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BEFORE HON'BLE NATIONAL GREEN TRIBUNAL, WESTERN ZONE BENCH, AT PUNE

Original Application No.21 of 2025 WZ.

Madhukar Vishnu Gaikwad & Ors. **- - - -} Applicants.**

Vs

MoEF & CC & Others. **- - - -} Respondents.**

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Adv. for R.No. 7

BEFORE HON'BLE NATIONAL GREEN TRIBUNAL, WESTERN ZONE BENCH, AT PUNE

Original Application No.21 of 2025 WZ.

Madhukar Vishnu Gaikwad & Others - - - -} Applicants.

Vs

MoEF & CC & Others - - - -} Respondents.

Counter - Reply to the Rejoinder on behalf of the R.N.7

MAY IT PLEASE YOUR HONOUR:

The R.N. 7 is filing its Counter-Reply to the Rejoinder filed on behalf of the Applicant as under:

1) The Applicant has made only referred the allegations made in the original application about "fake & misleading information" as mentioned in the OA Memo, Page-14, Para-6, giving example of his submission of a "totally false & fake NOC dated 30.08.2017 from Jaipur Grampanchayat" & alleging that the Respondent's blanket denial without addressing these specific allegations is insufficient. It appears that merely because the Applicant made allegations about the said NOC dated 30.08.2017, it becomes fake & false in the year 2025 because of the objections are raised by the Applicant. No other any evidence is brought on record except making such wild allegations. The NOC granted in the year 2017 can not become void & false in the year 2025 without challenging it earlier.

2) The Applicant further alleged that the "no prior survey or study was conducted by the Respondent-Industry or asked by the MoEF & CC or MPCB regarding the existing pollution level," despite previous industrial set up & therefore raises doubts about basis of the EC. While doing study almost all aspects were taken in to consideration. The Applicant fairly admitted that "no EC was required at that time for initial Consent to Establish, but unnecessarily raising doubts about the EIA-EC process. The Summary of the EIA Report is enclosed & marked as an **Annexure-1**.

3) The R.N. 7 has already filed a detailed Affidavit in Reply to the Application with the submission that the decision to conduct public hearing on 2 times was taken by the District Collector and MPCB jointly. It is submitted that about the expiry of IEM at the time of 1st Public Hearing, the Committee has rightly decided to

conduct Second Public Hearing. It is denied that the issue of expiry of IEM was supressed. (Para-11 & 12 of the Affidavit in Reply to Main Application).

4) The next contention raised by the Applicant in Rejoinder refers to the non-following of the conditions of EC & C to E & receipt of the C to O without examination of compliance of conditions. If we refer to para-14 on page-17 of the Application, the Applicant is just trying to link up it with the Proposed Directions dated 03.04.2025 & Interim Directions dated 06.05.2025 & forfeiture of BG of Rs.25 Lakhs as a non-compliance.

5) In fact, whatever non-compliances were observed for that purpose the MPCB had issued first P.D. The R.N. 7 had submitted the Reply thereto giving the details of the steps taken by it. The copies of the PD & Reply thereto are enclosed & marked as an Annexure- II & III respectively. Thereafter, the Respondent-Board extended the personal hearing & then issued the Interim Directions dated 06.05.2025. The copies of ID & the Compliance reported about it are enclosed & marked as an Annexure- IV & V respectively. The MPCB has already forfeited Bank Guarantee of Rs. 25 Lakhs for the said PD & ID. Therefore, there was no necessity to file present application.

6) The actions initiated by the R. Nos. 5 & 6 can be summarized as below:

6.1) The Applicant had made one complaint through some of Villagers regarding air, water & noise pollution alleged to have been caused by the R.N.7. The Respondent-Board deputed its officials at Satara to investigate complaint & to verify the compliance of consent conditions on 27th December 2024. The R.N.6 had issued the Proposed Directions dated 03rd April 2025 for storage of untreated/ partial treated effluent within factory premises & discharging it as well as for not operating it properly. The R.No.7 has already submitted its reply to the proposed direction dated 04.04.2025 stating that, the sugar industry has provided ETP consisting of primary, secondary and tertiary treatment with sand filter, activated carbon system and complied with the provision of plant of adequate capacity of 2400 CMD per day and also provided Condensate Polishing Unit of 4800 CMD per day. It is also communicated that industry has lifted waste water to ETP and treated the same. The industry does not discharge any untreated water outside the factory premises and recycle, reuse treated effluent. The copies of the PD & Reply thereto are enclosed & marked as an **Annexure- 2 & 3 respectively**.

6.2) The officials at MPCB-Satara office caused visit & inspection to verify the compliance of the P.D. by informing the Applicant & Complainants. However, none of them remained present & it was observed that the sugar-unit was closed on account of its season was over from 27th February 2025. It was also observed that the R.N.7 has lifted all the untreated effluent stored into Katcha Pit inside its premises & taken it to the ETP. R.N.7 also discarded Katcha Pit/s. No discharge found into Natural Odha & two open wells & outside the premises. The construction of distillery has been started after obtaining C to E. A copy of the Visit

Report dated 07th April 2025 is already attached to the Affidavit in Reply filed on behalf of the R. Nos.5 &6 respectively at Annexure-II with the Photographs, which clearly shows the clear water with green belt (Page-535 to 555 of the MPCB-Affidavit).

6.3) The R.N.6 had extended the personal hearing on 08th April 2025 & issued of late the Interim Directions dated 06th May 2025 to dispose of stored effluent & abandon stone quarry at the backside of factory, which was already done & verified during the visit & inspection on 07th April 2025. The copy of the ID is already attached at Annexure-III to the Affidavit of the MPCB at Page-556.

6.4) R.N. 5 & 6 have further submitted the point-wise compliance of the MPCB-Interim Directives in a Tabular Form at an Annexure-IV of its Affidavit in Reply with progress of Distillery Installation. (Affidavit of R. No. 5 & 6 dated 11.06.2025, Pages-557& 558).

6.5) R.N.5 & 6 have already forfeited B.G. of Rs. 25,00000/- for the above violations & further obtained B.G. of Rs. 50,00000/- to ensure future proper O & M and not to cause any violations. (Affidavit of R. No. 5 & 6 dated 11.06.2025, Page-558- Sr. No. 5 & 6 of the Table.)

Therefore, total compliance of the Directions done & no necessity to keep the matter pending.

7) The Applicant has not given any specific non-compliance about the alleged problem of air & water pollution as stated on page-678 duly supported by the documentary evidence at para-second of the Rejoinder-Application to the Affidavit in Reply filed by the R.N. 5 & 6 respectively. The R.N. 7 has been granted First Consent to Operate on 19.12.23 & it has started its First Crushing Season on 30/12/2023 and completed on 19.03.2024. The Second Season of 2024-25 started on 20.11.2024 and closed on 27.02.2025. It appears that the Applicant has initiated his action only after appearance of the News Paper Report on their complaint reported themselves in the news paper dated 16.01.2024 when sugar unit hardly started its full-fledged activity.

8) The MPCB has in fact, initiated its actions in the month of April 2025 & also forfeited the BG of Rs.25,00000/- towards whatever non-compliances were observed by it & hence no further substantial question arise to file the present application. (Affidavit of R. No. 5 & 6 dated 11.06.2025, Page-558- Sr. No. 5 & 6 of the Table.) Therefore, no further substantial question remains to be decided.

If we refer to para-14 on page-17 of the Application, the Applicant is just trying to link up it with the Proposed Directions dated 03.04.2025 & Interim Directions dated 06.05.2025 & forfeiture of BG of Rs.25 Lakhs as a non-compliance.

9) The Applicant has further raised the issue regarding ZLD and effluent discharge, stating that the Original Application explicitly states that “Not achieving ZLD anytime during its entire period of operation” as mentioned on page 18 Para 17a.

The Applicant is trying to misrepresent by insisting on ZLD since starting of the sugar unit. The Consent to Establish dated 17.12.2019, at **Annexure-A on page 602 in Condition No.4(1)** specifically provides that out of 450 CMD sugar effluent plus cogeneration effluent 104 CMD, **104 CMD shall be 100% recycled and remaining 450 CMD effluent shall be utilised on land for irrigation purpose**.

ZLD Condition has been imposed for the first-time in the E.C. dated 19.04.2023 obtained for expansion of existing sugar industry from 10,000 TCD Sugar Factory (scrapping existing 800 TCD plant), 60 MW Co-gen Plant (50 MW from Co-gen Plant & 10 MW from Distillery) and 200 KLPD molasses-based distillery located at Ganesh Tekadi, Jaipur (Nhavi Bk.) Taluka-Koregaon, District- Satara by Shivneri Sugar Ltd. Therefore, for the first-time for raw-Spentwash generated after establishment of distillery @ 1600 CMD MEE condition imposed for concentration and of which, 320 CMD incineration boiler condition has been imposed and 1726 CMD effluent from condensate, cooling and boiler blowdown, lab and wash effluent will be treated in CPU. Treated effluent will be fully recycled in the process thereafter. Here, the ETP Plant based on Zero Liquid Discharge System have been imposed.

The distillery work is still in progress and therefore, the contention of the Applicant "Not achieving ZLD anytime during its entire period of operation" in its Application and Rejoinder are not applicable at all. (Condition No. 2 on page 614 and 10 on page 615 of Annexure-B- E.C. dated 19.04.2023 to the Affidavit in Reply filed by the R.No.7 dated 10.06.2025). As far as the contention about discharge of effluent admitted by the MPCB, various news articles and exceeding parameters of BOD & COD, SS, and Chloride are concerned, the MPCB has already forfeited BG of Rs.25 Lacs and therefore, there is no necessity to do further scrutiny of leakage water, for which remedial measures are already taken to treat it in the ETP.

10) With reference to Online Continuous Monitoring System (OCEMS), since the E.C. has been received recently on 19.04.2023 and the installation of Distillery is under progress, though Piezometer well site is selected and identified, because of the work of installation of Distillery is in progress, the work could not be started. The parties have approached for the work and the work order is to be finalized by following due procedure. (Para No.26 in table No. 7.30 at Page No. 591-592). OCEMS data has already connected and the details are given in the Affidavit in Reply to the Application by R.No.7. (Para No. 26 of Table – 17.41 At Page No.596).

11) Water Use and Rainwater Harvesting & Solar System -(Sr. No.7 at Page- 681 of Rejoinder)-

Since, the distillery is yet to be commissioned and installation is in-progress, rainwater harvesting and installation of solar system is in the process of finalization of appropriate agencies for providing it. (Para No.26 in table No. 8.31 at Page No. 593).

12) Monitoring Reports and Ground Water Quality- (Sr.No.8 at Page 681 of Rejoinder)-

The third-party reports of the Applicant cannot be taken into consideration with reference to ground water quality monitoring of M/s Sona Analytical and Research Lab, Satara and M/s Green Envirosafe Laboratory.

13) Start of crushing season without valid consent from the MPCB- (Sr.No.9 at Page No. 683 of Rejoinder).

The MPCB consent was pending and was granted on 02.03.2025 without any refusal for the crushing season 2024-25 season and therefore, it cannot be treated as violation. (Para No. 26 in table No.33.59 at Page No. 599, of Reply-Affidavit).

14) Molasses Storage- (Sr.No.10 of Rejoinder at Page No.683-684)

Industry has already provided MS Molasses Tank of adequate capacity of 15000 M/T. Industry does not stored molasses other than MS Tank. (Para No. 26 in table No.26.50-51 at Page No. 597, of Reply-Affidavit).

15) General Denials Vs. Specific Allegations- (Sr.No.11 at Page 684 of Rejoinder)- The News Paper Article and other general allegations about development of green belt and initiating various actions by MPCB are already taken into consideration with regard to forfeiture of BG of Rs. 25 Lacs and nothing new specific is brought on record by the Applicant except repetitive allegations in the Rejoinder. Hence, on the basis of the Affidavit filed by the R.No.5 & 6 and the Affidavit filed by & on behalf of MoEF & CC with the details of on what basis E.C. has been recommended and granted. The CPCB has also not made any adverse remarks in respect of the facility of R.No.7. Hence, the Application may kindly dispose of without any cost.

Date – 08.07.2025
Place - Pune

(Dattatraya Devale)

Adv. For R.No.7

P-242-SSL-EIA-DISTILLERY-22022

SUMMARY ENVIRONMENTAL IMPACT ASSESSMENT (EIA) REPORT

FOR

ESTABLISHMENT OF 10,000 TCD SUGAR FACTORY (SCRAPPING OF EXISTING 800 TCD) ALONG WITH 60 MW CO-GENERATION PLANT (50 MW FROM CO-GENERATION PLANT & 10 MW FROM DISTILLERY PLANT) AND 200 KLPD MOLASSES BASED DISTILLERY.

BY

SHIVNERI SUGARS LTD.

Ganesh tekadi, Jaipur, Tal.: Koregaon,
Dist.: Satara, Maharashtra.

PREPARED BY

Equinox Environments (India) Pvt. Ltd.

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

MAY - 2022

SHIVNERI SUGARS LIMITED

Regd. Office : 2 nd Floor, Shiv Pavilion Apartment, Near Ram Mandir, Sangli -miraj Road, Sangli 416416, Maharashtra
Contact : 0233- 2373885, **E-mail** : sushant.shivneri@gmail.com
CIN : U15400PN2016PLC167162

Ref. No. Shivneri / 01 / 2022-23 **Date: 25 / 04 / 2022**

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

Sub.: Application for Public Hearing to be conducted for proposed establishment of 10,000 TCD Sugar Factory (scrapping of 800 TCD unit), 60 MW Co-Gen Plant (50 MW from Co-gen plant & 10 MW from distillery) and 200 KLPD Molasses based Distillery by – **Shivneri Sugars Ltd. (SSL)** is located At: Ganesh tekadi, Jaipur , Tal.: Koregaon, Dist.: Satara, Maharashtra.

Dear Sir,

We – **Shivneri Sugars Ltd. (SSL)** - have plan to establishment of 10,000 TCD Sugar Factory (scrapping of 800 TCD unit), 60 MW Co-Gen Plant (50 MW from Co-gen plant & 10 MW from distillery) and 200 KLPD Molasses based Distillery.

Accordingly, an application of Form – 1 was submitted online on 07.09.2018 to the 'Ministry of Environment, Forest and Climate Change (MoEFCC); New Delhi' for grant of ToR's. Subsequently, the application was accorded standard TORs were issued vide letter no. IA-J-11011-/277/2018-IA-II(I) dated 12.10.2018. Therein, directions have been given to conduct Public Hearing w.r.t our project. Now, in order to conduct public Hearing, we hereby are submitting all the relevant documents and information to your office.

Along with the Public Hearing application, a draft EIA Report as per the generic structure stipulated in MoEF Notification No. S.O.1533 (E) dated 14.09.2006 as amended vide Notification No. 3067 (E) dated December 01, 2009 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 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. 2,00,000/- (Rs. Two Lakh only) bearing No. 325226 drawn on Bank of Maharashtra dated 25/04/2022 towards the Public Hearing charges, as decided by the govt., has been presented herewith.

Factory : Ganesh tekdi Nhavi bk, 415511, Tal. Koregaon, Dist. Satara

SHIVNERI SUGARS LIMITED

Regd. Office : 2 nd Floor, Shiv Pavilion Apartment, Near Ram Mandir,
Sangli -miraj Road, Sangli 416416, Maharashtra
Contact : 0233- 2373885, **E-mail** : sushant.shivneri@gmail.com
CIN : U15400PN2016PLC167162

Please do the needful and oblige.

Thanking you.

Yours faithfully,

Shri Ravindra J. Deshmukh
(Authorised Signatory)
Shivneri Sugar Ltd, (SSL)
At: Ganesh tekadi, Jaipur
Tal.: Koregaon, Dist.: Satara, Maharashtra.

Encl.: 1. A Draft EIA Report & Summary EIA Report
2. A D.D. bearing No. 325226 dated 25/04/2022 drawn on Bank of Maharashtra

CERTIFICATE

Declaration by Expert contributing to the Draft EIA in respect of proposed establishment of establishment of 10,000 TCD Sugar Factory (scrapping of 800 TCD unit), 60 MW Co-Gen Plant (50 MW from Co-gen plant & 10 MW from distillery) and 200 KLPD Molasses based Distillery. by **Shivneri Sugars Ltd. (SSL),** S. No.: 164, 166,173,174,175,176,177,178,180, 181, Ganesh tekadi, Jaipur, Tal.: Koregaon, Dist.: Satara, Maharashtra.

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

EIA Outward No. P-242-SSL-EIA-DISTILLERY-22022

EIA Coordinators

Name : Ms. Sulakshana Ayarekar

Period of Involvement : December 2021 – February 2022

Contact Information : eia@equinoxenvi.com

Functional Area Expert:

Sr. No.	Functional Area	Name of the expert/s	Involvement (Period & Task)	Signature
1	WP	Dr. Sangram Ghugare	**December 2021 – February 2022** • Study of process and operations • Site visit and finalization of water sampling locations • Preparation of water balance and identification of wastewater generation. • Evaluation of water pollution & control management • Identification of impacts, suggestion and finalization of mitigation measures • Study on Treatment of effluents through existing ETP and to be upgraded under proposed expansion was contemplated and designs were done accordingly.	
2	EB	Ms. Sulakshana Ayarekar	**December 2021 – February 2022** • Selection of Site for conducting ecological & biodiversity status of the study region. • Interaction with Govt. offices and agencies for certain secondary data and information pertaining to region specific issues • Study of terrestrial fauna by sighting, noting pug-marks, calls, sounds, droppings, nests and burrows etc. • Interaction with local residents for	

Sr. No.	Functional Area	Name of the expert/s	Involvement (Period & Task)	Signature
			obtaining information about various species of animals and birds usually observed their existence and importance in the study region. • Review of rules, legislation and criteria towards knowing and understanding inclusion in the study region of any eco-sensitive zones, wild life sanctuary. • Collection, compilation and presentation of the data as well as incorporation of same in to the EIA report	
3	SE	Dr. V. B. Jugale	**December 2021 – February 2022** • Collection of data on socio-economic aspects in study area through surveys. • Public opinions and recording of events for future industrialization in the study area. • Study of sociological aspects like human settlement, demographic and infrastructural facilities available in study area. • Compilation of primary and secondary data and its inclusion in EIA report.	
4	AP	Mr. Yuvraj Damugade	**December 2021 – February 2022** • Involved in detailed study of mass balance w.r.t. raw materials & products especially from view point of process emissions. • Site visit and finalization sampling locations • Planning & identifying the most appropriate air pollution control equipment from view points of efficiencies, capital as well as O & M cost & suitability • Identification of impact and suggesting the mitigation measures.	
5	AQ	Mr. Yuvraj Damugade	**December 2021 – February 2022** • Designing of Ambient AQM network for use in prediction modeling and micro metrological data development • Development and application of air quality models in prediction of pollutant dispersion, • Plotting of isopleths of GLCs, Worst case scenarios prediction w.r.t. source and receptors.	

Sr. No.	Functional Area	Name of the expert/s	Involvement (Period & Task)	Signature
6	HG	Dr. J.B. Pishte	**December 2021 – February 2022** • Hydro geological studies, data processing; analysis and evaluation, Ground water table measurement and monitoring network methodology preparation. • Planning and scheduling of groundwater sampling stations in the region. • Study of geology & general geological configuration of the region as well as sub-surface geology. • Determination of impact and suggesting mitigation measures	
7	GEO			
8	SHW	Dr. Sangram Ghugare	**December 2021 – February 2022** • Detailed study of manufacturing process and mass balance. • Solid wastes generation in different steps of manufacturing was identified and their quantification done was checked. • Identification of various hazardous wastes generated through manufacturing process. • Practices of storage and disposal of HW its impact and mitigation measures.	
9	RH	Dr. B. N. Thorat	**December 2021 – February 2022** • All the necessary literature for processes storage of hazardous chemicals was studied before visit. • Site visit and Verification of adequacy of on-site emergency preparedness plan for proposed unit was done. • Identification of probable emergencies and procedures for preparedness for handling the same was verified. • Worst case analysis by using ALOHA, Ware house safety measures, suggestion of mitigation measures.	
10	NV	Mr. Vinay Kumar Kurakula	**December 2021 – February 2022** • Verification of noise levels Monitoring (both work zone and ambient) in the industrial premises and study region • Finalization and verification of sampling locations, ambient noise	

Sr. No.	Functional Area	Name of the expert/s	Involvement (Period & Task)	Signature
11	LU		monitoring stations and the data collected. • Land use land cover mapping using NRSC Satellite image, • Satellite image processing, Image classification, Technical analysis and study for setting up of facility, planning of storage facility.	
12	SC	Dr. R. Mudaliyar	**December 2021 – February 2022** • Involvement physical analysis & characterization of the soils. • Identification of Impact and its mitigation measures • Interpretation of soil analysis, results and data including comparison of same with standard soil classification. • Collection, study and evaluation of soil information from data obtained from secondary sources & its interpretation.	

