

P-390-JSMPL-AMEN- SUGAR-52021  
(Revision - 01)

**SUMMARY ENVIRONMENTAL IMPACT ASSESSMENT  
(EIA) REPORT  
(IN ENGLISH AND MARATHI)**

**FOR**

**EXPANSION OF SUGAR FACTORY FROM 10000 TCD TO 15000 TCD,  
COGENERATION FROM 32 MW TO 52MW & DISTILLERY FROM 80 TO 300 KLPD**

**BY**

**JARANDESHWAR SUGAR MILLS PVT. LTD.**

**CHIMANGAON, TAL.: KOREGAON, DIST.: SATARA,  
MAHARASHTRA STATE**

**PREPARED BY**



**EQUINOX ENVIRONMENTS (I) PVT. LTD.**

Environmental; Civil & Chemical Engineers, Consultants and Analysts, Kolhapur (MS)

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**An ISO 9001 : 2015 & QCI - NABET Accredited Organization**



**AUGUST - 2021**





## JARANDESHWAR SUGAR MILLS PVT. LTD.

REF NO.: 334

DATE: 14.08.2021

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

**Sub.:** Application for 'Public Hearing' to be conducted for expansion of Sugar Factory from 10,000 TCD to 15,000 TCD, Co-generation Plant from 32 MW to 52 MW & Distillery from 80 KLPD to 300 KLPD (B/C Heavy Molasses/ Cane Juice/ Syrup) by **Jarandeshwar Sugar Mills Pvt. Ltd. (JSMPL)**, A/p: Chimangaon, Tal.: Koregaon, Dist. Satara.

**Ref.:** 'Terms of Reference' (ToR) granted to industry. 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. The same was in respect of expansion of Sugar Factory from 10,000 TCD to 15,000 TCD, Co-generation Plant from 32 MW to 52 MW & Distillery from 80 KLPD to 300 KLPD by – **Jarandeshwar Sugar Mills Pvt. Ltd. (JSMPL), Satara**.

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.

Alongwith 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. /- (Rs. 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.

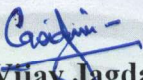
Thanking you.





## JARANDESHWAR SUGAR MILLS PVT. LTD.

Yours faithfully,

  
Mr. Vijay Jagdale  
(General Manager)

Encl.: 1. Executive Summary of Project

2. A Draft EIA Report

3. A D.D. bearing No. \_\_\_\_\_ dated \_\_\_\_\_ drawn on \_\_\_\_\_ bank



## **CERTIFICATE**

Declaration by Expert contributing to the EIA in respect of expansion of sugar factory from 10,000 TCD to 15,000 TCD, Cogeneration from 32 MW to 52 MW & distillery from 80KLPD to 300 KLPD (B/C Heavy Molasses/ Cane Juice/ Syrup) by – **Jarandeshwar Sugar Mills Pvt. Ltd.**, located at Chimangaon, Tal.: Koregaon, Dist.: Satara, Maharashtra.

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

**EIA Outward No.** : P- 390- JSMPL-AMEN-SUGAR-52021

**EIA Coordinator**


**Name** : Dr. Sangram Ghugare








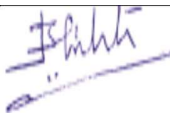
**Period of Involvement** : January 2021 to August 2021

**Contact Information** : [eia@equinoxenvi.com](mailto:eia@equinoxenvi.com)




### **Functional Area Expert:**

<b>Sr. No.</b>	<b>Functional Area</b>	<b>Name of the expert/s</b>	<b>Involvement (Period &amp; Task)</b>	<b>Signature</b>
<b>1</b>	<b>WP</b>	Dr. Sangram Ghugare	<b>January 2021 to August 2021</b> <ul style="list-style-type: none"><li>• Study of process and operations</li><li>• Site visit and finalization of water sampling locations</li><li>• Preparation of water balance and identification of wastewater generation.</li><li>• Evaluation of water pollution &amp; control management</li><li>• Identification of impacts, suggestion and finalization of mitigation measures</li><li>• Study on Treatment of effluents through existing ETP.</li></ul>	

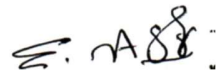


Sr. No.	Functional Area	Name of the expert/s	Involvement (Period & Task)	Signature
2	EB	Prof. (Dr.) Jay Samant	<b>January 2019 to March 2019</b> <ul style="list-style-type: none"> <li>• Selection of Site for conducting ecological &amp; wildlife surveys.</li> <li>• Interaction with Govt. offices and agencies for certain secondary data and information pertaining to region specific issues</li> <li>• Review of rules, legislation and criteria towards knowing and understanding inclusion in the study region of any eco-sensitive zones, wild life sanctuary.</li> <li>• Collection, compilation and presentation of the data as well as incorporation of same in to the Draft EIA report</li> </ul>	
3	SE	Dr. Anuradha Samant	<b>January 2019 to March 2019</b> <ul style="list-style-type: none"> <li>• Collection of data on socio-economic aspects in study area through surveys.</li> <li>• Public opinions and recording of events for future industrialization in the study area.</li> <li>• Study of sociological aspects like human settlement, demographic and infrastructural facilities available in study area.</li> </ul>	
4	AP	Dr. Sangram Ghugare  Mr. Yuvraj Damugade	<b>January 2021 to August 2021</b> <ul style="list-style-type: none"> <li>• Involved in detailed study of mass balance w.r.t. raw materials &amp; products especially from view point of process emissions.</li> <li>• Site visit and finalization sampling locations</li> <li>• Identification of impact and suggesting the mitigation measures.</li> </ul>	  
5	AQ	Mr. Yuvraj Damugade	<b>January 2019 to August 2019</b> <ul style="list-style-type: none"> <li>• Designing of Ambient AQM network for use in prediction modeling and micro metrological data development</li> <li>• Development and application of air quality models in prediction of pollutant dispersion,</li> <li>• Plotting of isopleths of GLCs, Worst case scenarios prediction w.r.t. source and receptors.</li> </ul>	
6	HG	Dr. J.B. Pishte	<b>January 2019 to August 2019</b> <ul style="list-style-type: none"> <li>• Hydro geological studies, data processing; analysis and evaluation, Ground water table measurement and monitoring network methodology</li> </ul>	
7	GEO			



Sr. No.	Functional Area	Name of the expert/s	Involvement (Period & Task)	Signature
			<p>preparation.</p> <ul style="list-style-type: none"> <li>• Planning and scheduling of groundwater sampling stations in the region.</li> <li>• Study of geology &amp; general geological configuration of the region as well as sub-surface geology.</li> <li>• Determination of impact and suggesting mitigation measures</li> </ul>	
8	SHW	Dr. Sangram Ghugare	<p><b>January 2021 to August 2021</b></p> <ul style="list-style-type: none"> <li>• Detailed study of manufacturing process and mass balance.</li> <li>• Solid wastes generation in different steps of manufacturing was identified and their quantification done was checked.</li> <li>• Identification of various hazardous wastes generated through manufacturing process.</li> <li>• Practices of storage and disposal of HW its impact and mitigation measures.</li> </ul>	
9	RH	Mr. Vinod Sahasrabuddhe	<p><b>January 2019 to August 2019</b></p> <ul style="list-style-type: none"> <li>• All the necessary literature for processes storage of hazardous chemicals was studied before visit.</li> <li>• Site visit and Verification of adequacy of on-site emergency preparedness plan for proposed unit was done.</li> <li>• Identification of probable emergencies and procedures for preparedness for handling the same was verified.</li> <li>• Worst case analysis by using ALOHA, Ware house safety measures, suggestion of mitigation measures.</li> </ul>	
10	NV	Mr. Vinay Kumar Kurakula	<p><b>January 2019 to August 2019</b></p> <ul style="list-style-type: none"> <li>• Verification of noise levels Monitoring (both work zone and ambient) in the industrial premises and study region</li> <li>• Finalization and verification of sampling locations, ambient noise monitoring stations and the data collected.</li> <li>• Land use land cover mapping using NRSC Satellite image,</li> <li>• Satellite image processing, Image classification, Technical analysis and study for setting up of facility,</li> </ul>	
11	LU			



Sr. No.	Functional Area	Name of the expert/s	Involvement (Period & Task)	Signature
			planning of storage facility.	
12	SC	Shri B. S. Lole	<b>January 2019 to August 2019</b> <ul style="list-style-type: none"> <li>• Involvement physical analysis &amp; characterization of the soils.</li> <li>• Identification of Impact and its mitigation measures</li> <li>• Interpretation of soil analysis, results and data including comparison of same with standard soil classification.</li> <li>• Collection, study and evaluation of soil information from data obtained from secondary sources &amp; its interpretation.</li> </ul>	

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 prepared the EIA report w.r.t. expansion of sugar factory from 10,000 TCD to 15,000 TCD, Cogeneration from 32 MW to 52 MW & distillery from 80KLPD to 300 KLPD (B/C Heavy Molasses/ Cane Juice/ Syrup)– **Jarandeshwar Sugar Mills Pvt. Ltd.**, located at Chimangaon, Tal.: Koregaon, Dist.: Satara, Maharashtra.

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, Chairman & MD  
**Name of the EIA Consultant Organization** : M/s. Equinox Environments (I) Pvt. Ltd. (EEIPL); Kolhapur  
**NABET Certificate No. & Issue** : NABET/EIA/1821/ RA 0135 valid up to 21.10.2021  
**Date**

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<b>2.</b>	<b>SUMMARY EIA IN MARATHI</b>	<b>25-50</b>



**Summary of Draft EIA Report  
for  
Expansion of Sugar Factory from 10,000 TCD to 15,000 TCD,  
Cogeneration from 32 MW to 52 MW & Distillery from 80 KLPD to 300  
KLPD (B/C Heavy Molasses/ Cane Juice/ Syrup)  
in the  
Existing 10,000 TCD Sugar Factory, 32 MW Cogeneration & 80 KLPD  
Distillery premises of  
Jarandeshwar Sugar Mills Pvt. Ltd., (JSMPL)  
Gat No. 803 & 804, A/p: Chimangaon, Tal.: Koregaon, Dist.: Satara – 415501, Maharashtra**

**1) THE PROJECT**

**Jarandeshwar Sugar Mills Pvt. Ltd. (JSMPL)** is located at Gat No. 803 & 804, Chimangaon, Tal.: Koregaon, Dist.: Satara, Maharashtra state. The industrial site is towards East of Satara, at a distance of about 22.5 Km from city. Industry is having existing 10,000 TCD Sugar factory, 32 MW Cogeneration plant & 80 KLPD Distillery unit. Now, the management of JSMPL have planned to expansion of sugar factory from 10,000 TCD to 15,000 TCD, Cogeneration from 32 MW to 52 MW & distillery from 80 KLPD to 300 KLPD (B/C Heavy Molasses/ Cane Juice/ Syrup) in the existing Sugar factory, Co-gen plant & Distillery unit premises.

As per the provisions of “EIA Notification No. S.O. 1533 (E)” dated 14.09.2006; as amended vide Notification No. “S.O. 1960 (E)” dated 13.06.2019; the proposed expansion of Sugar Factory, Cogeneration Plant and Molasses & Cane Juice based distillery are listed at activity 5(j) 1(d) and (g- i & ii) under Category ‘A’. As the Sugar, Cogen & Distillery projects are located in same premises as an integrated project complex, the entire proposal of expansion of Sugar, Cogen and Distillery is being submitted at ‘Ministry of Environment, Forests and Climate Change (MoEFCC); New Delhi’ for grant of ToRs and received Standard ToRs. A copy is enclosed separately.

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 & Co-gen plant	241.31	92.34	<b>333.65</b>
2	Distillery Unit	117.64	86.14	<b>203.78</b>
	<b>Total</b>	<b>358.95</b>	<b>178.48</b>	<b>537.43</b>

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.

**Table 2 Working Pattern**

No.	Type of Activity	Days of Operation		
		Season	Off- Season	Total
1	Sugar Factory	180	--	180
2	Co-gen Plant	180	60	240
3	Distillery	180	150	330

## 2) THE PLACE

Proposed expansion of sugar factory, co-gen plant and distillery shall be carried out at existing premises of JSMPL. Total land area acquired by the JSMPL is 81.26 Ha. Out of this total built up area after expansion sugar factory, co-gen plant & distillery is 17.59 Ha. Detailed area break-up is presented at Table 3 & copy of plot layout is enclosed separately.

**Table 3 Area Break up**

No.	List of area	Area (Sq. M.)		
		Existing	Expansion	Total
1	<b>Total Plot Area</b>	<b>8,12,633.29</b>		
2	<b>Built-up Area</b>			
	i. Sugar Factory & Cogen Plant	66,770.65	9,438.3	76,208.95
	ii. Distillery Unit	17,030.48	2481.99	19,512.47
	iii. Area under Road	45,485.0	1,000.0	46,485.0
	iv. Residential Colony	33,750.0	--	33,750.0
	<b>Total Built-up Area</b>	<b>1,63,036.13</b>	<b>12,920.29</b>	<b>1,75,956.42</b>
3	Green Belt Area (33% of total plot area)	3,02,323.0	16,253.0	3,18,576.0
4	Total Open Area	3,47,247.16	--	3,18,100.87

## 3) THE PROMOTERS

JSMPL promoters are well experienced in the field of sugar factory, co-gen & distillery & have made thorough study of entire project planning as well as implementation schedule. Name and designation of the promoters are as under-

**Table 4 List of Promoters**

No.	Name	Designation
1	Mr. Sachin Sinagare	Director
2	Mr. Vijay R. Jagdale	General Manager

## 4) THE PRODUCTS

Details of products that are being manufactured under existing & expansion of sugar factory, co-gen plant & distillery are represented in following table.

**Table 5 Product & By-product for Integrated Complex**

Industrial unit	Product & By-product	UoM	Quantity		
			Existing	Expansion	Total
<b>Sugar Factory (10,000 to 15,000 TCD)</b>	Sugar (12%)*	MT/D	1200	600	1800
	<b>By-Product</b>				
	Bagasse (28%)*	MT/D	2800	1400	4200
	Press Mud (4%)*	MT/D	400	200	600
	Molasses (4%)*	MT/D	400	200	600
<b>Co-gen Plant (32 to 52 MW)</b>	Power Generation	MW	32	20	52
<b>Distillery Unit (80 to 300 KPD)</b>	Rectified Spirit/ ENA/ Ethanol/ Absolute Alcohol	KLDP	80	220	300
	<b>By-product</b>				
	Fusel Oil	MT/D	5	15	20
	CO <sub>2</sub>	MT/D	60	170	230

NOTE- \*: % of cane crushed.

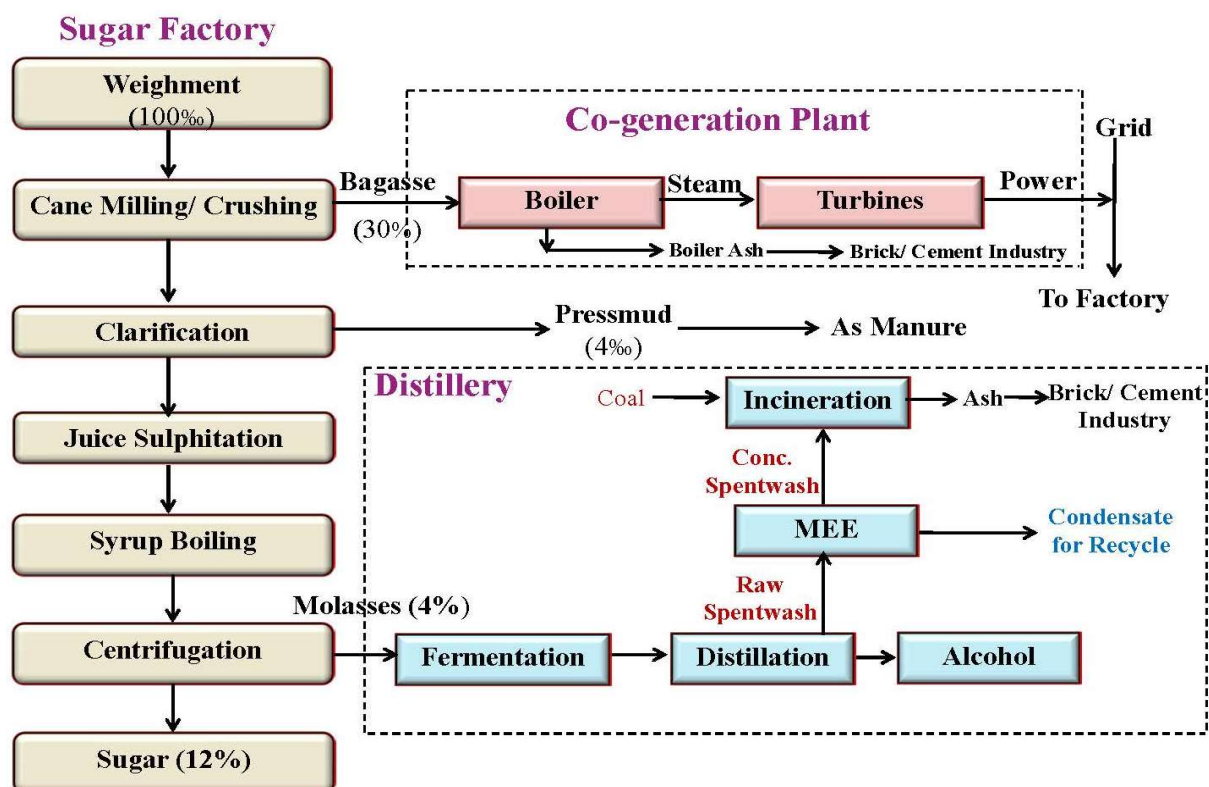


**Table 6 List of Raw Materials**

Industrial Unit	Raw Material	Quantity (MT/ D)			Source
		Existing	Expansion	Total	
<b>Sugar Factory (10,000 TCD to 15,000 TCD)</b>	Sugarcane	10,000	5,000	15,000	Nearby Farms
	Lime	23	11	34	Local Suppliers
	Sulphur	4	2	6	
<b>Co-gen Plant (30 MW to 50 MW)</b>	Bagasse	1632	1091	2723	Own sugar factory
<b>Distillery Unit (80 KLPD to 300 KPD)</b>	Molasses or	291	820	1111	Own sugar factory/ outside purchase
	Sugarcane for Juice	--	4290	4290	Nearby Farms
	Yeast	0.2	0.5	0.7	Local Vendors
	Urea	3	8	11	
	De-foaming Oil	9	26	35	

## 5) MANUFACTURING PROCESS

**Figure 1 Integrated Manufacturing Process Operations**



For more Details of manufacturing process and flow chart for sugar, Co-gen plant & Distillery are given in Chapter 2 of EIA Report.

## 6) 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 JSMPL decided to go for expansion.

## 6) ENVIRONMENTAL ASPECTS

JSMPL have an effective 'Environmental Management Plan' and various aspects of the same are as follows:-

### A. Water Use, Effluent Generation and its Treatment

#### a. Water Use

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

**Table 7 Details of Water Consumption in Sugar & Cogen Unit**

No.	Description	Quantity(M <sup>3</sup> /Day)		
		Existing	As Per CTO	After Expansion
1	Domestic	42 <sup>#</sup>	80	47 (11 <sup>#</sup> +36 <sup>Ω</sup> )
2	Industrial			
a)	Manufacturing process	3000*	1000	4500*
b)	Cooling Make-Up	675*		1725*
c)	Boiler Make-Up	384*		624*
d)	DM Plant	77 <sup>#</sup>		125 <sup>#</sup>
e)	Lab & Washing	10 <sup>#</sup>		15*
f)	Ash Quenching	4*		8*
	<b>Industrial Total</b>	<b>4150 (4063*+87<sup>#</sup>) 98% Recycle</b>	<b>1000</b>	<b>6997 (6872*+125<sup>#</sup>) 98% Recycle</b>
3	Green Belt & Gardening	605 <sup>Ω</sup>	--	650 <sup>Ω</sup>
	<b>Grand Total</b>	<b>4797 (4063*+605<sup>Ω</sup>+129<sup>#</sup>)</b>	<b>1080</b>	<b>7694 (6872*+686<sup>Ω</sup>+136<sup>#</sup>)</b>
	Fresh Water Consumption (Norm:100 lit./ MT of cane)	9	100	8

**Note:** # - Fresh water taken from Tilganga River, \* - Cane condensate, Ω -STP & ETP treated water.



**Table 8 Details of Water Consumption in Molasses Distillery Unit**

No	Description	Water Consumption (M <sup>3</sup> /Day)			
		Existing Distillery	As Per CTO	After Expansion; Cane Crushing Season (180 Days)	After Expansion; Cane Non- Crushing Season (150 Days)
1	Domestic	4 <sup>#</sup>	3	5 <sup>#</sup>	5 <sup>#</sup>
2	Industrial				
a)	Process	624 <sup>*</sup>	744	2382 <sup>*</sup>	2382 <sup>*</sup>
b)	Cooling Make- Up	112 (21 <sup>*</sup> +91 <sup>#</sup> )		420 <sup>*</sup>	420 (26 <sup>*</sup> +394 <sup>#</sup> )
c)	Boiler Make- Up	70 <sup>#</sup>		70 <sup>*</sup>	70 <sup>#</sup>
d)	DM Plant	14 <sup>#</sup>		14 <sup>*</sup>	14 <sup>#</sup>
e)	Lab & Washing	4 <sup>#</sup>		15 <sup>*</sup>	15 <sup>#</sup>
f)	Ash Quenching	2 <sup>#</sup>		5 <sup>*</sup>	5 <sup>#</sup>
	<b>Ind. Total</b>	<b>826 (645<sup>*</sup> + 181<sup>#</sup>) 78% Recycle</b>	<b>744</b>	<b>2906 (2408<sup>*</sup> + 498<sup>*</sup>) 100% Recycle</b>	<b>2906 (2408<sup>*</sup> + 498<sup>#</sup>) 83% Recycle</b>
	<b>Grand Total</b>	<b>830 (645<sup>*</sup> + 185<sup>#</sup>)</b>	<b>747</b>	<b>2911 (2408<sup>*</sup> + 498<sup>*</sup>+5<sup>#</sup>)</b>	<b>2911 (2408<sup>*</sup> + 503<sup>#</sup>)</b>
	<b>Fresh Water Consumption (Norm: 10 KL/KL of Alcohol)</b>	<b>2.2</b>	<b>9.3</b>	<b>0</b>	<b>1.6</b>

**Note:** - # - Fresh water taken from Tilganga River, \* - Recycled water from CPU, \* - Cane condensate.

**Table 9 Details of Water Consumption in Cane Juice Distillery Unit**

No.	Description	Water Consumption (CMD)
1	Domestic	4 <sup>#</sup>
2	Industrial	
	a. Cooling Make-Up	450 <sup>*</sup>
	b. Boiler Make-Up	70 <sup>*</sup>
	c. DM Plant	14 <sup>#</sup>
	d. Lab & Washing	4 <sup>*</sup>
	e. Ash Quenching	1 <sup>*</sup>
	<b>Ind. Total</b>	<b>539 (525<sup>*</sup>+14<sup>#</sup>) 97% Recycle</b>
	<b>Grand Total</b>	<b>543 (525<sup>*</sup>+18<sup>#</sup>)</b>

**Note :** # - Fresh water from Tilganga River, \* - Cane condensate

## **b. Effluent Treatment-**

Effluent generated from existing & expansion activities are as follows -

### **i) Domestic Effluent**

Domestic effluent from existing activities of JSMPL sugar factory, co-gen plant & distillery is 37 M<sup>3</sup>/D, same is being treated separately in septic tanks followed by soak pits provided in a decentralized manner. After implementation of expansion project, total domestic effluent from JSMPL campus will be 42 M<sup>3</sup>/D (from sugar factory & co-gen plant – 38M<sup>3</sup>/D and to that of distillery 4 M<sup>3</sup>/D). Same will be treated in proposed Sewage Treatment Plant (STP) of capacity 50 M<sup>3</sup>/D & treated effluent will be reused for flushing & also used for gardening.

**Table 10 Effluent Generation from Sugar & Cogeneration Unit**

Description	Quantity(M <sup>3</sup> /Day)			Treatment & Disposal
	Existing	As per CTO	After Expansion	
<b>Domestic</b>	34	50	38	<b>Existing</b> - Septic tank followed by soak pit <b>Expansion</b> – Proposed STP
<b>Industrial</b>				Treated in existing ETP having primary, secondary & tertiary treatment units; used for gardening.
a) Process	360	475	540	
b) Cooling B/D	68		173	
c) Boiler B/D	78		127	
d) DM Plant	77		125	
e) Lab & Washing	10		15	
<b>Industrial Total (a+b+c+d)</b>	<b>593</b>	<b>475</b>	<b>980</b>	
Norm:100 lit./ MT of cane	<b>59</b>	<b>--</b>	<b>65</b>	

**Table 11 Effluent Generation from Distillery Unit**

Description	Quantity(M <sup>3</sup> /Day)				Disposal
	Existing; Molasses Based	As per CTO	After Expansion; Molasses Based	Cane Juice Based	
Domestic	3	2	4	4	Existing - Septic tank followed by soak pit Expansion– Proposed STP
Industrial					Raw spentwash will concentrated in Multi Effect Evaporator (MEE). Conc. Spentwash (1.7 KL/KL) will be incinerated.  Other effluent from distillery will be treated in existing CPU. Treated effluent will be fully recycled in process to achieve ZLD. Condensate from MEE will be forwarded to Process Condensate Treatment Plant (PCTP); recycled in process.
Process	Raw Sp. Wash – 640	655	Raw Sp. wash – 2400	Raw Sp. wash – 1200	
	Conc. Sp. wash – 130		Conc. Sp. wash – 480	Conc. Sp. wash – 240	
	Condensate- 510		Condensate- 1920	Condensate- 960	
	Spent Lees – 98		Spent Lees – 426	Spent Lees - 331	
Cooling B/D	11		42	45	
Boiler B/D	15		15	15	
DM Backwash	14		14	14	
Lab & Washing	4		15	4	
<b>Ind. Total</b>	Conc. – 130 Other – 652	<b>655</b>	Conc. – 480 Other – 2432	Conc. – 240 Other – 1369	

## ii) Industrial Effluent

Total trade effluent generated after expansion of sugar and co-generation activities will be 980M<sup>3</sup>/D. Same will be treated in existing Effluent Treatment Plant (ETP) provided in own factory premises having capacity 1000 M<sup>3</sup>/D comprising of primary, secondary & tertiary unit operations. Effluent from sugar factory and co-gen plant generated @ 65Lit./MT of cane crushed against CREP norm of 100 Lit./MT of cane crushed. Treated water from sugar factory ETP is used for green belt development in own premises.



