी किंवा विशेष आकारणी ..		

माळशिरस ६ १ ४ ००१३८

इतर अधिकार (७८१३)
ट्रॅक्टर जॅक ऑईल इंजिन माळीन्या व ऑईल ऑईल व्हाल अवतुल अजनिकुम रु. १०००००-००/१०६ (१५१६)
या मिल्हा/विभागी जॉन्ची पूर्व परवानगी आवश्यक (७६९७)
(७८३८)
या मिल्हा/विभागी जॉन्ची पूर्व परवानगी आवश्यक (७८३८) (७८१६)

सीमा आणि भूमापन चिन्हे

गाव नमुना बारा (पिकांची नोंदवही)

[महाराष्ट्र जमीन महसूल अधिकार अभिलेख आणि नोंदवहया (तयार करणे व सुस्थितीत ठेवणे) नियम, १९७१ यातील नियम २९]

वर्ष	हंगाम	पिकाखालील क्षेत्राचा तपशील: मिश्र पिकाखालील क्षेत्र: मिश्रणाचा क्रमांक	मिश्र पिकाखालील क्षेत्र: अल लिखित	मिश्र पिकाखालील क्षेत्र: मजल लिखित	घटक पिके व प्रत्येकाखालील क्षेत्र: पिकाचे नाव	घटक पिके व प्रत्येकाखालील क्षेत्र: अल लिखित	घटक पिके व प्रत्येकाखालील क्षेत्र: मजल लिखित	निर्मळ पिकाखालील क्षेत्र: पिकाचे नाव	निर्मळ पिकाखालील क्षेत्र: अल लिखित	निर्मळ पिकाखालील क्षेत्र: मजल लिखित	लागवडीसाठी उपलब्ध नसलेली जमीन: हेक्टर	लागवडीसाठी उपलब्ध नसलेली जमीन: आर	जल सिंचनाचे साधन	जमीन करणाराचे नाव	शेरा
१	२	३	४ हे. आ.	५ हे. आ.	६	७ हे. आ.	८ हे. आ.	९	१० हे. आ.	११ हे. आ.	१२ हेक्टर	१३ आर	१४	१५	१६
२००४/२००५								फॅक्टरी व विगरशेतीपयु १-८३						बहुद	१-८३/१
२००५/२००६								फॅक्टरी व विगरशेतीपयु १-८३						बहुद	१-८३/१
२००६/२००७								फॅक्टरी व विगरशेतीपयु १-८३						बहुद	१-८३/१
२००७/२००८								फॅक्टरी व विगरशेतीपयु १-८३						बहुद	१-८३/१
२००८/२००९								फॅक्टरी व विगरशेतीपयु १-८३						बहुद	१-८३/१
२००९/२०१०								फॅक्टरी व विगरशेतीपयु १-८३						बहुद	१-८३/१

मागे पाहा

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गाव नमुना बारा – चालू

१	२	३	४	५	६	७	८	९	१०	११	१२	१३	१४	१५	१६
			हे. आ.	हे. आ.		हे. आ.	हे. आ.		हे. आ.	हे. आ.		हे. आ.			
2090/2099							फॅक्टरी व बिगरशेतीपड 9/C3							खुद	9/C3/9
2091/2092							फॅक्टरी व बिगरशेतीपड 9-C3							खुद	9-C3/9
2092/2093							फॅक्टरी व बिगरशेतीपड 9/C3							खुद	9/C3/9
2093/2094							फॅक्टरी व बिगरशेतीपड 9/C3							खुद	9/C3/9
2094/2095							फॅक्टरी व बिगरशे 9/C3							खुद	9/C3/9

यणे प्रमाणे असे
दि.- 23/04/2095

गाव कामगार तलाठी
मौजे:- माळीनगर

गाव कामगार तलाठी
मौजे:- माळीनगर

गाव माळीनगर तालुका माळशिरस

भूमापन क्रमांक	भूमापन क्रमांकाचा उपविभाग	भूमापन पोटहिस्सा	भोगवटादाराचे नाव
१	२	३	४

तहसिलदार

गाव माळीनगर तालुका मोहोळ

भूमापन क्रमांक	भूमापन क्रमांकचा उपविभाग	भूधारणा पद्धती
१३	३अ	जो
रोताचे स्थानिक नाव		

भोगवटादाराचे नाव
(५१०) (६४०१) (७८६६) (५५६) (००१२)
दि.जि.म.स. सुगर फॅक्टरी लि.