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

I, **M/s. Equinox Environments (I) Pvt. Ltd. (EEIPL); Kolhapur, Environmental & Civil Engineers, Consultants and Analysts.**, hereby confirm that the above mentioned experts were involved in preparation of Draft EIA and Executive Summary in respect of proposed establishment of establishment of 10,000 TCD Sugar Factory (scrapping of 800 TCD unit), 60 MW Co-Gen Plant (50 MW from Co-gen plant & 10 MW from distillery) and 200 KLPD Molasses based Distillery by **Shivneri Sugars Ltd. (SSL)** is located at Ganesh tekadi, Jaipur, 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

Designation: Chairman & MD

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

NABET Certificate No. & Issue Date: NABET/IA/1821/ RA 0135 Validity - 08/07/2022

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Summary of Draft EIA Report For Establishment of 10,000 TCD Sugar Factory (scrapping of 800 TCD unit), 60 MW Co-Gen Plant (50 MW from Co-gen Plant & 10 MW from Distillery) and 200 KLPD Molasses based Distillery By Shivneri Sugars Ltd. (SSL);

Ganesh Tekadi, Jaipur, Tal: Koregaon, Dist.: Satara, Maharashtra State

1) THE PROJECT

Shivneri Sugars Ltd. (SSL) is located at **Ganesh Tekadi, Jaipur, Tal.: Koregaon, Dist.: Satara, Maharashtra State**. It is towards South-East of Satara, at a distance of about 25 Km from city. Existing cane crushing capacity of the sugar factory is about 800 TCD. First crushing season for sugar factory was done in year 2011 as **Jijamata Ethanol and Agro Processing Ind. Ltd. (JEAPIL).** In the year 2017, **JEAPIL** was taken over by Shivneri Sugar Limited (SSL). Now the management of SSL is plan to go for establishment of 10,000 TCD Sugar Factory (scrapping of 800 TCD unit), 60 MW Co-Gen Plant (50 MW from Co-gen Plant & 10 MW from Distillery) and 200 KLPD Molasses based Distillery.

As per the provision of "EIA Notification No. S. O. 1533 (E)" dated 14.09.2006 as amended vide Notification dated 13 June 2019, the proposed project comes under Category – A, listed at item 5(j), 5(g) and 1(d). Accordingly, Form -1 application is submitted to EAC, MoEFCC and Std. ToRs granted on 12.10.2018. Proposed establishment of distillery would be formulated in such a fashion and manner so that the utmost care of Safety Norms and Environment Protection shall be taken. Details of capital investment are given in following table.

Table 1 - Project Investment Details

No.	Industrial unit	Capital Investment
1	Sugar Factory	Rs. 220 Cr
2	Co-gen Plant	Rs. 200 Cr
3	Distillery	Rs. 200 Cr
	Total	**Rs. 620 Cr**

2) THE PLACE

Proposed project by SSL should be set up at Survey. No. 164, 166, 173, 174, 175, 176, 177, 178, 180, 181, Jaipur, taluka Koregaon, district Satara, Maharashtra. Total land acquired by the SSL is 20.64 Ha. Out of this total built up area of proposed project will be 1.059 Ha. Refer Appendix - A of Draft EIA report for plot layout plan. A No Objection Certificate (NOC) for proposed establishment project has been obtained from the Grampanchayat Jaipur. Same is presented at certificates and other documents of EIA report.

Table 2 - Total Area Break up

No.	Description	Area (Sq. M.)
1	Total Plot Area	206464.00
2	Total Built up area (Sugar, Co-gen, Distillery & Other)	10,591.00
3	Total Open Area	28389.00
4	Proposed Green Belt Area (33% of Total plot area)	68797.60

3) THE PROMOTERS

The SSL promoters are well experienced in the field of Sugar, Co-gen and Distillery & have made a thorough study of entire project planning as well as implementation schedule. The names and designations of the promoters are as under-

Table 3 - Promoters of SSL

No.	Name	Designation
1.	Mr. Shrimant B Patil	Chairman & Managing Director
2.	Mr. Shrinivas Patil	Director
3.	Mr. Yogesh Patil	Director
4.	Mr. Sushant Patil	Director

4) THE PRODUCTS

The details of products to be manufactured under proposed units are represented in following table.

Table 4 - Products of the Sugar Factory, Co- Gen Plant & Distillery

Industrial unit	Product & By-product	Quantity (MT/ M)
Sugar Factory (10,000 TCD)	Sugar (12%)*	36,000
	By-product	
	Molasses (4%)*	12,000
	Bagasse (30%)*	90,000
	Press Mud (4%)*	12,000
Co-Gen (60 MW)	Electricity (MW)	60
Distillery (200 KLPD)	RS / ENA / Ethanol	6,000
	By-product	
	CO_2 Gas (MT/M)	4980
	Fusel Oil	12

*- Percent of Cane Crushed

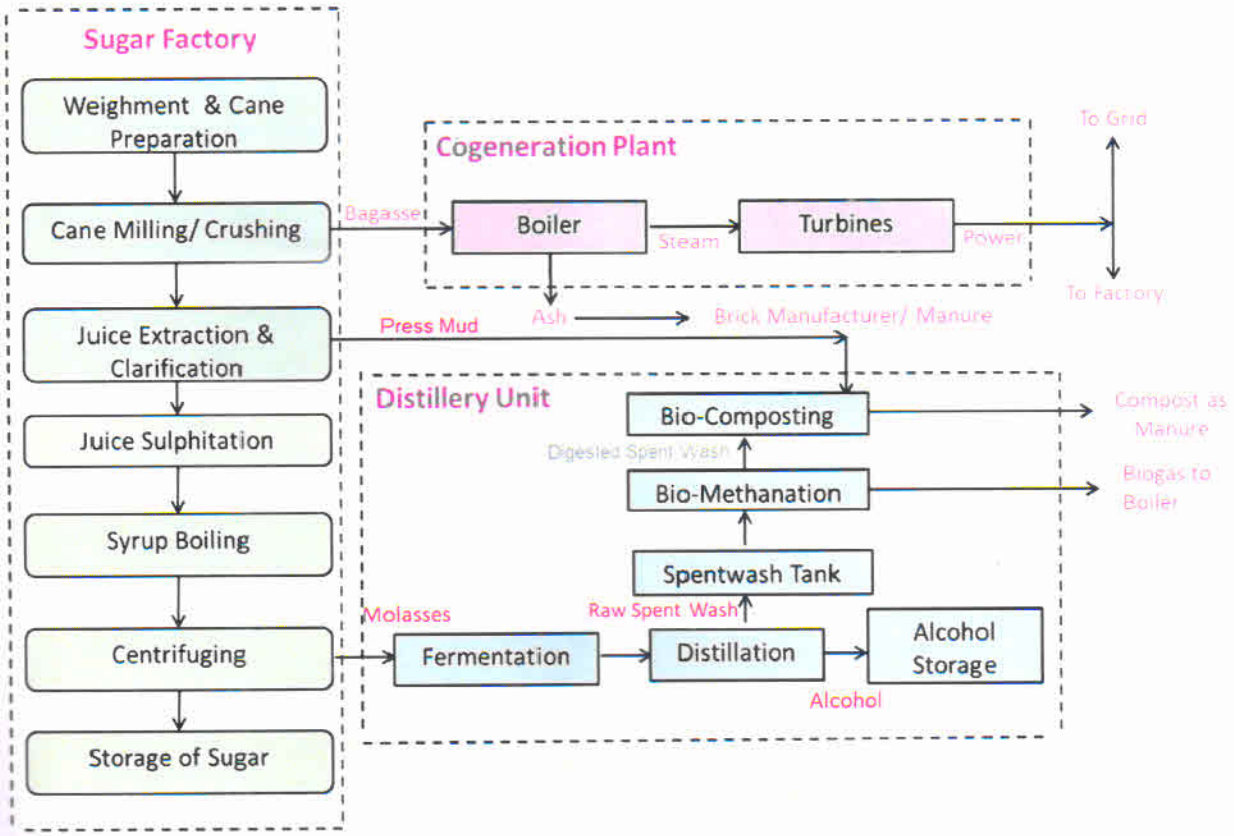
5) THE PURPOSE

- Sugar Industry is the second largest agro industry in the country.
- Maximum utilization of sugarcane in command area through sugar factory expansion.
- Bagasse based co-gen plant fulfills captive power need. Surplus exported in grid.
- Sugar industry is instrumental in resource mobilization, employment generation, income generation and in creating social infrastructure in command area.
- Alcohol industry is the second largest source of revenue of the state.
- Distillery business is gaining more importance with regards to production, usage, easy availability of raw material.
- Cogeneration for the sugar industry has been a very attractive option in view of the potential for increasing the financial health of the sugar mill on one hand and reducing the ecological damage by promoting the use of renewable fuels like bagasse for power generation, on the other hand.

Considering the above facts as well as cane availability, management of SSL has decided to go for expansion of sugar factory, establishment of Co-gen & distillery.

6) MANUFACTURING PROCESS

Figure 1 Integrated Manufacturing Process Operations



7) ENVIRONMENTAL ASPECTS

Environmental degradation is the greatest concern world over and as a citizen of India, it is the responsibility of one and all to strive and bring about a balance between Environment, Industrial Growth and Development of Economy thereby. Keeping in view the above fact, SSL has proposed to implement an effective 'Environmental Management Plan' & various aspects of the same are as follows,

A. Water Use, Effluent Generation and its Treatment

The details of water usage and effluent generation per day would be as follows

a. Water Use

Total water requirement for proposed distillery shall be to the tune of 2428 M^3/Day. Out of this 727 CMD will be Fresh water taken from Krishna River, 1691 CMD will be CPU treated effluent. Total 70% recycle water will be used in distillery.

Total water requirement for proposed Sugar Factory & Co-gen plant to the tune of 5225 CMD. Out of this 25 CMD will be fresh water taken from Krishna river, 4850 CMD will be recycled water from sugarcane condensate and 350 CMD will be treated effluent from ETP & STP. More details about water budget are presented in EIA report at Chapter 2

Table 5- Water Consumption & Effluent Generation in 200 KLPD Distillery

No.	Description	Water Consumption (M^3/D)		Effluent Generation (M^3/D)	Treatment
		Crushing	Non-Crushing		
1	**Domestic**	#10	#10	8	Proposed STP
2	**Industrial**				
	Process (Fermentation dilution)	*1587	*1587	Raw Sp. wash - 1600 Conc. Sp. wash - 320	Raw Sp.wash – Concentrate in MEE & Conc. Spentwash will be burnt in proposed Incineration Boiler
				MEE condensate - 1280 Spent lees - 274	Other effluent viz .MEE condensate, spent lees, cooling/d, boiler b/d, lab & wash shall be forwarded to Distillery CPU. Treated effluent shall be fully recycle in process to achieve ZLD.
	Cooling Tower	600 (♣104+*150+#346)	600 (♣104+#494)	90	
	Boiler b/d	#180	#180	36	
	DM Plant	#36	#36	36	
	Lab & Wash	#10	#10	10	
	Ash Quenching	#5	#5	0	
	Industrial Use	2418 (♣1691+*150+#577) 76% Recycle	2418 (♣1691+#727) 70% Recycle	Spent wash - 320 Other Effluent - 1726	
	Grand Total	2428 (♣1691+*150+#587)	2428 (♣1691+#737)		
	Norm: 10 KL/KL of Alcohol	2.8	3.6		

Note: # - Fresh water taken from Krishna River, ♣ - Distillery CPU treated water, * - Cane Condensate water.

Table 6 - Water Consumption & Effluent Generation in Sugar Factory & Co-gen Plant

No.	Description	Water Consumption (M^3/D)	Effluent Generation (M^3/D)	Treatment
1	**Domestic**	#25	20	Proposed STP
2	**Industrial**			
	a. Process	*2770	332	Treated in proposed well designed ETP
	b. Cooling	*1480	148	
	c. Boiler	*480	96	
	d. Lab & Wash	*96	20	
	e. DM Plant	*20	96	
	f. Ash Quenching	*4	0	
	Industrial Use	*4850 **(100% Recycle)**	**692**	
3	Green Belt	$350	332	
	Grand Total	5225(*4850+#25+$350)	148	
	Fresh Water: (100 Lit/ MT of Cane Crushed)	**0** Lit / MT of Cane		
	Affluent Generation: 200 Lit./MT of Cane Crushed	-	69 Lit./MT	

Note: # - Fresh water taken from Krishna River, * - Cane Condensate water, $ - Treated water from ETP & STP

b. Effluent Treatment

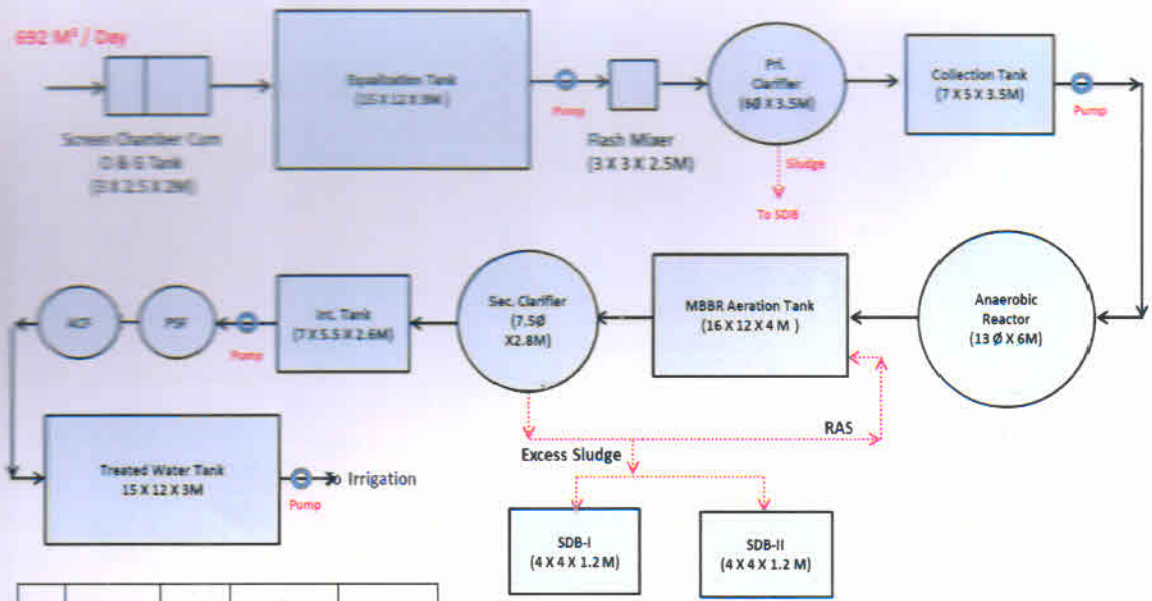
i) Domestic Effluent-

Total domestic effluent generated from SSL project complex will be 28 M^3/D (Domestic effluent from Sugar factory and Co-gen plant - 20 M^3/D and from Distillery - of 8 M^3/D) same shall be treated in proposed Sewage Treatment Plant (STP).

ii) Industrial Effluent-

Total industrial effluent generated from proposed sugar factory & co-gen plant shall be 692 M^3/D. & same shall be treated in proposed Effluent Treatment Plant (ETP). Treated water from ETP shall be used for green belt development in own factory premisses. Effluent generated from 200 KLPD distillery would be in the form of raw sp. wash to the tune of 1600 M^3/D. Raw Sp. wash will be concentrated in MEE. Concentrated sp. wash to the tune of 320 M^3/D will be incinerated in incineration boiler. Details of wastewater generation under proposed operations are presented in Table 2.17 & 2.18. Other effluents viz. spent lees @ 274 M^3/D, MEE condensate @ 1280 M^3/D and other effluents @ 172 M^3/D will be treated in proposed CPU under distillery unit. Refer figure 2.7 for the same. Treated water from CPU to the tune of 384 will be reused in process and boiler makeup, thereby achieving Zero Liquid Discharge (ZLD).

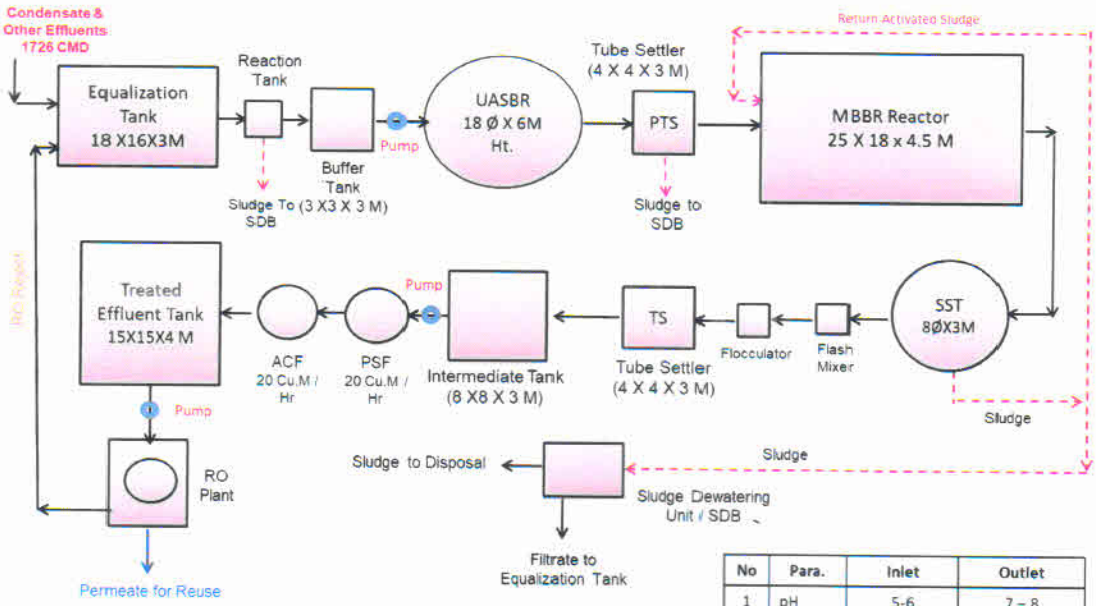
Figure 2 - Flow Chart of Sugar ETP



No	Parameters	Unit	Inlet	Outlet
1.	pH	---	5 - 6	7 – 8
2.	COD	mg/lit	2000 - 2500	< 250
3.	BOD	mg/lit	1000 - 1500	< 100
4.	TDS	mg/lit	1800 - 2100	< 2100
5.	SS	mg/lit	250 - 300	< 100

PSF	Pressure Sand Filter
ACF	Activated Carbon filter
RAS	Return Activated Sludge
SDB	Sludge Drying Beds

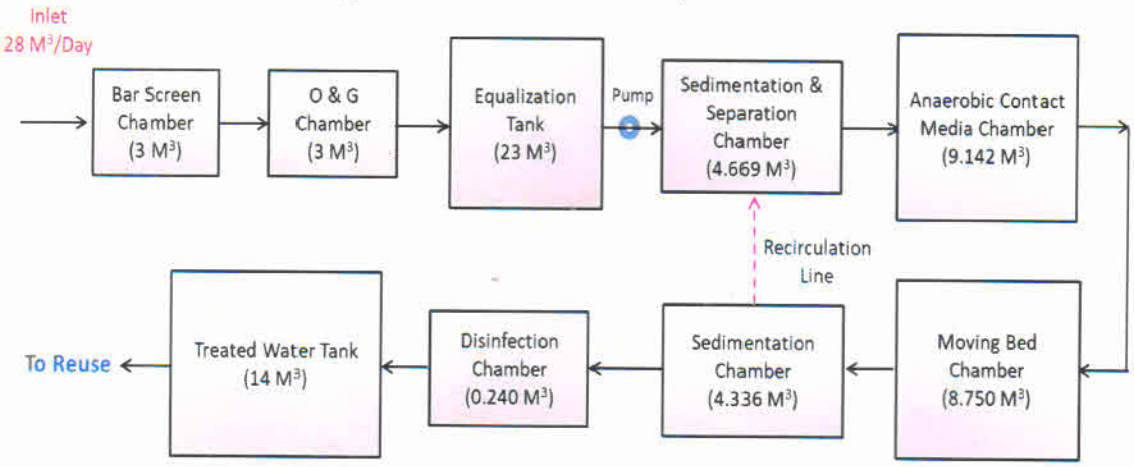
Figure 3 - Flow Chart of CPU in Distillery



Note:
PSF: Pressure Sand Filter
ACF : Activated carbon Filter
SST: Secondary Settling Tank
SDB: Sludge Drying Beds

No	Para.	Inlet	Outlet
1	pH	5-6	7 – 8
2	COD	3500-4000	< 100
3	BOD	2000-2500	< 50
4	TDS	2000-3000	< 100

Figure 4 Flow Chart of Proposed STP



No.	Parameter	Unit	Inlet	Outlet
1	pH	---	6.0 – 8.5	6.0 – 8.5
2	COD	mg/lit	400 – 500	< 50
3	BOD	mg/lit	250 – 300	< 20
4	TSS	mg/lit	150 - 250	< 30
5	O & G	mg/lit	20 - 30	< 10

B. Air Emissions

Emissions will be generated from 200 TPH bagasse fired boiler as well as 75 TPH incineration boiler (fuel-coal / Bagasse + conc. spent wash). ESP will be installed for same as APC equipment. Details of air pollution aspect and the control measures are given in following Table.