An ETP unit comprises of Screen chamber, Oil & Grease trap, Equalization Tank, Aeration Tank, Secondary Clarifier, Treated Water Tank, PSF & ACF. Photographs of same are presented below. The flow chart & dimensions of existing ETP is presented in Figure 2.

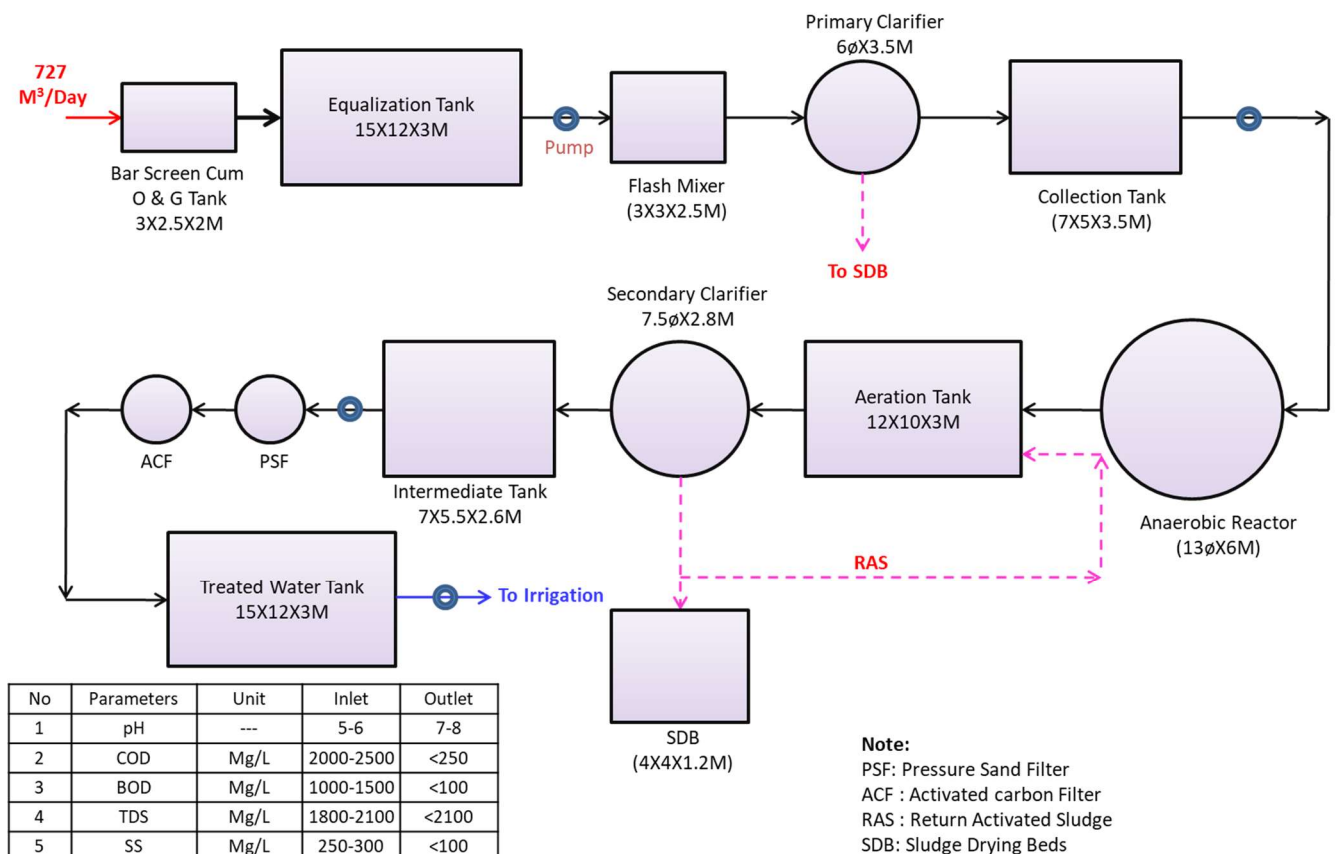
Further, industry is having existing CPU in sugar factory of 2000 M<sup>3</sup>/D capacity.

Industrial effluent generated from distillery activities after expansion will be in the form of Spent Lees 426M<sup>3</sup>/D, Condensate from MEE 1920M<sup>3</sup>/D, Boiler Blow down 15M<sup>3</sup>/D, cooling blow down 42M<sup>3</sup>/D and effluent from lab & washing & DM plant 29M<sup>3</sup>/D. This entire effluent will be treated in existing Condensate Polishing Unit (CPU) of 1845 M<sup>3</sup>/D capacity & Process Condensate Treatment Plant (PCTP- RO based) of 1200 M<sup>3</sup>/D capacity. Treated effluent will be recycled in to process for dilution of molasses and cooling tower make-up; thereby achieving ZLD.

Raw Spentwash @ 2400M<sup>3</sup>/D will be forwarded to evaporation and concentration in Multiple (Five) Effect Evaporator (MEE). Further, concentrated spentwash of 480M<sup>3</sup>/D will be incinerated in existing 28 TPH incineration boiler.

Same treatment will be given to effluent form cane juice distillery. Raw spentwash @ 1200M<sup>3</sup>/D will be concentrated & concentrated spentwash @ 240 M<sup>3</sup>/D will be incinerated. Other effluent will be forwarded to CPU & reused.

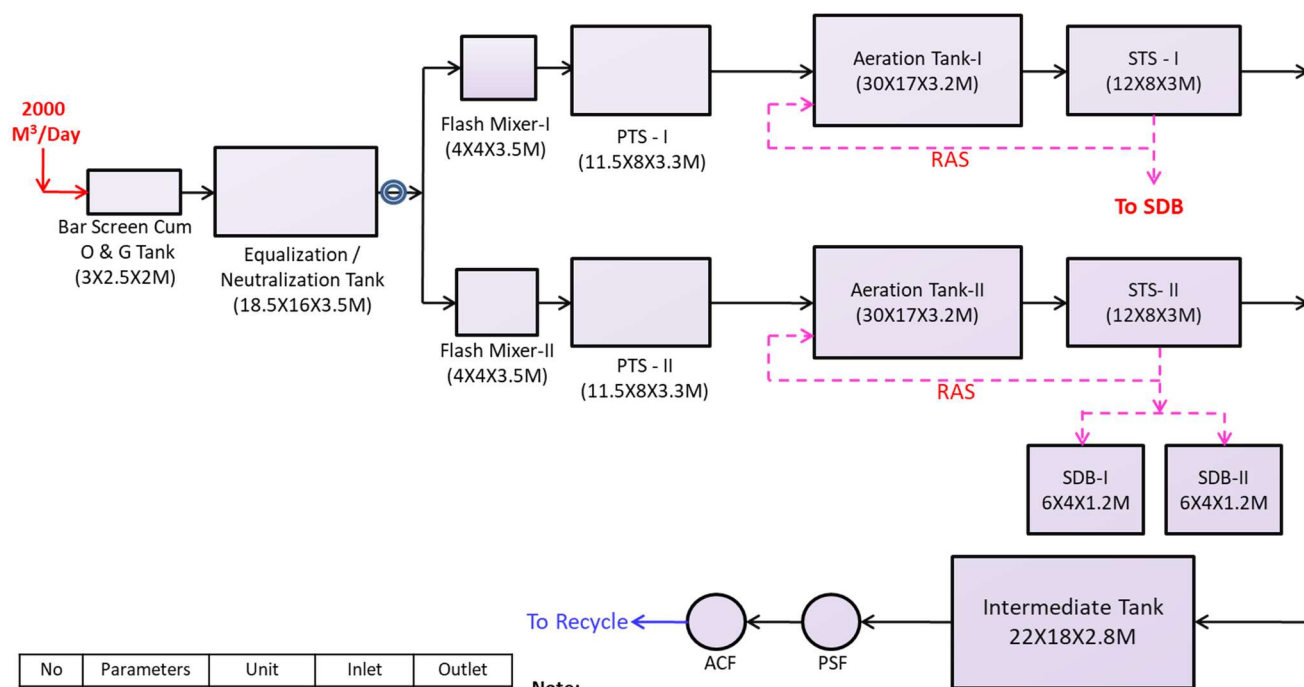
**Figure 2 Flow Chart of Sugar Factory ETP**



**Figure 3 Photographs of Existing ETP**



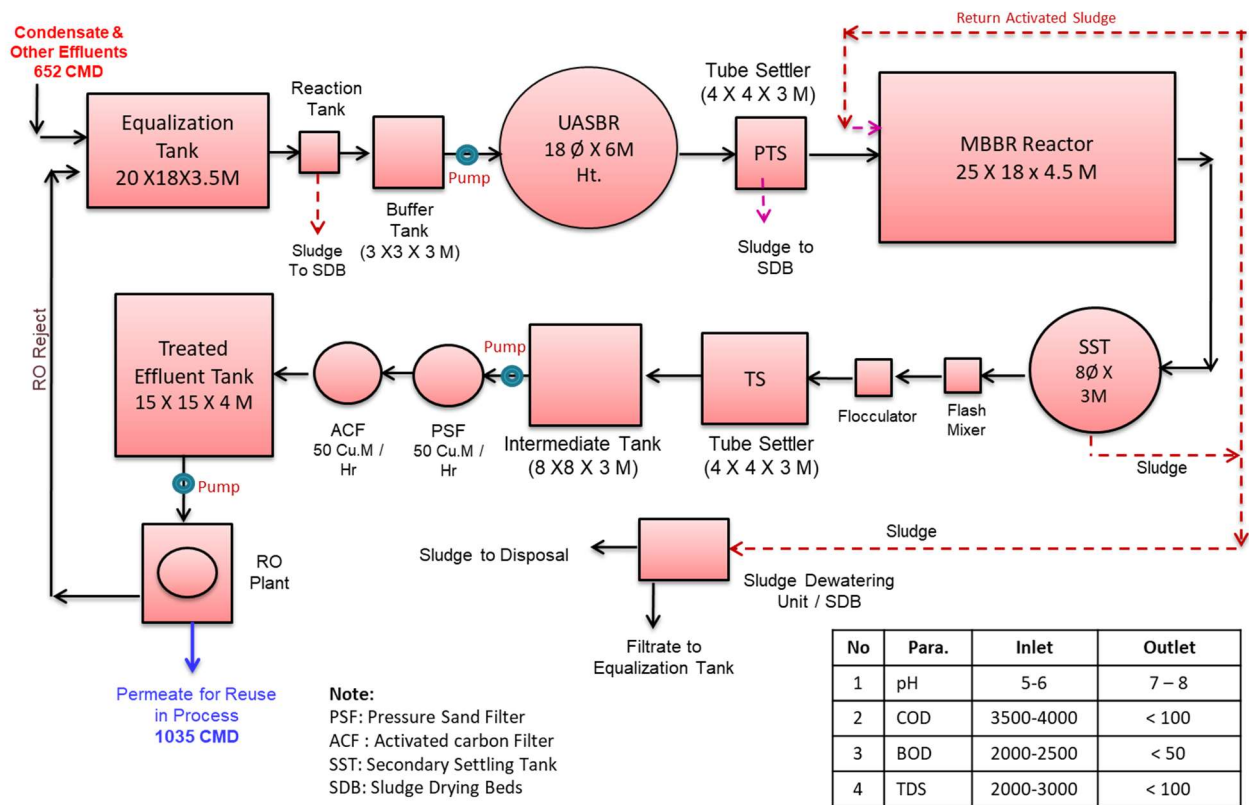
**Figure 4 Flow Chart of Sugar Factory CPU**



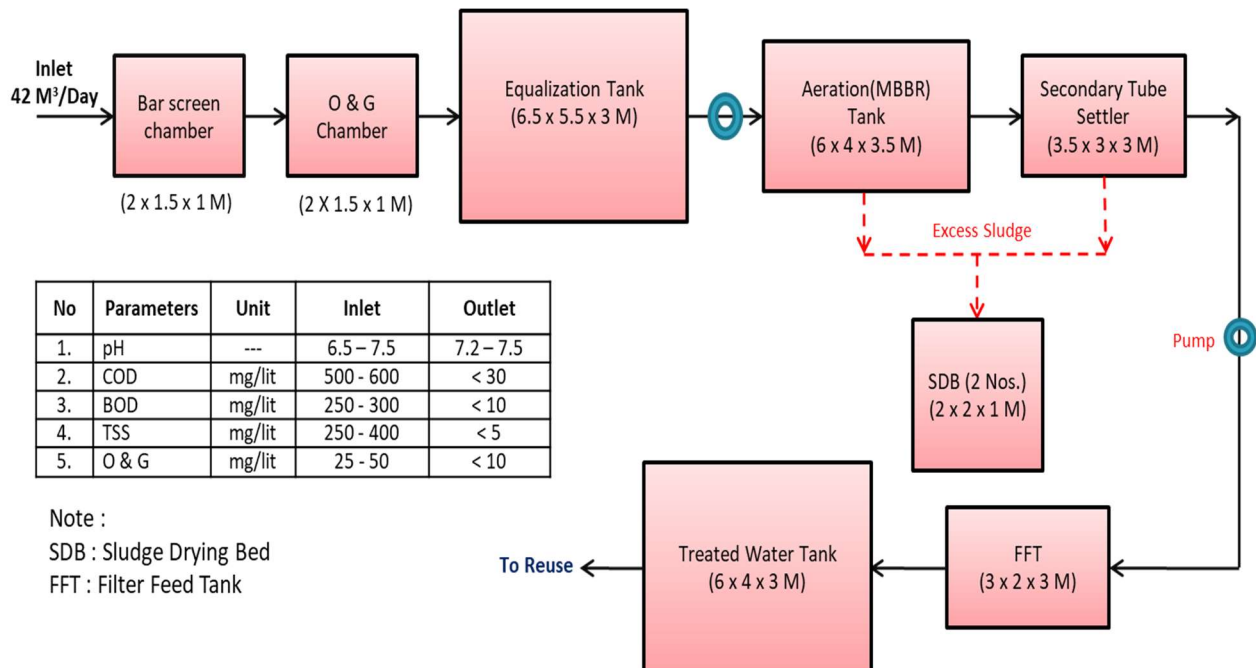
No	Parameters	Unit	Inlet	Outlet
1	pH	---	5-6	7-8
2	COD	Mg/lit	3500-4000	<100
3	BOD	Mg/lit	1500-2000	<50
4	TDS	Mg/lit	2000-2500	<100
5	SS	Mg/lit	400-500	<50

**Note:**  
 PST : Primary Tube Settler  
 SST: Secondary Tube Settler  
 RAS : Return Activated sludge  
 SDB: Sludge Drying Beds  
 PSF: Pressure Sand Filter  
 ACF : Activated carbon Filter

**Figure 5 Process Flow Diagram of Existing Distillery CPU**

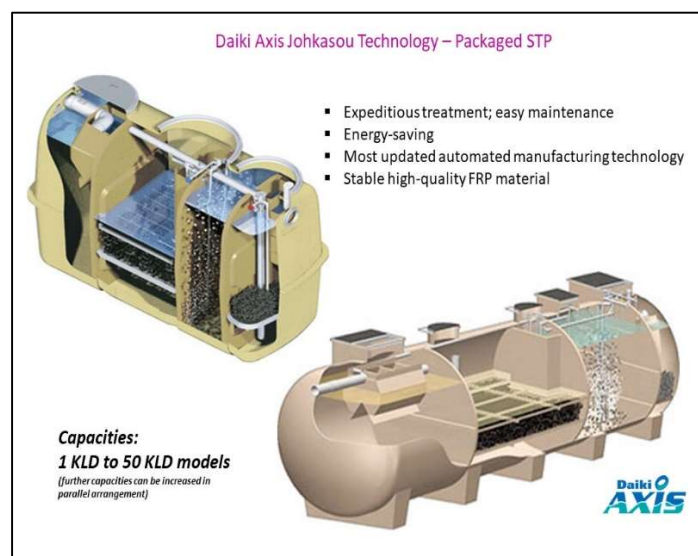


**Figure 6 Flow Chart of Proposed STP**

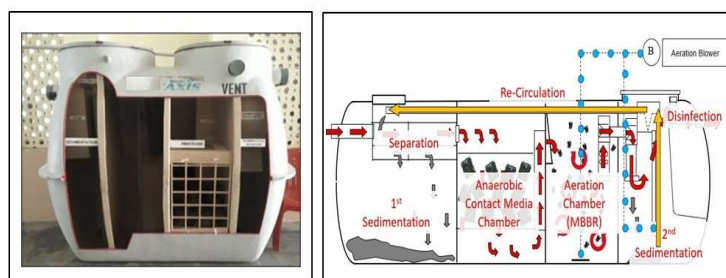




**Figure 7 Process Technology of STP**



**Johkasou STP Treatment Process**



Unit	MOC	Process Description	Technological Frame Work
Separation & Sedimentation Chamber	FRP	Suspended Solids (SS) are separated.	
Anaerobic Chamber	FRP	Organic matters are anaerobically decomposed.	
Moving Bed Chamber	FRP	BOD content reduced by continuous aeration.	
Sedimentation Chamber	FRP	SS are settled and clear treated water is obtained.	
Disinfection Chamber	FRP	Treated Water is disinfected by Disinfection agent.	
Sludge Re-circulation Arrangement	-	Sludge from 2 <sup>nd</sup> Sedimentation Chamber is recirculated to the 1 <sup>st</sup> Sedimentation Chamber.	

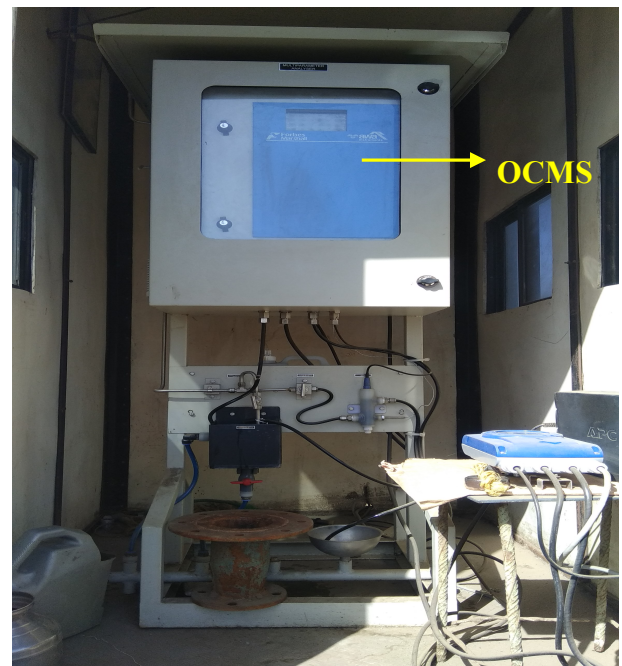
## B. Air Emissions

Under existing Sugar & Cogen, 1 boiler of 160 TPH capacity & 2 DG sets of 1000 KVA are installed on site. Boiler is provided with ESP as Air Pollution Control (APC) equipment followed by stack height of 82 M AGL. Moreover, under existing distillery, 1 boiler of 28 TPH is installed. Fuel for boiler will be Coal to the tune of 648 MT/D and Spentwash to the tune of 278 MT/D. ESP as APC will be provided with stack of 72 M height. Under expansion activities, a new boiler of 100 TPH will be installed. Following table gives details of existing and proposed boiler and D.G. Set. Further, D.G set is operated only during power failure.

**Table 12 Details of Boiler and Stack in JSMPL**

No.	Description	Existing Boiler & DG Set			Proposed
		Boiler 1 (Sugar & Cogen)	Boiler 2 (Distillery)	DG Set	Boiler 3 (Sugar & Cogen)
1	Capacity	160 TPH	28 TPH	1000 KVA (2 nos.)	100 TPH
2	Fuel type	Bagasse	Spentwash + Coal	Diesel	Bagasse
3	Quantity	1632 MT/D	648 + 278 MT/D	145 Lit./Hr. (each)	1091 MT/D
4	Material of construction	R.C.C.	R.C.C.	MS	R.C.C
5	Shape	Round	Round	Round	Round
6	Height, AGL	82 M	72 M	6 M (ARL)	75 M
7	Diameter	4.5 M	2.5 M	150 mm	3.5 M
8	Pollution Control equipment	ESP	ESP	--	ESP

**Figure 8 Air Pollution Control Equipments & Online Monitoring System**



## C. Noise Pollution Aspect

### 1. Sources of Noise

- i. The existing sugar factory and co-gen; noise generating sources are the boiler house, turbine rooms, cane crushing section and mill house, etc.
- ii. In the distillery, very high noise generating sources will not exist. D.G. set will be one of the sources of noise pollution. Operation of same will be only in case of power failure. Expected noise levels in the section will be 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.
- iii. Fermentation section & distillation section will be the other minor noise generating sources. The expected noise levels in these sections will be in the range of 70 to 80dB(A).
- iv. Adequate green will be developed in phase wise manner in and around the industry. So that it will further attenuate the noise levels.

### 2. Control Measures

Isolation, separation and insulation techniques to be followed, PPEs in the form of 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

**Table 13 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	0.54	3.0	Forwarded to authorized re-processor
		Contaminated Cotton Waste- Cat. 33.3	0.4	0.5	
		Empty Containers- Cat. 33.1	30	80	Forwarded to authorized re-seller

## E. Solid Wastes

**Table 14 Details of Solid Waste**

No.	Unit	Type	Quantity (MT/D)		Disposal
			Existing	After Expansion	
1	Sugar Factory & Co-gen Plant	ETP Sludge	0.5	0.8	Used as manure
		Boiler Ash (Bagasse)	33	55	To Brick manufacturing / as manure
2	Distillery	Boiler Ash (Coal + Sp. Wash)	38	153	To Brick manufacturing
		Yeast Sludge	14	50	Used as manure
		CPU Sludge	0.65	2.5	

## F. Odour Pollution

There are number of odour sources in existing as well as proposed expansion units, which include 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 proposed expansion project of distillery, 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 CPCB/ MPCB or any other concerned authority are strictly followed in the existing set up. Same practice shall be continued after implementation of proposed expansion projects.

## H. Environmental Management Cell (EMC)

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

**Table 15 Environmental Management Cell of JSMPL**

No.	Name of Member	Designation	No. of working persons
<b>A</b>	<b>Existing Sugar &amp; Cogeneration Unit</b>		
1	Mr. V. R. Jagdale	General Manager	1
2	Mr. S. P. Thorat	Works Manager	1
3	Mr. S. B. Patil	Chief Chemist	1
4	Mr. V. S. Phalke	Environmental Officer	1
5	Mr. V. C. Kokare	WTP In charge	1
6	Mr. R. R. Kadam	Lab In charge	1
7	Mr. K. D. Gaikwad	Garden In charge	1
<b>B</b>	<b>Existing Distillery Unit</b>		
8	Mr. B. K. Shinde	Distillery Manager	1
9	Mr. D. L. Shinde	ETP In charge	1
10	Mr. S. G. Kumbhar	Distillery Chemist	1
11	Mr. G. V. Kadam	Plant operator	1
12	Mr. N. R. Shinde	Lab Chemist	1
	<b>Total</b>		<b>12</b>

The capital as well as O & M cost towards environmental aspects under the existing & expansion activities will be as follows –



**Table 16 Capital as well as O & M Cost under Existing & Expansion Unit**

No.	Description	Cost Component (Rs. Lakhs)	
		Capital	O & M / Year
<b>A</b>	<b>Existing Project</b>		
1	Air Pollution Control: ESP{1 boiler- 160 TPH (Stack height – 82 M)}, 28 TPH Incineration Boiler, ESP	3000.0	350.0
2	Water Pollution Control -ETP, Distillery CPU, MEE	1500.0	50.0
3	Noise Pollution Control	15.0	2.0
4	Solid & Hazardous Waste Management	20.0	5.0
5	Occupational Health and Safety	25.0	3.0
6	Environmental Monitoring & Management	20.0	2.0
7	Green Belt Development & Rain Water Harvesting	100.0	25.0
	<b>Total</b> <b>(13% of Existing Investment of Rs. 358.95 Cr.)</b>	<b>4680.0</b>	<b>437.0</b>
<b>B</b>	<b>Expansion Project</b>		
1	APC - Stack of 75 M along with ESP (100 TPH boiler)	500.0	50.0
2	Water Pollution Control - Installation of MEE, STP	650.0	100.0
3	Noise Pollution Control	20.0	5.0
4	Solid & Hazardous Waste Management	20.0	5.0
5	Occupational Health & Safety	80.0	10.0
6	Environmental Monitoring & Management	30.0	5.0
7	Green Belt Augmentation	40.0	10.0
	<b>Total</b> <b>(8% of Expansion Investment of Rs. 178.48 Cr.)</b>	<b>1340.0</b>	<b>185.0</b>

### **I. Rainwater Harvesting Aspect**

- Total area of Plot – 8,12,633.29 M<sup>2</sup>
- Total Available Area – 3,18,100.87 M<sup>2</sup>
- Average annual rainfall in the area = 780 mm

#### ➤ Rooftop Harvesting

- Roof Top harvesting area of 21,500 M<sup>2</sup>
- Roof Top harvesting yield is – 13,416 M<sup>3</sup>

#### ➤ Surface Harvesting

- Surface Harvesting area – 6,83,161.8 M<sup>2</sup>
- Surface harvesting yield is – 1,67,110 M<sup>3</sup>

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

$$\begin{array}{rclcl}
 \text{Rooftop Harvesting} & + & \text{Surface Harvesting} & = & \text{Total RWH} \\
 13,416 & + & 1,67,110 & = & \mathbf{1,80,526 \text{ M}^3} \\
 & & & = & \mathbf{180 \text{ ML}}
 \end{array}$$

Total water from harvesting when charged to open / bore wells would have positive impact on the ground water quantity.