तहसिलदार सह. कार्यालय मोहोळ माळशिरस ००००१३५

भोगवटायोग्य क्षेत्र	हेक्टर	आर
.....	१	०३
.....		
.....		
एकूण ..	१	०३
पोटखराब (भोगवटायोग्य नसलेले)–		
वर्ग (अ) ..		
वर्ग (ब) ..		
एकूण ..	१	०३
आकारणी	रुपये	पैसे
सुधी किंवा विशेष आकारणी ..	१	५५

इतर अधिकार (५५७)
लेहेड कॉ. ऑफ इंडिया मर्यादित ने बँक ऑफ इंडिया अनुकूल कर्ज रु. १८. (००००००० - ७६८२००६ (५५८)
सह जिल्हाधिकारी सांगली पूर्व परवानगी आदेश, (१६६७) (२८३७)
मा. जिल्हाधिकारी सांगली यांची पूर्व परवानगी आदेश क्र. (७४१)

सीमा आणि भूमापन चिन्हे

गाव नमुना बारा (पिकांची नोंदवही)

[महाराष्ट्र जमीन महसूल अधिकार अभिलेख आणि नोंदवहया (तयार करणे व सुस्थितीत ठेवणे) नियम, १९७१ खालील नियम २९]

वर्ष	हंगाम	पिकाखालील क्षेत्राचा तपशील: मिश्र पिकाखालील क्षेत्र: भिन्नपाऊस क्षेत्र क्रमांक	जल सिंचित	अजल सिंचित	घटक पिके व प्रत्येकाखालील क्षेत्र: पिकाचे नाव	जल सिंचित	अजल सिंचित	निर्मळ पिकाखालील क्षेत्र: पिकाचे नाव	जल सिंचित	अजल सिंचित	भाडयासाठी उपलब्ध नसलेली जमीन: तपशील	क्षेत्र	जल सिंचनाचे साधन	जमीन कसणाऱ्याचे नाव	शेरा
१	२	३	४	५	६	७	८	९	१०	११	१२	१३	१४	१५	१६
			हे. आ.	हे. आ.		हे. आ.	हे. आ.		हे. आ.	हे. आ.		हे. आ.			
२००३/२००४								विजयी तीपट ९-०३						खुद	९-०३/१
२००४/२००५								विजयी तीपट ९-०३						खुद	९-०३/१
२००५/२००६								विजयी तीपट ९-०३						खुद	९-०३/१
२००६/२००७								विजयी तीपट ९-०३						खुद	९-०३/१
२००७/२००८								विजयी तीपट ९-०३						खुद	९-०३/१
२००८/२००९								विजयी तीपट ९-०३						खुद	९-०३/१
२००९/२०१०								विजयी तीपट ९-०३						खुद	९-०३/१

मागे पाहा >>

9.3/3 अ

गाव नमुना नंबर -चालू

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१	२	३	४	५	६	७	८	९	१०	११	१२	१३	१४	१५	१६
			चे. आ.	चे. आ.		हे. आ	हे. गु.		हे. आ.	हे. आ.		हे. आ.			
2090/2097								बिगरशेतीपड 9/03						खुद	9/03/9
2097/2092								बिगरशेतीपड 9-03						खुद	9-03/9
2092/2093								बिगरशेतीपड 9/03						खुद	9/03/9
2093/2098								बिगरशेतीपड 9/03						खुद	9/03/9
2098/2095								बिगरशेतीपड 9/03						खुद	9/03/9

यणे प्रमाणे असे
ता.- 23/04/2014

गाव कामगार तलाठी
मौजे:- माळीनगर

गाव माळीनगर तालुका माळशिरस ९९

फेरफार क्रमांक	भूमापन क्रमांक/उपविभाग	मूळ धारण पद्धती	भोगवटादाराचे नाव
६२१	६५७		दि अहमद गांधी आणि इतर

Quality Council of India

National Accreditation Board for Education & Training

CERTIFICATE OF ACCREDITATION

Equinox Environments (India) Pvt. Ltd.