Table 7 - Details of Boiler and Stack in SSL

No.	Description	Boilers		D.G. Set
1	Capacity	200 TPH	75 TPH	1000 KVA (2 Nos.)
2	Fuel type	Bagasse	Conc. Sp.Wash +Coal/Bagasse	HSD
3	Fuel Quantity (MT/D)	2400	432 + 185/463	145 Lit/Hr. Each
4	Stack Height, M (AGL)	90 M	82 M	7 M (ARL)
5	Material of construction	RCC	RCC	MS
6	Shape (round/rectangular)	Round	Round	Round
7	Diameter/ size, in meters	6 M	3.2 M	150 mm
8	APC Equipment	ESP	ESP	-

C. Noise Pollution Aspect

1. Sources of Noise

i. In proposed unit, very high noise generating sources would not exist. D.G. Set should be one of the sources of noise pollution. But the operation of D.G. Set would be only in the case of power failure. Expected noise levels in the section would be about 72 dB (A). Adequate noise abatement measures like silencer should be implemented in this section. Moreover, enclosures to the machinery should be provided wherever possible.

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

iii. Pumps, compressors, boiler house, turbine, movement of trucks for material transportation etc.

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

2. Control Measures

Isolation, separation and insulation techniques to be followed, PPE in the form of earmuffs, earplugs etc. should be provided to workers. The D.G. Set shall be enclosed in a separate canopy to reduce the noise levels.

D. Hazardous Wastes

Hazardous wastes will be generated from Sugar Factory & co-gen Plant. No any hazardous waste would be generated from Distillery project.

Table 8 - Hazardous Waste Details

No.	Description	Quantity	Mode of Disposal
1	Cat. No. 5.1 Spent Oil	0.5 MT/M	Burnt in incineration boiler

E. Solid Wastes

Table 9 Solid Waste Generation, Storage and Disposal Details

No.	Unit	Type	Quantity (MT/M)	Disposal
1	Sugar Factory & Co-gen Plant	ETP sludge	20.7	Burnt in Incineration boiler
		Boiler Ash (Bagasse)	1800	Used as manure
2	Distillery	Boiler Ash (Sp. Wash + Coal)	2850	Brick making
		CPU Sludge	49.8	Burnt in Incineration boiler
		Yeast Sludge	1260	

F. Odour Pollution

There are number of odour sources such as molasses handling and storage, fermentation and distillation, secondary effluent treatment, and storage of effluents, stale cane, bad mill sanitation, bacterial growth in interconnecting pipes & unattended drains. Measures adopted under existing unit for controlling same are proper housekeeping, sludge management in biological ETP units, steaming of major pipe lines, regular use of bleaching powder in the drains, efficient handling, prompt & proper disposal of press mud. Under proposed 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 Maharashtra Pollution Control Board (MPCB) or any other concerned authority are strictly followed in the existing set up. Same practice shall be continued after implementation of proposed project.

H. Environmental Management Cell

The SSL have planned an Environmental Management Cell (EMC) functioning under its proposed activity. Members of the EMC are well qualified and experienced in their concerned fields. The proposed EMC members are as under-

Table 10- Environmental Management Cell

No.	Designation	Number of Working Person (s)
1	Chairman & Managing Director	1
2	Environmental Officer	1
3	ETP Incharge	1
4	Safety Officer	1
5	Chief Chemist	1
6	Environment Consultant	1

Members of the environmental cell should be well qualified and experienced in the concerned fields.

The capital as well as O & M cost towards environmental aspects under the proposed activities would be as follows –

Table 11 - Capital as well as O & M Costs

No.	Description	Cost Component (Rs. Lakhs)	
		Capital	Annual O & M
1	APC System [ESP for co-gen boiler – 1 Nos. (Stack height 90 M) & distillery incineration boiler along with ESP - 1 Nos. (Stack height 82 M), OCMS]	7140.0	700.0
2	Wastewater Treatment Facility – Sp.wash Storage Tanks, MEE, CPUs, ETP, STP	16230.0	1600.0
3	Noise Pollution Control	50.0	10.0
4	Environmental Monitoring & Management	50.0	10.0
5	Occupational Health & Safety	100.0	15.0
6	Green Belt Development & Rain Water Harvesting	100.0	15.0
	Total (38% of Capital Investment of Rs. 620 Cr.)	**23,670.0**	**2,350.0**

I. Rainwater Harvesting Aspect

Table .12 Area Taken for RWH

No.	Description	Area (Sq. M.)
1	Rooftop Area	40,176
2	Green Belt Area	68,797
3	Area under Roads	10,591
4	Open Space	28,389
5	Parking Area	41,293

- Average annual rainfall in the area = 783 mm

Table 13 Area Taken for RWH

Sr. No.	Description	Area (Sq. M.)	Annual Average Rainfall (M)	Runoff Factors Considered	RWH Quantity (M^3)
1	**Roof Top Harvesting**				
	i. Rooftop Area	40,176	0.78	0.8	25,069.96
				Total Rooftop Harvesting	25,069.96
2	**Surface Water Harvesting**				
	i. Green Belt Area	68,797	0.78	0.3	16,098.50
	ii. Area under Roads	10,591	0.78	0.5	4,130.45
	iii. Parking Area	41,293	0.78	0.5	16,104.19
	iv. Open Space	28,389	0.78	0.3	6,642.96
				Total Surface Water Harvesting	**42,976.10**

J. The Green Belt

Table 14 - Area Details

No.	Description	Area (Sq. M.)
1	Total Plot Area	206464.00
2	Total Built up area (Sugar, Co-gen, Distillery & Other)	10,591.00
3	Total Open Area	28389.00
4	Proposed Green Belt Area (33% of Total plot area)	68797.60

The Criteria for Green Belt Development Plan

Emission of SPM, SO_2 is the main criteria for consideration of green belt development. The green belt development is provided to abate effects of the emissions of SPM & SO_2. 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 in proposed green belt.

Socio-Economic Development

The survey of 10 villages, selected out of 34 villages taking the reference of census 2011 within the 10 Km radius of SSL, was carried out with the help of a structured close ended interview schedule, comprising of 33 questions in Marathi, which was drafted prior to and employed during the survey. Refer Socio – economic profile in Chapter 3 of EIA report for detailed information of socio economic aspect. The observations and conclusions after the socio-economic study are as follows-

i. Most respondents from all villages are dependent on agriculture and allied activities for their livelihood.
ii. Major crops grown in the area included sugarcane, ginger, turmeric and wheat.
iii. Water conservation activities like "Pani Foundation" are implemented on mountain region areas like Borgaon, Ambheri, Velu & Jaipur.

8) ENVIRONMENTAL MONITORING PROGRAMME

Reconnaissance of the study area was undertaken in the Pre monsoon period. Field monitoring for measuring meteorological conditions, ambient air quality, water quality, and soil quality and noise levels was initiated. Report incorporates the data monitored during the period from December 2021 – January 2022 – February 2022 and secondary data collected from various sources which include Government Departments related to ground water, soil, agriculture, forest etc.

A. Land Use

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

B. Land Use/ Land Cover Categories of Study Area

Table 15 Land Use/ Land Cover

No.	LULC Classes	Area (Ha)	Percentage (%)
1	Built Up Area	970	3.09
2	Crop Land	12380	39.41
3	Fallow Land	4150	13.21
4	Water Bodies	150	0.48
5	River	35	0.11
6	Forest Area	2070	6.59
7	Barren Land	1850	5.89
8	Open Scrub Land	9810	31.23
	Total	**31415.50**	**100.00**

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 December 2021 – January 2022 – February 2022. Details of parameters monitored, equipment's used and the frequency of monitoring have been given in Chapter 3 of the EIA report. Hereunder, details of predominant wind directions and wind categories are given.

D. Air Quality

This section describes the selection of sampling locations, includes the methodology of sampling and analytical techniques with frequency of sampling. Presentation of results for December 2021 – January 2022 – February 2022 survey is followed by observations. All the requisite monitoring assignments, sampling and analysis was conducted through the laboratory of Green Envirosafe Engineers & Consultant Pvt. Ltd., Pune which is NABL accredited and MOEFCC; New Delhi approved organization. Further, same has received certifications namely ISO 9001– 2015 and OHSAS 18001–2007 from DNV. Ambient air monitoring was conducted in the study area to assess the quality of air for PM_{10}, $PM_{2.5}$, SO_2, NO_x and CO. Various monitoring stations selected are shown in table 16.

Table 16 Ambient Air Quality Monitoring (AAQM) Locations

No.	Location	Direction From Site	Distance (Km)	Direction
A1	Industrial Site	--	-	-
A2	Pimpri	Upwind	2.23	W
A3	Surli		4.91	W
A4	Khabalwadi	Downwind	4.89	E
A5	Jaigaon		7.67	NE
A6	Velu	Crosswind	2.16	NE
A7	Kombadwadi		5.38	S
A8	Jaipur	Nearest Habitat	1.92	SE

Table 17 Summary of the AAQ Monitoring Results for Season
[December 2021 – January 2022 – February 2022]

		Location							
		Industrial Site	Pimpri	Surli	Khaba lwadi	Jaigaon	Velu	Kombad wadi	Jaipur
PM_{10} µg/M³	Max	64.9	57.8	58.7	59.9	59.9	57.7	58.8	57.5
	Min	60.1	53.2	54.3	55.3	55.1	53.3	54.1	53.3
	Avg	62.5	55.5	56.3	57.8	57.5	55.5	56.5	55.4
	98%	64.8	57.7	58.7	59.9	59.9	57.7	58.8	57.4
$PM_{2.5}$ µg/M³	Max	29.9	20.8	21.9	22.8	22.9	20.9	21.9	20.9
	Min	25.2	16.2	17.2	18.1	18.1	16.2	17.2	16.1
	Avg	27.8	18.7	19.6	20.4	20.5	18.5	19.5	18.4
	98%	29.8	20.7	21.9	22.7	22.8	20.9	21.9	20.9
SO_2 µg/M³	Max	24.7	17.9	17.8	18.9	18.9	17.9	16.8	17.9
	Min	20.2	14.3	14.2	15.2	15.1	14.1	13.3	14.2
	Avg	22.5	16.1	15.9	17.0	17.1	16.1	15.0	16.1
	98%	24.5	17.9	17.6	18.8	18.9	17.9	16.8	17.9
NOx	Max	29.8	19.8	20.9	21.9	21.9	19.9	20.8	19.9
	Min	25.1	16.2	17.3	18.2	18.1	16.1	17.1	16.3

		Location							
		Industrial Site	Pimpri	Surli	Khaba Iwadi	Jaigaon	Velu	Kombad wadi	Jaipur
µg/M³	Avg	27.2	18.0	19.0	20.1	20.0	18.0	19.0	18.0
	98%	29.8	19.8	20.9	21.8	21.9	19.8	20.8	19.9
CO mg/M³	Max	0.900	0.090	0.090	0.090	0.090	0.090	0.090	0.090
	Min	0.100	0.010	0.010	0.010	0.010	0.010	0.010	0.010
	Avg	0.471	0.050	0.054	0.055	0.047	0.050	0.051	0.051
	98%	0.900	0.090	0.090	0.090	0.090	0.090	0.090	0.090

Notes: PM10, $PM_{2.5}$, SO_2 and NO_x are computed based on 24 hourly values. , CO is computed based on 8 hourly values.

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

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

Zone Station	PM_{10} µg/M³		$PM_{2.5}$ µg/M³		SO_2 µg/M³		NOx µg/M³		CO mg/M³	
	24 Hr	A.A.	24 Hr	A.A	24 Hr	A.A.	24 Hr	A.A.	8 Hr	1 Hr
Industrial, Rural & Residential Area	100	60	60	40	80	50	80	40	4	4
Eco-sensitive Area Notified by Govt.	100	60	60	40	80	20	80	30	4	4

Note: A.A. represents Annual Average

E. Water Quality

Sampling and analysis of water samples for physical, chemical and heavy metals were also undertaken through the laboratory of Green Enviro Safe Engineers & Consultant Pvt. Ltd Pune. Eight locations for surface water and eight locations for ground water were selected. Same are listed below-

Table 19 Monitoring Locations for Surface Water

Station Code	Name of the Station	Distance from Site (Km)	Direction w.r.t. Site
SW1	Near Jaipur (Nalla - Upstream)	1.29	SSE
SW2	Near Pimpri (Nalla - Downstream)	1.67	SW
SW3	Near Project Site	0.93	SW
SW4	Near Takale River Downstrem	9.76	WWS
SW5	NigadiVandan River Upstrem	9.86	W
SW6	Near Belewadi (Lake)	2.99	NE
SW7	Near Sap (Nalla)	4.44	NW
SW8	Near Apshinge (Lake)	8	NW

Table 20 Monitoring Locations for Ground Water

Station Code	Geographical Location	Distance from Site (Km)	Direction w.r.t. Site
GW1	17°33'22.78"N, 74°14'39.21"E	0.48	SW
GW2	17°33'31.41"N,74°14'40.66"E	0.30	WWS
GW3	17°33'27.72"N, 74°14'38.75"E	0.40	WWS
GW4	17°33'50.17"N, 74°14'55.99"E	0.52	NNE
GW5	17°33'42.70"N, 74°14'50.49"E	0.20	N
GW6	17°33'26.59"N, 74°14'49.98"E	0.23	S
GW7	17°33'17.11"N, 74°15'2.09"E	0.62	SSE
GW8	17°33'23.53"N, 74°15'6.61"E	0.57	SSE

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

F. Noise Level Survey

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

Table 21 Noise Sampling Locations

Station Code	Sampling Location	Distance from Site (Km)	Direction w.r.t. Site
N1	Industrial Site	--	--
N2	Ambheri	4.71	N
N3	Rahimatpur	6.89	NW
N4	Wathar	6.85	SW
N5	Arvi	5.98	SW
N6	Nagjari	7.61	S
N7	Jaipur	1.93	SE
N8	Nandoshi	6.68	SE

Table 22 Ambient Noise Levels

No.	Location	Average Noise Level in dB(A)					
		L_{10}	L_{50}	L_{90}	$L_{eq(day)}$	$L_{eq(night)}$	L_{dn}
1	N1	55.1	57.9	63.1	64.6	54.1	64.4
2	N2	43.1	45.9	47.1	51.1	41.5	51.3
3	N3	43.3	45.7	47.5	51.1	41.0	51.1
4	N4	43.6	46.7	48.4	52.3	41.9	52.1
5	N5	42.5	45.9	47.0	51.7	41.1	51.5
6	N6	43.5	46.2	47.6	52.2	41.0	51.8
7	N7	44.0	46.5	47.9	53.0	40.8	52.3
8	N8	43.5	46.2	47.6	52.2	41.0	51.8

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 aspects.

H. Ecology

Out of the total 47 villages within 10 km radius, 17 villages were selected for the EB and questionnaire study purpose, i.e. 9 villages within 5 km radius and 8 villages between 5 to 10 km radius.

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. The 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. The work force on the plant should be expected to accept a potentially greater risk than the members of the local community since the work force have been trained to protect themselves from the possible hazards and thus reducing the actual risk to themselves.

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

1. Risk to Plant: This risk is to be given priority only when it is proved beyond doubt that the risk to life is so low that reducing this risk may not be justified. Under this consideration, the risk to economic damage may be considered.
2. Risk to Public and Employees: 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 may be referred.

9) ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

A. Impact on Topography

No major topographical changes are envisaged in the acquired area as it is establishment of Distillery project. In acquired area, the changes would be due to the manmade structures, like Distillery structure and ancillary units. Industrial activity would invite positive benefits in the form of land leveling and tree plantation in the plant vicinity and other premises.

B. Impact on Climate

Impact on the climate conditions due to the establishment activity is not envisaged, as emissions to the atmosphere, of flue gases with very high temperatures are not expected

C. Impact on Air Quality

A study area of 10 km radius is considered for determination of impacts

i. Baseline Ambient Air Concentrations

24 hourly 98th percentile concentrations of PM_{10}, $PM_{2.5}$, SO_2 and NOx in Ambient Air, recorded during the field study conducted for the season January – February - March- 2021 are considered as baseline values. They represent impact due to operations of existing nearby industries on this region. Existing baseline concentrations are summarized in following table and the GLC of the same is included in 4th chapter of EIA report.

Table .23 Baseline Concentrations (98 Percentile)

Parameter	PM_{10}	$PM_{2.5}$	SO_2	NO_X	CO
Conc. ($\mu g/m^3$)	68.18	26.96	22.05	31.05	0.09
NAAQS	100 $\mu g/m^3$	60 $\mu g/m^3$	80 $\mu g/m^3$	80 $\mu g/m^3$	4mg/m^3

ii. Air Polluting Sources

A New Boiler of 15 TPH capacity will be installed under establishment of Distillery. Under existing activity of Sugar Factory & Co-gen plant operations, 40 TPH boiler is already installed. New DG set of capacity 625 KVA will be installed under establishment of

distillery project. Two DG sets of capacity 500 & 320 KVA each are installed under existing unit.

D. IMPACT ON WATER RESOURCES

i. Impact on Surface Water Resources& Quality

Surface water along with recycled water will be used to meet water requirment of SSL project complex. Effluent from distillery; Raw Spentwash shall be primarily treated in Multi Effect Evaporator (MEE). Concentrated spentwash will be treated in incineration boiler. Other Effluents viz. spent lees, Boiler blow down, cooling tower, and lab; washing, DM backwash is forwarded to CPU. Treated effluent shall be used in process to achieve ZLD. Total industrial effluent generated from proposed sugar factory & co-gen plant shall be 692 M^3/D. & same shall be treated in proposed Effluent Treatment Plant (ETP). Treated water from ETP shall be used for green belt development in own factory premisses.

Total domestic effluent would be treated in proposed STP. Hence there will not be any impact on surface water resource. More details about water budget are presented at Chapter 2.

ii. Impact on Ground Water Resources & Quality

Water required for the industry would be obtained from Krishna river. Permissions will be obtained for lifting required amount of water from the river and a copy of the application letter is enclosed for reference at Appendix - D Ground water will not be a source of raw water for the proposed project. Moreover, there will not be any discharge of untreated effluent so there will not be any impact on ground water level and quality.

E. IMPACT ON SOIL

Impact on the soil characteristics is usually attributed to air emissions, wastewater discharges and solid waste disposal. Deposition of particulate matter in ambient air without APC equipment can result in to alteration of properties of soil and its composition. Accidental discharge of spent wash, effluent or solid waste on land may change soil characteristics and soil fertility slowly; making it saline and non-suitable for agricultural or and any other vegetation to survive.

Solid waste generated from distillery and co-gen plant is yeast sludge and Boiler Ash respectively. Yeast sludge would be used as manure and Boiler Ash would be sold to brick manufacturer. The domestic effluent would be treated in sewage plant to be provided on site. Here, no impact is envisaged, as the quality of the effluent would be as per the norms stated by MPCB.

F. IMPACT ON NOISE LEVELS

The workers could get annoyance and can lose concentration during operation. It can cause disturbance during working. People working near the source need risk criteria for hearing damage while the people who stay near the industry need annoyance and psychological damage as the criteria for noise level impact analysis. The major noise emanating sources in SSL complex shall be plant & machinery in sugar factory like mill, compressors etc., boiler, turbine and DG set. SSL is not a major noise producing industry.