#### a. The Green Belt

**Table 17 Area Details**

No.	List of area	Area (Sq. M.)		
		Existing	Expansion	Total
1	<b>Total Plot Area</b>			<b>8,12,633.29</b>
2	<b>Built-up Area</b>			
	i. Sugar Factory & Cogen Plant	66,770.65	9,438.3	76,208.95
	ii. Distillery Unit	17,030.48	2481.99	19,512.47
	iii. Area under Road	45,485.0	1,000.0	46,485.0
	iv. Residential Colony	33,750.0	--	33,750.0
	<b>Total Built-up Area</b>	<b>1,63,036.13</b>	<b>12,920.29</b>	<b>1,75,956.42</b>
3	Green Belt Area (33% of total plot area)	3,02,323.0	16,253.0	3,18,576.0
4	Total Open Area	3,47,247.16	--	3,18,100.87

#### **The Criteria for Proposed Greenbelt Development Plan**

Emission of SPM, SO<sub>2</sub> 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 would 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.

#### **K. Socio-Economic Development**

Socio economic study was carried out in 8 villages within 10 Km radius of the study area. Methodology adopted involved a structured close ended interview schedule (30 questions) in Marathi, which was drafted prior to and employed during the survey. Refer Socio – economic profile in Chapter 3 of Draft EIA report for detailed information of socio economic aspect. The suggestions after the socio-economic study are as follows-

- Industry should contribute towards providing health facility under CER for locals at least through a mobile health van.
- Employment should be given to the people from nearby villages considering the JSMPL's environmental impacts on their traditional livelihood and agricultural land.
- Good rate to farmers for sugarcane.
- ZP / Gram panchayat should make provision for infrastructure like roads, toilets in public places with the help of the factory.
- 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.

#### **7) ENVIRONMENTAL MONITORING PROGRAMME**

Reconnaissance survey of the study area was undertaken in the month of December 2018. Field monitoring for measuring meteorological conditions, ambient air quality, water quality, soil quality and noise levels was initiated in January 2019. Report incorporates data monitored during the period from January 2019 to March 2019 and secondary data collected from various sources which include Government Departments related to ground water, soil, agriculture, forest etc.

**Figure 9 Existing Green Belt**



### A. Land Use

Land use study requires data regarding topography, zoning, settlement, industry, forest, roads and traffic etc. The 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 18 Land Use/ Land Cover**

No.	Class	Area (Ha)	Percentage (%)
1	Built Up Area	1280	4.07
2	Crop Land	11534	36.71
3	Fallow Land	12432	39.57
4	Water Bodies	250	0.79
5	Nadi/ Canal	209	0.66
6	Forest Area	2928	9.32
7	Open Scrub Land	2782	8.86
	<b>Total</b>	<b>31415</b>	<b>100</b>

### 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, Satara.

Meteorological parameters were monitored during the period January 2019 to March 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 selection of sampling locations, includes methodology of sampling and analytical techniques with frequency of sampling. Presentation of results for January 2019 to March 2019 survey is followed by observations. All the requisite monitoring assignments, sampling and analysis was conducted through the laboratory - M/s. Green Envirosafe Engineers & Consultant Private Limited, Pune. Lab has received NABL accreditation and has been approved by MoEFCC; New Delhi. Further it has also received ISO 9001:2008, ISO 14001:2004 OHSAS 18001–2007 certifications by DNV.

Ambient air monitoring was conducted in the study area to assess the quality of air for PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>x</sub> and CO. The various monitoring stations selected are shown in following table.

**Table 19 Ambient Air Quality Monitoring (AAQM) Locations**

AAQM Station Code	Name of the Station	Station Locations	Distance from Site (Km)	Direction w.r.t. Site
A1	Industrial Site	--	--	--
A2	Vadachivadi	Upwind	2.11	WWS
A3	Asare		5.77	W
A4	Khirkhandi	Downwind	1.49	SEE
A5	Bhatamwadi		1.77	NE
A6	Saigaon	Cross wind	2.85	SSW
A7	Chimangaon		3.0	NNW
A8	Koregaon	Nearest Habitation	7.0	W



**Table 20 Summary of the AAQ Levels for Monitoring Season  
[January 2019 to March 2019]**

Parameter		Location							
		Industrial Site	Koregaon	Khirkhandi	Bhatamwadi	Saigaon	Chimangaon	Wadachivadi	Asare
PM <sub>10</sub> (µg/M <sup>3</sup> )	Max.	67.10	59.60	59.50	59.70	58.90	59.90	59.20	59.80
	Min.	58.20	50.30	50.10	50.20	50.10	50.20	50.60	50.00
	Avg.	63.10	55.70	55.79	56.35	55.83	56.65	56.49	56.15
	98%	67.01	59.42	59.50	59.65	58.90	59.76	59.16	59.63
PM <sub>2.5</sub> (µg/M <sup>3</sup> )	Max.	29.70	20.40	20.10	19.90	20.50	19.70	19.80	19.90
	Min.	15.10	15.10	15.10	15.10	15.10	15.10	15.10	14.80
	Avg.	17.24	18.34	18.23	18.25	18.63	17.93	18.25	18.48
	98%	19.02	20.17	20.01	19.85	20.27	19.61	19.80	19.80
SO <sub>2</sub> (µg/M <sup>3</sup> )	Max.	29.70	19.50	19.90	19.80	19.70	19.70	19.80	19.90
	Min.	25.80	15.10	15.10	15.20	15.10	15.90	14.80	15.10
	Avg.	28.07	17.77	17.58	17.76	17.82	18.21	17.33	17.87
	98%	29.56	19.45	19.76	19.80	19.65	19.70	19.67	19.90
NO <sub>x</sub> (µg/M <sup>3</sup> )	Max.	35.40	25.60	26.20	25.80	24.80	24.90	24.90	25.40
	Min.	31.00	21.70	21.00	21.00	20.20	21.00	21.10	21.00
	Avg.	33.47	24.07	23.70	23.28	22.53	22.70	23.26	23.14
	98%	35.31	25.42	25.92	25.39	24.75	24.58	24.90	25.36
CO (mg/m <sup>3</sup> )	Max.	0.90	0.09	0.09	0.09	0.09	0.09	0.09	0.09
	Min.	0.20	0.01	0.02	0.01	0.02	0.01	0.02	0.02
	Avg.	0.57	0.06	0.06	0.07	0.07	0.05	0.06	0.06
	98%	0.90	0.09	0.09	0.09	0.09	0.09	0.09	0.09

**Note:** 1. PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub> are computed based on 24 hourly values.  
2. CO is computed based on 8 hourly values.

**Table 21 National Ambient Air Quality Standards (NAAQS) Specified By CPCB**  
(Notification No. S.O.B-29016/20/90/PCI-L by MOEFCC; New Delhi dated 18.11.2009)

Parameter (µg/M <sup>3</sup> )		Zone Station	
		Industrial, Residential, Rural & Other Area	Ecologically Sensitive Area
PM <sub>10</sub>	24 Hr	100	100
	A.A.	60	60
PM <sub>2.5</sub>	24 Hr	60	60
	A.A.	40	40
SO <sub>2</sub>	24 Hr	80	80
	A.A.	50	20
NO <sub>x</sub>	24 Hr	80	80
	A.A.	40	40
CO (ppm)	24 Hr	4	4
	1 Hr.	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.

## E. Water Quality

Sampling and analysis of ground water and surface water for physical, chemical and heavy metals were undertaken through the laboratory of M/s. Green EnviroSAFE Engineers & Consultant Private Limited, Pune.

As per standard ToRs 8 locations for surface water and 8 locations for ground water were selected. The locations are mentioned below-

**Table 22 Monitoring Location for Surface Water**

Location	Name of the Station	Distance from Site (km)	Direction w.r.t. Site	Justification
SW1	Near Chimangaon	4.0	NW	Upstream
SW2	Shirdhon	10.0	SW	Downstream
SW3	Site (Tank)	1.0	NW	Nalla
SW4	Kumthe	4.4	NW	River Nalla Confluence
SW5	Site (Nalla)	1.6	E	Water body- Tank
SW6	Sangavi -1	2.5	NW	Water body- Nalla
SW7	Sangavi – 2	1.9	W	Water body- Nalla
SW8	Near Saigaon	4.0	SSW	Water body- Nalla

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

**Table 23 Monitoring Locations for Ground Water**

Station Code	Location Name	Geographical Location		Distance from Site; Km
		Latitude	Longitude	
GW1	Industrial Site	17°42' 18.10" N	74°13' 46.99" E	0.25
GW2	W side of Chavhanwadi	17°42' 15.36" N	74°14' 33.18" E	1.33
GW3	N side of Site	17°42' 55.31" N	74°13' 44.40" E	1.14
GW4	SSE side of Site	17°42' 40.88" N	74°13' 38.92" E	0.75
GW5	W side of Bhatamwadi	17°42' 51.93" N	74°13' 22.67" E	1.27
GW6	WWS side of Bhatamwadi	17°42' 43.41" N	74°13' 25.14" E	1.0
GW7	WWS side of Bhatamwadi	17°42' 48.40" N	74°13' 27.03" E	1.12
GW8	E side of Vadachivadi	17°42' 44.95" N	74°13' 11.31" E	1.35

Refer Chapter 3, section 3.7.4 of EIA report for monitoring results.

## F. Noise Level Survey

Study area of 10 Km radius with reference to the project site has been covered for noise environment. The 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. The details of noise monitoring stations are given in following table

**Table 24 Noise Sampling Locations & Ambient Noise Levels**

Station	Station Location	Direction	Distance (km)
N1	Project Site	--	--
N2	Khirkhandi	SEE	1.49
N3	Ramoshiwadi	NE	2.7
N4	Vardhangad	NE	4.29
N5	Chimangaon	NNW	3.0
N6	Borjaiwadi	N	5.0
N7	Vadachivadi	WWS	2.11
N8	Golewadi	WWS	4.08
N9	Ekambe	S	2.91

**Table 25 Ambient Noise Levels**

No.	Loction	Average Noise Level in dB(A)					
		L <sub>10</sub>	L <sub>50</sub>	L <sub>90</sub>	L <sub>eq(day)</sub>	L <sub>eq(night)</sub>	L <sub>dn</sub>
1	N1	63.3	65.1	67.2	70.8	60.0	70.5
2	N2	45.7	47.3	48.6	53.4	41.5	52.8
3	N3	47.4	48.1	49.6	53.0	43.3	53.1
4	N4	45.4	47.0	47.9	52.6	41.6	52.3
5	N5	45.1	47.2	48.4	51.9	42.7	52.2
6	N6	43.6	45.3	46.2	49.7	41.0	50.2
7	N7	45.6	47.1	47.8	52.7	41.6	52.3
8	N8	47.4	48.6	49.4	54.0	43.3	53.7
9	N9	47.1	48.1	49.6	52.8	43.6	53.1

**G. 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.

**H. Ecology**

Ecological survey for project was conducted during pre- monsoon season. Out of the total 59 villages within 10 km radius, 13 villages were found for Ecology and Biodiversity (EB) studies being representative of the major habitats in the study area i.e. 9 villages within 5 km radius and 4 villages between 5 and 10 km radius.

**Table 26 Villages visited for EB field study and questionnaire survey within 5 and 10 km radius of the project site**

In radius 0 to 5 Km				In radius 5 to 10 Km			
No.	Names of Study villages	EB Study	Q. Survey	No.	Names of Study villages	EB Study	Q. Survey
1	Sangvi	*	*	10	Kumathe	*	*
2	Chimangaon	*	*	11	Ner	*	-
3	Bodhewadi	*	*	12	Borjaiwadi	*	*
4	Vadachiwadi	*	*	13	Kanherkhed	*	*
5	Golewadi	*	*				
6	Bhatamwadi	*	*				
7	Vardhangad	*	*				
8	Khirkhandi	*	*				
9	Ekambe	*	*				

**General Observations and Recommendations:**

1. Protection and conservation of the fragmented local natural habitats, with joint participation of locals by industry, are to be undertaken on priority. Three villages in the study area namely 1) Khirkhandi, 2) Vardhangad and 3) Shelti are recommended for CER activity for conservation of the existing ecology and biodiversity in their area, as it is still in better state.
2. Industry, by involving workers and locals, should demonstrate, encourage and promote suitable eco-friendly alternatives and green technologies in the villages in the 5 km and 10 km vicinity, Block plantation of local tree species, Water and soil conservation activities like Rain water harvesting, drip irrigation, Solid waste and sewage management,

Organic farming and Environmental awareness campaign should be undertaken involving locals, particularly youth clubs and women self-help groups.

3. In addition to proactively controlling negative impacts of industrial pollution on the ecology, above initiatives would help improve health of the villagers, most of who are employed in the industry.

## **8) 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 sugar factory premises.

### **B. Impact on Climate**

Impact on the climate conditions due to the proposed 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<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub> in Ambient Air, recorded during the field study conducted for the season January 2019-February 2019-March 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 27 Baseline Concentrations (98 Percentile)**

<b>Parameter</b>	<b>98 Percentile Concentration (µg/m<sup>3</sup>)</b>	<b>NAAQS</b>
PM <sub>10</sub>	67.01	100 µg/m <sup>3</sup>
PM <sub>2.5</sub>	19.02	60 µg/m <sup>3</sup>
SO <sub>2</sub>	29.56	80 µg/m <sup>3</sup>
NO <sub>x</sub>	35.31	80 µg/m <sup>3</sup>
CO	0.90 mg/m <sup>3</sup>	4 mg/m <sup>3</sup>

#### **ii. Air Polluting Sources**

As discussed above, under existing activity, boiler of 160 TPH & incineration boiler of 28 TPH capacity and 2 DG sets of 1000 KVA are installed on site. Moreover, under expansion, a new boiler of 100 TPH will be installed.

## **D. IMPACT ON WATER RESOURCES**

### **i. Impact on Surface Water Resources & Quality**

Total water requirement for existing & expansion activities will be 11,148 M<sup>3</sup>/D. Fresh water taken from Tilganga River. 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 @ 980 M<sup>3</sup>/Day shall be forwarded to the existing ETP in the GMSL premises.

Raw Spentwash from distillery will be forwarded to evaporation and concentration in Multiple (Five) Effect Evaporator (MEE). Further, concentrated spentwash will be

incinerated. Other effluents from distillery activities will be treated in CPU. Treated effluent will be recycled in to process for dilution of molasses and cooling tower make-up. Total domestic effluent generated from sugar, cogen & distillery unit will be treated in proposed STP and treated water will be used for flushing.

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 Tilganga river. 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 soil characteristics is usually attributed to air emissions, wastewater discharges and solid waste disposal. As mentioned above, there will not be discharge of any untreated effluent on land. Increase in chemical constituents of soil is not likely through deposition of air pollutants. ESP is provided as APC equipment to control the air emissions. There will not be any process emissions worth mentioning, the impact on the soil characteristics will be nil.

Solid waste generated will be in the form of boiler ash, ETP sludge, Yeast Sludge, CPU Sludge. Boiler ash is sold to farmers/brick manufacturers whereas sludge is used for plantation as manure. The same disposal method will be followed after sugar factory expansion. 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 waste water. Moreover, there will not be any process emissions worth mentioning, the impact on the soil characteristics will be nil.

## **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, cogeneration and distillery plant have already been established. Proposed expansion will be implemented in existing premises of sugar factory, an area was kept vacant for expansion project. 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**

Vardhangad Fort & Mahadev Temple at 4.38 Km & Kedareshwar Temple at 7.6 Km are the historical places present in the study area. But, the places are not notified and the impact is nil.

### **9) 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 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.

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.

Risk to Public and Employees: The 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.). The 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 of EIA may be referred.

### **10) SALIENT FEATURES OF EMP**

Following routine monitoring programme as detailed in Table 28 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 28 Plan for Monitoring of Environmental Attributes in and around industry**

No.	Description	Location	Parameters	Frequency	Conducted by
1	Ambient Air Quality	Upwind-1, Downwind-2 (Near Cane Yard, Near Main ETP, Near Alcohol Plant)	PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NO <sub>x</sub> & CO	Monthly	MoEFCC and NABL Approved External Lab
		Study area – (Industrial Site, Koregaon, Khirkhandi, Bhatamwadi, Saigaon,		Monthly or CPCB / SPCB requirement	
3	Stack Emissions	Boiler – 3 Nos., D.G – 2 Nos.	SPM, SO <sub>2</sub> , NO <sub>x</sub>	Monthly	
4	Noise	Workzone 5 Locations - (Near Main Gate, Near Fermentation Section Distillation section, Boiler, DG set, Turbine)	Spot Noise Level; Leq(n), Leq (d), Leq (dn)	Monthly	
		Ambient Noise location - 8	Spot Noise Level; Leq(n), Leq(d), Leq (dn)	Monthly	
	Drinking water	Canteen	Parameters as per drinking water Std IS:10500	Monthly	
	Soil	Soil location - 8	pH, Salinity, Organic Carbon, N, P, K	Quarterly	
	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	
5	Effluent	• Treated, Untreated	pH, SS, TDS, COD, BOD, Cl, Sulphates, Oil & Grease.	Monthly	
6	Waste management	Implement waste management plan that Identifies and characterizes every waste associated with existing and expansion 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 JSMPL
7	Emergency Preparedness such as fire fighting	Fire protection and safety measures to take care of fire and explosion hazards, to be assessed and steps taken for their prevention.	On site Emergency Plan, Evacuation Plan, fire fighting mock drills	Twice a year	By JSMPL
8	Health Check up	Employees and migrant labour health check ups	All relevant health check-up parameters as per factories act.	Once in a Year	By JSMPL
9	Green Belt	Within Industry premises as well as nearby villages	Survival rate of planted sapling	In consultation with DFO.	By JSMPL
10	CER	As per activities	--	Six Monthly	

## जवंडेशवर शुगर मिल्स प्रा. लि.

(ज. शु. मि. प्रा. लि.)

गट क्र. ८०३ व ८०४, मु.पो. चिमणगाव, ता. कोरेगाव, जि. सातारा.महाराष्ट्र  
यांच्या

अध्याच्या साखर कारखान्याची गाळप क्षमता १०,००० टन प्रतिदिन पाहून १५,०००  
टन प्रतिदिन पर्यंत तसेच

अहवीज निर्मिती प्रकल्पाचे ३२ मे.वॅट पाहून ५२ मे.वॅट पर्यंत आणि  
८० के.एल.पी.डी. पाहून ३०० के.एल.पी.डी. मोलॅक्स/ केन ज्युस आधारित  
आवणी विस्तारीकरण प्रकल्प बंदर्भातील  
इन्व्हायरमेंट इंपॅक्ट असेसमेंट अहवालाचा आरांश

### १)प्रकल्पाविषयी थोडक्यात

जवंडेशवर शुगर मिल्स प्रा. लि.(ज.शु.मि.प्रा.लि.) यांचा प्रकल्प मु.पो. चिमणगाव, ता. कोरेगाव, जि. सातारा येथे गट क्र. ८०३ व ८०४ मध्ये स्थित आहे.. प अध्याच्या साखर कारखान्याची गाळप क्षमता १०,००० टन प्रतिदिन पाहून १५,००० टन प्रतिदिन पर्यंत तसेच अहवीज निर्मिती प्रकल्पाचे ३२ मे.वॅट पाहून ५२ मे.वॅट पर्यंत आणि ८० के.एल.पी.डी. पाहून ३०० के.एल.पी.डी. मोलॅक्स/ केन ज्युस आधारित आवणी विस्तारीकरण अध्याच्या १०००० टन प्रतिदिन गाळप क्षमतेचा साखर कारखाना, ३२ मे.वॅट अहवीज व ८० के.एल.पी.डी. आवणी प्रकल्पाच्या आवसात उभारण्यात येणार आहे.

अद्व प्रकल्प हा दि. १४.०९.२००६ च्या इन्व्हायरमेंट इंपॅक्ट असेसमेंट ह्यश्रीअह नोटीफिकेशन नं. अ. ओ. १५३३ (ई) च्या १३ जून २०१९ च्या नोटीफिकेशन मधील तरतुदीनुसार श्रेणी 'अ' मध्ये येतो. यानुसार, वने, पर्यावरण व हवामान बदल मंत्रालय, नवी दिल्ली यांच्याकडे फॉर्म १ ऑप्लिकेशन जमा केला आहे व रटॅंडर्ड ToRs मंजूर झाले आहेत. प्रस्तावित विस्तारीकरण प्रकल्प बांधविताना सुरक्षिततेचे नियम व पर्यावरणाचे संरक्षण करण्याच्या सर्व गोष्टींची खबरदारी घेतली जाईल.

खालील तक्त्यामध्ये गुंतवणुकीचे तपशील दिलेले आहेत.

### तक्ता १ गुंतवणुक

क्र	विभाग	भांडवली गुंतवणुक (रु. करोडमध्ये)		
		अध्याची	प्रस्तावित	एकुण
१	साखर कारखाना व अहवीज प्रकल्प	२४१.३१	९२.३४	३३३.६५
२	आवणी प्रकल्प	११७.६४	८६.१४	२०३.७८
	एकुण	३५८.९५	१७८.४८	५३७.४३

### तक्ता २ कामकाजाचा कार्यकाळ

क्र	विभाग	ऑपवेशनचे दिवस (नं.)		
		हंगाम	खंड हंगाम	एकुण
१	साखर कारखाना	१८०	--	१८०
२	अहवीज प्रकल्प	१८०	६०	२४०
३	आवणी प्रकल्प	१८०	१५०	३३०

## २) प्रकल्पाची जागा

ज. शु. मि. प्रा.लि.द्वारे मु.पो. चिमणगाव, ता. कोरेगाव, जि. भातावा, महाराष्ट्र राज्य येथे ८१.२६ हेक्टर एवढ्या विद्यमान जागेमध्ये विस्तारले आहे. विद्यमान जागेमध्येच शाखर कारखाना व सहवीज तसेच आशयनी प्रकल्पाचे विस्तारीकरणाची स्थापना प्रस्तावित आहे.

प्रस्तावित एकात्मिक प्रकल्पातील शाखर कारखाना, वीजनिर्मिती प्रकल्प आणि आशयनी प्रकल्पासाठी उद्योगाने मिळवलेली एकूण जमीन सुमारे ८१.२६ हेक्टर आहे. यापैकी शाखर कारखाना, सहवीज प्रकल्प, आशयनी प्रकल्प यांचे एकूण आंधकाम क्षेत्र १७.५९ हे. इतके आहे. जागेअंर्दर्भातील माहिती खालीलप्रमाणे आहे. जागेचा ले-आऊट प्लॅन जोडला आहे. जागेअंर्दर्भातील माहिती खालीलप्रमाणे आहे.

तक्ता ३ विविध विभागांच्या क्षेत्राचा तपशील(वर्ग.मी)

क्र.	तपशील	क्षेत्र (वर्ग.मी)		
		अध्याची	प्रस्तावित	एकूण
१	एकूण क्षेत्र			८,१२,६३३.२९
२	आंधकाम क्षेत्र			
	i. शाखर कारखाना व सहवीज प्रकल्प	६६,७७०.६५.०	९,४३८.३	७६,२०८.९५
	ii. आशयनी प्रकल्प	१७,०३०.४८	२,४८१.९९	१९,५१२.४७
	iii. रस्ता क्षेत्र	४५,४८५.०	१,०००.०	४६,४८५.०
	iv. कॉलनी क्षेत्र	३३,७५०.०	--	३३,७५०.०
	एकूण	१,६३,०३६.१३	१२,९२०.२९	१,७५,९५६.४२
३	हरित पट्टा	३,०२,३२३.०	१६,२५३.०	३,१८,५७६.०
४	एकूण खुले क्षेत्र	३,४७,२४७.१६	--	३,४७,२४७.१६

## ३) प्रकल्प प्रवर्तकांची ओळख

ज. शु. मि. प्रा.लि.च्या प्रवर्तकांना शाखर कारखाना, सहवीज व आशयनी प्रकल्प क्षेत्रामधील चांगला अनुभव आहे. प्रवर्तकांनी प्रकल्प नियोजन तसेच अंमलबजावणी योजनेचा अखोल अभ्यास केला आहे. प्रकल्प प्रवर्तकांचे नाव आणि हुद्दा खालीलप्रमाणे -

तक्ता ४ प्रवर्तकांचे नाव व हुद्दा

क्र.	प्रवर्तकाचे नाव	हुद्दा
१.	श्री. अचिन शिंगारे	अंचालक
२.	श्री. विजय आर. जगदाळे	जनरल मॅनेजर

## ४) उत्पादनांविषयी माहिती

ज. शु. मि. प्रा.लि.यांच्या यांच्या अध्याच्या प्रकल्पामधून आणि प्रस्तावित प्रकल्पामधून तयार होणाऱ्या उत्पादने व त्यांचे परिमाण खालीलप्रमाणे आहे.