F-11, Namdev Nest, 1160-B, 'E' Ward, Sykes Extension,
Opp. Kamala College, Kolhapur – 416001, Maharashtra

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Sl. No.	Sector Description	Sector (as per)		Cat.
		NABET	MoEFCC	
1	Mining of minerals including opencast / underground mining	1	1 (a) (i)	A
2	Offshore and onshore oil and gas exploration, development & production	2	1 (b)	A
3	Thermal power plants	4	1 (d)	B
4	Metallurgical industries (ferrous & non-ferrous) - secondary only	8	3 (a)	B
5	Asbestos milling and asbestos based products	12	4 (c)	A
6	Pesticides industry and pesticide specific intermediates (excluding formulations)	17	5 (b)	A
7	Petro-chemical complexes (industries based on processing of petroleum fractions & natural gas and/or reforming to aromatics)	18	5 (c)	A
8	Petrochemical based processing (processes other than cracking &reformation and not covered under the complexes)	20	5 (e)	A
9	Synthetic organic chemicals industry (dyes & dye intermediates; bulk drugs and intermediates **excluding** drug formulations; synthetic rubbers; basic organic chemicals, other synthetic organic chemicals and chemical intermediates)	21	5 (f)	A
10	Distilleries	22	5 (g)	A
11	Sugar Industry	25	5 (j)	B
12	Common hazardous waste treatment, storage and disposal facilities (TSDFs)	32	7 (d)	A
13	Bio-medical waste treatment facilities	32 A	7 (da)	B
14	Common municipal solid waste management facility (CMSWMF)	37	7 (i)	B
15	Townships and Area development projects	39	8 (b)	B

Note: Names of approved EIA Coordinators and Functional Area Experts are mentioned in RA AC minutes dated May 31, 2019 posted on QCI-NABET website.

The Accreditation shall remain in force subject to continued compliance to the terms and conditions mentioned in QCI-NABET's letter of accreditation bearing no. QCI/NABET/ENV/ACO/19/1021 dated August 02, 2019. The accreditation needs to be renewed before the expiry date by Equinox Environments (India) Pvt. Ltd., Kolhapur, following due process of assessment.

Sr. Director, NABET
Dated: August 02, 2019

Certificate No.
NABET/ EIA/1821/ RA 0135

Valid till
21.10.2021

For the updated List of Accredited EIA Consultant Organizations with approved Sectors please refer to QCI-NABET website.

The Saswad Mali Sugar Factory Ltd.

Successfully Moving Towards Centenary

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• Molasses Based Distillery • Grain Based Distillery • Ethanol Plant • Co-generation • Hotel Central Park, Pune

Ref. No. : 1803

Date : 13 NOV 2020

DECLARATION

This is to state that the 'Executive Summary &Draft EIA Report' submitted herewith has been prepared in respect of expansion of Sugar Factory from 4500 TCD to 5000 TCD, Co-generation from 14.8 MW to 18 MW & Molasses based distillery from 30 KLPD to 50 KLPD by **The Saswad Mali Sugar Factory Ltd. (TSMSFL)**, located at Malinagar, Tal.: Malshiras, Dist.: Solapur, Maharashtra State.

Information, data and details presented in this report are true to the best of our knowledge. Primary and secondary data have been generated through actual exercise conducted from time to time as well as procured from the concerned Govt. offices/departments has been incorporated here subsequent to necessary processing, formulation and compilation.

Rajendra G. Girme
(Managing Director)
The Saswad Mali Sugar Factory Ltd. (TSMSFL)
Malinagar, Tal.: Malshiras, Dist.: Solapur, Maharashtra

Project Proponent

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