G. IMPACT ON LAND USE

The proposed activity should be implemented in own land premises on the same acquired land & hence no any change in the land use pattern is expected. Therefore the impact on land use is non-significant.

H. IMPACT ON FLORA AND FAUNA

Discharge of 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, industry is going to contribute in SPM pollution load in nearby area. This may have negative impact particularly on avifauna, surrounding crop yields & local population. Details in respect of impacts on ecology and biodiversity are described in Chapter 3.

I. IMPACT ON HISTORICAL PLACES

No historical places in study area. No major impact was observed during site visit.

10) SALIENT FEATURES OF EMP

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

Table 24 Plan for Monitoring of Environmental Attributes in and around SSL

No.	Description	Location	Parameters	Frequency	Conducted by
1	Air Emissions	Upwind – 1, Downwind - 2 (Near main gate, Fermentation section, Distillation section)	PM_{10}, $PM_{2.5}$, SO_2, NOx, CO	Monthly	MoEFCC & NABL Approved External Lab
		Study area - (Pimpri, Surli, Khabalwadi, Jaigaon, Velu, Kombadwadi, Jaipur)		Quarterly	
2	Work Zone Air	4 locations (Mill section, Fermentation section, Bagging & Distillation section)	PM_{10}, $PM_{2.5}$, SO_2, NOx, CO	Monthly	
3	Fugitive Emissions	Bagasse Yard	VOC	Monthly	
4	Stack Emissions	Boiler – 2 Nos., D.G Set – 2 Nos.	SO_2, SPM, NOx	Monthly	
5	Ambient Noise	5 Locations (Near main gate, Near ETP, Near Sugar godown, Near Distillation section, Near fermentation section)	Spot Noise Level recording; Leq(n), Leq(d), Leq (dn)	Monthly	
	Work Zone Noise	5 Locations - (Near mill section, Distillation section, Boiler, DG set, Turbine section)			
6	Effluent	Treated, Untreated	pH, SS, TDS, COD, BOD, Cl, Sulphates, Oil & Grease.	Monthly	
7	Drinking water	Factory canteen / Residential Colony	Parameters as per drinking water Std IS10500	Monthly	
8	Soil	**8 locations** (Industrial Site, Amberi, Rahimatpur, Velang, Surli, Arvi, Nagzari, Nandoshi)	pH, Salinity, Organic Carbon, N, P, K	Quarterly	
9	Water Quality (Ground	Surface Water: Near Jaipur (Nalla - Upstream), Near Pimpri (Nalla - Downstream), Near Project Site, Near	Parameters as per CPCB guideline for water quality	Quarterly	

No.	Description	Location	Parameters	Frequency	Conducted by
	Water & Surface Water)	Takale River Downstrem Nigadi, Vandan River Upstrem, Near Belewadi (Lake), Near Sap (Nalla), Near Apshinge (Lake) Ground Water: 8 locations within the study area	monitoring – MINARS/27/2007-08		
10	Waste management	Implement waste management plan that Identifies and characterizes every waste associated with proposed 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 SSL
11	Emergency Preparedness such as fire fighting	Fire protection & safety measures to take care of fire & explosion hazards, to be assessed & steps taken for their prevention.	On site Emergency Plan, Evacuation Plan, fire fighting mock drills	Twice a year	By SSL
12	Health Check up	Employees and migrant Labour health check ups	All relevant health check-up parameters as per factories act	Twice a Year	By SSL
13	Green Belt	Within Industry premises as well as nearby villages	Survival rate of planted sapling	In consultation with DFO	By SSL
14	CER	As per activities mentioned	--	Six Monthly	By SSL

शिवनेरी शुगर्स लिमिटेड (शि.शु.लि.)

मु. पो. गणेश टेकडी, जयपुर, ता. कोरेगाव, जि. सातारा.महाराष्ट्र राज्य

यांच्या

प्रस्तावित साखर कारखान्याची गाळप क्षमता १0000 टन प्रतिदिन (स्क्रपिंग ८00 टन प्रतिदिन युनिट) तसेच ६0 मे.वॅट क्षमतेचा वीज निर्मिती प्रकल्प (सहवीज निर्मिती प्रकल्पातुन ५0 मे. वॅट वीज निर्मिती आणि आसवनी प्रकल्पा मधुन १0 मे.वॅट वीज निर्मिती) आणि २00 के.एल.पी.डी. मोलॅसिस आधारित आसवनी प्रकल्पाची विद्यमान जागेमध्ये स्थापना

संदर्भातील इन्व्हायरमेंट इंपॅक्ट असेसमेंट अहवालाचा सारांश.

१) प्रकल्पाविषयी थोडक्यात

शिवनेरी शुगर्स लिमिटेड (शि.शु.लि.), मु. पो. गणेश टेकडी, जयपुर, ता. कोरेगाव, जि. सातारा. महाराष्ट्र येथे उभारणेत येईल. हा प्रकल्प सातारा-यापासून सुमारे २५ कि.मी. अंतरावर आग्नेय दिशेला आहे. साखर कारखान्याची सध्याची ऊस गाळप क्षमता सुमारे ८00 टन.प्रतिदिन आहे. सदर साखर कारखान्याचा प्रथम गळीत हंगाम सन २0११ मध्ये जीजामाता इथेनॉल आणि ॲग्रो प्रोसेसिंग इंडस्ट्रीज लि. (जी.इ.आ.ॲं.प्रो.इं.लि.), या नावाने घेणेत आला होता. २0१७ साली शिवनेरी शुगर्स लिमिटेड ने जी.इ.आ.ॲं.प्रो.इं.लि. हा कारखाना ताब्यात घेतला. शि.शु.लि.च्या व्यवस्थापनाने १0000 टन प्रतिदिन गाळप क्षमता असलेला साखर कारखाना (स्क्रपिंग ८00 टन प्रतिदिन युनिट) तसेच ६0 मे.वॅट क्षमतेचा वीज निर्मिती प्रकल्प (सहवीज निर्मिती प्रकल्पामधुन ५0 मे. वॅट आणि आसवनी प्रकल्पा मधुन १0 मे.वॅट वीज निर्मिती) आणि २00 के.एल.पी.डी. मोलॅसिस आधारित आसवनीची स्थापना प्रस्तावित आहे.

सदर प्रकल्प हा दि. १४.0९.२00६ च्या इन्व्हायरमेंन्ट इंपॅक्ट असेसमेंन्ट (EIA) नोटीफिकेशन नं. स. ओ. १५३३ (ई) प १३ जून २0१९ च्या नोटीफिकेशन मधील वस्तुदीनुसार कॅटॅगरी ए मध्ये येतो. प्रस्तावित प्रकल्प राबविताना सुरक्षिततेचे नियम प पर्यावरणाचे संरक्षण करण्याच्या सर्व गोष्टींची खबरदारी घेतली जाईल. खालील तक्त्यामध्ये गुंतवणुकीचे तपशील दिलेले आहेत.

तक्ता क्र. १ गुंतवणुक

No.	विभाग	भांडवली गुंतवणुक (करोडमध्ये)
१	साखर कारखाना	रु.२२0
२	सहवीज प्रकल्प	रु. २00
३	आसवनी प्रकल्प	रु. २00
	Total	रु. ६२0

२) प्रकल्पाची जागा

शि.शु.लि.द्वारे जयपूर, ता. कोरेगाव, जि. सातारा.महाराष्ट्र येथे गट.क्र. १६४, १६६ १७३, १७४, १७५, १७६, १७७, १७८, १८0, १८१ मध्ये २0.६४ हेक्टर एवढी जागा संपादित केली आहे. प्रस्तावित प्रकल्पाचे बांधकाम क्षेत्र १.0५ हे. एवढे असेल.प्रस्तावित विस्तारीकरण प्रकल्पासाठी आवश्यक असणारे ना हरकत प्रमाणपत्र ग्रामपंचायत जयपूर यांच्याकडून प्राप्त झालेले आहे ते ई आय ए रिपोर्टमध्ये जोडले आहे. जागेसंदर्भातील माहिती तक्ता २ मध्ये आहे.

तक्ता क्र.२ विविध विभागांच्या क्षेत्राचा तपशील

अ.क्र.	तपशील	बांधकाम एकुण क्षेत्र चौ.मी
१	एकुण क्षेत्र	२0६४६४.00
२	बांधकाम क्षेत्र	१0५९१.00
३	खुले क्षेत्र	२८३८९.00
४	हरित पट्टा	६८७९७.६0

उपरोक्त तक्त्यावरून असे दिसून येते की उपलब्ध जमीन वास्तविक आवश्यकतेपेक्षा जास्त आहे. प्रकल्पाच्या जागेच्या आवश्यकते व्यतिरिक्त इतर क्षेत्रामध्ये हरित पट्टा विकास आणि रस्ते यांसारख्या पायाभूत सुविधा पुरविल्या जातील. अंतर्गत तसेच मुख्य मार्गांचे चांगले जाळे तयार केले जाईल. प्रस्तावित प्रकल्पाचा योजना आराखडा **ॲपेन्डीक्स (परिशिष्ट) - अ** येथे जोडला आहे.

३) प्रकल्प प्रवर्तकांची ओळख

शि.शु.लि.च्या प्रवर्तकांना साखर कारखाना - सहवीज प्रकल्प तसेच आसवनी प्रकल्प क्षेत्रामधील चांगला अनुभव आहे. प्रवर्तकांनी प्रस्तावित प्रकल्पाचे नियोजन तसेच अंमलबजावणी योजनेचा सखोल अभ्यास केला आहे. प्रकल्प प्रवर्तकांचे नाव आणि हुद्दा खालीलप्रमाणे -

तक्ता क्र. ३ प्रवर्तकांचे नाव व हुद्दा

अ. क्र.	प्रवर्तकाचे नाव	हुद्दा
१.	श्री. श्रीमंत बी. पाटील	संस्थापक अध्यक्ष आणि व्यवस्थापकीय संचालक
२.	श्री. श्रीनिवास पाटील	व्यवस्थापक
३.	श्री. योगेश पाटील	व्यवस्थापक
४.	श्री. सुशांत पाटील	व्यवस्थापक

४) उत्पादनांविषयी माहिती

शिवनेरी शुगर्स लिमीटेड यांच्या प्रस्तावित प्रकल्पामधून तयार होणारी उत्पादने व त्यांचे परिमाण खालीलप्रमाणे आहे.

तक्ता क्र. ४ उत्पादने व उपउत्पादनांचा तपशिल

प्रकल्प	उत्पादने व उपउत्पादनांची नावे	क्षमता (मे.टन/म.)
साखर कारखाना	साखर (१२%)*	३६,०००
	उपउत्पादने	
	मोलॅसिस (४%)*	१२,०००
	बगॅस (३२%)*	९०,०००
	प्रेसमड (४%)*	१२,०००
सहवीज प्रकल्प	वीज	६०
आसवनी	इथेनॉल / आर.एस./इ.एन.ए.	६,०००
	उपउत्पादने	
	फ्युजल ऑईल	१२
	कार्बनडाय ऑक्साइड	४९८०

*उस गाळपाच्या टक्केवारीत

५) प्रकल्पाचे उद्दिष्ट

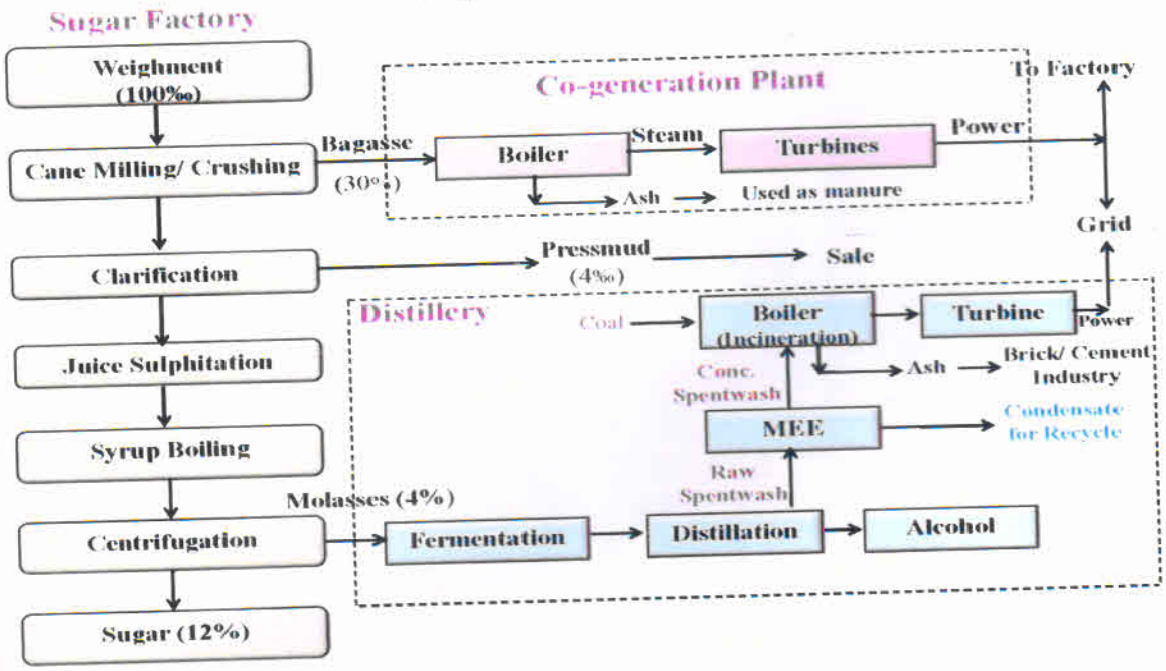
- साखर उद्योग हा देशातील सर्वात मोठा उद्योग आहे.
- साखर कारखाना विस्तारीकरणाद्वारे स्वामित्व (कमांड) क्षेत्रातील ऊसाचा अधिकतम उपयोग आहे.
- बगॅस आधारित सहवीज प्रकल्पाद्वारे कॅप्टीव पॉवर ची आवश्यकता पूर्ण होईल तसेच अधिशेष ग्रिड मध्ये निर्यात केला जाईल.
- साखर उद्योग हा स्त्रोत संघटना रोजगार निर्मिती, उत्पन्न निर्मिती आणि स्वामित्व क्षेत्रामध्ये पायाभुत घटक तयार करण्यासाठी महत्वपूर्ण आहे.
- अल्कोहोल उद्योग हा राज्याच्या उत्पन्नाचा दुसरा सर्वात मोठा स्त्रोत आहे.

- उत्पादन, वापर, कच्चा माल सुलभतेने उपलब्ध होण्यामुळे आसवनी प्रकल्प व्यवसाय अधिक महत्वाचा ठरत आहे.
- साखर कारखान्याचे आर्थिक आरोग्य वाढवण्याच्या शक्यतेच्या दृष्टीने साखर उद्योगासाठी एकत्रीकरणाचा पर्याय हा एक अतिशय आकर्षक पर्याय आहे आणि दुस-या बाजूला ऊर्जा निर्मितीसाठी अगॅसआरखा नूतनीकरणक्षम इंधनाचा वापर करून पर्यावरणीय नुकसान कमी करण्यास या प्रकल्पाचा हातभार आहे.

उपरोक्त तथ्यांसह ऊस उपलब्धता लक्षात घेऊन शि.शु.लि.च्या व्यवस्थापनाने साखर कारखाना विस्तार तसेच सहवीज आणि आसवनी प्रकल्पाची स्थापना करण्याचे ठरविले आहे.

६) उत्पादन प्रक्रिया

आकृती १ उत्पादन प्रक्रिया



६) पर्यावरणविषयक दृष्टिकोन

पर्यावरणीय घट हा जागतिक पातळीवरील अतिशय चिंतेचा विषय आहे आणि भारताचा एक नागरिक म्हणून आपण सर्वांनी जबाबदारीने पर्यावरण, औद्योगिक वाढ आणि अर्थ–व्यवस्थेच्या विकासादरम्यान समतोल साधन्याची गरज आहे.

वरील तथ्याकडे लक्ष देऊन शि.शु.लि. ने प्रभावी पर्यावरणीय व्यवस्थापन योजनेची अंमलबजावणी करण्याचा प्रस्ताव ठेवला आहे आणि त्याचे विविध पैलू खालीलप्रमाणे आहेत.

- **पाण्याचा वापर, सांडपाण्याची निर्मिती व त्याची प्रक्रिया**

अ) पाण्याचा वापर

प्रस्तावित आसवनी प्रकल्पाला एकूण २४२८ घनमीटर/दिन इतके पाणी लागेल. यापैकी ७२७ घन मी. प्रतिदिन इतके पाणी कृष्णा नदितुन घेतले जाईल, १६९१ घन मी. प्रतिदिन हे आसवनी प्रकल्पाच्या सी.पी.यु. मध्ये प्रक्रिया केलेले पाणी घेतले जाईल. यानुसार एकूण ७० % पाणी हे पुर्नवापर केलेले पाणी असेल.

साखर कारखाना व सहवीज प्रकल्पांसाठी साठी एकूण ५२२५घन मी.प्रतिदिन इतके पाणी लागते. यापैकी २५ घन मी.प्रतिदिन इतके पाणी कृष्णा नदितुन घेतले जाईल, ४८५० घन मी.प्रतिदिन इतके ऊसामधील कंडेनसेट घेतले जाईल. ३५० घन मी.प्रतिदिन इतके पाणी घरगुती सांडपाणी प्रक्रिया आणि औद्योगिक सांडपाणी प्रकल्पात प्रक्रिया केलेले

अश्वेल.शिवनेरी शुगर्स लिमीटेड यांच्या प्रस्तावित प्रकल्पामध्ये होणा-या पाण्याच्या वापराविषयी सविस्तर तपशील खालीलप्रमाणे -

तक्ता क्र.५ आसवनी प्रकल्पामधील पाण्याचा वापराविषयी सविस्तर तपशील खालीलप्रमाणे -

तपशील	पाण्याची गरज (घनमीटर/दिन)		सांडपाणी	प्रक्रिया
	गळित हंगाम	विना गळित हंगाम		
घरगुती	#१०	#१०	८	प्रस्तावित घरगुती सांडपा प्रक्रीया प्रकल्पामध्ये प्रक्रि केले जाईल.
औद्योगिक				
फरमेंटेशन डायल्युशन	♣१५८७	♣१५८७	वॉ स्पेंटवॉश- १६00 कॉ स्पेंटवॉश- ३२0	प्रस्तावित प्रकल्पामध्ये एक वॉ स्पेंटवॉश हे MEE प्र कॉसनट्रेट केले जाईल आ कॉसनट्रेट स्पेंटवॉ इन्सिनरेशन बॉयलर म जाळले जाईल.
			कंडेनसेट - १२८0 स्पेंट लीक्स -२७४	इतर सांडपाणी - स्पे लीक्स, कुलिंग ब्लो डाऊ बॉयलर ब्लो डाऊन, ME कंडेनसेट, लॅब व वॉशि हे आसवनी प्रकल्पा CPU ला पाठवले जाईल.
कुलिंग टॉवर रेप्लिनेशमेंट	६00 (♣१०४+*१५0+#३४६)	६00 (♣१०४+#४९४)	९0	
बॉयलर ब्लो डाऊन	#१८0	#१८0	३६	
डि.एम.प्लांट	#३६	#३६	३६	
लॅब वॉश	#१0	#१0	१0	
ड्रॉश क्वीनचींग	#५	#५	0	
औद्योगिक एकुण (a+b+c+d)	२४१८ (♣१६९१+*१५0+#५७७) (७६ पुनर्वापर)	२४१८ (♣१६९१+#७२७) (७0 पुनर्वापर)	कॉ स्पेंटवॉश - ३२0	
			इतर सांडपाणी-१७२६	
एकुण	२४२८ (♣१६९१+*१५0+#५८७)	२४२८ (♣१६९१+#७३७)		

टीप : # एकुण पाणी जे कृष्णा नदीमधुन वापरले जाईल,* यामधून निघणारे कंन्डेंसेट पाणी, ♣ आसवनी सी.पी.यु.मधुन प्रक्रिया केलेले पाणी

तक्ता क्र. ६ साखर कारखाना सहवीज प्रकल्पांसाठी पाण्याचा वापर

क्र.	तपशील	पाण्याची गरज	सांडपाणी	प्रक्रिया
१.	घरगुती	#२५	२0	प्रस्तावित घरगुती सांडपाणी प्रक्रीया प्रकल्पात प्रक्रिया केले जाईल.
२.	औद्योगिक			
a.	प्रोसेस	*२७७0	३३२	प्रस्तावित साखर कारखान्याच्या औद्योगिक सांडपाणी प्रक्रिया प्रकल्पात प्रक्रीया केली जाईल.
b.	कुलिंग	*१४८0	१४८	
c.	बॉयलर मेकअप	*४८0	९६	
d.	डी.एम. बॅकवॉश	*९६	२0	
e.	लॅब व वॉशिंग	*२0	९६	
f.	ड्रॉश क्वेंचिंग	*४	0	
	औद्योगिक वापर	*४८५0 (१00% पुनर्वापर)	६९२	
३.	हरितपट्टा	$350		
	एकूण	६८४(*६२५+#४0+Ω१९)		148

क्र.	तपशील	पाण्याची गरज	सांडपाणी	प्रक्रिया
	पाण्याचा वापर (१०० ली. /मे.टन ऊस)	0 ली. /मे.टन ऊस		
	सांडपाण्याचा वापर (२०० ली. /मे.टन ऊस)	-	६९ ली. /मे.टन ऊस	

टीप : # एकुण पाणी जे कृष्णा नदीमधुन वापरले जाईल,* सामधून निघणारे कंन्डेसेट पाणी, $ सांडपाणी प्रक्रिया प्रकल्पातून प्रक्रिया केलेले पाणी जे फ्लशिंगसाठी वापरले जाईल, Ω वेन वॉटर हार्वोस्टिंग.