तक्ता ५ भाखर कारखाना, सहजीज आणि आशवनी प्रकल्पांची उत्पादने

प्रकल्प	उत्पादने व उपउत्पादनांची नावे	क्षमता		
		अध्याची गाळप क्षमता (१०,००० टि.बी.डी)	प्रस्तापित गाळप क्षमता (५००० टि.बी.डी)	एकूण गाळप क्षमता (१५,००० टि.बी.डी)
भाखर कारखाना	भाखर (१२%) <sup>*</sup>	१२०० मे.टन/दिन	६०० मे.टन/दिन	१८०० मे.टन/दिन
	उपउत्पादने			
	खर्च (२८%) <sup>*</sup>	२८०० मे.टन/दिन	१४०० मे.टन/दिन	४२०० मे.टन/दिन
	प्रेक्षमंड (४%) <sup>*</sup>	४०० मे.टन/दिन	२०० मे.टन/दिन	६०० मे.टन/दिन
	मोलॅक्झ (४%) <sup>*</sup>	४०० मे.टन/दिन	२०० मे.टन/दिन	६०० मे.टन/दिन
सहजीज	जीज	३२ मे. पॅट / तास	२० मे. पॅट / तास	५२ मे. पॅट / तास
आशवनी	रेक्ट्रीफाईड रिपरिट (आर.एभ.) / एक्स्ट्रा न्युट्रल अल्कोहोल (इ.एन.ए.)	८० कि.ली. /दिन	२२० कि.ली. /दिन	३०० कि.ली. /दिन
	उपउत्पादने			
	फ्युजल ऑईल	५ मे.टन/दिन	१५ मे.टन/दिन	२० मे.टन/दिन
	कार्बन डायऑक्साईड	६० मे.टन/दिन	१७० मे.टन/दिन	२३० मे.टन/दिन

टिप : \* उभ गाळपाच्या टक्केप्राप्तीत

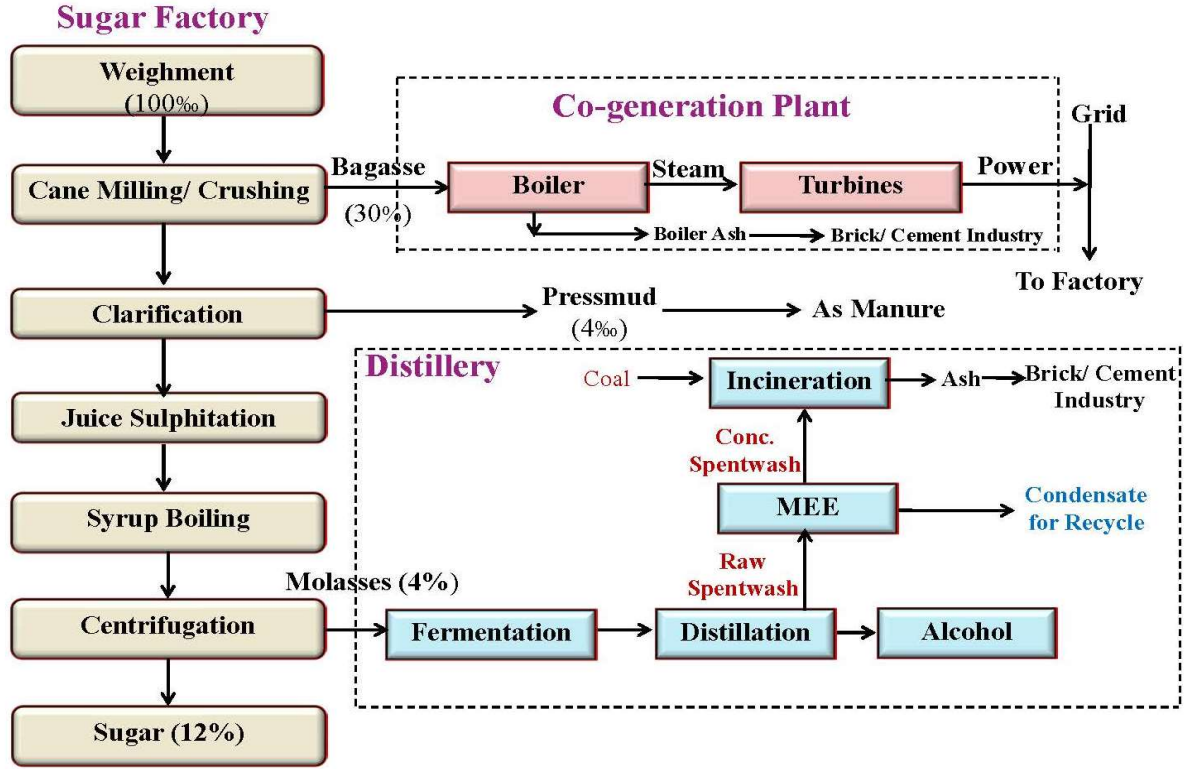
भाखर कारखाना, सहजीज प्रकल्प तसेच आशवनी अंदाजित उत्पादन प्रक्रिया आणि प्रवाहतक्ता (फ्लो चार्ट) ई.आय. ए. रिपोर्ट मध्ये प्रकरण -२ येथे जोडलेला आहे.

५) प्रकल्पाचे उद्दिष्ट

- भाखर उद्योग हा देशातील दुसरा सर्वात मोठा शेती आधारित उद्योग आहे.
- भाखर उद्योग हा रोजगार निर्मिती, उत्पन्न निर्मिती आणि कार्यक्षेत्रामध्ये पायाभूत घटक तयार करण्यासाठी महत्त्वपूर्ण आहे.
- अल्कोहोलयुक्त पेयांच्या उत्पादनांसाठी ऊर्जा, मोलॅक्झ, कडधान्ये व इतर कृषी उत्पादने आशवनी उद्योग आपरतो. जगभर आपरल्या जाणा-या फरमेंटेड व डिस्टीलड पेयांचे उत्पादन स्थानिक उत्पादित व उत्तम वातावरणीय परिस्थितीत वाढलेल्या कच्चा मालावर आधारित आहे. इथिल अल्कोहोल हे फरमेंटींग मोलॅक्झ पासून तयार केले जाते. मोलॅक्झ हे भाखर कारखान्यामधून मिळते.
- अल्कोहोल उद्योगाची देशाच्या अर्थव्यवस्थेमध्ये महत्वाची जागा आहे. अल्कोहोल हे खुप रसायनांमध्ये कच्चा माल म्हणून आपरले जाते. त्याखरोखरच या व्यवसायामुळे सरकारला मोठ्या प्रमाणात अर्थकारी कर पसुल होतो.
- पेट्रोलखरोखर अल्कोहोलचे प्लेंडींग केलेस पॉवर अल्कोहोल यावररुपात अल्कोहोल मध्ये इंधन म्हणून क्षमता आहे.
- तसेच जपान, यु.एभ.ए., कॅनडा, श्रीलंका, इ. देशांमध्ये पेट्रोलियम कुड पासूनच्या नॅप्थापासूनचे सिंथेटिक अल्कोहोल थिफरेजीससाठी उपयुक्त नसलेने या देशांमध्ये फरमेंटेड अल्कोहोलला खुप मोठ्या प्रमाणामध्ये मागणी आहे.

## ६) उत्पादन प्रक्रिया

### आकृती १ उत्पादन प्रक्रिया



## ७) पर्यावरणविषयक दृष्टिकोन

ज. शु. मि. प्रा. लि. यांनी अत्यंतप्रभावी व परिणामकारक अशी पर्यावरण व्यवस्थापन योजना (EMP) बाबतचे नियोजन केले आहे. त्यातील विविध घटक खालीलप्रमाणे आहेत.

### अ) पाण्याचा वापर, झाडपाण्याची निर्मिती व त्याची प्रक्रिया

#### • पाण्याचा वापर

ज. शु. मि. प्रा. लि. यांच्या सध्याच्या व प्रस्तावित विस्तारीकरण प्रकल्पामध्ये होणा-या पाण्याच्या वापराविषयी सविस्तर तपशील खालीलप्रमाणे -

**तक्ता ६ भास्वर कारखाना व सहजीव प्रकल्पासाठी पाण्याचा वापर**

क्र.	तपशील	पाण्याचा वापर (घन मी./दिन)		
		अध्याचा प्रकल्प	MPCB कन्सेंट नुसार	एकूण पिस्तारीकरणानंतर
१.	घरगुती	४२ <sup>#</sup>	८०	४७ (११ <sup>#</sup> +३६ <sup>Ω</sup> )
२.	औद्योगिक			
a.	प्रोबेअ	३०००*	१०००	४५००*
b.	कुलिंगमेक अप	६७५*		१७२५*
c.	ऑयलमेक अप	३८४*		६२४*
d.	डी.एम.प्लांट	७७ <sup>#</sup>		१२५ <sup>#</sup>
e.	लॅबोरेटरी व वॉशिंग	१० <sup>#</sup>		१५*
f.	ऑश क्वेंचिंग	४*		८*
	<b>औद्योगिक वापर (a+b+c+d+e+f)</b>	<b>४१५० (४०६३*+८७<sup>#</sup>)</b>	<b>१०००</b>	<b>६९९७ (६८७२*+१२५<sup>#</sup>)</b>
३.	आग+ हरितपट्टा	६०५ <sup>Ω</sup>	--	६५० <sup>Ω</sup>
	<b>एकूण (१+२+३)</b>	<b>४७९७ (४०६३*+६०५<sup>#</sup>+१२९<sup>Ω</sup>)</b>	<b>१०८०</b>	<b>७६९४ (६८७२*+१३६<sup>#</sup>+६८६<sup>Ω</sup>)</b>
	<b>पुनर्वापर</b>	<b>९८%</b>	<b>--</b>	<b>९८%</b>
	ताज्या पाण्याचा वापर (प्रमाण १०० लि./मे.टन ऊर्जागळप व १० कि.लि. / कि.लि.अल्कोहोल)	९ लि./मे.टन	१०० लि./मे.टन	८ कि.लि./कि.लि.

टीप : <sup>#</sup>पाणी नदि मधुन घेतले जाईल. \*ऊर्जामधील कंडेनसेट. <sup>Ω</sup> एअर.टी.पी. व ई.टी.पी. प्रकल्पातून प्रकिया केलेले पाणी.

**तक्ता ७ मोलॅबिअस आक्षयनी प्रकल्पासाठी पाण्याचा वापर**

क्र.	तपशील	पाण्याची गरज (घनमीटर/दिन)			
		अध्याचा प्रकल्प	MPCB कन्सेंट नुसार	एकूण पिस्तारीकरणानंतर; ऊर्जा गळित हंगाम	एकूण पिस्तारीकरणानंतर; पिना ऊर्जा गळित हंगाम
१.	घरगुती	४ <sup>#</sup>	३	५ <sup>#</sup>	५ <sup>#</sup>
२.	औद्योगिक				
	I. प्रोबेअ	६२४*	७४४	२३८२*	२३८२*
	II. कुलिंग	११२(८७३*+१०६*)		४२०*	४२०(८७३*+१०६*)
	III. ऑयल	७० <sup>#</sup>		७०*	७० <sup>#</sup>
	IV. डी.एम.प्लांट	१४ <sup>#</sup>		१४*	१४ <sup>#</sup>
	V. लॅब व वॉशिंग	४ <sup>#</sup>		१५*	१५ <sup>#</sup>
	VI. ऑश क्वेंचिंग	२ <sup>#</sup>		५*	५ <sup>#</sup>
	<b>एकूण औद्योगिक वापर</b>	<b>८२६ (६४५*+१८१*)</b>	<b>७४४</b>	<b>२९०६ (२४०८*+४९८*)</b>	<b>२९०६ (२४०८*+४९८<sup>#</sup>)</b>
	<b>एकूण</b>	<b>८३० (६४५*+१८५*)</b>	<b>७४७</b>	<b>२९११ (२४०८*+४९८*+५<sup>#</sup>)</b>	<b>२९११ (२४०८*+५०३<sup>#</sup>)</b>
	<b>पुनर्वापर (%)</b>	<b>७८</b>		<b>१००</b>	<b>९९</b>
	ताज्या पाण्याचा वापर (प्रमाण १० कि. लि./ कि. लि. अल्कोहोल)	२.२ कि. लि.	९.३ कि. लि.	० कि. लि.	१.६ कि. लि.

टीप: <sup>#</sup> पाणी नदि मधुन घेतले जाईल, \*ऊर्जामधील कंडेनसेट, \* बी.पी.यु मधील प्रकियात केलेले पाणी

तक्ता ८ केन ज्युअर आशयनी प्रकल्पासाठी पाण्याचा वापर

क्र.	तपशील	पाण्याची गरज (घनमीटर/दिन)
१.	घरगुती	४#
२.	औद्योगिक	
	I. कुलिंग	४५०*
	II. ऑयलर	७०*
	III. डी.एम.प्लॉट	१४#
	IV. लॅण्ड व वॉशिंग	४*
	V. ऑयल क्लेनिंग	१*
	एकूण औद्योगिक वापर	५३९ (१४# + ५२५*)
	एकूण	५४३ (१८# + ५२५*)
	ताज्या पाण्याचा वापर (प्रमाण १० कि. लि. / कि. लि. अल्कोहोल)	० कि. लि.

टीप: # एकुण वापरापैकी प्रतिदिन लागणारे पाणी नदि मधुन घेतले जाईल,

\*ऊर्ध्वमधील कंडेनसेट

## ब. बांडपाणी प्रक्रिया

### १. घरगुती बांडपाणी

ज. शु. मि. प्रा.लि.प्रकल्पामधील आख्य कारखाना, अहलीज आणि आशयनी प्रकल्पामधुन ३७ घनमीटर प्रतिदिन घरगुती बांडपाणी तयार होते. अथ्या तयार होणारे घरगुती बांडपाणी हे भेट्टीक टँक नंतर भोक्पीट मध्ये प्रक्रिया केले जाते. विस्तारीकरणानंतर एकुण ३७ घनमीटर प्रतिदिन घरगुती बांडपाणी तयार होईल. घरगुती बांडपाण्यावर; प्रस्तावित घरगुती बांडपाणी प्रक्रिया प्रकल्पामध्ये (एअ.टी.पी.) प्रक्रियेत केले जाईल व हरित पट्ट्या विकासासाठी वापरले जाईल.

### २. औद्योगिक बांडपाणी

आख्य कारखाना व अहलीज प्रकल्प विस्तारीकरणानुन ९८० घन.मी. प्रतिदिन इतके बांडपाणी तयार होईल. हे बांडपाणी आख्य कारखान्याच्या अथ्याच्या औद्योगिक बांडपाणी प्रक्रिया प्रकल्पामध्ये (ई.टी.पी.) मध्ये पाठवले जाईल. प्रक्रिया केलेले बांडपाणी अथ्याच्या परिवरातील आगेसाठी व हरितपट्टा विकासासाठी वापरले जाईल.

मोलॅबिअर आधारित आशयनी विस्तारीकरणानुन एकुण २४०० घन.मी.प्रतिदिन इतका बाँ अपेंटवॉश तयार होईल. अपेंटवॉश एम.ई.ई. मध्ये इव्हॅपोरेट व कॉन्सन्ट्रेट केला जाईल. कॉन्सन्ट्रेटेड अपेंटवॉश ४८० घन.मी.प्रतिदिन इनसिनरेट केला जाईल. केन ज्युअर आधारित आशयनी प्रकल्पासाठी देखील हीच प्रक्रिया वापरली जाईल. (बाँ अपेंटवॉश - १२०० घन.मी.प्रतिदिन व कॉन्सन्ट्रेटेड अपेंटवॉश - २४० घन.मी.प्रतिदिन)

आशयनी प्रकल्पांतर्गत तयार होणारे बांडपाणी हे अपेंटलीअ, एम.ई.ई. मधील कंडेनसेट, ऑयलर ज्लो डाऊन, कुलिंग ज्लो डाऊन आणि लॅण्ड, वॉशिंग/ एफ.ओ.बी.लीअ, पी.आर.बी.लीअ, बी.लीअ - २४३२ घन.मी.प्रतिदिन (मोलॅबिअर आधारित), १३६९ घन.मी.प्रतिदिन (केन ज्युअर आधारित) मधील

भांडपाणी असेल. सर्व भांडपाणी प्रस्तावित कंडेनसेट पॉलिशिंग युनिटमध्ये प्रक्रियेत केले जाईल. प्रक्रियेत भांडपाणी हे डायल्युशन व कुलिंग टॉवर मेकअपसाठी वापरले जाईल.

**तक्ता ९ बाखर कारखाना व सहजीव प्रकल्पामधून तयार होणारे भांडपाणी**

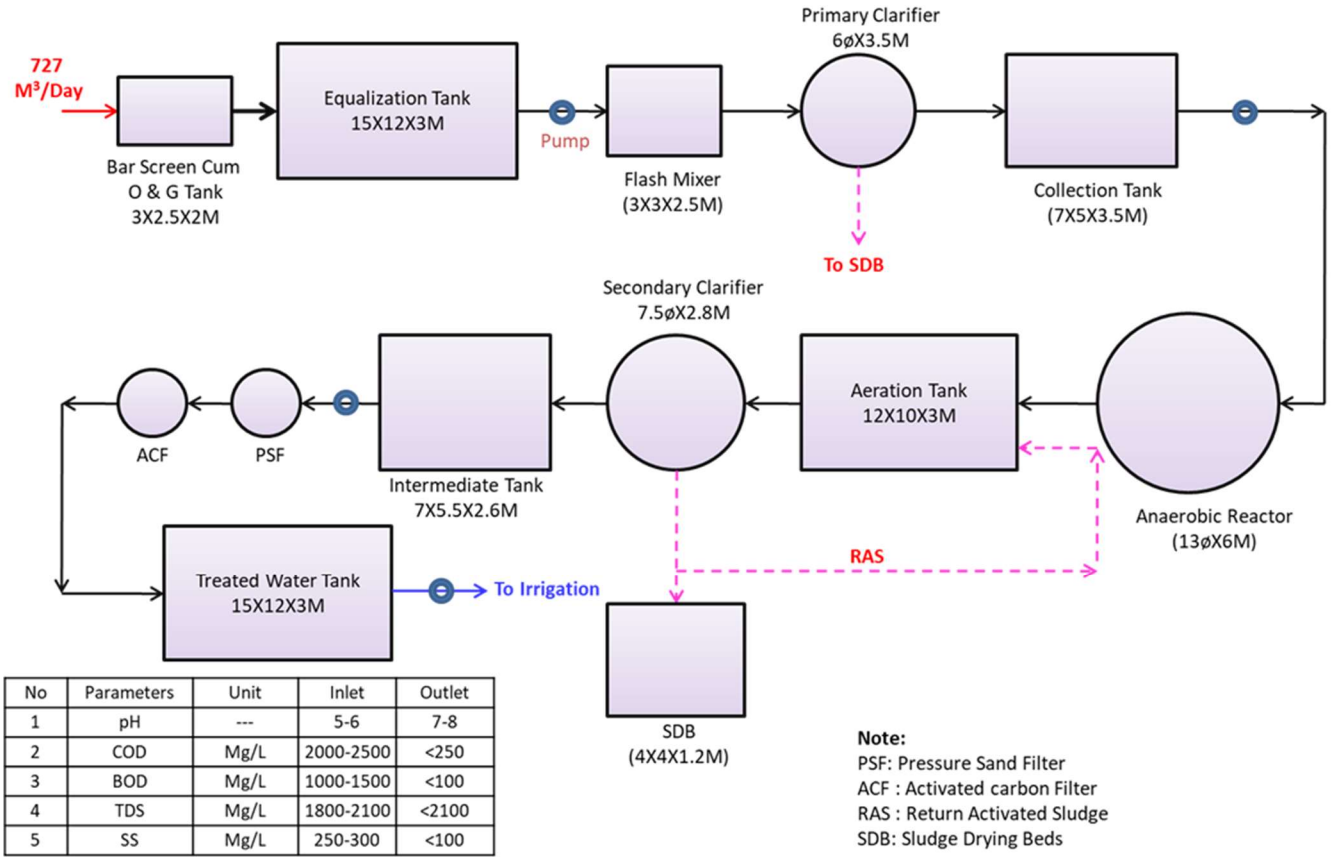
क्र.	तपशील	भांडपाणी (घन. मी. / दिन)			प्रक्रिया
		अध्याचा प्रकल्प	कन्सेट प्रमाणे	एकूण विस्तारीकरणानंतर	
१.	घरगुती	३४	५०	३८	प्रस्तावित एअर. टी. पी. मध्ये प्रक्रिया
२.	औद्योगिक				
a.	प्रोसेस	३६०	४७५	५४०	कारखान्याच्या अध्याच्या ई.टी.पी. मध्ये प्रक्रिया
b.	कुलिंग	६८		१७३	
c.	ऑयलर	७८		१२७	
d.	डी.एम.बॅकवॉश	७७		१२५	
e.	लॅस / वॉशिंग	१०		१५	
	<b>औद्योगिक एकूण</b>	<b>५९३</b>	<b>४७५</b>	<b>९८०</b>	
	<b>भांडपाणी प्रमाण: १०० लि./मे.टन गाळप</b>	<b>५९</b>	<b>--</b>	<b>६५</b>	

**तक्ता १० आभयनी प्रकल्पाचे भांडपाणी**

क्र.	तपशील	भांडपाणी घन मी. प्रतिदिन				प्रक्रिया
		अध्याचा प्रकल्प	कन्सेट प्रमाणे	मोलॅभिस आभयनी	केन ज्युस आभयनी	
१.	घरगुती	३	२	४	४	प्रस्तावित घरगुती भांडपाणी प्रक्रिया प्रकल्पामध्ये (एअर.टी.पी.) प्रक्रियेत केले जाईल
२.	औद्योगिक					
	प्रोसेस	बॉ स्प्रेटवॉश- ६४० कॉन्स. स्प्रेटवॉश- १३०	६५५	बॉ स्प्रेटवॉश- २४०० कॉन्स. स्प्रेटवॉश- ४८०	बॉ स्प्रेटवॉश- १२०० कॉन्स. स्प्रेटवॉश- २४०	बॉ स्प्रेटवॉश एम.ई.ईमध्ये इव्हॅपोरेट व कॉन्सन्ट्रेट केला जाईल. कॉन्सन्ट्रेट स्प्रेटवॉश ड्राय करून पावडर केला जाईल केला जाईल.
		कंडेनसेट - ५१०		कंडेनसेट - १९२०	कंडेनसेट - ९६०	सर्व भांडपाणी कंडेनसेट पॉलिशिंग युनिटमध्ये प्रक्रियेत केले जाईल.
		स्प्रेट लीस - ९८		स्प्रेट लीस - ४२६	स्प्रेट लीस - ३३१	
	कुलिंग ब्लोडाऊन	११		४२	४५	
	ऑयलर ब्लोडाऊन	१५		१५	१५	
	डि.एम.बॅकवॉश	१४		१४	१४	
	लॅस वॉशिंग	४		१५	४	
	<b>एकूण</b>	कॉन्स. स्प्रेटवॉश- १३० <b>इतर भांडपाणी-६५२</b>	<b>६५५</b>	कॉन्स. स्प्रेटवॉश - ४८० <b>इतर भांडपाणी-२४३२</b>	कॉन्स. स्प्रेटवॉश - २४० <b>इतर भांडपाणी- १३६९</b>	



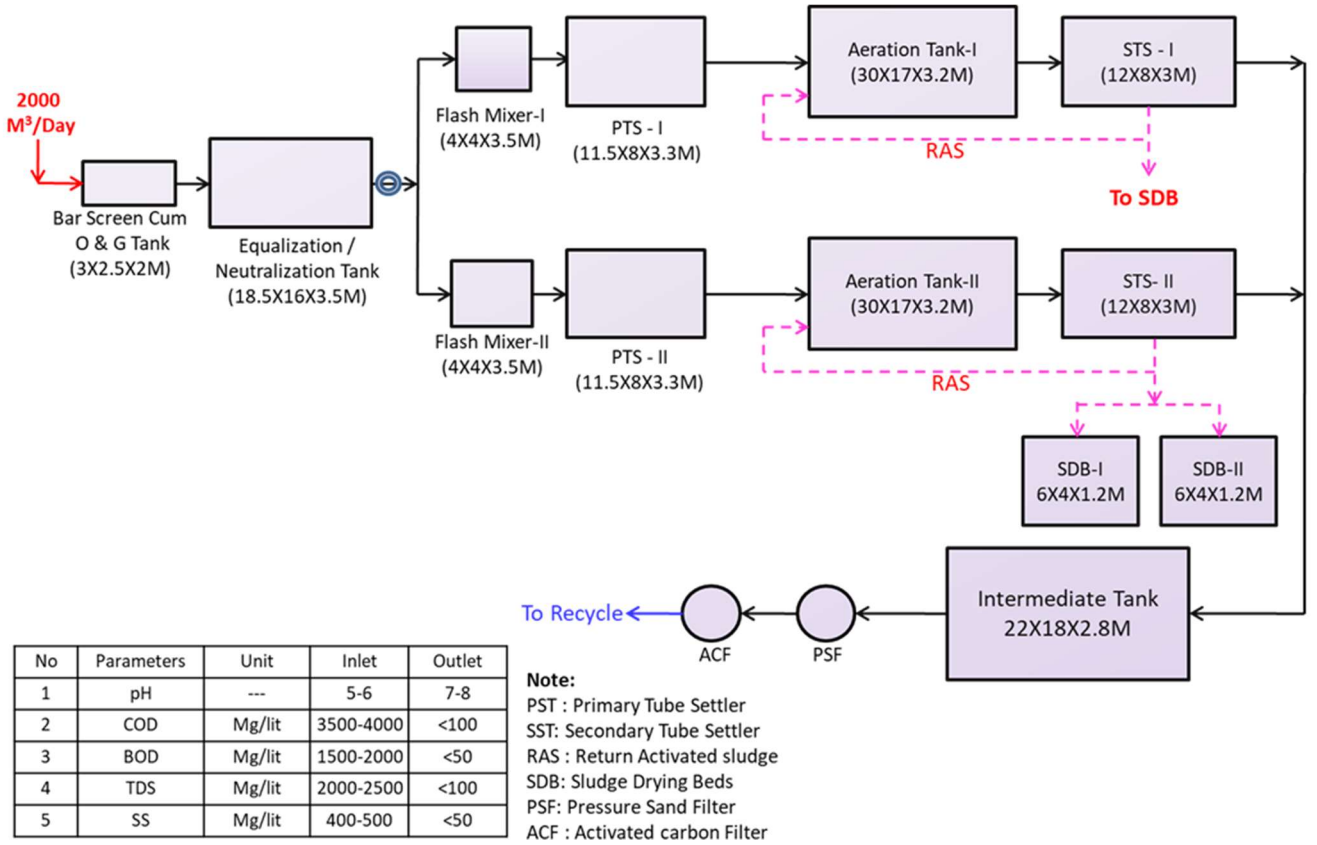
## આકૃતી ૨ બાબર કારખાન્યાતીલ ઈ.ટી.પી. ચા પ્લો ચાર્ટ



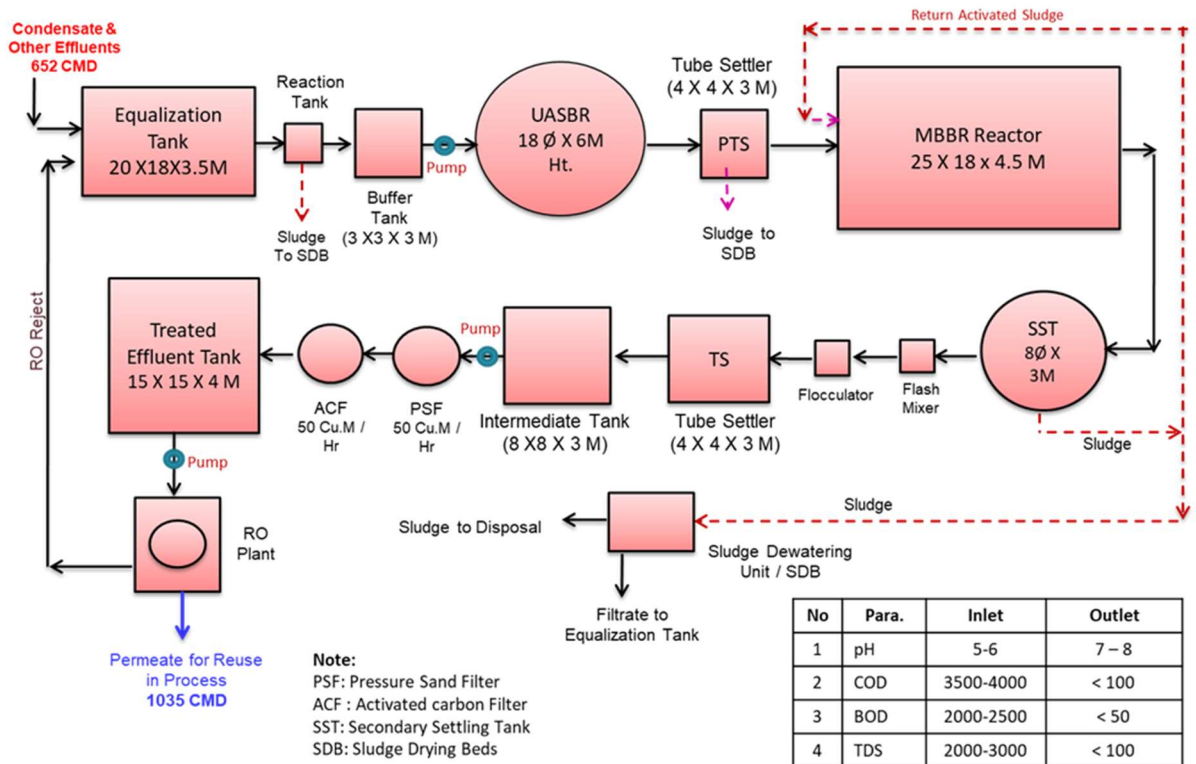
## આકૃતી ૩ બાબર કારખાન્યાતીલ ઈ.ટી.પી.