ब. सांडपाणी प्रक्रिया

१. घरगुती सांडपाणी

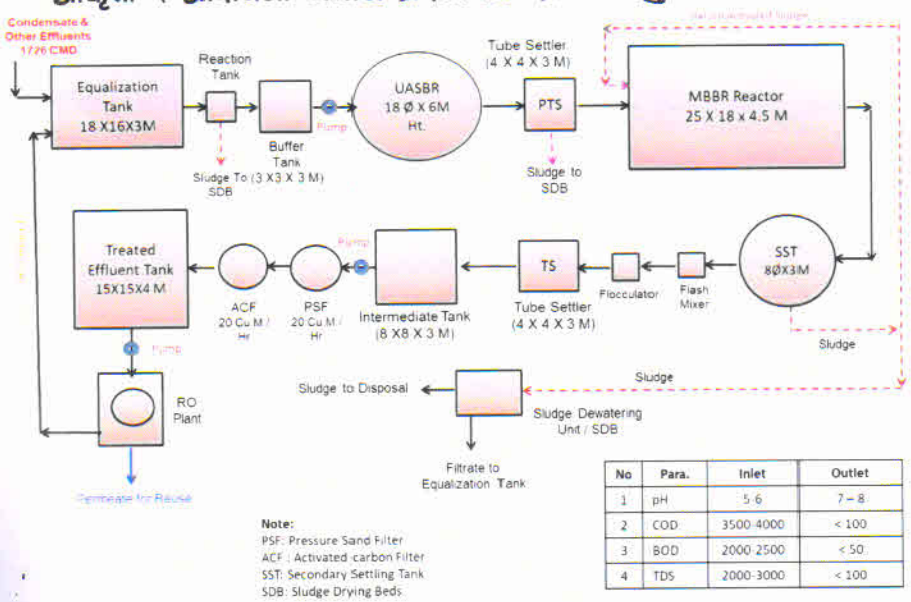
शि.शु.लि. प्रकल्पामधील साखर कारखाना, सहवीज आणि आसवनी मधुन एकुण २८ घन मीटर प्रति दिन इतके घरगुती सांडपाणी तयार होईल. (साखर कारखाना व सहवीज प्रकल्पातुन २० घन मी. प्रतिदिन तर आसवनी प्रकल्पामधुन ८ घन मीटर प्रति दिन इतके घरगुती सांडपाणी तयार होईल.) तयार होणा-या एकुण घरगुती सांडपाण्यावर प्रस्तावित सांडपाणी प्रक्रिया केंद्रामध्ये (STP) मध्ये प्रक्रिया केले जाईल.

२. औद्योगिक सांडपाणी

प्रस्तावित आसवनी प्रकल्पामधून स्पेंटवॉश, स्पेंटलीज, एम.ई.ई.मधील कंडेनसेट व इतर सांडपाणी तयार होईल. १६00 घन.मी.प्रतिदिन (८ कि.लि/कि.लि अल्कोहोल) इतके तयार होणारे सॉ स्पेंटवॉश हे MEE मध्ये कॉंसनट्रेट केले जाईल आणि कॉंसनट्रेट स्पेंटवॉश ३२0 घन. मी. प्रतिदिन (१.६ कि.लि/कि.लि अल्कोहोल) इन्सिनरेशन बॉयलर मध्ये जाळले जाईल.स्पेंटलीज २७४ घन.मी प्रतिदिन , एम.ई.ई. मधील कंडेनसेट १२८0 घन.मी/दिन, इतर सांडपाणी १७२ घन.मी प्रतिदिन हे आसवनी प्रकल्पाच्या कंडेनसेट पॉलिशिंग युनिट (शि.पी.यु) मध्ये प्रकियित करून त्याचा पुर्नवापर केला जाईल. शि.पी.यु प्रकल्प आकृती २ येथे दाखवला आहे.

साखर कारखान्यातून निघणारे एकुण सांडपाणी ६९२ घन.मी प्रतिदिन सांडपाणी प्रक्रिया केंद्रात प्रकियीत करून त्याचा पुर्नवापर केला. प्रक्रिया केलेले पाणी बागेसाठी वापरले जाते. ई.टी.पी. प्रकल्प आकृती ३ येथे दाखवला आहे.

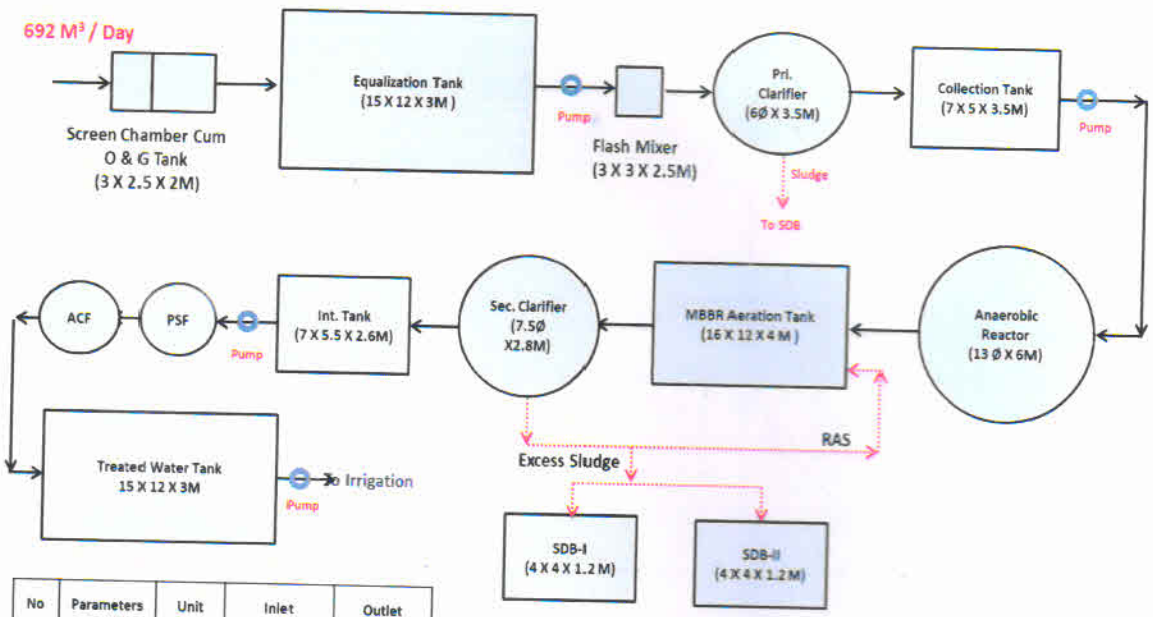
आकृती २ आसवनी मधील प्रस्तावित सी. पी.यु. फ्लो चार्ट



No	Para.	Inlet	Outlet
1	pH	5-6	7 – 8
2	COD	3500-4000	< 100
3	BOD	2000-2500	< 50
4	TDS	2000-3000	< 100

Note:
PSF: Pressure Sand Filter
ACF : Activated carbon Filter
SST: Secondary Settling Tank
SDB: Sludge Drying Beds

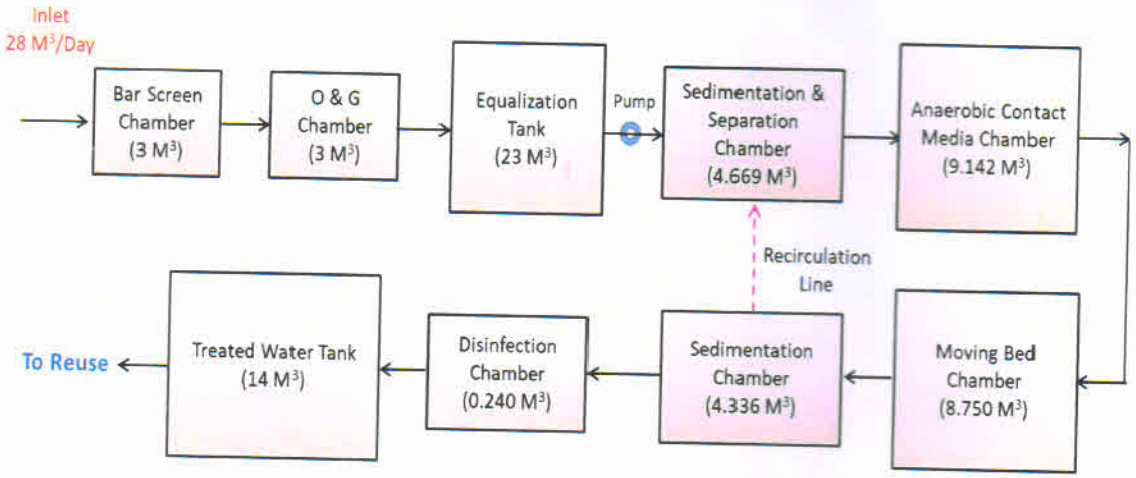
आकृती ३ साखर कारखान्यातील प्रस्तावित ई.टी.पी. फ्लो चार्ट



No	Parameters	Unit	Inlet	Outlet
1.	pH	---	5 - 6	7 - 8
2.	COD	mg/lit	2000 - 2500	< 250
3.	BOD	mg/lit	1000 - 1500	< 100
4.	TDS	mg/lit	1800 - 2100	< 2100
5.	SS	mg/lit	250 - 300	< 100

PSF	Pressure Sand Filter
ACF	Activated Carbon filter
RAS	Return Activated Sludge
SDB	Sludge Drying Beds

आकृती ४ प्रस्तावित एस.टी.पी. फ्लो चार्ट



No.	Parameter	Unit	Inlet	Outlet
1	pH	---	6.0 – 8.5	6.0 – 8.5
2	COD	mg/lit	400 – 500	< 50
3	BOD	mg/lit	250 – 300	< 20
4	TSS	mg/lit	150 - 250	< 30
5	O & G	mg/lit	20 - 30	< 10

क. वायु उत्सर्जने

शि.श्रु.लि.कारखान्यातील विविध प्रकियांसाठी लागणारी वाफ (स्टिम) ही २०० टन प्रति तास क्षमतेचा बगॅस आधारित व ७५ टन प्रति तास क्षमतेच्या इन्सिनरेशन बॉयलर मधून घेतली जाई ल. या बॉयलरना इ.एस.पी. हे प्रदूषण नियंत्रक उपकरण असवले जाणार आहे. प्रदूषण नियंत्रण करण्यासाठी २०० टन प्रति तास क्षमतेचा बगॅस आधारित बॉयलरला ९४ मी. उंचीची तसेच ७५ टन प्रति तास क्षमतेच्या इन्सिनरेशन बॉयलरला ९१ मी.उंचीची चिमणी असवली जाणार आहे. या बॉयलर्स साठी इंधन म्हणून कोळसा मिश्रित स्पेंट वॉश व बगॅस वापरला जाईल.

हवा प्रदुषण व त्या संबंधीच्या इतर बाबींची माहीती खालील तक्त्यात दिली आहे.

तक्ता क्र.७ बॉयलर आणि चिमणीचा तपशील

क्र.	तपशील	प्रस्तावित बॉयलर		
		बॉयलर १	बॉयलर २	डि.जी.सेट २ No.
१	क्षमता (टन/तास)	२००	७५	१००० (के.वी.ए)
२	इंधनाचा प्रकार	बगॅस	बगॅस / कोळसा + स्पेंट वॉश	एच.एस.डि.
३ ४	इंधन जरूरी (टन/दिन)	२४००	४६३/१८५+४३२	१५ LPH
	बांधणीसाठी वापरलेले मटेरीयल	आर.सी.सी	आर.सी.सी	
५	आकार (गोल/चौरस)	गोल	गोल	
६	उंची, मी (जमीनीच्या वर)	९२ मी	८२ मी	१५० मिमि
७	परीघ / आकार मी. मध्ये	६ मी	३.२ मी	
१०	चिमणीला असलेले नियंत्रणाचे उपकरण	ई.एस.पी	ई.एस.पी	

ड. ध्वनी प्रदुषण

१. ध्वनी निर्माण करणारे स्त्रोत

- प्रस्तावित प्रकल्पांमध्ये खुप जास्त आवाज निर्माण करणारे स्त्रोत असणार नाहीत. डी.जी.सेट हा ध्वनी प्रदुषणाचा एक स्त्रोत ठरू शकतो पण सदरील डी.जी.सेट फक्त नेहमीचा वीजपुरवठा खंडित असताना कार्यरत राहील. डी. जी. सेट असणा-या विभागातील ध्वनीची पातळी ७२ डी बी (ए) इतकी अपेक्षीत आहे. या विभागात जरूरी ध्वनी नियंत्रण साधने जसे कि सायलेंन्सर असविण्यात येतील. तसेच
- बॉयलर, फर्मन्टेशन सेक्शन व डिस्टीलेशन सेक्शन हे इतर थोडया प्रमाणात आवाज निर्मा ण करणारे स्त्रोत असतील येथील ध्वनीची पातळी ७० ते ८० डी बी (ए) दरम्यान अपेक्षीत आहे.
- पंप्स, कॉप्रेसर्स, बॉयलर हाऊस, टर्बाइन, ट्रक वाहतूक इत्यादी.

२. नियंत्रण उपाय

- ध्वनी नियंत्रणासाठी आयसोलेशन, सेपरेशन आणि इन्क्युलेशन तंत्रे वापरली जातील. इअरमफ्स, ई. स्वरूपात कामगारांना पी. पी. ई (PPE) पुरवण्यात येतील. तसेच ध्वनीची पातळी कमी करण्यासाठी डी. जी. सेट स्वतंत्र कॅनॉपी मध्ये बंदीस्त करण्यात येईल.

इ. घातक स्वरूपाचा कचरा

प्रस्तावित विस्तारीकरण निर्माण होणाऱ्या घातक स्वरूपाच्या कच-यामध्ये खालील बाबींचा समावेश असेल.

तक्ता क्र.८ घातक स्वरूपाचा कचरा तपशील

औद्योगिक विभाग	कच-याचा प्रकार	परिमाण मे.टन/महिना	विल्हेवाट पद्धत
साखर कारखाना व सहवीज प्रकल्प	५.१ युजड ऑईल	०.५	बॉयलर मध्ये बगॅस सहीत ज्वलनासाठी

प्रस्तावित आसवनी प्रकल्पामधुन कोणत्याही प्रकारचा घातक कचरा निर्माण होणार नाही.

फ. घन स्वरूपाचा कचरा

प्रस्तावित प्रकल्पांमधुन निर्माण होणाऱ्या घन स्वरूपाच्या कच-यामध्ये खालील बाबींचा समावेश असेल.

तक्ता क्र.९ घन स्वरूपाच्या कच-याचा तपशील

क्र.	कच-याचा प्रकार	परिमाण मे.टन/महिना	विल्हेवाट पद्धत
१.	यीस्ट स्लज	१२६०	बॉयलर मध्ये जाळले जाईल.
२.	सी.पी.यु. स्लज	४९.८	
३.	ई.टी.पी. स्लज	२०.७	
४.	बॉयलरची राख - बगॅस	१८००	खत म्हणून वापरले जाईल
५.	बॉयलरची राख - कोळसा व स्पेंट वॉश	२८५०	वीट भटटी निर्मितीसाठी साठी दिली जाईल.

ब. पाण्याचा उपद्रव

प्रस्तावित प्रकल्पांतर्गत मोलॅसिस हाताळणी तसेच अंतर्गत पाईपलाईन्स आणि दुर्लक्षित ड्रेन्स इ. पाण्याच्या उपद्रवाचे स्त्रोत असतील. स्पेंटवॉश बंद नलिकेतुन इन्सिनरेशनसाठी आणी MEE मध्ये कॉन्संट्रेशन साठी नेला जाईल. त्यामुळे स्पेंटवॉश साठवणुक व इन्सिनरेशन यापासुन होणारा पाण्याचा उपद्रव कमी होईल.

भ. नियम व अटींचे पालन

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

म. पर्यावरण व्यवस्थापन विभाग

शिवनेरी शुगर्स लिमिटेडमध्ये पर्यावरण व्यवस्थापन विभाग कार्यरत आहे. या विभागातील सर्व सदस्य उच्चशिक्षित आणि संबंधीत क्षेत्रातील योग्य तो अनुभव असलेले आहेत. सध्याच्या व प्रस्तावित पर्यावरण व्यवस्थापन विभागामधील सदस्य खालीलप्रमाणे –

तक्ता क्र.१० पर्यावरण व्यवस्थापन विभाग

अ.क्र.	नावे	पदाचे नाव
१	श्री. श्रीमंत पाटील	संस्थापक अध्यक्ष आणि व्यवस्थापकीय संचालक
२	डॉ.संग्राम घूगरे	पर्यावरण सल्लागार ईक्विनॉक्स ईनव्हायरमेंन्ट (इं) प्रा. लि.
३	श्री. पदमराज सी. पै	पर्यावरण अधिकारी (युनिट १)

४	श्री. तुषार करकरे	पर्यावरण अधिकारी (युनिट २)
५	श्री. चंद्रकांत लिहारे	ई.टी.पी. इनचार्ज (युनिट १)
६	श्री. सुजितकुमार चौगले	सूरक्षा अधिकारी (युनिट १)

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

तक्ता क्र.११ देखभालीसाठीच्या खर्चाचा तपशील

क्र.	तपशील	खर्च (रू. करोड) मध्ये	
		भांडवली गूंतवणूक	वार्षिक देखभाल व दुरूस्ती
१.	हवा प्रदुषण नियंत्रणासाठी २ बॉयलरना इ.स.पी (सहवीज प्रकल्पातील १ बॉयलर व आसवनी प्रकल्पातील १ बॉयलर साठी लागणारा खर्च व ९४ मी. आणी ९१ मी. उंचीच्या चिमण्या	७१४०.०	७००.०
२.	सांडपाणी प्रक्रिया प्रकल्प, बायोमिथीनेशन प्लांट, MEE, स्पेंट वॉश स्टोरेज टाकी, कंपोस्ट यार्ड, कंपोस्ट ईक्विपमेंट, स्पेंटवॉश हाताळणी इ.	१६२३०.०	१६००.०
३.	ध्वनी प्रदुषण नियंत्रणासाठी लागणारा खर्च	५०.०	१०.०
४.	एन्व्हायरमेंटल मॉनिटरींग व मॅनेजमेंट	५०.०	१०.०
५.	व्यवसायविषयक आरोग्य व सुरक्षीतता.	१००.०	१५.०
६.	हरित पट्टा विकासासाठी व रेन वॉटर हार्वेस्टिंगसाठी लागणारा खर्च	१००.०	१५.०
	एकुण	२३६७०.०	२३५०.०

य) रेनवॉटर हार्वेस्टिंग संकल्पना

तक्ता १२ रेनवॉटर हार्वेस्टिंगसाठी घेतलेले क्षेत्र

क्र.	तपशील	क्षेत्र (चर्म.मी´
१	रुफटॉप	६८,७९७
२	हरित पट्टा	१०,५९१
३	रस्त्याखालील क्षेत्र	२८,३८९
५	वाहनतळ	४१,२९३
४	खुलेक्षेत्र	६८,७९७

सरासरी वार्षिक पाऊस - ७८३ मिमी.