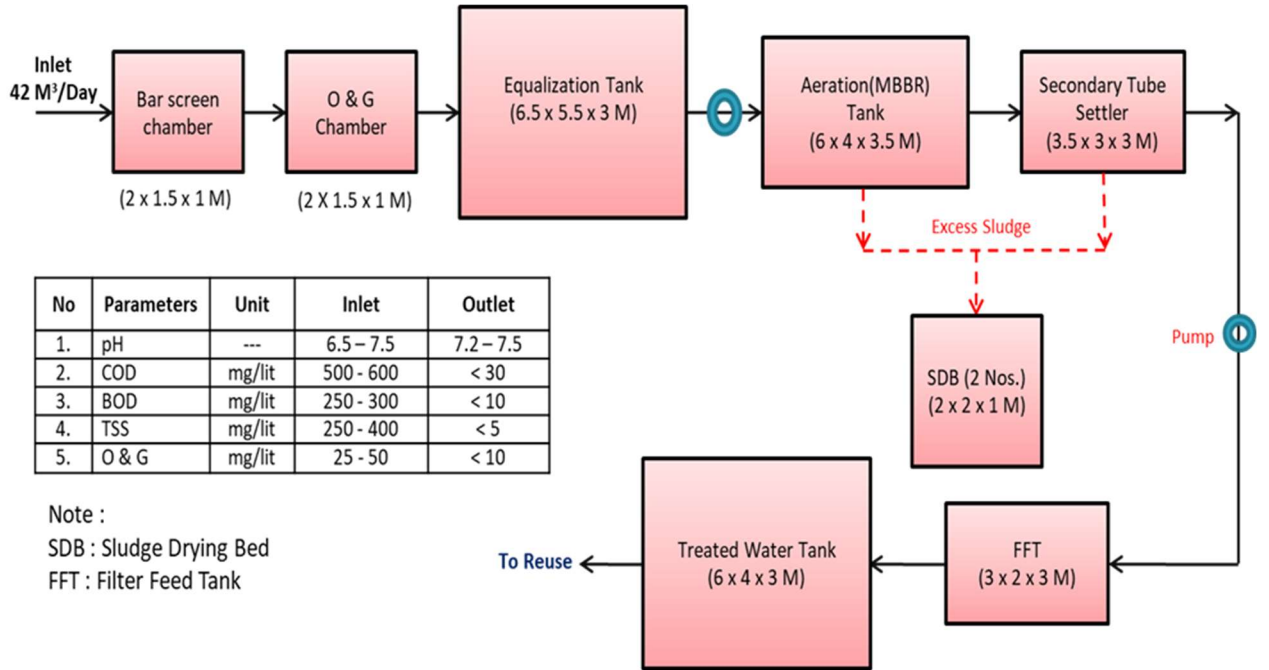
### આકૃતી ૪ ભાસ્કર કાચબાન્યાતીલ સી. પી.યુ. ચા ફ્લો ચાર્ટ



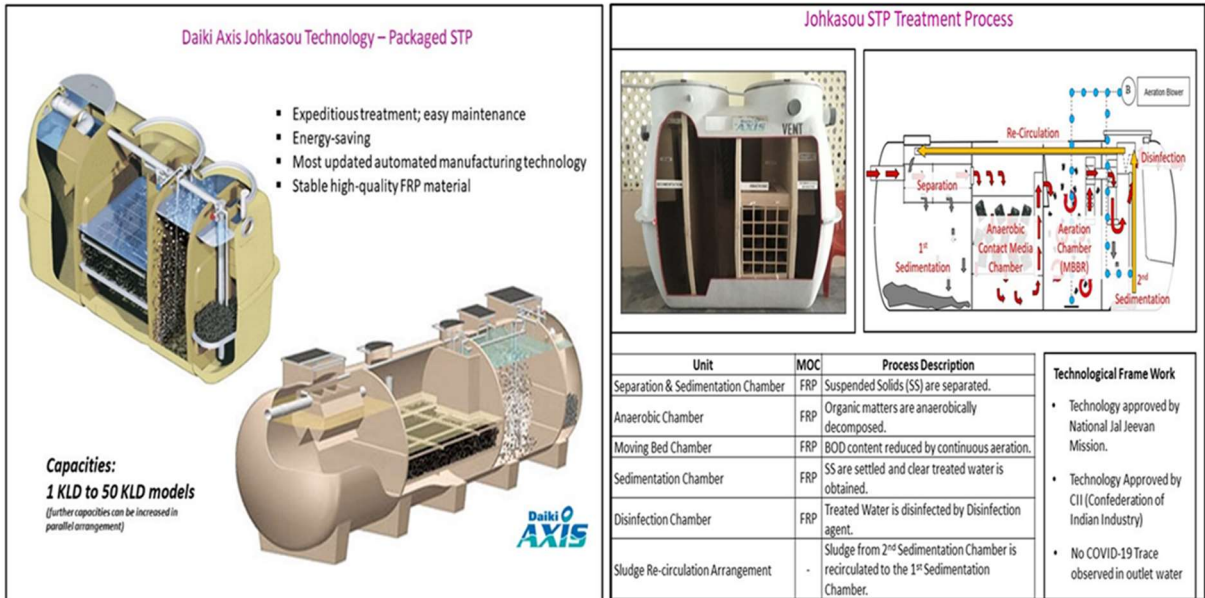
### આકૃતી ૫ આશવની મઘીલ સી. પી.યુ. ચા ફ્લો ચાર્ટ



## आकृती ६ प्रस्तावित एम्.टी.पी. चा फ्लो चार्ट



## आकृती ७ एम्.टी.पी. प्रक्रिया



## क. वायु उत्सर्जन

अध्या खाखर कारखाना व अहवीज प्रकल्पासाठी लागणाऱ्या वाफ १६० टन प्रति तास क्षमतेच्या ऑयलर मधुन घेतली जाते ज्यासाठी १६३२ मे.टन.प्रतिदिन इतका अर्धशे इंधन म्हणून वापरला जातो. ८२मी. उंचीच्या चिमणीसाठी इलेक्ट्रोस्टॅटिक प्रेसिपिटेटर ई.एम्.पी.वायु प्रदूषण नियंत्रक उपकरण म्हणून वापरले आहे.

आश्वनी प्रकल्पासाठी लागणाऱ्या वाफ २८ टन प्रतितास क्षमतेच्या ऑयलरमधुन घेतली जाते; ज्यासाठी २७८ मे.टन.प्रतिदिन कोळशासोबत ६४८ मे.टन.प्रतिदिन

विस्तराक्षीकरणांतर्गत १०० टन प्रति ताक्ष क्षमतेच्या नवीन ऑयलर अक्षधिला जाईल व या ऑयलरला ई.एम्.पी. हे प्रदूषण नियंत्रक उपकरण अक्षधले जाईल. डी.जी. ब्लेट चा वापर फक्त पीज पुरवठा खंडीत झाल्यानंतर केला जाईल.

तक्ता ११ ऑयलरचा तपशील

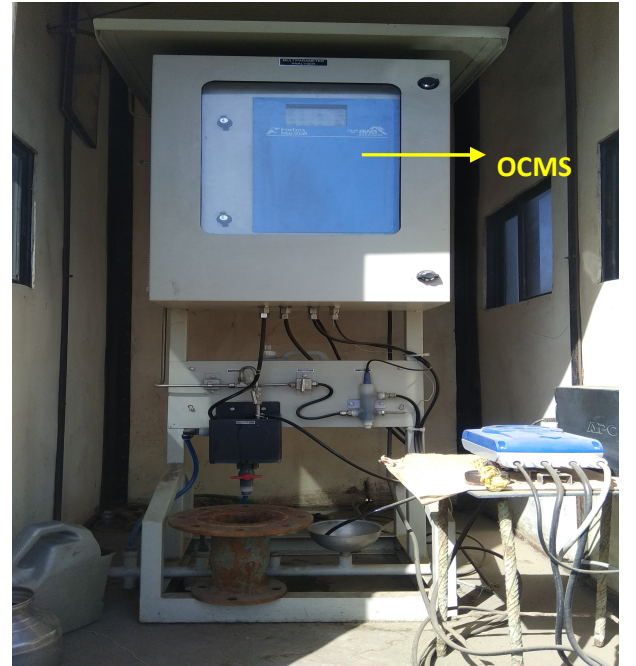
क्र.	तपशील	अध्याचे			पिस्तारीकरणानंतर
१	जोडले आहे-	खॉयलर १	खॉयलर २	डी. जी. बेट	खॉयलर ३
२	क्षमता	१६० टन/तास	२८ टन/तास	१००० के. व्ही. ए. - २ अंख्या	१०० टन/तास
३	इंधनाचा प्रकार	खर्गस	बॅपेटॉश + कोळसा	डीझेल	खर्गस
४	इंधन (मे. टन/दिन)	१६३२	६४८+२७८	१४५ लि. प्रतितास (प्रत्येकी)	१०९१
५	खांधणीभाठी पापरलेले मटेरीयल	आर. बी. बी	आर. बी. बी	एम. एस.	आर. बी. बी
६	आकार (गोल/चौरस)	गोल	गोल	गोल	गोल
७	उंची, मी (जमीनीच्या वर)	८२ मी	७२ मी	६ मी	७५ मी
८	चिमणीला अक्षलेले प्रदूषण नियंत्रणाचे उपकरण	ई. एस. पी.	ई. एस. पी.	--	ई. एस. पी.

### १. ध्वनी निर्माण करणारे स्रोत

- अद्याच्या ष प्रस्तावित षस्ताशीकरण प्रकल्पांमध्ये खुप जास्त आवाज निर्माण करणारे स्त्रोत अस्तणास् नाहीत. डी.जी.स्त्रेड हा ध्वनी प्रदुषणाचा एक स्त्रोत ठरू शकतो षण अद्वरील डी.जी.स्त्रेड फक्त नेहमीचा षीजपुस्वठा खंडित अस्ताना कार्यस्वत राहील. डी. जी. स्त्रेड अस्तणा-या षिभागातील ध्वनीची षातली ७२ डी स्त्री (ए) इतकी अपेक्षीत आहे. या षिभागात जस्वरी ध्वनी नियंत्रण आधने जस्त्रे कि आयलेंस्वस्त्र अस्त्राषिण्यात येतील. तस्त्रेच
- ऑयलस्त्र, फर्मन्टेशन स्त्रेक्शन ष डिस्त्रीलेशन स्त्रेक्शन हे इतस्त्र थोड्या प्रमाणात आवाज निर्माण करणारे स्त्रोत अस्त्रतील येथील ध्वनीची षातली ७० ते ८० डी स्त्री (ए) दस्त्रम्यान अपेक्षीत आहे.
- षंक्स्त्र, कॉप्रैस्त्रर्स्त्र, ऑयलस्त्र हाऊस्त्र, टर्शाइन, ट्रक वाहतूक इत्यादी.
- कास्त्रखान्या अस्त्रोषती टप्प्याटप्प्याने षिकस्त्रित केला जाणास्त्रा पुस्त्रेस्त्रा वाढीव हरित षट्टा यामुळे आवाज षातलीत घट होईल.



## आकृती ८ वायूचे प्रदूषण नियंत्रक उपकरण





## २. नियंत्रण उपाय

- ध्वनी नियंत्रणासाठी आयसोलेशन, ओपनरेशन आणि इन्स्युलेशन तंत्रे वापरली जातील. इअरमफ्स, ई. ब्यूपपात कामगारांना (PPE) पुरवण्यात येतील. तसेच ध्वनीची पातळी कमी करण्यासाठी डी. जी. शेट ब्युतंत्र कॅनॉपीमध्ये खंदीबत करण्यात येईल.

## इ. घातक ब्यूपपाचा कचरा

तक्ता १२ घातक ब्यूपपाचा कचरा तपशील

क्र.	प्रकल्प	कच-याचा प्रकार	परिमाण (मे.टन /वर्ष)		विल्हेवाट पद्धत
			अध्याचा	वित्तारीकरणानंतर	
१.	आखर कारखाना, आखणी व अहणीज	५.१ बॅट ऑईल	०.५४	३.०	आधिकृत पुनर्विकेता
		३३.३ कंटामिनेटेड कॉटन ग्रेट	०.४	०.५	आधिकृत पुनर्विकेता
		३३.१ एमटी कंटेनर	३०	८०	आधिकृत पुनर्विकेता

## फ. घन ब्यूपपाचा कचरा

तक्ता १३ घन ब्यूपपाच्या कच-याचा तपशील

क्र.	प्रकल्प	कच-याचा प्रकार	परिमाण (मे.टन /दिन)		विल्हेवाट पद्धत
			अध्याचा	वित्तारीकरणानंतर	
१.	आखर कारखाना व अहणीज प्रकल्प	ई.टी.पी. बलज	०.५	०.८	खत म्हणून वापरले जाईल
		ऑयलची बाख (अर्गस)	३३	५५	पीट निर्मितीसाठी/खत म्हणून वापर
२.	आखणी प्रकल्प	ऑयलची बाख (कोळसा+बॅटगॅश)	३८	१५३	पीट निर्मितीसाठी
		रीब्ट बलज	१४	५०	खत म्हणून वापरले जाईल
		सी.पी.यु. बलज	०.६५	२.५	

## ख. आवाचा उपद्रव

औद्योगिक प्रक्रियेतून ई.टी.पी. बलज रीब्ट बलज आणि प्रेशमड हे आवाचाच्या उपद्रवाचे ब्रोत अक्षतील ज्यासाठी दगडांच्या जाड थराबह ब्युतंत्र साठवणूक रार्ड पुरविले जाईल. यापुढे फरमेंटेशन विभाग बुद्धा आवाचाच्या उपद्रवाचे कारण ठरू शकतो. फरमेंटर्स खंदीबत करण्याबहित फरमेंटर्समध्ये योग्यप्रक्रिया यामुळे दुर्गधी कमी होऊ शकते.

## भ. नियम व अटीचे पालन

अध्याच्या प्रकल्पांतर्गत महाशष्ट्र प्रदुषण नियंत्रण मंडळ (MPCB) किंवा तत्क्षम अंशेधमार्फत सांडपाणी प्रक्रिया व विल्हेवाट, घातक ब्यूपपाचा कचरा व घन कचरा हाताळणी व विल्हेवाट तसेच वायु ऊत्सर्जने इ. अंशंधित घालुन देण्यात आलेल्या अर्ध कायद्यांचे व नियमांचे काटेकोरपणे पालन केले जाते. अदर कार्यपद्धती प्रस्तावित आखणी प्रकल्पांतर्गत ही पाळली जाईल.

## म. पर्यावरण व्यवस्थापन विभाग

ज. शु. मि. प्रा.लि. मध्ये पर्यावरण व्यवस्थापन विभाग कार्यरत आहे. या विभागातील सर्व सदस्य उच्च शिक्षित आणि संबंधित क्षेत्रातील योग्य तो अनुभव असलेले आहेत. सदस्यांच्या पर्यावरण व्यवस्थापन विभागामधील सदस्य खालीलप्रमाणे-

### तक्ता १३ पर्यावरण व्यवस्थापन विभाग

अनु.क्र.	नाव	पदाचे नाव	संख्या
अ	भास्वर कासबाना व सहजीव प्रकल्प		
१	श्री. विजय आर. जगदाळे	जनरल मॅनेजर	१
२	श्री.एन. पी. थोरात	वर्कर्स मॅनेजर	१
३	श्री. एन.सी.पाटील	मुख्य रक्षायनतज्ञ	१
४	श्री.व्ही. एन.फाळके	पर्यावरणीय अधिकारी	१
५	श्री. व्ही.सी. कोकरे	डिप्यु.टी.पी. ऑपरेटर व सहाय्यक	१
६	श्री.आर. आर. कदम	प्रयोगशाळा रक्षायनतज्ञ	१
७	श्री.के. डी. गायकवाड	गार्डन सहाय्यक	१
ख	आसपनी प्रकल्प		
८	श्री. सी.के. शिंदे	आसपनी अधिकारी	१
९	श्री. डी.एल. शिंदे	डि.टी.पी. ऑपरेटर व सहाय्यक	१
१०	श्री. एन.जी.कुंभार	आसपनी रक्षायनतज्ञ	१
११	श्री. जी. व्ही. कदम	प्लांट ऑपरेटर	१
१२	श्री. एन.आर. शिंदे	प्रयोगशाळा रक्षायनतज्ञ	१

सदस्यांच्या व प्रस्तावित विस्तारीकरण प्रकल्पांमधील पर्यावरण घटकांसाठी व त्यांच्या देखभालीसाठी लागणा-या खर्चाचा तपशील खालील प्रमाणे:-

### तक्ता १४ देखभालीसाठीच्या खर्चाचा तपशील

क्र.	तपशील	खर्च (रु. लाखांमध्ये)	
		भांडवली गंतवणूक	वार्षिक देखभाल व दुरुवस्ती
अ	सध्याचा प्रकल्पासाठी		
१.	ऑयलरला हवा प्रदूषण नियंत्रणासाठी ई.एन.पी व चिमणी आणि इन्व्हेन्शन ऑयलर, हवा प्रदूषण नियंत्रक उपकरणे - ई.एन.पी व चिमणी	३०००.०	३५०.०
२.	जल प्रदूषण नियंत्रण ई.टी.पी.व क्षि. पी. यु.	१५००.०	५०.०
३.	ध्वनी प्रदूषण नियंत्रणासाठी लागणाऱ्या खर्च	१५.०	२.०
४.	घनकचरा व्यवस्थापनासाठी	२०.०	५.०
५.	व्यवसायविषयक आरोग्य व सुरक्षितता	२५.०	३.०
६.	एन्व्हायरमेंटल मॉनिटरींग व मॅनेजमेंट	२०.०	२.०
७.	हवित पट्टा विकासासाठी व वेन पॉटर हार्व्हेस्टिंग	१००.०	२५.०
	<b>एकुण</b>	<b>४६८०.०</b>	<b>४३७.०</b>
ख	प्रस्तावित प्रकल्पासाठी		
१.	ऑयलरला हवा प्रदूषण नियंत्रणासाठी ई.एन.पी व चिमणी	५००.०	५०.०
२.	भांडवली प्रकिया सुविधा - MEE, STP	६५०.०	१००.०
३.	ध्वनी प्रदूषण नियंत्रणासाठी लागणाऱ्या खर्च	२०.०	५.०

क्र.	तपशील	खर्च (रु. लाखांमध्ये)	
		भांडवली गंतवणूक	वार्षिक देखभाल व दुरुवारी
४.	घनकचरा व्यवस्थापनासाठी	२०.०	५.०
५.	व्यवसायविषयक आरोग्य व सुरक्षितता	८०.०	१०.०
६.	एन्व्हायरमेंटल मॉनिटरिंग व मॅनेजमेंट	३०.०	५.०
७.	हरित पट्टा विकासासाठी लागणारा खर्च	४०.०	१०.०
	<b>एकूण</b>	<b>१३४०.०</b>	<b>१८५.०</b>

#### य) वेनवॉटर हार्वेस्टिंग संकल्पना

- प्रकल्पाचे एकूण क्षेत्र - ८,१२,६३३.२९ वर्ग मी.
- एकूण विकामे क्षेत्र - ३,१८,१००.८७ वर्ग मी.
- सरासरी वार्षिक पाऊस - ७८० मिमी.

#### ➤ कफटॉप हार्वेस्टिंग

- कफटॉप हार्वेस्टिंग क्षेत्र - २१,५०० वर्ग मी.
- कफटॉप हार्वेस्टिंग मधून मिळणारे पाणी - १३,४१६ घन मी.

#### ➤ सरफेस हार्वेस्टिंग

- सरफेस हार्वेस्टिंग क्षेत्र - ६,८३,१६१.८ वर्ग मी.
- सरफेस हार्वेस्टिंग मधून मिळणारे पाणी - १,६७,११० घन मी.

कफटॉप हार्वेस्टिंग आणि सरफेस हार्वेस्टिंग मधून उपलब्ध होणारे पाणी -

$$१३,४१६ \text{ घन मी.} + १,६७,११० \text{ घन मी.} = १,८०,५२६ \text{ घन मी.}$$

#### ब) हरित पट्टा माहिती

##### तक्ता १५ क्षेत्रफळाची माहिती

क्र.	तपशील	क्षेत्र (वर्ग.मी)		
		अध्याची	प्रस्तावित	एकूण
१	एकूण क्षेत्र			८,१२,६३३.२९
२	आंधकाम क्षेत्र			
	i. बाबखर कारखाना व सहवीज प्रकल्प	६६,७७०.६५.०	९,४३८.३	७६,२०८.९५
	ii. आश्रयणी प्रकल्प	१७,०३०.४८	२,४८१.९९	१९,५१२.४७
	iii. रस्ता क्षेत्र	४५,४८५.०	१,०००.०	४६,४८५.०
	iv. कॉलनी क्षेत्र	३३,७५०.०	--	३३,७५०.०
	<b>एकूण</b>	<b>१,६३,०३६.१३</b>	<b>१२,९२०.२९</b>	<b>१,७५,९५६.४२</b>
३	हरित पट्टा	३,०२,३२३.०	१६,२५३.०	३,१८,५७६.०
४	एकूण खुले क्षेत्र	३,४७,२४७.१६	--	३,१८,१००.८७

हरित पट्टा विकसित करण्यासाठी SPM, SO<sub>2</sub> चे उत्सर्जन या बाबी प्रामुख्याने विचारात घेतल्या जातील. SPM, SO<sub>2</sub> यांच्या उत्सर्जनांमुळे होणारे परिणाम कमी करण्यास उपयुक्त अशा हरित पट्टा विकास कार्यक्रम राबविला जाईल. तसेच नियोजित हरित पट्ट्यातील झाडांमुळे इंडस्ट्रीमध्ये तयार होणा-या धुनीची तीव्रता कमी होऊन परिक्षरात होणारे धुनी प्रदूषण कमी होणेस मदत होईल. यानुसार

SO<sub>2</sub> आणि ध्वनी प्रदूषण नियंत्रण इ. बाबी लक्षात घेऊन प्रस्तावित हरित पट्टा विकास कार्यक्रमांतर्गत विविध जातीच्या झाडांची लागवड केली जाईल.

### आकृती ९ मध्याचा हरित पट्टा



## ल) सामाजिक व आर्थिक विकास

सामाजिक व आर्थिक विकास अंतर्गत प्रकल्पास केंद्रस्थानी मानुन १० कि. मी. परीघ क्षेत्रामधील ८ गावांचे अर्थेक्षण केले गेले. या अंतर्गत पैयक्तिक रित्या लोकांच्या मुलाखती मराठी प्रश्नावलीद्वारे (३० प्रश्न) घेण्यात आल्या. अधिक माहितीसाठी EIA रिपोर्ट मधील प्रकरण - ३ सामाजिक व आर्थिक विकास मुद्दा पहा. सामाजिक व आर्थिक विकास अभ्यासामधील निरीक्षण आणि निष्कर्ष पुढील प्रमाणे

- कारखान्याने CER अंतर्गत आरोग्य सुविधा पुरवण्यात व त्या अंतर्गत किमान एका फिरत्या दवाखान्याची सोय करावी.
- ज. शु. मि. प्रा.लि.च्या पर्यावरणीय आघातांचा स्थानिक लोकांच्या जीवनावर, शेतीवर होणारा परिणाम लक्षात घेऊन स्थानिक लोकांनाच रोजगार मिळावा.
- शेतक-यांच्या ऋशाला चांगला दर मिळावा.
- कारखान्याच्या मदतीने जिल्हा परिषद/ग्रामपंचायत यांनी पायाभुत सुविधा जसे की रस्ते, शौचालये यांची व्यवस्था करावी.
- रस्त्यावरील अपघात रोखण्यासाठी ऋष वाहतुक करणा-या वाहनांना रेडिअम पट्टी अथवा ध्वज कारखान्याने पुरवावा.

म्हणुन कारखान्याने समाजाच्या विकासासाठी नेटका आराखडा व त्यासाठी आर्थिक तरतुद केली पाहिजे.

## ७) पर्यावरणविषयक तपासणी कार्यक्रम

अभ्यासासाठी निवडलेल्या भागाची पूर्ण पाहणी डिसेंबर २०१८ मध्ये करण्यात आली होती. प्रस्तावित प्रकल्पाच्या अभोवतालच्या हवामान परिस्थितीच्या माहितीसाठी हवा, पाणी व मातीवरूप इ. गोष्टींचा अभ्यास जानेवारीते मार्च २०१९मध्ये सुरू केला गेला होता. या प्रस्तावामध्ये जानेवारी २०१९, फेब्रुवारी २०१९, मार्च २०१९ या दरम्यानच्या कालावधीमध्ये गोळा केलेली माहिती नमूद केली आहे. याअंशंधीची दुय्यम स्तरावरील माहिती ही सरकारी विभागांकडून घेण्यात आली आहे ज्यामध्ये भुवर्गभ्रीय 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. अंशंधीत माहिती ही विविध दुय्यम स्तरावरून जसे की जनगणना पुस्तिका, सरकारी कार्यालये, सर्वे ऑफ इंडिया टोपोशीट्स, याचखेखर सॅटेलाईट इमेजीस व जागेवरील प्राथमिक सर्वे इ. मधुन घेण्यात आली आहे.

## ख. अभ्यासासाठी निवडलेल्या जमीनीचा वापर / व्यापलेलीजमीन



**तक्ता १६ जमीनीचा वापर / व्यापलेली जमीन**

अ.क्र.	जमीनीचा वापर / व्यापलेली जमीन	क्षेत्र (हेक्टर)	टक्केवारी(%)
१.	आंधकामाखालील जमीन	१२८०.००	४.०७
२.	लागवडीखालील जमीन	११५३४.००	३६.७१
३.	शेतीपड जमीन	१२४३२.००	३९.५७
४.	जलस्रोत	२५०.००	०.७९
५.	नदी/कालवा	२०९.००	०.६६
६.	जंगल	२९२८.००	९.३२
७.	खुबटी झुडूप प्रदेश	२७८२.००	८.८६
<b>एकुण</b>		<b>३१४१५.५०</b>	<b>१०० .००</b>

**क. हवामान माहिती**

भारत पाहणीसाठी ब्यूरो ऑफ इंडियन स्टॅण्डर्ड (BIS) आणि इंडियन मेट्रोलॉजी डिपार्टमेंट (IMD) यांनी नमूद केलेली मानके वापरली आहेत. उपमान परिवर्धनीच्या माहितीसाठी वेगवेगळ्या हवामान घटकांचा अभ्यास प्रत्यक्ष जागेवरती केला गेला आहे. याअंशधीची द्वितीय स्तरावरील अधिक माहिती ही हवामान विभाग, सातारा येथून घेण्यात आली आहे. त्यामध्ये तापमान, आर्द्रता, पर्जन्यमान इ. आर्षीचा समावेश आहे.

वेगवेगळ्या हवामान घटकांचा अभ्यास हा जानेवारी २०१९, फेब्रुवारी २०१९, मार्च २०१९ या दरम्यान केला गेला होता. या अभ्यासातील परिमाणे, उपकरणे व वापरता यांचा तपशील ई. आय. ए. रिपोर्टच्या प्रकरण ३ मध्ये देणेत आला आहे.

**ड) हवेचा दर्जा**

या विभागामधून नमुने घेतलेल्या ठिकाणांची निषड, नमुना घेण्याची पद्धत, पृष्ठकरणची तंत्रे आणि नमुना घेण्याची वापरता इ. गोष्टींची माहिती दिली आहे. जानेवारी २०१९, फेब्रुवारी २०१९, मार्च २०१९ या कालावधीमधील निरीक्षणानंतरचे निकाल भारत केले आहेत. सर्व मॉनिटरींग असाइनमेंटस, नमुने घेणे व त्यांचे पृष्ठकरण MoEFCC, New Delhi मान्यताप्राप्त तसेच ISO ९००१ -२००८ व ISO १४००१ - २००४मानांकित मे. ग्रीन एनवायरोन्मेंट इंजिनीअर्स आणि अल्लागार प्रा.लि., पुणे या प्रयोगशाळेमार्फत केले आहे; ज्यांना DNV कडून ISO ९००१:२००८ ISO १४००१:२००४ व OHSAS १८००१:२००७ प्रमाणपत्र मिळाले आहे.

अभ्यास क्षेत्रातील हवेच्या गुणवत्तेचे मूल्यमापन करण्यासाठी PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>x</sub> and CO या घटकांचे वेगवेगळ्या स्थानांवर मॉनिटरींग केले गेले. मॉनिटरींगची वेगवेगळी स्थानके खाली दिलेल्या तक्त्यामध्ये दाखवली आहेत.

तक्ता १७ हवा परिक्षणाची स्थानके

AAQM केंद्र आणिआंकेतांक	स्थानकाचे नाव	भाईट पावूनचे अंतर (कि.मी.)	भाईटला अनुभवन दिशा
A1	भाईट	-	-
A2	खोरेगाव	७.०	W
A3	खिरखंडी	१.४९	SEE
A4	भाटमवाडी	१.७७	NE
A5	बैगाव	२.८५	SSW
A6	चिमणगाव	३.०	NNW
A7	वडाचीवाडी	२.११	WWS
A8	आभरे	५.७७	W

तक्ता १८ Summary of the AAQ Levels for Monitoring Season  
[January 2019 – February 2019 – March 2019]

परिमाण		ठिकाण							
		भाईट	कोरेगाव	खिरखंडी	भाटमवाडी	बैगाव	चिमणगाव	वडाचीवाडी	आभरे
PM <sub>10</sub> μg/M <sup>3</sup>	Max.	६७.१०	५९.६०	५९.५०	५९.७०	५८.९०	५९.९०	५९.२०	५९.८०
	Min.	५८.२०	५०.३०	५०.१०	५०.२०	५०.१०	५०.२०	५०.६०	५०.००
	Avg.	६३.१०	५५.७०	५५.७९	५६.३५	५५.८३	५६.६५	५६.४९	५६.१५
	98%	६७.०१	५९.४२	५९.५०	५९.६५	५८.९०	५९.७६	५९.१६	५९.६३
PM <sub>2.5</sub> μg/ M <sup>3</sup>	Max.	२९.७०	२०.४०	२०.१०	१९.९०	२०.५०	१९.७०	१९.८०	१९.९०
	Min.	१५.१०	१५.१०	१५.१०	१५.१०	१५.१०	१५.१०	१५.१०	१४.८०
	Avg.	१७.२४	१८.३४	१८.२३	१८.२५	१८.६३	१७.९३	१८.२५	१८.४८
	98%	१९.०२	२०.१७	२०.०१	१९.८५	२०.२७	१९.६१	१९.८०	१९.८०
SO <sub>2</sub> μg/M <sup>3</sup>	Max.	२९.७०	१९.५०	१९.९०	१९.८०	१९.७०	१९.७०	१९.८०	१९.९०
	Min.	२५.८०	१५.१०	१५.१०	१५.२०	१५.१०	१५.९०	१४.८०	१५.१०
	Avg.	२८.०७	१७.७७	१७.५८	१७.७६	१७.८२	१८.२१	१७.३३	१७.८७
	98%	२९.५६	१९.४५	१९.७६	१९.८०	१९.६५	१९.७०	१९.६७	१९.९०
NO <sub>x</sub> μg/M <sup>3</sup>	Max.	३५.४०	२५.६०	२६.२०	२५.८०	२४.८०	२४.९०	२४.९०	२५.४०
	Min.	३१.००	२१.७०	२१.००	२१.००	२०.२०	२१.००	२१.१०	२१.००
	Avg.	३३.४७	२४.०७	२३.७०	२३.२८	२२.५३	२२.७०	२३.२६	२३.१४
	98%	३५.३१	२५.४२	२५.९२	२५.३९	२४.७५	२४.५८	२४.९०	२५.३६
CO mg/M <sup>3</sup>	Max.	०.९०	०.०९	०.०९	०.०९	०.०९	०.०९	०.०९	०.०९
	Min.	०.२०	०.०१	०.०२	०.०१	०.०२	०.०१	०.०२	०.०२
	Avg.	०.५७	०.०६	०.०६	०.०७	०.०७	०.०५	०.०६	०.०६
	98%	०.९०	०.०९	०.०९	०.०९	०.०९	०.०९	०.०९	०.०९

Note: PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub> are computed based on 24 hourly values.

CO is computed based on 8 hourly values.

तक्ता १९ National Ambient Air Quality Standards (NAAQS) Specified by Central Pollution Control Board Notification (New Delhi, the 18<sup>TH</sup> November, 2009)

		Standards	
		औद्योगिक आणि मिश्रित भाग	बहिष्वासी आणि ग्रामीण भाग
PM <sub>10</sub> µg/M <sup>3</sup>	24 Hr	१००	१००
	A.A.	६०	६०
PM <sub>2.5</sub> µg/M <sup>3</sup>	24 Hr	६०	६०
	A.A.	४०	४०
SO <sub>2</sub> µg/M <sup>3</sup>	24 Hr	८०	८०
	A.A.	५०	२०
NO <sub>x</sub> µg/M <sup>3</sup>	24 Hr	८०	८०
	A.A.	४०	४०
CO <sub>x</sub> mg/M <sup>3</sup>	24 Hr	४	४
	A.A.	४	४

Note: A.A. represents "Annual Average"

परील स्थानकांचे निरीक्षण केल्यानंतर त्यांचे निकाल NAAQS च्या मर्यादेत आढळले. अधिक माहितीसाठी प्रकरण क्र. ३ पहा.

### इ) पाण्याची गुणवत्ता

पाण्याच्या भौतिक, रासायनिक गुणधर्मांची आणि त्यातील जडधातूंची तपासणी करण्यासाठी MoEFCC, New Delhi मानांकित मे. वीन एनवायरोन्मेण्ट इंजिनीअर्स आणि अल्लागाव प्रा.लि., पुणे यांच्यामार्फत नमुने घेऊन त्यांचे पृथक्करण केले. भूगर्भातील पाण्याच्या नमुना चाचणीसाठी ८ ठिकाणे व भूपृष्ठीय पाण्याच्या नमुनाचाचणीसाठी ८ ठिकाणे घेतली होती.

#### तक्ता २० पृष्ठभागावरील पाण्यासाठी निवडलेली ठिकाणे

स्थानक संकेतांक	स्थानकाचे नाव		बोर्ड पात्रुन चे अंतर	बोर्ड पात्रुनची दिशा
SW1	चिमणगावजवळ	खालुन परच्या दिशेला पाहणावे पावे	४.०	NW
SW2	शिबढोण	परून खालच्या दिशेला पाहणावे पावे	१०.०	SW
SW3	बोर्ड	नाला	१.०	NW
SW4	खुमठे	नदी व नाला संगम	४.४	NW
SW5	बोर्ड	टाकी	१.६	E
SW6	सांगवी १	नाला	२.५	NW
SW7	सांगवी २	नाला	१.९	W
SW8	बैगावजवळ	नाला	४.०	SSW

तक्ता २१ भूगर्भातील पाण्यासाठी निवडलेली ठिकाणे

स्थानक सांकेतांक	स्थानकाचे नाव	को-ऑर्डिनेट्स	
		अक्षांश	रेखांश
GW1	साईट	१७°४२' १८.१०" N	७४°१३' ४६.९९" E
GW2	चंदनवाडीची पश्चिमदिशा	१७°४२' १५.३६" N	७४°१४' ३३.१८" E
GW3	साईटच्या उत्तरेला	१७°४२' ५५.३१" N	७४°१३' ४४.४०" E
GW4	साईटच्या नैऋत्येला	१७°४२' ४०.८८" N	७४°१३' ३८.९२" E
GW5	भाटमवाडीची पश्चिमदिशा	१७°४२' ५१.९३" N	७४°१३' २२.६७" E
GW6	भाटमवाडीची नैऋत्यदिशा	१७°४२' ४३.४१" N	७४°१३' २५.१४" E
GW7	भाटमवाडीची नैऋत्यदिशा	१७°४२' ४८.४०" N	७४°१३' २७.०३" E
GW8	वडाचीवाडीची पूर्ण दिशा	१७°४२' ४४.९५" N	७४°१३' ११.३१" E

अधिक माहितीसाठी प्रकरण ३, सेक्शन ३.७.४ पहा.

फ) ध्वनी पातळीचे अर्थेक्षण

ध्वनी पातळीचे अर्थेक्षणसाठी कारखाना परिवारास केंद्र मानून त्यापासून १० कि.मी. अंतराच्या परिघामध्ये येणारा भाग हा अभ्यासक्षेत्र म्हणून विचारात घेण्यात आला होता. ध्वनीपातळीचे मॉनिटरींगसाठी रहिवासी, व्यावसायिक, औद्योगिक, शांतता विभाग असे चार विभाग विचारात घेण्यात आले होते. या अभ्यासामध्ये काही महत्वाच्या बरेल्यावर वाहतुकीमुळे होणारा आवाजसुद्धा समाविष्ट केला होता. प्रत्येक ठिकाणी २४ तासा साठी ध्वनी पातळीचे मॉनिटरींग करण्यात आले. ध्वनी पातळीचे मॉनिटरींगची वेगवेगळी स्थानके खाली दिलेल्या तक्त्या मध्ये दाखवली आहेत.

तक्ता २२ ध्वनी नमुना ठिकाणे व ध्वनीपातळी

Station Code	Name of the Sampling Point	Distance from Site (km)	Direction	Average Noise Level in dB(A)					
				L <sub>10</sub>	L <sub>50</sub>	L <sub>90</sub>	Leq(day)	Leq(night)	L <sub>dn</sub>
N1	साईट	--	--	६३.३	६५.१	६७.२	७०.८	६०.०	७०.५
N2	खिबखिंडी	१.४९	SEE	४५.७	४७.३	४८.६	५३.४	४१.५	५२.८
N3	बामोशीवाडी	२.७	NE	४७.४	४८.१	४९.६	५३.०	४३.३	५३.१
N4	वर्धनगड	४.२९	NE	४५.४	४७.०	४७.९	५२.६	४१.६	५२.३
N5	चिमनगाव	३.०	NNW	४५.१	४७.२	४८.४	५१.९	४२.७	५२.२
N6	खोबजाईवाडी	५.०	N	४३.६	४५.३	४६.२	४९.७	४१.०	५०.२
N7	वडाचीवाडी	२.११	WWS	४५.६	४७.१	४७.८	५२.७	४१.६	५२.३
N8	गोलेवाडी	४.०८	WWS	४७.४	४८.६	४९.४	५४.०	४३.३	५३.७
N9	एकांछे	२.९१	S	४७.१	४८.१	४९.६	५२.८	४३.६	५३.१

ग) सामाजिक - आर्थिक रचना

सामाजिक व आर्थिक व्तरावरून त्याभागातील प्रगती दर्शनास येते. कोणत्याही प्रकारच्या विकासा प्रकल्पामुळे कार्यक्षेत्रात राहणा-या लोकांच्या राहणी मानावर, सामाजिक व आर्थिक व्तरावर प्रभाव पडतो. याखंडदलची अपेक्षित माहिती ई.आय.ए. रिपोर्ट मधील प्रकरण ३ मध्ये आहे.

## ब) पर्यावरण

प्रस्तावित विस्तारीकरण प्रकल्पाची स्थापनेकरिता पर्यावरणीय अर्थेक्षण मान्यपुर्वी स्वीक्षण मध्ये करण्यात आले. प्रकल्पाच्या १० कि.मी. परिघातील ५९ गावांपैकी १३ गावे पर्यावरण व जैवविविधता अभ्यासासाठी अनुकूल आढळली जी अभ्यास क्षेत्रातील बहुतांश वस्तीस्थानांचे प्रतिनिधित्व करतात म्हणजेच ५ कि.मी. परिघातील ९ गावे व १० कि.मी. परिघातील ४ गावे. प्रकल्पाच्या १० कि.मी. परिघातील पर्यावरण व जैवविविधता अर्थेक्षण व प्रश्नावली अर्थेक्षण केलेली गावे

**तक्ता २३ प्रकल्पाच्या १० कि.मी. परिघातील अभ्यास व प्रश्नावलीद्वारे अर्थेक्षणासाठी भेट दिलेली गावे**

० ते ५ कि.मी. परिघ				५ ते १० कि.मी. परिघ			
क.	गावाचेनाव	EB Study	Q. Survey	क.	गावाचेनाव	EB Study	Q. Survey
१	सांगवी	*	*	१०	कुमठे	*	*
२	चिमणगाव	*	*	११	नेव	*	-
३	खोद्येवाडी	*	*	१२	खोवजाईवाडी	*	*
४	वडाचीवाडी	*	*	१३	कान्हेरखेड	*	*
५	गोलेवाडी	*	*				
६	भाटमवाडी	*	*				
७	वर्धनगड	*	*				
८	खिरखिंडी	*	*				
९	एकांछे	*	*				

## आमान्य निरीक्षणे व शिफारसी :

१. विखुरलेल्या स्थानिक नैसर्गिक अधिवासांचे प्राथमिकतेने संरक्षण व जतन स्थानिक लोक व कारखान्याच्या संयुक्त विद्यमाने करणे गरजेचे आहे. CER अंतर्गत अभ्यास क्षेत्रातील गावातील पर्यावरण व जैवविविधता जतन करण्यासाठी पुढील ३ गावांची शिफारस करण्यात येत आहे जे की अजूनही चांगल्या स्थिती मध्ये आहेत; त्यांची नावे पुढीलप्रमाणे १. खिरखिंडी २. वर्धनगड ३. शेल्टी
२. कारखाना स्थानिक लोक व कामगारांच्या सहाय्याने अभ्यास क्षेत्रातील ५ ते १० कि.मी. परिघातील गावांना सुसहय पर्यावरणाबद्दल पर्याय आणि हरित तंत्रज्ञान याचे प्रात्यक्षिक, उत्तेजन व प्रचार केला पाहिजे. स्थानिक मुख्यतः तरुण मंडळे व स्त्रियांचे संयोजकता गट यांच्यामार्फत स्थानिक जनरपी प्रजातींचे पृष्ठापोषण, माती व जल संधारण, रेल पॉटर हार्व्हिस्टिंग, ठिणक सिंचन, घनकचरा व मैला व्यवस्थापन, सैद्धीय शेती आणि पर्यावरण जागरूकता अभियान यांसारखे कार्यक्रम हाती घेतले पाहिजेत.
३. याअधिक कारखाना प्रदूषणामुळे पर्यावरणावर होणारा दुष्परिणाम संयंत्रेणेने नियंत्रित केला पाहिजे. वरील पुढाकारामुळे गावांचे आरोग्य सुधारण्यास मदत होणार आहे.

## ८) इतर अभ्यास

### आपत्ती व्यवस्थापन

आपत्ती व्यवस्थापन करताना, खालील खालील विचार केला जातो.



१. प्रकल्पाच्या शेजारी राहणा-या लोकांना प्रकल्पामुळे कमीत कमी धोका असावा.
२. प्रकल्पामध्ये काम करणा-या कामगारांना शेजारी राहणा-या लोकांपेक्षा जास्त धोका अपेक्षित आहे, यामुळे प्रकल्पामध्ये काम करणा-या कामगारांना अंभाष्य धोक्यापासून रक्षणाचे ट्रेनिंग दिले गेले पाहिजे जेणे करून अंभाष्य धोके कमी होतील.

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

१. प्रकल्पास धोका : जेव्हा जिवीतास कमीतकमी धोका असतो व तो धोका पुढे कमी करणे शक्य होत नाही यावेळी ह्या धोक्यास प्राथमिकता दिली गेली पाहिजे. याअंतर्गत अंभाषित वित्तीय नुकसानीच्या धोक्याचा विचार केला जातो.
२. कामगार व जनतेस धोका : फेटल ऑक्सीडेंटरेट (एफ. ए. आर) किंवा फेटल ऑक्सीडेंट फिक्सेन्सीरेट (एफ. ए. एफ. आर) याचा वापर कामगार व जनतेस धोके यांचा अभ्यास करताना वापर केला जातो. एफ. ए. आर व एफ. ए. एफ. आर म्हणजेच औद्योगिक अपघातांमध्ये १००० लोकांमागे होणा-या अपेक्षित मृतांची संख्या होय.

जोखीम व धोके पुढील गोष्टींमध्ये वितरीत होतात

- उत्पादन प्रक्रियेमधील धोक्याची ओळख जसे की साखर कारखान्यातील बल्फर डायऑक्साईडची निर्मिती.
- साखर कारखान्यातील ज्वलन, मोलॅस्सिस यांच्या साठवणूक व हाताळणी मधील धोक्याची ओळख.
- आभयानी मधील अल्कोहोलच्या साठवणूक व हाताळणी मधील शक्य धोके.
- फॅक्टरी अँक्ट अंतर्गत जखमी व्यवसायविषयक आरोग्य व सुरक्षितता, आवश्यक कर्मचारी व मुशलक आरोग्य सुविधा

यासंबंधीची अधिक माहिती इ.आय. ए. रिपोर्ट मधील प्रकरण ७ येथे जोडली आहे.

## १) पर्यावरणावर होणारे परिणाम आणि त्यासाठीच्या उपाययोजना

### अ. भौगोलिक रचनेवर परिणाम

अध्याच्या प्रकल्पामध्ये विस्तारीकरण प्रकल्पांची स्थापना होणार असलेने संपादित जागेच्या भौगोलिक रचनेवर परिणाम अपेक्षित नाही.

### ब. वातावरणावरील परिणाम

प्रस्तावित विस्तारीकरण प्रकल्पांमुळे हवामानावर परिणाम अपेक्षित नाही कारण जास्त तापमान अक्षणा-या वायुंचे उत्सर्जन अपेक्षित नाही.

### क. हवेच्या दर्जावरील परिणाम

प्रस्तावित विस्तारीकरण प्रकल्पांमुळे होणा-या परिणामांची छाननी करण्यासाठी कारखाना परिसरास केंद्र मानून त्यापासून १० कि.मी. अंतराच्या परिघामध्ये येणारा भाग विचारात घेत लागेला आहे.

## १. मुलभूत ऑक्सीजन वायू प्रमाणके

जानेवारी २०१९ ते मार्च २०१९ मध्ये करण्यात आलेल्या फिल्ड स्टडी मध्ये रेकॉर्ड करण्यात आलेली २४ तासामधील ९८ पर्सेंटायल प्रमाणके आणि PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> व NO<sub>x</sub> यांची अभ्युपेक्षात्मक हवेमधील अंशवर्षी यानुसार मिळालेल्या प्रमाणांना मुलभूत प्रमाणके मानण्यात आली आहेत. अद्वय प्रमाणके परिवर्तनामध्ये होणारे परिणाम दर्शवतात. अद्याची मुलभूत प्रमाणके ई. आय. ए. रिपोर्ट मधील प्रकरण ४ तसेच पुढील तक्त्यामध्ये मांडण्यात आली आहेत.

### तक्ता २४ मुलभूतप्रमाणके

तपशील	प्रमाणके $\mu\text{g}/\text{m}^3$
PM <sub>10</sub>	६७.०१
PM <sub>2.5</sub>	१९.०२
SO <sub>2</sub>	२९.५६
NO <sub>x</sub>	३५.३१
CO	०.९० mg/m <sup>3</sup>

## २. हवा प्रदूषण स्रोत

अध्याच्या प्रकल्पासाठी लागणाऱ्या वाफ १६० टन प्रति तास क्षमतेच्या ऑयलर मधुन घेतात. ८२ मी चिमणीसहित इलेक्ट्रोस्टॅटिक प्रेसिपिटेटर (ESP) वायु प्रदूषण नियंत्रक उपकरण म्हणून अक्षयिला आहे.

आवृत्तीकरिता लागणाऱ्या वाफ प्रस्तावित २८ टन प्रति तास क्षमतेच्या इन्व्हर्शनरेशन ऑयलर मधुन घेतली जाईल. ऑयलरला ७२ मी. उंचीच्या चिमणीसहित वायु प्रदूषण नियंत्रक उपकरण म्हणून इलेक्ट्रोस्टॅटिक प्रेसिपिटेटर (ESP) अक्षयिला जाईल.

## ड. जलस्रोतावरील परिणाम

### १. भूपृष्ठीय जलस्रोतावरील परिणाम

अध्याच्या व विस्तारीकरण प्रकल्पासाठी लागणारे पाणी हे भूपृष्ठीय जलस्रोतांमधुन घेण्यात येईल. प्रस्तावित प्रकल्पानंतर आख्य कारखाना, आवृत्ती प्रकल्प व अहलीज प्रकल्पामधुन तयार होणारे एकुण ४२ घन मी. प्रतिदिन एवढे झांडपाणी अध्याच्या झांडपाणी प्रक्रिया केंद्रात प्रक्रियेत केले जाईल. घरगुती झांडपाण्यावर प्रस्तावित झांडपाणी प्रक्रिया केंद्रात प्रक्रिया केली जाईल. कोणत्याही प्रकारचे प्रक्रिया न केलेले झांडपाणी नदी अथवा नाल्यामध्ये विस्फर्जित करणारे नाही. अधिक माहितीई .आय.ए. रिपोर्ट मधील प्रकरण क. २ मध्ये देण्यात आली आहे.

### २. भूगर्भीय पाण्याच्या गुणवत्तेवर होणारे परिणाम

प्रस्तावित विस्तारीकरण प्रकल्पासाठी लागणारे पाणी हे नदीमधून घेण्यात येईल. पाणी वापरासाठी आवश्यक परवानगी घेण्यात आली आहे. प्रकल्पासाठी भूगर्भीय पाण्याचा वापर केला जात नाही. भूगर्भीय पाण्याचा इथे वापर नसल्यामुळे त्याच्या स्तरावर कोणताही परिणाम होणारे नाही.

## इ. माती वर होणारे परिणाम

मातीच्या गुणधर्मावर होणारे परिणाम हे आध्यारणपणे वायू उत्सर्जन, झांडपाण्याचे आणि घनकचरा विनियोगांमुळे होत असतात. अध्याच्या आख्य कारखाना व

अहवीज प्रकल्पातून वर उल्लेख केलेले घटक विसर्जित होणार नाहीत. ऑयलर्सना ई.एअ.पी. व पेट बक्षर अक्षपिले आहेत. ऑयलर्सची राख व ई.टी.पी. बलजरूपान घनकचरा निर्माण होईल. ऑयलर्सची राख पीट निर्मितीसाठी दिली जाईल व ई.टी.पी. बलज वृक्षारोपनासाठी खत म्हणून वापरली जाईल. घरगुती आंडपाण्यावर प्रस्तावित आंडपाणी प्रक्रिया केंद्रात प्रक्रिया केली जाईल. त्यामुळे वायु प्रदूषके अथवा आंडपाण्यामुळे जमिनीच्या रासायनिक घटकांमध्ये कोणताही मोठा बदल होणार नाही.