तक्ता १३ रेनवॉटर हार्वेस्टिंगसाठी घेतलेले क्षेत्र

क्र.	तपशील	क्षेत्र (चर्म.मी´	सरासरी वार्षिक पाऊस	रनऑफ फॅक्टर	हार्वेस्टिंग मधून मिळणारे पाणी (घन मी.´
अ.	रुफटॉप हार्वेस्टिंग				
१	रुफटॉप	४०,१७६	०.७८	०.८	२५,०६९.९६
ब.	सरफेस हार्वेस्टिंग				
१	हरित पट्टा	६८,७९७	०.७८	०.३	१६,०९८.५०
२	रस्त्याखालील क्षेत्र	१०,५९1	०.७८	०.५	४,१३०.४५
३	वाहनतळ	४१,२९३	०.७८	०.५	१६,१०४.१९
४	खुलेक्षेत्र	२८,३८९	०.७८	०.३	६६४२.९६
	एकुण				४२,९७६.१०
	एकुण (अ + ब)				६८,०४६.०६ घन

				मी.
				६८.०४लक्ष लि.

ब) हरित पट्टा माहिती

तक्ता क्र. १४ क्षेत्रफळाची माहिती

तपशील	क्षेत्र (चर्ग.मी´
एकुण क्षेत्र	२०६४६४.00
बांधकामाखालील क्षेत्र	१०५९१.00
प्रस्तावित हरित पट्टा (एकुण क्षेत्राच्या ३३ %)	२८३८९.00
खुले क्षेत्र	६८७९७.६0

हरित पट्टा विकसित करण्यासाठी SPM, SO_2 चे उत्सर्जन या बाबी प्रामुख्याने विचारात घेतल्या जातील. SPM, SO_2 यांच्या उत्सर्जनांमुळे होणारे परिणाम कमी करण्यास उपयुक्त अशा हरित पट्टा विकास कार्यक्रम राबविला जाईल. तसेच नियोजित हरित पट्टयातील झाडांमुळे इंडस्ट्रीमध्ये तयार होणा-या ध्वनीची तीव्रता कमी होऊन परिसरात होणारे ध्वनी प्रदुषण कमी होणेस मदत होईल. यानुसार SO_2 आणि ध्वनी प्रदुषण नियंत्रण इ. बाबी लक्षात घेऊन प्रस्तावित हरित पट्टा विकास कार्यक्रमाअंतर्गत विविध जातीच्या झाडांची लागवड केली जाईल.

ल) सामाजिक व आर्थिक विकास

सामाजिक व आर्थिक विकास अंतर्गत प्रकल्पास केंद्रस्थानी मानुन १० कि. मी. परीघ क्षेत्रामधील ३४ गावांपैकी १० गावांचे सर्वेक्षण केले गेले. या अंतर्गत वैयक्तिकरित्या लोकांच्या मुलाखती मराठी प्रश्नावलीद्वारे (३३ प्रश्न´ घेण्यात आल्या. अधिक माहीतीसाठी EIA रिपोर्ट मधील प्रकरण - ३ सामाजिक व आर्थिक विकास मुद्दा पहा. सामाजिक व आर्थिक विकास अभ्यासामधील निरीक्षण आणि निष्कर्ष पुढील प्रमाणे

- मुलाखतीदरम्यान असे दिसुन आले की बहूसंख्य लोक हे उदरनिर्वाहासाठी शेती व त्याशी निगडीत व्यवसायांवर अवलंबुन आहेत.
- परिसरामध्ये ऊस, हळद, आलं, भात ई. मूख्य पिके घेतली जातात.
- बहुतेक रहिवाशांची सदर प्रकल्पामुळे प्रदुषणाबाबतीत कोणतीही तक्रार नव्हती यावरून असे दिसुन येते की प्रदुषण होऊ नये म्हणून कारखान्याने योग्य ती खबरदारी घेतली आहे.
- खोरगावं, आंभेरी, वेलु आणि जयपूर यांसारख्या डोंगराळ भागामध्ये पाणी जतनासाठी 'पाणी फाऊंडेशन' कार्यरत आहे.

७) पर्यावरणविषयक तपासणी कार्यक्रम

अभ्यासासाठी निवडलेल्या भागाची पूर्वपाहणी डिसेंबर २०२१ ते फेब्रुआरि २०२२ मध्ये करण्यात आली होती. प्रस्तावित प्रकल्पाच्या सभोवतालच्या हवामान परिस्थीतीच्या माहितीसाठी हवा, पाणी व माती स्वरूप इ. गोष्टींचा अभ्यास डिसेंबर २०२१ मध्ये सुरू केला गेला होता. या प्रस्तावामध्ये डिसेंबर २०२१ ते फेब्रुआरि २०२२, या दरम्यानच्या कालावधीमध्ये गोळा केलेली माहीती नमूद केली आहे. या संबंधीची द्वितीय स्तरावरील माहिती ही सरकारी विभागांकडून घेण्यात आली आहे ज्यामध्ये भुर्गभीय पाणी, माती, शेती आणि वने इ. समावेश आहे.

अ. जमिनीचा वापर

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

ब. अभ्यासासाठी निवडलेल्या जमीनीचा वापर / व्यापलेली जमिन

तक्ता क्र. १५ जमीनीचा वापर / व्यापलेली जमिन

अ.क्र.	जमिनीचा वापर / व्यापलेली जमीन	क्षेत्र (हेक्टर)	टक्केवारी (%)
१.	खांधकामाखालील जमीन	९७०.००	३.०९
२.	लागवडीखालील जमीन	१२३८०.००	३९.४१
३.	शेतीपड जमीन	४१५०.००	१३.२१
४.	जलस्त्रोत	१५०.००	०.४८
५.	नदी	३५.००	०.११
६.	पन जमीन	२०७०.००	६.५९
७.	पडीक जमीन	१८५०.००	५.८९
८.	खुरटी झुडूप प्रदेश	९८१०.००	३१.२३
	एकुण	३१४१५.५०	१०० .००

क. हवामान माहिती

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

वेगवेगळया हवामान घटकांचा अभ्यास हा डिसेंबर २०२१ ते फेब्रुअरि २०२२या दरम्यान केला गेला होता. या अभ्यासातील परिमाणे, उपकरणे व वारंवारता यांचा तपशील इ. आय. ए. रिपोर्टच्या Chapter 3 मध्ये देणेत आला आहे.

ड) हवेचा दर्जा

या विभागामधून नमुने घेतलेल्या ठिकाणांची निवड, नमुना घेण्याची पद्धत, पृथःकरणाची तंत्रे आणि नमुना घेण्याची वारंवारता इ. गोष्टींची माहिती दिली आहे. डिसेंबर २०२१ ते फेब्रुअरि २०२२ या कालावधी मधील निरीक्षणानंतरचे निकाल सादर केले आहेत. सर्व मॉनिटरींग असाइनमेंटस, नमुने घेणे व त्यांचे पृथःकरण MoEFCC, New Delhi मान्यताप्राप्त तसेच ISO 9001 -2008 va ISO १४००१ - २००४ मानांकित मे. ग्रीन एनवायरोसेफ इंजिनीअर्स आणि सल्लागार प्रा.लि., पुणे या प्रयोगशाळेमार्फत केले आहे.

अभ्यास क्षेत्रातील हवेच्या गुणवत्तेचे मूल्यमापन करण्यासाठी PM_{10}, $PM_{2.5}$, SO_2, NOx and CO. या घटकांचे वेगवेगळया स्थानाकांवर मॉनिटरींग केले गेले. मॉनिटरींगची वेगवेगळी स्थानके खाली दिलेल्या तक्त्या मध्ये दाखवली आहेत.

तक्ता क्र. १६ हवा परिक्षणाची स्थानके

AAQM केंद्र आणि संकेतांक	स्थानकाचे नाव	साईट पासूनचे अंतर (कि.मी.)	साईटला अनुसकन दिशा
A1	साईट	-	-
A2	पिंपरी	२.२३	W
A3	भुरळी	४.९१	W
A4	खंडालवाडी	४.८९	E
A5	जायगांव	७.६७	NE
A6	वेळु	२.१६	NE
A7	कोंडाडवाडी	५.३८	S
A8	जयपूर	१.९२	SE

तक्ता क्र.१७ निरीक्षण हंगामातील हवेच्या गुणवत्तेचा सारांश

[ऑक्टोबर २०१८ नोव्हेंबर २०१८ डिसेंबर २०१८]

		स्थानक							
		साईट	पिंपरी	भुरळी	खबालवाडी	जायगांव	चेळु	कोंबाडवाडी	जयपूर
PM_{10} µg/M^3	Max.	६४.९	५७.८	५८.७	५९.९	५९.९	५७.७	५८.८	५७.५
	Min.	६०.१	५३.२	५४.३	५५.३	५५.१	५३.३	५४.१	५३.३
	Avg.	६२.५	५५.५	५६.३	५७.८	५७.५	५५.५	५६.५	५५.४
	98%	६४.८	५७.७	५८.७	५९.९	५९.९	५७.७	५८.८	५७.४
$PM_{2.5}$ µg/M^3	Max.	२९.९	२०.८	२१.९	२२.८	२२.९	२०.९	२१.९	२०.९
	Min.	२५.२	१६.२	१७.२	१८.१	१८.१	१६.२	१७.२	१६.१
	Avg.	२७.८	१८.७	१९.६	२०.४	२०.५	१८.५	१९.५	१८.४
	98%	२९.८	२०.७	२१.९	२२.७	२२.८	२०.९	२१.९	२०.९
SO_2 µg/M^3	Max.	२४.७	१७.९	१७.८	१८.९	१८.९	१७.९	१६.८	१७.९
	Min.	२०.२	१४.३	१४.२	१५.२	१५.१	१४.१	१३.३	१४.२
	Avg.	२२.५	१६.१	१५.९	१७.०	१७.१	१६.१	१५.०	१६.१
	98%	२४.५	१७.९	१७.६	१८.८	१८.९	१७.९	१६.८	१७.९
NOx µg/M^3	Max.	२९.८	१९.८	२०.९	२१.९	२१.९	१९.९	२०.८	१९.९
	Min.	२५.१	१६.२	१७.३	१८.२	१८.१	१६.१	१७.१	१६.३
	Avg.	२७.२	१८.०	१९.०	२०.१	२०.०	१८.०	१९.०	१८.०
	98%	२९.८	१९.८	२०.९	२१.८	२१.९	१९.८	२०.८	१९.९
CO mg/M^3	Max.	०.९००	०.०९०	०.०९०	०.०९०	०.०९०	०.०९०	०.०९०	०.०९०
	Min.	०.१००	०.०१०	०.०१०	०.०१०	०.०१०	०.०१०	०.०१०	०.०१०
	Avg.	०.४७१	०.०५०	०.०५४	०.०५५	०.०४७	०.०५०	०.०५१	०.०५१
	98%	०.९००	०.०९०	०.०९०	०.०९०	०.०९०	०.०९०	०.०९०	०.०९०

Note:

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

तक्ता क्र. १८ केंद्रीय प्रदुषण नियंत्रण मंडळ निर्दिष्टीत राष्ट्रीय पातावरणीय वायु गुणवत्ता मानके (नवी दिल्ली, १८ नोव्हेंबर २००९)

		Zone Station	
		औदयोगिक आणि मिश्रित भाग	रहिवाशी आणि ग्रामिण भाग
PM_{10} µg/M^3	24 Hr	१००	१००
	A.A.	६०	६०
$PM_{2.5}$ µg/M^3	24 Hr	६०	६०
	A.A.	४०	४०
SO_2 µg/M^3	24 Hr	८०	८०
	A.A.	५०	२०
NOx µg/M^3	24 Hr	८०	८०
	A.A.	४०	४०
COx mg/M^3	24 Hr	४	४
	A.A.	२	२

Note: A.A. represents "Annual Average

इ) पाण्याची गुणवत्ता

पाण्याच्या भौतिक, रासायनिक गुणधर्मांची आणि त्यातील जड धातूंची तपासणी करण्यासाठी MoEFCC, New Delhi मानांकित मे. ग्रीन एनवायरोसेफ इंजिनीअर्स आणि सल्लागार प्रा.लि., पुणे यांच्यामार्फत नमुने घेऊन त्यांचे पृथःकरण केले. भूर्गभातील पाण्याच्या नमुना चाचणीसाठी ८ ठिकाणे व भूपृष्ठीय पाण्याच्या नमुना चाचणीसाठी ८ ठिकाणे घेतली होती.

तक्ता क्र. १९ पृष्ठभागावरील पाण्यासाठी निवडलेली ठिकाणे

स्थानक संकेतांक	स्थानकाचे नाव	साईट पासुनचे अंतर	साईट पासुनची दिशा
SW1	जयपूर	१.२९	SSE
SW2	पिंपरी	१.६७	SW
SW3	साईट	०.९३	SW
SW4	टाकळे	९.७६	WWS
SW5	निगडी पंढन	९.८६	W
SW6	खेलेवाडी	२.९९	NE
SW7	साप	४.४४	NW
SW8	अपशिंगे	८.००	NW

तक्ता क्र. २० भूगर्भातील पाण्यासाठी निवडलेली ठिकाणे

स्थानक संकेतांक	भौगोलिक ठिकाण	साईट पासुनचे अंतर	साईट पासुनची दिशा
SW1	17°33'22.78"N, 74°14'39.21"E	०.४८	SW
SW2	17°33'31.41"N,74°14'40.66"E	०.३०	WWS
SW3	17°33'27.72"N, 74°14'38.75"E	०.४०	WWS
SW4	17°33'50.17"N, 74°14'55.99"E	०.५२	NNE
SW5	17°33'42.70"N, 74°14'50.49"E	०.२०	N
SW6	17°33'26.59"N, 74°14'49.98"E	०.२३	S
SW7	17°33'17.11"N, 74°15'2.09"E	०.६२	SSE
SW8	17°33'23.53"N, 74°15'6.61"E	०.५७	SSE

फ) ध्वनी पातळीचे सर्वेक्षण

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

तक्ता क्र. २१ ध्वनी पातळी

ठिकाणे	स्थानकाचे नाव	दिशा	अंतर	सरासरी ध्वनी पातळी (डेसिबल)					
				L_{10}	L_{50}	L_{90}	$L_{eq(day)}$	$L_{eq(night)}$	L_{dn}
N1	साईट	--	--	५५.१	५७.९	६३.१	६४.६	५४.१	६४.४
N2	आंभेरी	N	४.७१	४३.१	४५.९	४७.१	५१.१	४१.५	५१.३
N3	रहिमतपुर	NW	६.८९	४३.३	४५.७	४७.५	५१.१	४१.०	५१.१

ठिकाणे	स्थानकाचे नाव	दिशा	अंतर	सरासरी ध्वनी पातळी (डेसिबल)					
				L_{10}	L_{50}	L_{90}	$L_{eq(day)}$	$L_{eq(night)}$	L_{dn}
N4	पाठार	SW	६.८५	४३.६	४६.७	४८.४	५२.३	४१.९	५२.१
N5	अरबी	SW	५.९८	४२.५	४५.९	४७.०	५१.७	४१.१	५१.५
N6	नागझरी	S	७.६१	४३.५	४६.२	४७.६	५२.२	४१.०	५१.८
N7	जयपूर	SE	१.९३	४४.०	४६.५	४७.९	५३.०	४०.८	५२.३
N8	नांढोशी	SE	६.६८	४३.५	४६.२	४७.६	५२.२	४१.०	५१.८

ग) सामाजिक - आर्थिक रचना

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

ष) जैवविविधता

जैवविविधता सर्वेक्षण परिक्षणादरम्यान Random Sampling व Oppurtunistic Method या पध्दतीचा वापर त्या भागातील जैवविविधता परिक्षणासाठी करण्यात आला. तसेच १० गावांमधून प्रश्नावलीच्या मदतीने परिक्षण करण्यात आले ज्यामध्ये जैवविविधतेशी निगडीत २१ प्रश्नांचा समावेश करण्यात आला होता.

९) इतर अभ्यास

आपत्ती व्यवस्थापन

आपत्ती व्यवस्थापन करताना, खालील बाबींचा विचार केला जातो.

१. प्रकल्पाच्या शेजारी राहणा-या लोकानां प्रकल्पामुळे कमीत कमी धोका असावा.
२. प्रकल्पामध्ये काम करणा-या कामगारांना शेजारी राहणा-या लोकांपेक्षा जास्त धोका अपेक्षित आहे, यामुळे प्रकल्पामध्ये काम करणा-या कामगाराना संभाव्य धोक्यापासून रक्षणाचे ट्रेनिंग दिले गेले पाहिजे जेणे करून संभाव्य 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 शकय होत नाही यावेळी हया धोक्यास प्राथमिकता दिली गेली पाहिजे. या अंर्तगत संभावित वित्तीय नुकसानीच्या धोक्याचा विचार केला जातो.
२. कामगार व जनतेस धोका : फेटल ॲक्सीडेंट रेट (एफ. ऐ. आर) किंवा फेटल ॲक्सीडेंट फिक्वेंन्सी रेट (एफ. ऐ. एफ. आर) याचा वापर कामगार व जनतेस धोके यांचा अभ्यास करताना वापर केला जातो. एफ. ऐ. आर व एफ. ऐ. एफ. आर म्हणजेच औद्योगिक अपघातांमध्ये १000 लोकांमागे होणा-या अपेक्षित मृतांची संख्या होय.

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

९) पर्यावरणावर होणारे परिणाम आणि त्यासाठीच्या उपाय योजना

अ. भौगोलिक रचनेवर परिणाम

प्रस्तावित प्रकल्पाच्या उभारणीमुळे संपादित जागेच्या भौगोलिक रचनेवर जास्ता परिणाम अपेक्षित नाही. संपादित जागेमध्ये बदल जसे की, आसवनी प्रकल्प उभारणी अपेक्षित आहे. सदर औद्येगिक प्रकल्पामुळे काही सकारात्मक फायदे जसे की जमिन विकसिकरण, व झाडे लावणे अपेक्षित आहे.

ब. वातावरणावरील परिणाम

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

हवेच्या दर्जावरील परिणाम

प्रस्तावित प्रकल्पामुळे होणा-या परिणामांची छाननी करण्यासाठी कारखाना परिसरास केंद्र मानून त्यापासून १० कि.मी. अंतराच्या परिघामध्ये येणारा भाग विचारात घेतला गेला आहे.

१. मुलभूत अॅम्बिएंट वायू प्रमाणके

डिसेंबर २०२१ ते फेब्रुअरि २०२२ मध्ये करण्यात आलेल्या क्षेत्र अभ्यासादरम्यान नोंद करण्यात आलेली २४ तासांमधील ९८ पर्सेंटाईल प्रमाणके आणि PM_{10}, $PM_{2.5}$, SO_2 व NO_x यांची सभोवतालच्या हवेमधील सरासरी यानुसार मिळालेल्या प्रमाणांना मुलभूत प्रमाणके मानण्यात आली आहेत. सदर प्रमाणके परिसरामध्ये होणारे परिणाम दर्शवितात. सध्याची मुलभूत प्रमाणके ई. आय. ए. रिपोर्ट मधील प्रकरण ४ तसेच पुढील तक्त्यामध्ये मांडण्यात आली आहेत.

तक्ता २२ मुलभूत प्रमाणके

तपशील	PM_{10}	$PM_{2.5}$	SO_2	NO_x	CO
98 percentile	६८.१८ $\mu g/m^3$	२६.९६ $\mu g/m^3$	२२.०५ $\mu g/m^3$	३१.०५ $\mu g/m^3$	०.०९ mg/m^3
NAAQS	१०० $\mu g/m^3$	६० $\mu g/m^3$	८० $\mu g/m^3$	८० $\mu g/m^3$	४ mg/m^3

२. हवा प्रदुषण स्त्रोत

प्रस्तावित प्रकल्पांसाठी लागणारी वाफ (स्टीम) ही प्रस्तावित २०० टन प्रति तास को जेन बॉयलर व ७५ टन प्रति तास क्षमता असणा-या बगॉस आधारित इन्सिनरेशन बॉयलर मधुन बॉयलर घेतली जाईल. २०० टन प्रति तास व ७५ टन प्रति तास क्षमता असणा-या बॉयलरसाठी इंधन म्हणुन बगॉस व स्पेंट वॉश मिश्रित कोळसा वापरण्यात येईल. दोन्ही बॉयलरर्स साठी ई .एस.पी. हे प्रदूषण नियंत्रक उपकरण बसवले जाणार आहे.

शिवनेरी शुगर्स लिमिटेडमधे १ मे. वॅट क्षमतेचे २ डी. जी. सेट बसविले जाणार असुन सदर डी. जी. सेट अत्यंत गरजेच्यावेळी वापरण्यात येतील.

ड. जलस्त्रोतावरील परिणाम

१. भुपृष्ठीय जलस्त्रोतावरील परिणाम

प्रस्तावित प्रकल्पांसाठी लागणारे पाणी हे कृष्णा नदीमधून घेण्यात येईल. जलसंपदा विभाग, महाराष्ट्र शासन यांचे कडून १५०० m^3 प्रतिवर्ष पाणी घेणेसाठी शिवनेरी शुगर्स लिमिटेड यांना तात्पुरती परवानगी देणेत आली आहे. प्रकल्पांसाठी लागणारे पाणी हे परवानगीपेक्षा कमी असेल या बाबतची माहिती पुढील तक्ता क्र. ५ व ६ मध्ये पहा. परवानगी संबधीची कागदपत्रे इ.आय. रिपोर्ट मधील **अॅपेन्डीक्स डी** येथे जोडली आहे.

सी स्पेंटवॉश (१६०० घनमीटर प्रतिदिन) MEE मध्ये प्रक्रिया केली जाईल. concentrated स्पेंटवॉश (३२० घन मीटर प्रतिदिन) इन्सिनरेशनसाठी पाठविले जाईल.

२. भूगर्भित पाण्याच्या गुणवत्तेवर होणारा परिणाम

प्रस्तावित प्रकल्पांसाठी लागणारे पाणी हे कृष्णा नदीमधून घेण्यात येईल. यासाठी जलसंपदा विभाग महाराष्ट्र शासन यांचेकडुन जरूरी परवानगी घेणेत आली आहे. यासंबंधीची कागदपत्रे

सोबत जोडली आहेत. भूगर्भिय पाण्याचा इथे वापर नसल्यामूळे त्याच्या स्तरांवर कोणताही परिणाम होणार नाही.

इ. माती वर होणारे परिणाम

मातीच्या गुणधर्मावर होणारे परिणाम हे साधारणपणे वायू उत्सर्जन, सांडपाण्याचे आणि घनकचरा विनियोग यांमुळे होत असतात. वायु प्रदुषण नियंत्रण उपकरणाच्या अभावामुळे होणा-या वायुउत्सर्जनातील धुलीकणांमुळे मातीच्या गुणधर्मामध्ये बदल होऊ शकतो. स्पेंटवॉश किंवा घनकचरा यांचा प्रादुर्भावामूळे जमिनीची गुणवत्ता तसेच उत्पादन क्षमता यांच्यात फरक पडु शकतो. आसवनी व सहवीज प्रकल्पातून यीस्ट स्लज व बॉयलरची राख हे घनकच-याच्या स्वरूपात तयार होतात. यीस्ट स्लज हे खत म्हणून तर बॉयलरची राख पीट निर्मिती साठी देण्यात येईल.

घरगुती सांडपाण्यावर प्रस्तावित सांडपाणी प्रकिया केंद्रात प्रकिया केली जाईल. सांडपाण्याची गुणवत्ता ही महाराष्ट्र प्रदूषण नियंत्रण मंडळाच्या गुणवत्तेप्रमाणे असल्यामुळे तसेच सांडपाणी भूजलामध्ये मिसळणार नाही यामुळे मातीवर कोणताही परिणाम अपेक्षित नाही

फ. ध्वनी मर्यादेवर होणारा परिणाम

अतिध्वनी निर्माण करणा-या यंत्रावर काम करीत असणा-या कामगारांचे संतुलन बिघडुन कामावर परिणाम होण्याची शक्यता असते. ध्वनी निर्माण होणाऱ्या स्त्रोताजवळ असणाऱ्या लोकांची ऐकण्याची क्षमता कमी होऊ शकते. सदर प्रकल्पामध्ये मुख्यत: साखर कारखान्यातील मील, कॉम्प्रेसर, बॉयलर, टर्बाइन व डि. जी. सेट हे ध्वनी प्रदूषणाचे मुख्य स्त्रोत ठरतील. सदर प्रकल्प हा ध्वनीप्रदुषण करणारा नसणार आहे.

ग. जमीन वापरावर होणारा परिणाम

शि.शु. लि.यांच्या सध्याच्या जागेमध्ये साखर कारखानाउभारण्यात आला आहे. प्रस्तावित आसवनी प्रकल्प हा सध्याच्या कारखान्याच्या आवारात उभारण्यात येईल. यामुळे जमीन वापरामध्ये बदल अपेक्षित नाही.

ष. झाडांवर व प्राण्यांवर होणारा परिणाम

प्रकिया न केलेले सांडपाणी कारखान्याच्या सभोवताली विसर्जित केल्यास पाणी संस्था व त्यावर अवलंबून असलेली जैवविविधतेवर परिणाम संभोवतो. वायु प्रदुषणा संदर्भात कारखाना SPM च्या स्वरूपात प्रदुषण योगदान देऊ शकतो. याचा विपरीत परिणाम अंशतः पक्षी, सभोवतालची पीके आणि स्थानिक लोकांवर होऊ शकतो. झाडांवर व प्राण्यांवर होणारा परिणामांची माहिती ई. आय. ए. रिपोर्ट मधील प्रकरण ३ मध्ये देण्यात आलेली आहे.

द. ऐतिहासिक ठिकाणावर होणारा परिणाम

प्रकल्पाच्या १० कि.मी क्षेत्रात कोणतेही ऐतिहासिक ठिकाण येत नसलेने ऐतिहासिक ठिकाणावर कोणताही परिणाम अपेक्षित नाही.

१०) पर्यावरण व्यवस्थापन समितीच्या महत्वाच्या बाबी

१. बांधकामादरम्यान व्यवस्थापन

तक्ता २३ मध्ये दिलेला विस्तृत पर्यावरणीय निरीक्षण आराखडयाची अंमलबजावणी केली जाईल. पर्यावरणीय निरीक्षणाव्यतिरिक्त पर्यावरणीय मंजुरीमध्ये दिलेल्या अटींची पुर्तता

तसेच CPCB/ MoEFCC/ MPCB यांच्याकडील नियमित परवानग्या आणि रिपोर्टस पुढील संदर्भासाठी सुस्थितीत ठेवली जातील.

तक्ता २३ पर्यावरणीय निरीक्षण आराखडयाची ठळक वैशिष्टये (ऑनसाईट)

अ.क्र.	तपशील	ठिकाण	परिमाणे	पारंपारता	तपासणी
१.	हवेची गुणवत्ता	• अपविंड - १ • डाऊनविंड - २ (बॅगॅस यार्डजवळ, कंपोस्ट यार्डजवळ, मेन गेट जवळ, केन यार्ड	1. PM_{10}, 2. $PM_{2.5}$ 3. SO_2 4. NO_x 5. CO	मासिक	MoEFCC approved Laboratory मधुन
२.	कामाच्या ठिकाणाची हवेची गुणवत्ता	४ ठिकाणी मील विभाग, फरमेंटेशन विभाग, डिस्टीलेशन विभाग, साखरपोती भरणा विभाग.	1. PM_{10} 2. $PM_{2.5}$ 3. SO_2 4. NOx 5. CO	मासिक	
३.	चिमणीतुन होणारे उत्सर्जन	• बॉयलर - २ आसवनी प्रकल्प व सहवीज प्रकल्प • डी.जी. संच -२	1. SPM 2. SO_2 3. NOx	मासिक	
४.	ध्वनि गुणवत्ता	५ ठिकाणी मेन गेट जवळ, ETP जवळ, साखर गोदाम, कंपोस्ट जवळ, फरमेंटेशन विभाग	Spot Noise Level recording; Leq(n), Leq(d), Leq(dn)	मासिक	
५.	कामाच्या ठिकाणाची ध्वनि	परिसरामध्ये - ५ ठिकाणी मील विभाग, डिस्टीलेशन विभाग, बॉयलर, डी. जी. सेट, टर्बाइन विभाग,	Spot Noise Level recording; Leq(n), Leq(d), Leq(dn)	मासिक	
६.	सांडपाणी	• प्रक्रिया न केलेले • प्रक्रिया केलेले	1. pH 2. SS 3. TDS 4. COD 5. BOD 6. Chlorides 7. Sulphates 8. Oil & Grease	मासिक	
७.	पिण्याचे पाणी	कारखान्याचे उपहारगृह शाळा	Parameters as drinking water standards.	मासिक	
८.	फ्युजिटीव इमीशन	इथेनॉल साठवण्याची जागा आणि डीस्टीलेशन कॉलम	VOC	मासिक	
९.	कचरा व्यवस्थापन	प्रस्थापित कृतीतून तयार होणा-या कच-याची वैशिष्टे आणि स्वरुपानुसार व्यवस्थापन केले जाईल	कच-याचे निर्मिती, प्रक्रिया आणि विल्हेवाट यांची नोंद	वर्षातून दोनदा	
१०.	आपातकालीन तयारी जसे की आग व्यवस्थापन	प्रतिबंधात्मक उपाय म्हणून आगीच्या व स्फोट होणाऱ्या ठिकाणी आगीपासून संरक्षण आणि सुरक्षिततेची काळजी घेतली जाईल.	ऑन साईट ईमरजन्सी व संकटकालीन बाहेर पडण्याचा आराखडा	मासिक	
११.	आरोग्य	कारखाण्याचे कामगार आणी स्थलांतरीत कामगारांसाठी आरोग्य शिबीराचे आयोजन	सर्व आरोग्य विषयक चाचण्या	वार्षिक	
१२.	हरीत पट्टा	कारखान्याच्या परीसरामध्ये आणी शेजारील गावांमध्ये	झाडे जगण्याचा दर	तज्ञां नुसार	

National Accreditation Board for Education and Training

QCI/NABET/ENV/ACO/22/2307

Apr. 08, 2022

To
Equinox Environments (India) Pvt. Ltd.
F-11, Namdev Nest, 1160-B, 'E' Ward,
Sykes Extension, Opp. Kamala College,
Kolhapur - 416001

Sub.: Extension of Validity of Accreditation till July 08, 2022– regarding
Ref.: Certificate no. NABET/EIA/1821/RA 0135

Dear Sir/Madam,

This has reference to the accreditation of your organization under QCI-NABET EIA Scheme, the validity of **Equinox Environments (India) Pvt. Ltd.** is hereby extended till July 08, 2022 or completion of assessment process, whichever is earlier.

The above extension is subject to the submitted documents/required information with respect to your application and timely submission and closure of NC/Obs. during the process of assessment.

You are requested not to use this letter after expiry of the above stated date.

With best regards.

(Dr. Pawan Kumar Singh)
Deputy Director, NABET

National Accreditation Board for Education and Training

QCI/NABET/ENV/ACO/22/2208

January 11, 202

To
Equinox Environments (India) Pvt. Ltd.
F-11, Namdev Nest, 1160-B, 'E' Ward,
Sykes Extension, Opp. Kamala College,
Kolhapur - 416001

Sub.: Extension of Validity of Accreditation till April 10, 2022– regarding
Ref.: Certificate no. NABET/EIA/1821/RA 0135

Dear Sir/Madam,

This has reference to the accreditation of your organization under QCI-NABET EIA Scheme, the validity of **Equinox Environments (India) Pvt. Ltd.** is hereby extended till April 10, 2022 or completion of assessment process, whichever is earlier.

The above extension is subject to the submitted documents/required information with respect to your application and timely submission and closure of NC/Obs. during the process of assessment.

You are requested not to use this letter after expiry of the above stated date.

With best regards.

(A K Jha)
Sr. Director, NABET

National Accreditation Board for Education and Training

QCI/NABET/ENV/ACO/21/2111

October 16, 2021

To
Equinox Environments (India) Pvt. Ltd.
F-11, Namdev Nest, 1160-B, 'E' Ward,
Sykes Extension, Opp. Kamala College,
Kolhapur - 416001

Sub.: Extension of Validity of Accreditation till January 15, 2022– regarding
Ref.: Certificate no. NABET/EIA/1821/RA 0135

Dear Sir/Madam,

This has reference to the accreditation of your organization under QCI-NABET EIA Scheme, the validity of **Equinox Environments (India) Pvt. Ltd.** is hereby extended till January 15, 2022 or completion of assessment process, whichever is earlier.

The above extension is subject to the submitted documents/required information with respect to your application and timely submission and closure of NC/Obs. during the process of assessment.

You are requested not to use this letter after expiry of the above stated date.

With best regards.

(A K Jha)
Sr. Director, NABET

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 **excluding** drug formulations; synthetic rubbers; basic organic chemicals, other synthetic organic chemicals and chemical intermediates)	21	5 (f)	A
10	Distilleries	22	5 (g)	A
11	Sugar industry	25	5 (j)	B
12	Common hazardous waste treatment, storage and disposal facilities (TSDFs)	32	7 (d)	A
13	Bio-medical waste treatment facilities	32 A	7 (da)	B
14	Common municipal solid waste management facility (CMSWMF)	37	7 (i)	B
15	Townships and Area development projects	39	8 (b)	B

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

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

Sr. Director, NABET
Dated: August 02, 2019

Certificate No.
NABET/ EIA/1821/ RA 0135

Valid till
21.10.2021

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

List '1' – Accredited EIA Consultant Organizations (ACOs) - as on March 07, 2019#

S. No.	Consultant Organization	Scope of Accreditation			
		As per NABET Scheme			Project or Activity as per Schedule of MoEFCC Notification dated September 14, 2006 and subsequent Amendments
		Sector Number	Name of Sector	Category	
1	**Aadhi Boomi Mining and Enviro Tech Private Limited** (formerly known as Suriya Mining Services) **Address:**3/216, K.S.V.Nagar, Narasothipatti, Salem-636004 **Email:**suriyakumarsemban@gmail.com **Tel.:**09842729655, 09443290855 *Conditions apply*	1	Mining of minerals – opencast only	A	1 (a) (i)
		3	River Valley Projects	A	1 (c)
		7	Mineral beneficiation	A	2 (b)
		9	Cement Plants	A	3 (b)
		34	Highways	B	7 (f)
		38	Building and construction projects	B	8(a)
2	**Aakhivi Consultants** **Address:**57 C, Block E5, Shatabdi Vihar, Sector 52, Noida, UP - 201 308	1	Mining of minerals - opencast only	A**	1 (a) (i)
		4	Thermal power plants	A**	1 (d)

S. No.	Consultant Organization	Scope of Accreditation			
		As per NABET Scheme			
		Sector Number	Name of Sector	Category	Project or Activity as per Schedule of MoEFCC Notification dated September 14, 2006 and subsequent Amendments
			and dredging		
		34	Highways	A	7 (f)
		37	Common Municipal Solid Waste Management Facility (CMSWMF)	B	7 (i)
		38	Building and construction projects	B	8 (a)
		39	Townships and Area development projects	A	8 (b)
64	**Equinox Environments (India) Private Limited** **Address:** F-11, Namdev Nest, 1160- B, "E" Ward, Skyes Extension, Opp. Kamala College, Kolhapur-416001. e.mail:projects@equinoxenvl.com, eia@equinoxenvl.com, eeloltd@equinoxenvl.com, Tel.: 0231-2531231/ 2526337, 09822045083, 09881121522 *Conditions apply*	1	Mining of minerals including opencast / underground mining	A	1 (a) (i)
		4	Thermal power plants	B	1 (d)
		8	Metallurgical industries(ferrous only) - both primary & secondary	B	3 (a)
		12	Asbestos milling and asbestos based products	A	4 (c)
		13	Chlor-alkali industry	A	4 (d)
		17	Pesticides industry and pesticide specific intermediates (excluding formulations)	A	5 (b)
		18	Petro-chemical complexes (industries based on processing of petroleum fractions & natural gas and/or reforming to	A	5 (c)

S. No.	Consultant Organization	Scope of Accreditation			
		As per NABET Scheme			Project or Activity as per Schedule of MoEFCC Notification dated September 14, 2006 and subsequent Amendments
		Sector Number	Name of Sector	Category	
			aromatics)		
		20	Petrochemical based processing (processes other than cracking &reformation and not covered under the complexes)	A	5 (e)
		21	Synthetic organic chemicals industry (dyes & dye intermediates; bulk drugs and intermediates **excluding** drug formulations; synthetic rubbers; basic organic chemicals, other synthetic organic chemicals and chemical intermediates)	A	5 (f)
		22	Distilleries	A	5 (g)
		25	Sugar Industry	B	5 (j)
		32	Common hazardous waste treatment, storage and disposal facilities (TSDFs)	A	7 (d)
		37	Common municipal solid waste management facility (CMSWMF)	B	7 (i)
		38	Building and construction projects	B	8 (a)
		39	Townships and Area development projects	B	8 (b)
		40 (ii)	Electroplating and Metal Coating	-	-

S. No.	Consultant Organization	Scope of Accreditation			
		As per NABET Scheme			Project or Activity as per Schedule of MoEFCC Notification dated September 14, 2006 and subsequent Amendments
		Sector Number	Name of Sector	Category	
		40 (v)	Food Processing	-	-
65	**ERM India Private Limited** **Address:** Building No. 10,Tower A, Fourth Floor, DLF Cyber City, Gurgaon - 122002 **e. mail:** subir.gupta@erm.com **Tel.:** 0124-4170300 09810068161 *Conditions apply*	1	Mining of minerals including Open cast/ Underground mining	A	1 (a) (i)
		2	Off shore and on-shore oil and gas exploration, development & production	A	1 (b)
		3	River valley Projects	A	1 (c)
		4	Thermal power plants	A	1 (d)
		8	Secondary Steel only	B	3 (a)
		9	Cement plants	A	3 (b)
		13	Chlor-alkali industry	A	4 (d)
		16	Chemical Fertilizers	A	5 (a)
		17	Pesticides industry and pesticide specific intermediates (excluding formulations)	A	5 (b)
		18	Petro-chemical complexes (industries based on processing of petroleum fractions & natural gas and/or reforming to aromatics)	A	5 (c)
		20	Petrochemical based processing (processes other than cracking &reformation and not covered under the complexes)	A	5 (e)

DNV

MANAGEMENT SYSTEM CERTIFICATE

Certificate no.:
183398-2015-AQ-IND-RvA

Initial certification date:
28 August 2012

Valid:
28 August 2021 – 27 August 2024

This is to certify that the management system of

Equinox Environments (I) Pvt. Ltd.

Flat No. 11, Namdev Nest Apartment, 1160-B, 'E' Ward, Sykes Extension, Opp. Kamala College, Kolhapur - 416 001, Maharashtra, India

and the sites as mentioned in the appendix accompanying this certificate

has been found to conform to the Quality Management System standard:

ISO 9001:2015

This certificate is valid for the following scope:

Consultation and project management for:
- **Environmental impact assessment**
- **Prevention/control of pollution from effluents, emissions, noise & solid wastes**
- **Revival and conservation of lake/river**

[redacted]

For the issuing office:
DNV - Business Assurance
ROMA, No. 10, GST Road, Alandur,Chennai - 600 016, India

MGMT. SYS.
RvA C 024

Sivadasan Madiyath
Management Representative

Lack of fulfilment of conditions as set out in the Certification Agreement may render this Certificate invalid.
ACCREDITED UNIT: DNV Business Assurance B.V., Zwolseweg 1, 2994 LB, Barendrecht, Netherlands - TEL: +31(0)102922689, www.dnv.com/assurance

DNV

Certificate no.: 183398-2015-AQ-IND-RvA
Place and date: Chennai, 26 August 2021

Appendix to Certificate

Equinox Environments (I) Pvt. Ltd.