#### फ. ध्वनी मर्यादेवर होणारा परिणाम

अतिध्वनी निर्माण करणा-या यंत्रावर काम करीत अक्षणा-या कामगारांचे अंतुलन बिघडून कामावर परिणाम होण्याची शक्यता असते. ध्वनी निर्माण होणाऱ्या यंत्रोत्पादक अक्षणाच्या लोकांची ऐकण्याची क्षमता कमी होऊ शकते. शहर प्रकल्पामध्ये मुख्यतः आखर कारखान्यातील मील, कॉम्प्रेसर, ऑयलर, टर्बाइन व डि.जी. सेट हे ध्वनी प्रदूषणाचे मुख्य स्रोत ठरतील. शहर प्रकल्प हा ध्वनी प्रदूषण करणारा नाही.

#### ग. जमीन वापरावर होणारा परिणाम

प्रस्तावित विसर्जककरण प्रकल्प हे शहराच्या आखर कारखाना, अहवीज प्रकल्प व आशवनी प्रकल्पांमध्ये करण्यात येणार आहेत. शहर जागेचा औद्योगिक कारणांसाठी वापर करण्यात येत आहे यामुळे जमीन वापरामध्ये बदल अपेक्षित नाही.

#### घ. झाडांवर व प्राण्यांवर होणारा परिणाम

प्रक्रिया न केलेले आंडपाणी कारखान्याच्या अक्षोवताली विसर्जित केल्यास पाणी अक्षो व त्यावर अवलंबून असलेली जैवविविधतेवर परिणाम असोवतो. वायु प्रदूषणा अक्षोत कारखाना SPM च्या अक्षरूपान प्रदूषण योगदान देऊ शकतो. याचा विसर्जित परिणाम अक्षतः पक्षी, अक्षोवतालची पीके आणि अक्षानिक लोकांवर होऊ शकतो. झाडांवर व प्राण्यांवर होणारा परिणामांची माहिती ई.आय. ए. रिपोर्ट मधीलप्रकरण ३ मध्ये देण्यात आलेली आहे.

#### ङ. ऐतिहासिक ठिकाणावर होणारा परिणाम

प्रकल्प क्षेत्रात ४.३८ कि.मी. अंतरावर वर्धन गड किल्ला व महादेव मंदिर आणि ७.६ कि. मी. अंतरावर केदारेश्वर मंदिर आहे पण ही अक्षेले अक्षित नाहीत त्यामुळे परिणाम शुन्य अक्षेल.

#### १०) पर्यावरणीय निरीक्षण आराखड्याची ठळक वैशिष्ट्ये

पर्यावरणीय व्यवस्थापन आराखड्याची ठळक वैशिष्ट्ये खालील तक्त्यामध्ये दिलेली आहेत -

**तक्ता २५ पर्यावरणीय व्यवस्थापन आराखडा**

क्र.	तपशील	ठिकाण	परिमाणे	वारंवारता	तपासणी
१.	हवेची गुणवत्ता	अपविंड - १, डाऊनविंड - २ (अगॅस यार्डजवळ, कंपोस्ट यार्ड जवळ, मेन गेट जवळ, केन यार्ड) अभ्यास क्षेत्र (साईट, कोरेगाव, बिबबिंडी, भाटमवाडी, बैगाव, चिमणगाव, पडाचीवाडी, आसरे)	PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NO <sub>x</sub> , CO	मासिक	MoEFCC approved Laboratory मधुन
२.	चिमणीतुन होणाऱे उत्सर्जन	ऑयलरच्या ३ चिमण्या, २ डी.जी. बेट	1. SPM 2. SO <sub>2</sub> 3. NO <sub>x</sub>	मासिक	
३.	ध्वनि गुणवत्ता	मेनगेट जवळ, किण्वन विभाग, भाखर गोदाम, ऑयलर, डी.जी. बेट, टर्झिन विभाग	Spot Noise Level recording; Leq(n), Leq(d), Leq(dn)	मासिक	
४.	पिण्याचे पाणी	कारखान्याचे उपहारगृह / वसाहत	Parameters as drinking water standards IS10500	मासिक	
५.	जमीन	८ ठिकाणे	PH, Salinity, Organic Carbon, N.P.K.	मासिक	
६.	पाण्याची गुणवत्ता	अभ्यास क्षेत्रामधील ठिकाणे - भुगर्भीय पाणी आणि 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	जबंडेशवर शुगर् प्रायव्हेट लिमिटेड यांचेकडून
८.	कचरा व्यवस्थापन	प्रस्थापित कृतीतून तयार होणा-या कच-याचे षैशिष्टे आणि कपानुसार व्यवस्थापन केले जाईल	कच-याचे निर्मिती, प्रक्रिया आणि विल्हेवाट यांची नोंद	वर्षातून दोनदा	
९.	आपातकालीन तयारी जसे की आग व्यवस्थापन	प्रतिबंधात्मक उपाय म्हणून आगीच्या व स्फोट होणाऱ्या ठिकाणी आगीपाहून संरक्षण आणि सुरक्षिततेची काळजी घेतली जाईल.	ऑन साईट ईमरजन्सी व संकटकालीन आह्वार पडण्याचा आराखडा	मासिक	
१०.	आरोग्य	कारखान्याचे कामगार आणि स्थलांतरीत कामगारांसाठी आरोग्य क्षीणीचे आयोजन	सर्व आरोग्य विषयक चाचण्या	वार्षिक	
११.	हरीत पट्टा	कारखान्याच्या परीक्षामध्ये आणि शेजारील गावांमध्ये	झाडे जगण्याचा दर	तज्ञां नुसार	
१२.	बी.ई.आर.	निर्देशाप्रमाणे		सहा महिन्यातून	







## MAHARASHTRA POLLUTION CONTROL BOARD

Tel: 24010706/24010437  
Fax: 24023516  
Website: <http://mpcb.gov.in>  
Email: [cac-cell@mpcb.gov.in](mailto:cac-cell@mpcb.gov.in)



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

Date: 20/08/2020

RED/L.S.I (R60)

No:- Format1.0/CAC/UAN No.MPCB- 200800698  
CONSENT-0000094180/CO

To,  
M/s Jarandeshwar Sugar Mills Pvt. Ltd.  
803,A/p - Chimangaon  
Koregaon,Satara.

**Sub: 1st Consent to Operate for 80 KLPD Molasses based Distillery. under RED Category.**

- Ref:**
1. Environmental Clearance granted vide letter No. STA/MH/IND2/53002/2019 on 26.06.2020
  2. Consent to Establish granted by Board vide No. BO/CAC-CELL/UAN NO. 0000086882/CE/CAC- 2008000149 dtd. 05.08.2020
  3. Minutes of CAC Meeting dtd. 24.07.2020.

Your application No.MPCB-CONSENT-0000094180 Dated 03.07.2020

For: Consent to Operate under Section 26 of the Water (Prevention & Control of Pollution) Act, 1974 & under Section 21 of the Air (Prevention & Control of Pollution) Act, 1981 and Authorization 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 operate is granted for a period up to 31/08/2021
2. The capital investment of the project is Rs.117.646 Crs. (As per C.A Certificate submitted by industry )
3. Consent is valid for the manufacture of:

Sr No	Product	Maximum Quantity	UOM
Products			
1	RS/ENA/Ethanol	80	KL/D

Distillery Capacity shall not exceed (Molasses base) 80 KLPD.

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

Sr No	Description	Permitted (in CMD)	Standards to	Disposal Path
1.	Trade effluent	655	As per Schedule-I	MEE & Incineration Boiler to achieve ZLD
2.	Domestic effluent	2	As per Schedule-I	On land for irrigation





# Maharashtra Pollution Control Board

## 5f3e31c0a6b21f06f7f1b0f2

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

Sr No.	Stack No.	Description of stack / source	Number of Stack	Standards to be achieved
1	1	Incineration Boiler (25 TPH)	1	As per Schedule -II

### 6. Non-Hazardous Wastes:

Sr No	Type of Waste	Quantity	UoM	Treatment	Disposal
1	Boiler Ash(Coal+Spent wash)	1140	MT/M	Given to Brick Manufacturers	Given to Brick manufacturers.
2	Yeast Sludge	420	MT/M	Dried	Burned in boiler
3	CPU Sludge	21	MT/M	Dried	Burned in boiler

### 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
	NA				

- The Board reserves the right to review, amend, suspend, revoke this consent and the same shall be binding on the industry.
- This consent should not be construed as exemption from obtaining necessary NOC/ permission from any other Government authorities.
- This consent is issued pursuant to the decision of the 6th Consent Appraisal Committee Meeting held on 24.07.2020.
- The applicant shall comply with the conditions of the Environmental Clearance granted vide letter No. STA/MH/IND2/53002/2019 on 26.06.2020.
- Industry shall install online continuous monitoring system as per CPCB guidelines & data to be transmitted directly from Data Logger to Board server .
- The applicant shall make an application for renewal of consent 60 days prior to date of expiry of the consent. (Operate/Renewal)

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	235292.00	TXN2007000204	03/07/2020	Online Payment

### Copy to:

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



# Maharashtra Pollution Control Board

## 5f3e31c0a6b21f06f7f1b0f2

### SCHEDULE-I

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

##### 1. Conditions for Trade effluent:

- A] You have provided comprehensive treatment i.e Effluent treatment plant with the design capacity of 700 CMD for trade effluent 655 CMD including MEE for volume reduction followed by incineration boiler for achieving zero discharge. In no any spent wash shall discharge outside the 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. 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	120.00
2.	Domestic purpose	3.00
3.	Processing whereby water gets polluted & pollutants are easily biodegradable	624.00
4.	Processing whereby water gets polluted & pollutants are not easily biodegradable and are toxic	0.00
5.	Gardening	0

Fresh water requirement is restricted as per Environmental clearance.

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

## 5f3e31c0a6b21f06f7f1b0f2

### 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
1	Incineration Boiler (25 TPH)	ESP Followed by wet scrubber	72	Coal + Concentrated Spent wash	72 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/Nm <sup>3</sup>
--------------------	---------------	------------------------
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

## 5f3e31c0a6b21f06f7f1b0f2

### 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 O	500000	15 days/extended	Towards compliance of Consent conditions, Environmental clearance conditions & O & M of pollution control system.	31.08.2021	31.12.2021

### 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
NA						

### BG Return details

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







# Maharashtra Pollution Control Board

## 5f3e31c0a6b21f06f7f1b0f2

### **SCHEDULE-IV** **General Conditions:**

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 siting and control measures.
  - d) Installation of DG Set must be strictly in compliance with recommendations of DG Set manufacturer.
  - e) A proper routine and preventive maintenance procedure for DG set should be set and followed in consultation with the DG manufacturer which would help to prevent noise levels of DG set from deteriorating with use.
  - f) D.G. Set shall be operated only in case of power failure.
  - g) The applicant should not cause any nuisance in the surrounding area due to operation of D.G. Set.
  - h) The applicant shall comply with the notification of MoEFCC, India on Environment (Protection) second Amendment Rules vide GSR 371(E) dated 17.05.2002 and its amendments regarding noise limit for generator sets run with diesel.
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.





# Maharashtra Pollution Control Board

## 5f3e31c0a6b21f06f7f1b0f2

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.
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.





# Maharashtra Pollution Control Board

## 5f3e31c0a6b21f06f7f1b0f2

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 firm shall submit to this office, the 30th day of September every year, the Environment 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.
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

Tel: 24010706/24010437  
Fax: 24023516  
Website: <http://mpcb.gov.in>  
Email: [cac-cell@mpcb.gov.in](mailto: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-0000093053/CR - 2007001728

Date: 29/07/2020

To,  
M/s Jarandeshwar Sugar Mills Pvt. Ltd.  
803, At post - Chimangaon  
Koregaon, Satara.

Sub: Renewal of sugar unit of 10000 TCD sugar unit & 32 MW  
Cogeneration unit Under L.S.I RED Category

Ref: 1. Renewal of consent granted by the Board vide no. CAC-UAN/NO.  
MPCBCONSENT-0000073924/CR-2001000079 dtd. 02.01.2020.  
2. Minutes of CAC Meeting dtd. 19.06.2020.

Your application No.MPCB-CONSENT-0000093053 Dated 15.06.2020

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.241.3146 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	34850	MT/M
2	Bagasse	84000	MT/M
3	Press Mud	12000	MT/M
4	Molasses	12000	MT/M
5	Electricity Co-gen	32	MW

The Cane crushing capacity of Sugar unit shall not exceed 10000 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	475	As per Schedule -I	165 CMD is recycled and 310 CMD on land for irrigation
2.	Domestic effluent	50	As per Schedule - I	onland for gardening / irrigation



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

Stack No.	Description of stack / source	Number of Stack	Standards to be achieved
1	Boiler (160 TPH)	1	As per Schedule -II

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

Sr No	Type of Waste	Quantity	UoM	Treatment	Disposal
1	Fly / Boiler Ash	978	MT/M	-	Sale to Brick manufacturers balance used for composting process
2	ETP Sludge	5	MT/M	-	Used as manure

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

Sr No	Type of Waste	HW Category.	Quantity & UoM	Treatment	Disposal
1	5.1 Used or spent oil	5.1	1.5 Kg/Day	Recycle	Sale to authorized recycler

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

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

8. The Board reserves the right to review, amend, suspend, revoke etc. this consent and the same shall be binding on the industry.
9. This consent should not be construed as exemption from obtaining necessary NOC/permission from any other Government authorities.
10. Industry shall connect online CMS data as per CPCB guidelines to CPCB & MPCB Servers.
11. Industry shall stop production activity voluntarily in case of failure of operation and maintenance of the ETP system as preventive measures.
12. Industry shall extend all existing BGs towards O&M of pollution control systems and towards compliance of the Consent conditions.
13. This consent is issued as per the Consent Appraisal Committee meeting dated 19.06.2020.
14. Industry shall install CPU for recycle excess condensate within 1 year.
15. 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. Ravikiran IAS),  
Member Secretary



# Maharashtra Pollution Control Board

## 5f215f90a023ff3c89003e60

### Received Consent fee of -

Sr.No	Amount(Rs.)	Transaction/DR.No.	Date	Transaction Type
1	482629.00	TXN2006000671	15/06/2020	Online Payment

### Copy to:

1. Regional Officer, MPCB, Pune and Sub-Regional Officer, MPCB, Satara  
- They are directed to ensure the compliance of the consent conditions.
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 1000.00 CMD consisting of Primary, Secondary, Tertiary for the treatment of 475.00 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°)	100
(4)	Sulphate	1000
(5)	Suspended Solids	100
(6)	COD	250
(7)	Chloride	600
(8)	Total Dissolved Solids	2100

C] The treated effluent 310.00 CMD shall be disposed on land for irrigation on 18.21 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 165.00 CMD generated from Co-gen shall be 100% recycle in process.

**E] CREP conditions for Sugar Factory**

- Operation of ETP shall be started at least one month before starting of cane crushing to achieve desired MLSS. So as to meet prescribed standards from day one the operation of mill.
- Waste water generation shall be reduced to 100 liters per tone of cane crushed.
- Industry shall achieve zero discharge into in land surface water bodies.
- 15 days' storage capacity tank shall be provided for treated effluent to take care 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 50.00 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.





# Maharashtra Pollution Control Board

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- 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	500.00
2.	Domestic purpose	80.00
3.	Processing whereby water gets polluted & pollutants are easily biodegradable	500.00
4.	Processing whereby water gets polluted & pollutants are not easily biodegradable and are toxic	0.00
5.	Grandening	00

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





**SCHEDULE-II**

**Terms & conditions for compliance of Air Pollution Control:**

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

Stack No.	Stack Attached To	APC System	Height in Mtrs.	Type of Fuel	Quantity & UoM	S%	SO <sub>2</sub>
1	Boiler	ESP	82	Bagasse	1632 MT/Day	0.20	6528.00

- 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/Nm <sup>3</sup>
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- 3 The Applicant shall obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or replacement/alteration well before its life come to an end or erection of new pollution control equipment.

- 4 The Board reserves its rights to vary all or any of the condition in the consent, if due to any technological improvement or otherwise such variation (including the change of any control equipment, other in whole or in part is necessary).

- 5 Industry should not use auxiliary fuel more than 15 % (as per amendment in EIA Notification 2009, power plant upto 15 MW based on Bio-mass and using auxiliary fuel as coal upto 15% are exempt.) as co-gen capacity is below 15 MW.

- 3) The Applicant shall obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or replacement/alteration well before its life come to an end or erection of new pollution control equipment.

- 4) The Board reserves its rights to vary all or any of the condition in the consent, if due to any technological improvement or otherwise such variation (including the change of any control equipment, other in whole or in part is necessary).



**SCHEDULE-III**  
**Details of Bank Guarantees:**

Sr. No.	Consent(C2E/C2O/C2R)	Amt of BG Imposed	Submission Period	Purpose of BG	Compliance Period	Validity Date
1	C to R	3000000	15 days/extended	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
NA						





**SCHEDULE-IV**

**General Conditions:**

- 1 The applicant shall provide facility for collection of environmental samples and samples of trade and sewage effluents, air emissions and hazardous waste to the Board staff at the terminal or designated points and shall pay to the Board for the services rendered in this behalf.
- 2 The applicant shall provide ports in the chimney/(s) and facilities such as ladder, platform etc. for monitoring the air emissions and the same shall be open for inspection to/and for use of the Board's Staff. The chimney(s) vents attached to various sources of emission shall be designated by numbers such as S-1, S-2, etc. and these shall be painted/ displayed to facilitate identification.
- 3 Whenever due to any accident or other unforeseen act or even, such emissions occur or is apprehended to occur in excess of standards laid down, such information shall be forthwith Reported to Board, concerned Police Station, office of Directorate of Health Services, Department of Explosives, Inspectorate of Factories and Local Body. In case of failure of pollution control equipment, the production process connected to it shall be stopped.
- 4 The applicant shall provide an alternate electric power source sufficient to operate all pollution control facilities installed to maintain compliance with the terms and conditions of the consent. In the absence, the applicant shall stop, reduce or otherwise, control production to abide by terms and conditions of this consent.
- 5 The firm shall submit to this office, the 30th day of September every year, the Environmental Statement Report for the financial year ending 31st March in the prescribed Form-V as per the provisions of rule 14 of the Environment (Protection) (Second Amendment) Rules, 1992.
- 6 The industry should comply with the Hazardous & Other Wastes (M & TM) Rules, 2016 and submit the Annual Returns as per Rule 6(5) & 20(2) of Hazardous & Other Wastes (M & TM) Rules, 2016 for the preceding year April to March in Form-IV by 30th June of every year.
- 7 An inspection book shall be opened and made available to the Board's officers during their visit to the applicant.
- 8 The industry shall constitute an Environmental cell with qualified staff/personnel/agency to see the day to day compliance of consent condition towards Environment Protection.
- 9 The applicant shall install a separate meter showing the consumption of energy for operation of domestic and industrial effluent treatment plants and air pollution control system. A register showing consumption of chemicals used for treatment shall be maintained.
- 10 The applicant shall bring minimum 33% of the available open land under green coverage/ plantation. The applicant shall submit a yearly statement by 30th September every year on available open plot area, number of trees surviving as on 31st March of the year and number of trees planted by September end.
- 11 The industry shall submit official e-mail address and any change will be duly informed to the MPCB.
- 12 Industry should monitor effluent quality, stack emissions and ambient air quality monthly/quarterly.



- 13 The industry shall recycle/reprocess/reuse/recover Hazardous Waste as per the provision contain in the H&OW(M&TM) Rules 2016, which can be recycled/processed/ reused/ recovered and only waste which has to be incinerated shall go to incineration and waste which can be used for land filling and cannot be recycled/ reprocessed etc. should go for that purpose, in order to reduce load on incineration and landfill site/environment.
- 14 Industry shall strictly comply with the Water (P&CP) Act, 1974, Air (P&CP) Act,1981 and Environmental Protection Act,1986 and industry specific standard under EP Rules 1986 which are available on MPCB website(www.mpcb.gov.in).
- 15 Separate drainage system shall be provided for collection of trade and sewage effluents. Terminal manholes shall be provided at the end of the collection system with arrangement for measuring the flow. No effluent shall be admitted in the pipes/sewers downstream of the terminal manholes. No effluent shall find its way other than in designed and provided collection system.
- 16 Neither storm water nor discharge from other premises shall be allowed to mix with the effluents from the factory.
17. Conditions for D.G. Set
  - a) Noise from the D.G. Set should be controlled by providing an acoustic enclosure or by treating the room acoustically.
  - b) Industry should provide acoustic enclosure for control of noise. The acoustic enclosure/ acoustic treatment of the room should be designed for minimum 25 dB (A) insertion loss or for meeting the ambient noise standards, whichever is on higher side. A suitable exhaust muffler with insertion loss of 25 dB (A) shall also be provided. The measurement of insertion loss will be done at different points at 0.5 meters from acoustic enclosure/room and then average.
  - c) Industry should make efforts to bring down noise level due to DG set, outside industrial premises, within ambient noise requirements by proper siting and control measures.
  - d) Installation of DG Set must be strictly in compliance with recommendations of DG Set manufacturer.
  - e) A proper routine and preventive maintenance procedure for DG set should be set and followed in consultation with the DG manufacturer which would help to prevent noise levels of DG set from deteriorating with use.
  - f) D.G. Set shall be operated only in case of power failure.
  - g) The applicant should not cause any nuisance in the surrounding area due to operation of D.G. Set.
  - h) The applicant shall comply with the notification of MoEFCC, India on Environment (Protection) second Amendment Rules vide GSR 371(E) dated 17.05.2002 and its amendments regarding noise limit for generator sets run with diesel.
- 18 The industry should not cause any nuisance in surrounding area.
- 19 The industry shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standard in respect of noise to less than 75 dB (A) during day time and 70 dB (A) during night time. Day time is reckoned in between 6 a.m. and 10 p.m. and night time is reckoned between 10 p.m. and 6 a.m.
- 20 The applicant shall maintain good housekeeping.
- 21 The non-hazardous solid waste arising in the factory premises, sweepings, etc. be disposed of scientifically so as not to cause any nuisance / pollution. The applicant shall take necessary permissions from civic authorities for disposal of solid waste.
- 22 The applicant shall not change or alter the quantity, quality, the rate of discharge, temperature or the mode of the effluent/emissions or hazardous wastes or control equipment provided for without previous written permission of the Board. The industry will not carry out any activity, for which this consent has not been granted/without prior consent of the Board.



# Maharashtra Pollution Control Board

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- 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.





भारत सरकार-कॉर्पोरेट कार्य मंत्रालय  
कम्पनी रजिस्ट्रार कार्यालय, महाराष्ट्र, पूणे

प्राइवेट लिमिटेड कम्पनी के रूप में परिवर्तित होने के परिणामस्वरूप, कम्पनी के नाम में परिवर्तन  
का नया निगमन प्रमाण-पत्र

कॉर्पोरेट पहचान संख्या : U15421PN2010PTC137691

मैसर्स JARANDESHWAR SUGAR MILLS LIMITED

के मामले में, मैं एतद्वारा सत्यापित करता हूँ कि मैसर्स

JARANDESHWAR SUGAR MILLS LIMITED

जो मूल रूप में दिनांक तीन नवम्बर दो हजार दस को कम्पनी अधिनियम, 1956 (1956 का 1) के अंतर्गत मैसर्स  
JARANDESHWAR SUGAR MILLS LIMITED

के रूप में निगमित की गई थी, और उसके द्वारा कम्पनी अधिनियम, 1956 की धारा 31(1) के अधीन प्राइवेट कम्पनी के रूप में  
परिवर्तित करने के लिए प्रार्थना-पत्र देने तथा भारत सरकार द्वारा उसका अनुमोदन कम्पनी रजिस्ट्रार कार्यालय आर.सी. - पूणे के एस  
आर एन B81838260 दिनांक 20/08/2013 द्वारा प्राप्त होने की लिखित सूचना प्राप्त होने पर उक्त कम्पनी का नाम आज से परिवर्तित रूप  
में मैसर्स JARANDESHWAR SUGAR MILLS Private Limited

हो गया है।

यह प्रमाण-पत्र, आज दिनांक बीस अगस्त दो हजार तेरह को पूणे में जारी किया जाता है।

GOVERNMENT OF INDIA - MINISTRY OF CORPORATE AFFAIRS  
Registrar of Companies, Maharashtra, Pune

Fresh Certificate of Incorporation Consequent upon Change of Name on  
Conversion to Private Limited Company

Corporate Identity Number : U15421PN2010PTC137691

In the matter of M/s JARANDESHWAR SUGAR MILLS LIMITED

I hereby certify that JARANDESHWAR SUGAR MILLS LIMITED which was originally incorporated on Third day of  
November Two Thousand Ten, under the Companies Act, 1956 (No. 1 of 1956) as JARANDESHWAR SUGAR  
MILLS LIMITED and upon an application made for conversion into a Private Company under Section 31(1) of the  
Companies Act, 1956; and approval of Central Government signified in writing having been accorded thereto by the  
RoC-Pune vide SRN B81838260 dated 20/08/2013 the name of the said company is this day changed to  
JARANDESHWAR SUGAR MILLS Private Limited.

Given at Pune this Twentieth day of August Two Thousand Thirteen.

Signature valid  
Date 20/08/2013  
By 20/08/2013

Registrar of Companies, Maharashtra, Pune

कम्पनी रजिस्ट्रार, महाराष्ट्र, पूणे

\*Note: The corresponding form has been approved by SHINDE AMOL BHAGWAN, Assistant Registrar of Companies and this certificate  
has been digitally signed by the Registrar through a system generated digital signature under rule 5(2) of the Companies (Electronic  
Filing and Authentication of Documents) Rules, 2006.

The digitally signed certificate can be verified at the Ministry website (www.mca.gov.in).

कम्पनी रजिस्ट्रार के कार्यालय अभिलेख में उपलब्ध पत्राचार का पता

Mailing Address as per record available in Registrar of Companies office:

JARANDESHWAR SUGAR MILLS Private Limited  
A WING, SNO. 685/2B SHARADA ARCADE, SHOW ROOM NO2., GROUND FLOOR, PUNE  
SATARA ROAD, BIBWEWADI,  
PUNE - 411037,  
Maharashtra, INDIA





भारत सरकार  
Government of India  
वाणिज्य और उद्योग मंत्रालय : 2  
Ministry of Commerce & Industry  
औद्योगिक सहायता सचिवालय  
Secretariat for Industrial Assistance  
जन सम्पर्क एवम् शिकायत अनुभाग  
Public Relation & Complaints Section

संख्या.....

No. ....

1834/SIA/IMO/2013

**ACKNOWLEDGEMENT**

नई दिल्ली, दिनांक

New Delhi, Date

इसद्वारा निम्नलिखित का विनिर्माण करने संबंधी आपका ज्ञापन प्राप्त होने की सूचना दी जाती है:-  
The receipt of your memorandum for the manufacture of following is hereby acknowledged:-

24/09/2013

Item Code

SUGAR-CANE/SUGARBEET/PALM JUICE PRODUCTS N.E.C.  
Proposed Capacity : 6800.00 M3/ANNUM

\*\*\*\*\* No More Items \*\*\*\*\*

This acknowledgement is subject to the provisions of Press Note No 6 dated 29th July 1993, Press Note No 17 dated 28th November 1997 and Press Release dt 17-01-2012 (F.No.7(7)/2011-IP) regarding the significance implications and legal status of filing of Industrial Entrepreneur Memorandum  
\*\* No Potable Alcohol shall be produced

M/S GURU COMMODITY SERVICES PVT.  
TD.  
A-108, FIRST FLOOR,  
BL. NO. 3, OSTWAL PARADISE,  
MIRA BHAYANDAR ROAD,  
THANE-401107.  
MAHARASHTRA.

DINESH KISHW  
Under Secretary  
Min. of Commerce & In-  
Department of I. P. &  
Udyog Bhawan New

स्थापना-स्थल

Located at

स्थान/कस्बा

Place/Town

तहसील/ताल्लुक

Tehsil/Taluk

जिला

355strict

राज्य

CHIMANGAON

KOREGAON

SATARA



भारत सरकार  
Government of India

वाणिज्य और उद्योग मंत्रालय

Page No : 1

Contact Address in State

Shri V.W Bhamare

Dy. Director of

Industries (Licensing)

Directorate of Industries

New Administrative

Opposite Mantralaya

Mumbai - 400 032

Telephone : 20229086

Fax : 2026826

Ministry of Commerce & Industry

औद्योगिक सहायता सचिवालय

Secretariat for Industrial Assistance

जन सम्पर्क एवम् शिकायत अनुभाग

Public Relation & Complaints Section

संख्या.....

प्राप्ति सूचना

नई दिल्ली, दिनांक

No. ....

1834/SIA/IMD/2017

ACKNOWLEDGEMENT

New Delhi, Date

एतद्वारा निम्नलिखित का विनिर्माण करने संबंधी आपका ज्ञापन प्राप्त होने की सूचना दी जाती है:-

The receipt of your memorandum for the manufacture of following is hereby acknowledged:-

24/09/2013

Item Code

Proposed Item:  
of Manufacture

INDUSTRIAL ALCOHOL, ETHANOL, RECTIFIED SPIRIT, EXTRA  
NEUTRAL ALCOHOL (UNDENATURED ETHYL ALCOHOL OF AN  
ALCOHOLIC STRENGTH BY VOL. OF 80% OR HIGHER)

2200

falling under NIC - broad description  
DISTILLING, RECTIFYING AND BLENDING OF SPIRITS; ETHYL  
ALCOHOL PRODUCTION FROM FERMENTED MATERIALS  
Proposed Capacity : 13500000.00 BULK LITRES

Proposed Item:  
of Manufacture

BIOCOMPOST

2079

falling under NIC - broad description  
MANUFACTURE OF OTHER INDIGENOUS  
SUGAR-CANE/SUGARBEET/PALM JUICE PRODUCTS N.E.C.  
Proposed Capacity : 30000.00 MTPA

Proposed Item:  
of Manufacture

FUSEL OIL

2079

falling under NIC - broad description  
MANUFACTURE OF OTHER INDIGENOUS  
SUGAR-CANE/SUGARBEET/PALM JUICE PRODUCTS N.E.C.  
Proposed Capacity : 27.00 KLPA

Proposed Item:  
of Manufacture

BIOGAS

2079

falling under NIC - broad description  
MANUFACTURE OF OTHER INDIGENOUS

स्थापना-स्थल

Located at

स्थान/कस्बा

Place/Town

तहसील/ताल्लुक

Tehsil/Taluk

जिला

District







ਸਰਤੋਸ਼



D. No. 10022/24-18-10-401



गाव नमुना सात

अभिलेख पत्रक

[महाराष्ट्र जमीन सहस्र अधिकार अभिलेख आणि नोंदवहचा (तयार करणे व सुस्थितीत ठेवणे) नियम, १९७१ यातील नियम ३, ४, ५ आणि ६]

गाव निम्नलिखित

तालुका निम्नलिखित

भूमापन क्रमांक	भूमापन क्षेत्राचा अन्विष्ट भाग	सुधारणा पद्धती	आगत दावाचे नाव	सात क्रमांक	भूमापन क्षेत्राचा अन्विष्ट भाग
८०४	खाल्डसा		जरीधर सरकारी सावर कारखाना	१०२४	
शेताचे स्थानिक नाव	अभिलेख		कैरगाव अष्टाव लीफे सावर मलमलगाव	१०२४	
लागवडीयोग्य क्षेत्र	हेक्टर	आर	कोत्यातेश्वर फाटके	१०२४	
	१६-०८			१०२४	
एकूण	१६-०८		गुड मॉस्ट्री दळवी	१०२४	
पोटखराव (लागवडीयोग्य नसलेले)-			पानाई नि. गुडगाव दळवी	१०२४	
वर्ग (अ)	२-१०		कापरेगाव (२२८४)	१०२४	
वर्ग (ब)				१०२४	
एकूण	१८-१८			१०२४	
रुपये		पैसे		१०२४	
१७-८९				१०२४	
आकारणी				१०२४	
जडी किंवा विशेष आकारणी				१०२४	

गाव नमुना आरा (पिकांचा नोंदवह)

[महाराष्ट्र जमीन सहस्र अधिकार अभिलेख आणि नोंदवहचा (तयार करणे व सुस्थितीत ठेवणे) नियम, १९७१ यातील नियम ३, ४, ५ आणि ६]

वर्ष	हंगाम	पिकांखालील क्षेत्राचा तपशील										लागवडीसाठी उपलब्ध नसलेली जमीन	
		मिश्र पिकांखालील क्षेत्र					निर्मळ पिकांखालील क्षेत्र					एकूण	एकूण
		पिकांखालील क्षेत्र	पिकांचा क्षेत्र	अजून सिंचित	घटक पिके व प्रत्येक खालील क्षेत्र		पिकांचा क्षेत्र	अजून सिंचित	अजून सिंचित				
					पिकांचा क्षेत्र	अजून सिंचित							
१	२	३	४	५	६	७	८	९	१०	११	१२	१३	
		हे. आ.	हे. आ.		हे. आ.	हे. आ.		हे. आ.	हे. आ.		हे. आ.		
					नांदेड	विनोदी	१५	१५	१५	१५	१५	१५	
					२-००	६-०६	४-०२						
					नांदेड	विनोदी	१५	१५	१५	१५	१५	१५	
					२-००	६-०६	४-०२						
					नांदेड	विनोदी	१५	१५	१५	१५	१५	१५	
					२-००	६-०६	४-०२						
					नांदेड	विनोदी	१५	१५	१५	१५	१५	१५	
					२-००	६-०६	४-०२						
					नांदेड	विनोदी	१५	१५	१५	१५	१५	१५	
					२-००	६-०६	४-०२						
					नांदेड	विनोदी	१५	१५	१५	१५	१५	१५	
					२-००	६-०६	४-०२						
					नांदेड	विनोदी	१५	१५	१५	१५	१५	१५	
					२-००	६-०६	४-०२						
					नांदेड	विनोदी	१५	१५	१५	१५	१५	१५	
					२-००	६-०६	४-०२						
					नांदेड	विनोदी	१५	१५	१५	१५	१५	१५	
					२-००	६-०६	४-०२						
					नांदेड	विनोदी	१५	१५	१५	१५	१५	१५	
					२-००	६-०६	४-०२						
					नांदेड	विनोदी	१५	१५	१५	१५	१५	१५	
					२-००	६-०६	४-०२						
					नांदेड	विनोदी	१५	१५	१५	१५	१५	१५	
					२-००	६-०६	४-०२						
					नांदेड	विनोदी	१५	१५	१५	१५	१५	१५	
					२-००	६-०६	४-०२						
					नांदेड	विनोदी	१५	१५	१५	१५	१५	१५	
					२-००	६-०६	४-०२						
					नांदेड	विनोदी	१५	१५	१५	१५	१५	१५	
					२-००	६-०६	४-०२						
					नांदेड	विनोदी	१५	१५	१५	१५	१५	१५	
					२-००	६-०६	४-०२						
					नांदेड	विनोदी	१५	१५	१५	१५	१५	१५	
					२-००	६-०६	४-०२						
					नांदेड	विनोदी	१५	१५	१५	१५	१५	१५	
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					नांदेड	विनोदी	१५	१५	१५	१५	१५	१५	
					२-००	६-०६	४-०२						
					नांदेड	विनोदी	१५	१५	१५	१५	१५	१५	
					२-००	६-०६	४-०२						
					नांदेड	विनोदी	१५	१५	१५	१५	१५	१५	
					२-००	६-०६	४-०२						
					नांदेड	विनोदी	१५	१५	१५	१५	१५	१५	
					२-००	६-०६	४-०२						
					नांदेड	विनोदी	१५	१५	१५	१५	१५	१५	
					२-००	६-०६	४-०२						
					नांदेड	विनोदी	१५	१५	१५	१५	१५	१५	
					२-००	६-०६	४-०२						
					नांदेड	विनोदी	१५	१५	१५	१५	१५	१५	
					२-००	६-०६	४-०२						
					नांदेड	विनोदी	१५	१५	१५	१५	१५	१५	
					२-००	६-०६	४-०२						
					नांदेड	विनोदी	१५	१५	१५	१५	१५	१५	
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					नांदेड	विनोदी	१५	१५	१५	१५	१५	१५	
					२-००	६-०६	४-०२						
					नांदेड	विनोदी	१५	१५	१५	१५	१५	१५	
					२-००	६-०६	४-०२						
					नांदेड	विनोदी	१५	१५	१५	१५	१५	१५	
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					नांदेड	विनोदी	१५	१५	१५	१५	१५	१५	
					२-००	६-०६	४-०२						
					नांदेड	विनोदी	१५	१५	१५	१५	१५	१५	
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					नांदेड	विनोदी	१५	१५	१५	१५	१५	१५	
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					नांदेड	विनोदी	१५	१५	१५	१५	१५	१५	
					२-००	६-०६	४-०२						
					नांदेड	विनोदी	१५	१५	१५	१५	१५	१५	
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					नांदेड	विनोदी	१५	१५	१५	१५	१५	१५	
					२-००	६-०६	४-०२						
					नांदेड	विनोदी	१५	१५	१५	१५	१५	१५	
					२-००	६-०६	४-०२						
					नांदेड	विनोदी	१५	१५	१५	१५	१५	१५	
					२-००	६-०६	४-०२						
					नांदेड	विनोदी	१५	१५	१५	१५	१५	१५	
					२-००	६-०६	४-०२						
					नांदेड	विनोदी	१५	१५	१५	१५	१५	१५	
					२-००	६-०६	४-०२						
					नांदेड	विनोदी	१५	१५	१५	१५	१५	१५	
					२-००	६-०६	४-०२						
					नांदेड	विनोदी	१५	१५	१५	१५	१५	१५	
					२-००	६-०६	४-०२						
					नांदेड	विनोदी	१५	१५	१५	१५	१५	१५	
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					नांदेड	विनोदी	१५	१५	१५	१५	१५	१५	
					२-००	६-०६	४-०२						
					नांदेड	विनोदी	१५	१५	१५	१५	१५	१५	
					२-००	६-०६	४-०२						
					नांदेड	विनोदी	१५	१५	१५	१५	१५	१५	
					२-००	६-०६	४-०२						
					नांदेड	विनोदी	१५	१५	१५	१५	१५	१५	
					२-००	६-०६	४-०२						
					नांदेड	विनोदी	१५	१५	१५	१५	१५	१५	
					२-००	६-०६	४-०२						
					नांदेड	विनोदी	१५	१५	१५	१५	१५	१५	
					२-००	६-०६	४-०२						
					नांदेड	विनोदी	१५	१५	१५	१५	१५	१५	
					२-००	६-०६	४-०२						
					नांदेड	विनोदी	१५	१५	१५	१५	१५	१५	
					२-००	६-०६	४-०२						



41

वाचो :- १] कार्यकारी संचालक, जरडेश्वर सहकारी साखार कारखाना लिमिटेड,  
चिमणागंव यांचेकडील पत्र क्र. जससाका/सा. प्र./मोजणी/४४०/  
दिनांक १०/११/१९९६.

२] मा. जिल्हाधिकारी सातारा यांचेकडील पत्र क्र. मख/तीन/बिनरोती/  
ना/समआर/६८ दिनांक १६/११/१९९६.

३] तहसिलदार कोरेगांव यांचेकडील पत्र क्र. जमीन/कावि/९४४/प्रया/१९/९६  
दिनांक ५/११/१९९६.

जरडेश्वर स. सा. का. लि. चिमणागंव  
अ. सं. क्र. ६७७  
दिनांक ११/११/९६  
लिपिक सही

क्रमांक बिनरोती / कवि. ७७७  
उपविभागीय अधिकारी, कार्यालय  
सातारा : ५/११/१९९६

---\* आदेश : \*---

मौजि चिमणागंव व भाटमवाडी ता. कोरेगांव येथील गट नंबर  
अनुक्रमे १०४८, १०४९, १०५७, १०५८, १०५९, १०६० व १२०, १२१, १२२ या  
जमिनीचे २६ हे. २८ आर अकृषिक क्षेत्रापैकी १६ हे. २८ आर क्षेत्र कृषिक प्रयोजनाकडे  
पुन्हा वर्ग करण्याबाबत वरील अलान्वये विनंती गेली आहे.

प्रस्तुत प्रकरणाची तहसिलदार यांचेमार्फत चौकशी करण्यात आली  
असून याकामी तहसिलदार कोरेगांव यांनी अर्जदार यांनी विनंती गेलेप्रमाणे कृषिक  
प्रयोजनासाठी क्षेत्र वापरणेत परवानगी देणेत हरकत नसलेबाबत कळविले आहे.

त्याअर्थी मी, उपविभागीय अधिकारी सातारा उपविभाग सातारा  
महाराष्ट्र जमिन मळतू अधिनियम १९६६ चे कलम १४ व त्याखालील महाराष्ट्र  
जमिन मळतू [जमिनीचे वापरात दिला व अकृषिक आकारणी.] नियम १९६२ चे नियम  
२० नुसार खालील परिशिष्टात नमुद केलेप्रमाणे अकृषिक क्षेत्रापैकी त्या जमिनीचे  
गट नंबर समोर नमुद केलेप्रमाणे सोबतच्या नकाशात दर्शविलेप्रमाणे क्षेत्र कृषिक  
प्रयोजनासाठी वापरणेत खालील अटीतः शर्तीवर मान्यता देत आहे.

परिशिष्ट

अ. क्र.	शा. वा. चे नांव	जमिनीचा असामना-क्रमांक जुना नवीन नंबर नंबर	बिनरोती गेलेले क्षेत्र	बिनरोती क्षेत्रापैकी शेती प्रयोजनाकडे वर्ग करण्यात क्षेत्र	अकृषिक प्रयोजनासाठी आवश्यक क्षेत्र
१.	२.	३.	४.	५.	६.
१.	चिमणागंव	१०४८ ७९४	३ - ५०	३ - २८ ✓	० - २२४
		१०४९ ७९५	४ - ७५	० - ५२ ✓	४ - १८
		१०५७ ८०३	१० - २०	-	१० - २०



2046	204	2 - 85	3 - 200	0 - 442
2048	204	2 - 87	2 - 180	0 - 360
2050	205	2 - 89	2 - 22	0 - 82
2052	-	0 - 40	0 - 128	0 - 168
2054	-	2 - 83	2 - 66	0 - 150
2056	-	2 - 30	2 - 26	0 - 56
કુલ : 36 - 36 86 - 36 20 - 00				

મહા મંત્રી

- 1) કૃષિક પ્રયોજનામાંથી વર્ગ ક્લેન્ડા જમિનીમાં મોતીમાંથી વાપર મેલા પાલિયે
- 2) કૃષિક પ્રયોજનામાંથી વર્ગ ક્લેન્ડા જમિનીની વિતરણની પૂર્વીયા વરણે કૃષિક આજ્ઞાઓ ઉપકરણ દરવર્ષે પ્રતી પાલિયે.

અધિકારી  
સાતારા અધિકારી સાતારા

✓ લાયકારી સંચાલક  
જલેશ્વર સરકારી સાતારા મારહાતા નિ. વિમ્બામાં  
તા. જોરમાં નિ. સાતારા

0.5/04/2018

વેડ વેડ પ્રેસ રજીસ્ટરમાં  
સર્વેસ  
સ. ગેન્ટલ વેડ પ્રેસ રજીસ્ટરમાં  
સર્વેસ નોંધાયેલું

11/1/18





## JARANDESHWAR SUGAR MILLS PVT. LTD.

Ref. No.: 336

Date: 14.08.2021

**Declaration about Environmental Status, Management and Compliance Done  
w.r.t. Existing as well as Proposed Projects of  
Jarandeshwar Sugar Mills Pvt. Ltd. (JSMPL)  
A/p: Chimangaon, Tal: Koregaon, Dist: Satara (MS)**

This is to state that 'Jarandeshwar Sugar Mills Pvt. Ltd. (JSMPL)' located at Gat No. 803 & 804, A/P: Chimangaon, Tal.: Koregaon, Dist.: Satara, Maharashtra is going for expansion of Sugar Factory from 10,000 TCD to 15,000 TCD, Co-generation Plant from 32 MW to 52 MW & Distillery from 80 KLPD to 300 KLPD (B/C Heavy Molasses/ Cane Juice/ Syrup). In this connection, a declaration is being made as follows -

1. Presently the Industry is having manufacturing setup for Sugar Factory of 10,000 TCD, Co-generation Plant of 32 MW and 80 KLPD Molasses Distillery .
2. The existing Sugar Factory (10,000 TCD) & Cogen Plant (32 MW) have been granted 'Environmental Clearance (EC)' by Department of Environment (DoE); Govt. of Maharashtra vide order No. SEIAA-EC-0000000250 dated 16.04.2018.
3. Existing 80 KLPD Molasses Distillery have been granted 'Environmental Clearance (EC)' by Department of Environment (DoE); Govt. of Maharashtra vide order No. SIA/MH/ND2/53002/2019 dated 26.06.2020
4. Further, the Industry is having valid 'Consent to Operate' issued by Maharashtra Pollution Control Board (MPCB) for its existing project activities.
5. The industry has cautiously & meticulously followed directions, from time to time, issued by MoEFCC; CPCB; MPCB; DoE etc. and have complied with conditions in the EC order of Sugar Factory, Co-gen Plant and Distillery Unit.
6. The industry has, so far, never violated any conditions from the procured EC order dated 16.04.2018 neither have done violation of the stipulations in EIA notification of 14.09.2006 as amended from time to time.
7. In the premises of existing Sugar Factory, Cogen Plant & distillery unit; expansion project shall be implemented.
8. The appropriate and adequate infrastructure under Environmental Management Plan has been installed in the JSMPL industry which is duly operated & maintained through experienced and qualified manpower & staff as well as an EMC (Environmental Management Cell). The Industry also has a SHE Policy; provisions under which are duly followed.
9. All requisite compliances under the EPA 1986, CREP, Consents and EC conditions are timely observed by the industry.





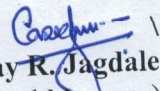
## JARANDESHWAR SUGAR MILLS PVT. LTD.

10. There are no any SCN, PD, ID & Closure Directions against the industry issued by MPCB, CPEB, MoEFCC and DoE as on the date of submission of application for grant of EC / EIA report submitted to the MoEFCC; New Delhi.
11. There is no any Court Case against the JSMPL industry while operating existing 10,000 TCD Sugar Factory, 32 MW Cogeneration Plant & 80 KLPD Distillery Unit.
12. Under proposed expansion of Sugar Factory from 10,000 TCD to 15,000 TCD, Co-generation Plant from 32 MW to 52 MW & Distillery from 80 KLPD to 300 KLPD, the industry has not taken any steps towards establishment of the project or activities thereunder which could result in to "Violation" as per MoEFCC Notification No. S.O. (E) 804 dated 14.03.2017 and amendment to same vide Notification No. S.O. 1030 (E) dated 08.03.2018 as well as in light of provisions of Environment Protection Act 1986 and rules thereunder.

The above declaration is being made in addition to as well as in support of facts, figures, information and data presented in the EIA Report being submitted by **Jarandeshwar Sugar Mills Pvt. Ltd. (JSMPL)**, A/P: Chimangaon, Tal.: Koregaon, Dist.: Satara, Maharashtra for grant of 'Environmental Clearance' towards expansion of Sugar Factory from 10,000 TCD to 15,000 TCD, Co-generation Plant from 32 MW to 52 MW & Distillery from 80 KLPD to 300 KLPD.

Date:

Place: Satara

  
**Mr. Vijay R. Jagdale**  
(General Manager)  
**For Jarandeshwar Sugar Mills Pvt. Ltd.**  
A/p: Chimangaon, Tal.: Koregaon, Dist.:  
Satara (MS)

C.C. :

1. Member Secretary; EAC (Ind.-2), MoEFCC, New Delhi.
2. Regional Officer, MoEFCC, Nagpur.
3. CPCB, Parivesh Bhawan, East Arjun Nagar, New Delhi.
4. Member Secretary; MPCB, Mumbai.
5. Director; Department of Environment; Govt. of Maharashtra, Mumbai.
6. Equinox Environments India Pvt. Ltd., Kolhapur.





## JARANDESHWAR SUGAR MILLS PVT. LTD.

REF NO.: 335

DATE: 14.08.2021

### 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 10,000 TCD to 15,000 TCD, Co-generation Plant from 32 MW to 52 MW & Distillery from 80 KLPD to 300 KLPD by **Jarandeshwar Sugar Mills Pvt. Ltd. (JSMPL)**, A/p: Chimangaon, Tal.: Koregaon, Dist. Satara.

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.

**Mr. Vijay Jagdale**  
(General Manager)

**Jarandeshwar Sugar Mills Pvt. Ltd.**  
(JSMPL)

Chimangaon, Tal.: Koregaon,  
Dist.: Satara, Maharashtra

**Project Proponent**

**Dr. Sangram P. Ghugare**  
(Chairman & Managing Director)

**M/s. Equinox Environments (I) Pvt. Ltd.,**  
(EEIPL)

F-11, Namdev Nest 1160-B, 'E' Ward  
Sykes Extension opp. of Kamala  
College, Kolhapur 416 001

**Environmental Consultant**



## BIBLIOGRAPHY

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# Quality Council of India

## National Accreditation Board for Education & Training



### CERTIFICATE OF ACCREDITATION

#### **Equinox Environments (India) Pvt. Ltd.**

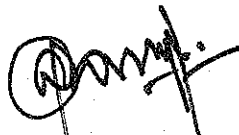
F-11, Namdev Nest, 1160-B, 'E' Ward, Sykes Extension,  
Opp. Kamala College, Kolhapur – 416001, Maharashtra

Accredited as **Category - A** organization under the QCI-NABET Scheme for Accreditation of EIA  
Consultant Organizations: Version 3 for preparing EIA-EMP reports in the following Sectors:

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 <b>excluding</b> 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.





## JARANDESHWAR SUGAR MILLS PVT. LTD.

Ref. No.: 336

Date: 14.08.2021

**Declaration about Environmental Status, Management and Compliance Done  
w.r.t. Existing as well as Proposed Projects of  
Jarandeshwar Sugar Mills Pvt. Ltd. (JSMPL)  
A/p: Chimangaon, Tal: Koregaon, Dist: Satara (MS)**

This is to state that 'Jarandeshwar Sugar Mills Pvt. Ltd. (JSMPL)' located at Gat No. 803 & 804, A/P: Chimangaon, Tal.: Koregaon, Dist.: Satara, Maharashtra is going for expansion of Sugar Factory from 10,000 TCD to 15,000 TCD, Co-generation Plant from 32 MW to 52 MW & Distillery from 80 KLPD to 300 KLPD (B/C Heavy Molasses/ Cane Juice/ Syrup). In this connection, a declaration is being made as follows -

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5. The industry has cautiously & meticulously followed directions, from time to time, issued by MoEFCC; CPCB; MPCB; DoE etc. and have complied with conditions in the EC order of Sugar Factory, Co-gen Plant and Distillery Unit.
6. The industry has, so far, never violated any conditions from the procured EC order dated 16.04.2018 neither have done violation of the stipulations in EIA notification of 14.09.2006 as amended from time to time.
7. In the premises of existing Sugar Factory, Cogen Plant & distillery unit; expansion project shall be implemented.
8. The appropriate and adequate infrastructure under Environmental Management Plan has been installed in the JSMPL industry which is duly operated & maintained through experienced and qualified manpower & staff as well as an EMC (Environmental Management Cell). The Industry also has a SHE Policy; provisions under which are duly followed.
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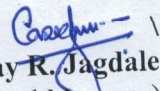
## JARANDESHWAR SUGAR MILLS PVT. LTD.

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Date:

Place: Satara

  
**Mr. Vijay R. Jagdale**  
(General Manager)  
**For Jarandeshwar Sugar Mills Pvt. Ltd.**  
A/p: Chimangaon, Tal.: Koregaon, Dist.:  
Satara (MS)

C.C. :

1. Member Secretary; EAC (Ind.-2), MoEFCC, New Delhi.
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5. Director; Department of Environment; Govt. of Maharashtra, Mumbai.
6. Equinox Environments India Pvt. Ltd., Kolhapur.





## JARANDESHWAR SUGAR MILLS PVT. LTD.

REF NO.: 335

DATE: 14.08.2021

### 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 10,000 TCD to 15,000 TCD, Co-generation Plant from 32 MW to 52 MW & Distillery from 80 KLPD to 300 KLPD by **Jarandeshwar Sugar Mills Pvt. Ltd. (JSMPL)**, A/p: Chimangaon, Tal.: Koregaon, Dist. Satara.

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.

**Mr. Vijay Jagdale**  
(General Manager)

**Jarandeshwar Sugar Mills Pvt. Ltd.**  
(JSMPL)

Chimangaon, Tal.: Koregaon,  
Dist.: Satara, Maharashtra

**Project Proponent**

**Dr. Sangram P. Ghugare**  
(Chairman & Managing Director)

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**Environmental Consultant**