Locations included in the certification are as follows:

Site Name	Site Address	Site Scope
Equinox Environments (I) Pvt. Ltd.	Flat No. 11, Namdev Nest Apartment, 1160-B, 'E' Ward, Sykes Extension, Opp. Kamala College, Kolhapur - 416 001, Maharashtra, India	Consultation and project management for environmental impact assessment
Enviclean Associates	Flat No. 11, Namdev Nest Apartment, 1160-B, 'E' Ward, Sykes Extension, Opp. Kamala College, Kolhapur - 416 001, Maharashtra, India	Consultation and project management for prevention/control of pollution from effluents, emissions, noise & solid waste
Clinviron Consultants' Combine	(Environmental and Civil Engineers, Consultants and Analysts), Flat No. 11, Namdev Nest Apartment, 1160-B, 'E' Ward, Sykes Extension, Opp. Kamala College, Kolhapur - 416 001, Maharashtra, India	Consultation and project management for revival and conservation of lake/river

NABL 400

National Accreditation Board for Testing and Calibration Laboratories (NABL)

NABL

Directory of Accredited Testing Laboratories

As on : 31-Oct-2020

List of Laboratories Accredited in Accordance with the Standard ISO IEC 17025:2017

SL. NO.	NAME & CONTACT DETAILS OF THE LABORATORY	CERTIFICATE NO.	DISCIPLINE	DATE OF ISSUE	DATE OF EXPIRY
83.	The Marine Product Export Development Authority (MPEDA), Quality Control Laboratory, MPEDA House, Panampilly Avenue, Ernakulam, P.B.No. 4272, Kochi, Ernakulam-682036, Kerala, India Landline No. (s): 944-6031638, 0484-2315199 Fax No. (s): 484-2313361 E-mail: suma@mpeda.gov.in Contact Person: Mr. Mahesh G	TC-8117	Chemical	14.11.2019	30.10.2020
84.	ThyssenKrupp Electrical Steel India Pvt. Ltd. Testing Laboratory, At Post Gonde, Village Wadivarhe, Nashik-422403, Maharashtra, India E-mail: kapil.kapoor@thyssenkrupp.com Contact Person: Kapil Kapoor Mobile: 7030915117	TC-8228	Chemical Mechanical Electrical	02.11.2018	01.11.2020
85.	Emerald Testing India (P) Ltd., 401, Telugu Street, Coimbatore-641001, Tamil Nadu, India Ph. No. 0422-2344718, 2346279 Fax: 0422-2340376 E-mail: etiplhallmark@gmail.com Contact Person: R.V. Sugumar Mobile: 9952199909	TC-8044	Chemical	23.09.2020	01.11.2020
86.	National Food Laboratory, Ahinsa Khand-II, Indirapuram, Ghaziabad-201014, Uttar Pradesh, India Ph. No. 0120-2987172-2650950, E-mail: frslindia1971@gmail.com Contact Person: Ashok Kumar Patel Mobile: 8860405548	TC-5351	Chemical	24.02.2020	23.02.2022
87.	Green Envirosafe Engineersand Consultant Pvt. Ltd., Survey No.1405/06, Mayuri Residency, Shop.No16, 2nd Floor, Sanaswadi, Tal Shirur, Pune-412208, Maharashtra, India Mb:0-9767838931,gesec12@gmail.com ContactPerson:Mr.SanjayTanpure	TC-8061	Chemical	03.11.2018	02.11.2020

National Accreditation Board for Testing and Calibration Laboratories

(A Constituent Board of Quality Council of India)

NABL/T- 4280/C

05.11.2018

To,

Mr. Sanjay Tanpure

Green Envirosafe Engineers and Consultant Pvt. Ltd

Survey No.1405/06, Mayuri Residency, Shop. No 16, 2nd Floor,

Sanaswadi,Tal Shirur, Pune-412208, Pune-412208,Maharashtra, India

Mb: 0-9767838931, gesec12@gmail.com

Sub: Grant of NABL Accreditation

Dear **Mr Sanjay Tanpure**

NABL is pleased to grant accreditation to the laboratory in accordance with ISO/IEC 17025:2005 in the discipline of **Chemical testing** as per the scope and authorized signatories recommended by the assessment team.

The accreditation certificate no. TC-8061 issue date **03.11.2018** valid till **02.11.2020** is under preparation and will be sent to the laboratory in due course of time. **Kindly submit the soft copy of recommended scope in MS word format** to the undersigned thereafter complete certificate preparation will take place.

The accreditation is granted for two years subject to your satisfactory compliance to the terms and conditions for maintaining NABL accreditation (refer NABL 131). NABL-133 which is available on our website 'www.nabl-india.org' should be followed for using NABL Symbol.

There will be an on–site surveillance visit, within 12 months of grant of accreditation, to verify laboratory's continued compliance to NABL requirements.

Sincerely,

Nabo Gopal Roy
Joint Director
nabogopal@nabl.qcin.org

Note: CABs accredited as per the ISO/IEC17025:2005 may opt to convert to ISO/IEC17025:2017 either during on-site surveillance falling during the year 2019 or during re-assessment on or before 29th Nov 2020. Please refer "Revised Transition from ISO/IEC 17025:2005 to ISO/IEC 17025:2017" at NABL website under announcements.

REGD.NO.D.L.-33004/99

भारत का राजपत्र
The Gazette of India

EXTRAORDINARY
PART II—Section 3—Sub-section (ii)
PUBLISHED BY AUTHORITY

No.352] NEW DELHI, FRIDAY, FEBRUARY 10, 2017/MAGHA 21,1938

MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE NOTIFICATION

New Delhi, the 10th February, 2017

S.O. 388(E).—In exercise of the powers conferred by clause (b) of sub-section (1) of section 12 and section 13 of the Environment (Protection) Act, 1986 (29 of 1986), read with rule 10 of the Environment (Protection) Rules, 1986, the Central Government hereby makes the following further amendments in the notification of the Government of India in the erstwhile Ministry of Environment and Forests, number S.O. 1174(E), dated the 18th July, 2007, namely :-

In the Table appended to the said notification,-

(i) for serial numbers 12,16,18,21,22,47,75,76,77,88,89,90,91 and 92 the entries relating thereto, the following serial numbers and entries shall be substituted, namely:-

(1)	(2)	(3)	(4)
144	M/s Green Envirosafe Engineers and Consultant Pvt. Ltd. Gat No. 1405/06, Mayuri Residency, Office No. 16, 2nd Floor, Sanswadi, Pune- Nagpur Highway, Tal-Shirur, Pune- 412208, Maharashtra.	(i) Dr. Satish Damodar Kulkarni (ii) Dr. Ayodhya Kshirsagar (iii) Mr. Vinod Prataprao Hande	09.02.2017 to 08.02.2022

[F. No. Q. 15018/7/2003-CPW]

Dr. MANORANJAN HOTA, Advisor

Note : The principal notification was published in the Gazette of India, Extraordinary vide number S.O. 1174 (E), dated the 18th July, 2007 and subsequently amended vide notification numbers S.O. 1539 (E), dated the 13th September,2007, S.O.1811(E), dated the 24th October, 2007, S.O.55(E), dated 9th January, 2008, S.O.428(E), dated the 4 th March, 2008, S.O.No.865(E) dated the 11th April, 2008, S.O.No.1894(E) dated the 31st July, 2008, S.O.No.2728(E) dated the 25 th November, 2008, S.O.1356(E) dated the 27 th May, 2009, S.O.No.1802(E) dated the 22nd July, 2009 and S.O.No.2399(E), dated the 18th September, 2009 and S.O.No.3122(E), dated the 7th December, 2009 and S.O.No.3123(E), dated the 7th December, 2009, S.O.No.142(E), dated the 21st January, 2010, S.O.619(E), 19th March, 2010, S.O.No.1662(E) dated the 13rd July, 2010, S.O.No.2390(E), dated the 30th September, 2010 S.O.No.2904(E), dated the 8th December, 2010 and S.O.No.181(E), dated the 28th January, 2011, S.O.No.692(E) dated the 5th April, 2011, S.O No. 1754(E), dated the 28th July, 2011, S.O. No. 2609, dated 22th November, 2011, S.O No. 264(E), dated- 13th February, 2012, S.O No. 1150(E) dated-22th May, 2012, S.O No.1295(E), dated-6th June, 2012, S.O. No. 2039 (E), dated-5thSeptember,2012,S.ONo.2850(E),dated-7thDecember,2012,S.O.No.592(E),dated-8thMarch,2013,
S.O. No. 945(E), dated-8th April, 2013, S.O. No. 2287(E), dated-26th July, 2013, S.O No. 3489(E), dated-26th November,2013,S.ONo.21(E),dated-3rdJanuary,2014,S.ONo.561(E),dated-26thFebruary,2014,S.O.No.1190(E), dated-1st June, 2014, S.O. No. 2003(E), dated-9th August, 2014, S.O. No. 137(E), dated-12th January, 2015, S.O. NO.1783(E), dated-30th June, 2015, S.O. No. 2453(E), dated-7th September, 2015 and S.O. No. 1953(E), dated-2nd June,2016

CRESCENT QUALITY CERTIFICATION PVT. LTD.

Certificate of Registration

This is to certify that the Quality Management System of

GREEN ENVIROSAFE ENGINEERS & CONSULTANT PVT. LTD.

At Address

M/S. GREEN ENVIROSAFE ENGINEERS & CONSULTANT PVT. LTD.,
PLOT NO. A - 7/2/C-11, MIDC, CHAKAN INDL. AREA PH-IV,
NIGHOJE, TAL - KHED, DIST - PUNE.

Has been Assessed by Crescent Quality Certification Pvt. Ltd. and Deemed to comply with the requirement of

ISO 9001:2015

This Certificate is Valid for the activities specified below:

ENVIRONMENT CONSULTANCY SERVICES PROVIDER,
ENVIRONMENT TESTING WATER & WASTE WATER TESTING
AIR MONITORING & TESTING, FOOD TESTING & ANALYSIS

Registration No.: CQCPL/QMS/0221/6701
Certificate Issue Date: 22.02.2021
1st Surveillance: 02.2022

Managing Director

CRESCENT QUALITY CERTIFICATION PVT. LTD.
B-1005, Gundecha Symphony, Veera Desai Road, Andheri West, Mumbai - 400 053, India
Phone: +919820429510, Email: info@crescentqualitycerfification.com,
Website: www.crescentqualitycertification.com

For Current validity of this certificate, please visit our website

CRESCENT QUALITY CERTIFICATION PVT. LTD.

Certificate of Registration

This is to certify that the Enviornment Management System of

GREEN ENVIROSAFE ENGINEERS & CONSULTANT PVT. LT

At Addr

M/S. GREEN ENVIROSAFE ENGINEERS & CONSULTANT PVT. LT
PLOT NO. A - 7/2/C-11, MIDC, CHAKAN INDL. AREA PH
NIGHOJE, TAL - KHED, DIST - PUN

Has been Assessed by Crescent Quality Certification Pvt. Ltd. and Dee
to comply with the requirem

ISO 14001:201

This Certificate is Valid for the activities specified be

ENVIRONMENT CONSULTANCY SERVICES PROVIDE
ENVIRONMENT TESTING WATER & WASTE WATER TEST
AIR MONITORING & TESTING, FOOD TESTING & ANALYS

Registration No.: CQCPL/EMS/0221/1572
Certificate Issue Date: 22.02.2021
1st Surveillance: 02.2022

Certificate Expire Date: 21.02.2024
2nd Surveillance: 02.202

Managing Director

CRESCENT QUALITY CERTIFICATION PVT. L

B-1005, Gundecha Symphony, Veera Desai Road, Andheri West, Mumbai - 400 053, India
Phone: +919820429510, Email: info@crescentqualitycerfification.com,
Website: www.crescentqualitycertification.com
For Current validity of this certificate, please visit our website

Certificate of Registration

This is to certify that the

Occupational Health And Safety Management System of

GREEN ENVIROSAFE ENGINEERS & CONSULTANT PVT. LTD.

At Address

M/S. GREEN ENVIROSAFE ENGINEERS & CONSULTANT PVT. LTD.,
PLOT NO. A - 7/2/C-11, MIDC, CHAKAN INDL. AREA PH-IV,
NIGHOJE, TAL - KHED, DIST - PUNE.

Has been Assessed by Crescent Quality Certification Pvt. Ltd. and Deemed to comply with the requirement of

ISO 45001:2018

This Certificate is Valid for the activities specified below:

ENVIRONMENT CONSULTANCY SERVICES PROVIDER,
ENVIRONMENT TESTING WATER & WASTE WATER TESTING
AIR MONITORING & TESTING, FOOD TESTING & ANALYSIS

Registration No.: CQCPL/OHSMS/0221/5518
Certificate Issue Date: 22.02.2021
1st Surveillance: 02.2021

Certificate Expire Date: 21.02.2024
2nd Surveillance: 02.2023

Managing Director

CRESCENT QUALITY CERTIFICATION PVT. LTD.
B-1005, Gundecha Symphony, Veera Desai Road, Andheri West, Mumbai - 400 053, India
Phone: +919820429510, Email: info@crescentqualitycerfification.com,
Website: www.crescentqualitycertification.com

For Current validity of this certificate, please visit our website

SHIVNERI SUGARS LIMITED

Regd. Office : 2 nd Floor, Shiv Pavilion Apartment, Near Ram Mandir,
Sangli -miraj Road, Sangli 416416, Maharashtra
Contact : 0233- 2373885, **E-mail** : sushant.shivneri@gmail.com
CIN : U15400PN2016PLC167162

DECLARATION

This is to state that the 'Executive Summary & Draft EIA Report' submitted herewith has been prepared in respect of our Proposed establishment of 10,000 TCD Sugar Factory (scrapping of 800 TCD unit), 60 MW Co-Gen Plant (50 MW from Co-gen plant & 10 MW from distillery) and 200 KLPD Molasses based Distillery by **Shivneri Sugars Ltd. (SSL)** is located At: Ganesh tekadi, Jaipur, Tal.: Koregaon, Dist.: Satara, Maharashtra.

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.

Shri. Ravindra J. Deshmukh.
(Authorised Signatory)
Shivneri Sugar Ltd, (SSL)
At: Ganesh tekadi, Jaipur, Tal.: Koregaon,
Dist.: Satara, Maharashtra.

Project Proponent

Dr. Sangram P. Ghugare
(CMD)
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

LiFE Lifestyle for Environment

Tel. No. 9423632901
SRO Off: 9422742901
E-mail:
ropune@mpcb.gov.in
Visit us at:
www.mpcb.gov.in

MAHARASHTRA POLLUTION CONTROL BOARD
REGIONAL OFFICE, PUNE

महाराष्ट्र

"आपली सेवा आमचे कर्तव्य"

Jog Center, Building, 3rd Flor, Wakadewadi, Mumbai-Pune Highway, Pune-411003, Maharashtra

No. MPCB/ROP/PD/2504030018 Date:03/04/2025

To,
M/S Shivneri Sugars Ltd.,
Gut no.166, 164, 173, 174, 175, 176, 177, 178, 180, 181,
A/p. Ganeshtekadi, Jaipur,
Tal. Koregaon, Dist. Satara

Sub: Proposed Directions under section 33 A of Water (Prevention & Control of Pollution) Act, 1974 and under section 31A of Air (Prevention & Control of Pollution) Act, 1981.

Ref: 1) Consent granted by the Board vide letter dtd. 02/03/2025.
2) Compliant received from the Grampanchyat Pimpri, Tal. Koregaon, Dist. Satara vide letter Dtd. 23/12/2024
3) Visit of the Board officials to your industry on 27/12/2024.
4) Proposal submitted by the Sub Regional Officer, Satara vide no. MPCB-LEGAL_ACTIONS_311224014

WHEREAS, the Maharashtra Pollution Control Board has granted Consent to Operate u/s 26 of the Water (Prevention and Control of Pollution) Act, 1974 and u/s 21 of the Air (Prevention and Control of Pollution) Act, 1981 & Authorization under Rule 6 of the Hazardous and Other Wastes (Management and Trans-boundary Movement) Rules, 2016, ,subject to certain terms and conditions.

AND WHEREAS, it is obligatory on your part to provide adequate pollution control devices and comply with the consent conditions so as to achieve the standards prescribed by the Board in its consent.

AND WHEREAS, the Board office has received complaint from the Grampanchyat Pimpri, Tal. Koregaon, Dist. Satara regarding air and water pollution nuisance caused due to your activities vide above reference (2).

AND WHEREAS, In accordance to the complaint, the Official/s of the Maharashtra Pollution Control Board at Satara visited to your site and accordingly, Sub Regional Officer, MPC Board Satara submitted legal action proposal with following non-compliances,

1. The untreated / partial treated effluent is found stored within factory premises and discharged along with condensate water outside the premises.
2. The units of the Effluent Treatment Plant are not operating properly.
3. The effluent is found discharged illegally outside the factory premises by various ways, causing blackish colour to the well water.

AND WHEREAS, it has been observed that you have failed to comply with the conditions stipulated in the Consent, thereby causing water pollution into the environment.

2...

NOW THEREFORE, in view of the above non-compliance, you are hereby directed to:

1. You shall stop the discharge of any kind of effluent outside the factory premises.
2. You shall treat the stored effluent into the existing ETP as per the consent conditions.

You are hereby directed to submit reply / respond along with the compliance report within 03 days from issuance of these directions failing which, further necessary legal action will be initiated against your unit under the provisions of the Water (prevention & Control of Pollution) Act, 1974 and Air (Prevention & Control of Pollution) Act, 1981, which may be note.

For and on behalf of
Maharashtra Pollution Control Board

03/04/25

(J. S. Salunkhe)
Regional Officer,
M. P. C. Board Pune

Copy Submitted for information to
1. Joint Director (APC), M.P.C. Board, Mumbai.
2. Law Officer, M.P.C. Board, Mumbai.

Copy to- The Sub-Regional Officer, M.P.C. Board, Satara :- Keep necessary follow up and submit the compliance report within time.

Shivneri /ADM/ 49 /2025-26 Date: 04 /04/2025

To,
Regional Officer,
Maharashtra Pollution Control Board,
3 rd floor, Jog Center, near Vodafone Office,
Old Pune-Mumbai Road
Shivajinagar ,Pune-411003

Sub: Reply to Proposed direction notice Issued on 03/04/2025.

Ref: MPCB /ROP/PD/2504030018

Dear Sir,

We operating our industry located in pollution prevention area under water (prevention & control of pollution) Act, 1974 & Air (prevention & control of pollution) Act 1981 & Hazardous & other waste (M & TM) rules 2016 the board has granted us consent to operate under section 26 of the water (prevention & control pollution)Act 1974, under section 21 of the Air (prevention & control of pollution) Act 1981& authorization under 6 of the hazardous & other waste (MH & TM) rule,2016 & amendments, thereof .

With reference to Proposed direction issued by Regional Office, MPCB, Pune on dated-03/04/2025 to M/s Shivneri Sugars Ltd. A/P –Ganeshtekadi, Jaipur, Tal-Koregaon, Dist-Satara.

Received
08/04/2025
Sub-Regional Office
M. P. C. Board, Satara
NEW ADMINISTRATIVE BUILDING
2nd Floor, Satara S.T. Stand
Sadar Bazar, Satara, 415 002
Ph - (02162) 233627

Reply to the points of Board Officer Site visit on 03/04/2025

1) The untreated / partial treated effluent is found stored within factory Premises and discharged along with condensate water outside the Premises.

- Industry has provided Effluent treatment plant 2400 m3/day & condensate polishing unit 4800 m3/day. With comprising primary treatment, secondary treatment, and tertiary treatment with sand filter, activated carbon filter .Industry has complied with all equipment to achieve parameter. In season operations found some operation mistake industry gives proper attention and will resolve this issue. Industry has lifted waste water to ETP & treated the same. Industry do not discharge any untreated water outside the factory premises as well as industry recycle, reuse of treated water.

2) The units of the Effluent Treatment plant are not operating properly.

- In season ETP plant is being operated and running as per the norms to achieve desired standard parameters to control water pollution and industry also focus to improve plant performance. OCEMS system is successfully installed by FORBS MARSHELL Pvt. Ltd. Both stack & water monitoring installation. The connectivity with the CPCB completed the details are as follows.
  Shivneri Sugars Ltd, Jaipur
  URL-http//cpdms.forbesmarshell.in.8080/enviroconnect

3) The Effluent is found discharged illegally outside the factory premises by Various ways, causing blackish colour to the well water.

- As per Environmental conscious industry installed ETP/CPU plant, industry operating & stabilized it. Industry do not discharge any untreated waste water outside the factory premises. Industry doing agreement to nearby farmers to treated water used to agriculture purpose.

  Nearby water steam have farmer ginger washing plant. This ginger washing water mix up well & might be well water colour blacked

A) Reference point No.2 -Grampanchyat pimpri citizen gives letter to sub divisional office koregoan & MPCB Satara. Industry does not discharge any water to stream. for your reference here attached with this copy.

Hope, this reply towards the complaints is in line with your requirements.

Thanks & Regards

Authorized Signatory
M/s Shivneri Sugars Ltd.Jaipur

SHIVNERI SUGARS LTD. JAIPUR