

ATHANI SUGARS LIMITED

Shahuwadi Unit (Lessee of Udaysingrao Gaikwad SSK)

Sonawade - Bambawade, 416 213, Taluka Shahuwadi, District Kolhapur.

- **Registered Office** : VishnuannaNagar, Post Navalihai 591 234, Taluka Athani,
District : Belagavi, Tel: (08339) 280100/1/2, Fax : (08339) 280103
E-mail : info@athanisugars.com, Website : www.athanisugars.com
- **Branch Office** : 'Shiv Pavilion', Second Floor, Near Ram Mandir, Sangli Miraj Road,
Sangli - 416 416, Tel: (0233 - 2373885)



CIN : U40109KA1995PLC017806

Ref: ASL/Unit II /Sugar/ENV /540 /2023-24.

Date: 22 /02/ 2024

To,
The Integrated Regional Office
MoEFCC; Regional Office (WCZ),
Ground Floor, East Wing,
New Secretariat Building,
Civil Lines, Nagpur – 440001

- Sub.** : Submission of Six Monthly Environment Compliance report for period July 2023 to December 2023 w.r.t "Expansion of Sugar from 2500 TCD to 8000 TCD and Proposed 35 MW Cogeneration Plant at Village- Sonawade - Bambawade, Tehsil- Shahuwadi, District Kolhapur, Maharashtra.
- Ref.** : 1. Environmental Clearance granted by State Level Environment Impact Assessment Authority; Government of Maharashtra, SEIAA-EC-0000002357 dated July 8, 2021.

Respected Sir,

This has reference to Environmental Clearance (EC) granted to our Sugar unit of 2500 TCD to 8000 TCD – M/s. Athani Sugars Limited, located at Village- Sonawade - Bambawade, Tehsil- Shahuwadi, District Kolhapur, Maharashtra.

As per General Conditions & Special Conditions in EC letter, we are submitting a six-monthly compliance report for a period of July 2023 to December 2023.

We hope the details furnished by us are in accordance with your requirements.

Thanking you,

Yours faithfully,


M/s. Athani Sugars Limited.
Athani Sugars Ltd.
Shahuwadi Unit, Kolhapur

A

SIX MONTHLY COMPLIANCE REPORT

(PERIOD JULY 2023- DECEMBER 2023)

FOR

**Expansion of Sugar from 2500 TCD to 8000 TCD and
Proposed 35 MW Cogeneration Plant**

By

**M/s. Athani Sugars Limited,
(Lessee of Udaysingrao Gaikwad SSK Ltd.)**

**At Village-Sonawade-Bambawade
Tehsil- Shahuwadi, Dist- Kolhapur, 416213
State - Maharashtra**

Brief Summary of the Project

Name of Project : **M/s Athani Sugars Limited (ASL)**
 Clearance Letter No. & date : SEIAA-EC-0000002357 dated July 8, 2021
 Location: District & State/UT : District - Kolhapur, Maharashtra
 Address for Correspondence : At Village-Sonawade-Bambawade Tehsil- Shahuwadi,
 Dist- Kolhapur, State - Maharashtra.

M/s Athani Sugars Limited, (Lessee-Udaysingrao Gaikwad Sahakari Sakhar Karkhana Limited), which is located at Sonawade-Bambawade, Tal.: Shahuwadi, Dist.: Kolhapur (Maharashtra), The ASL Shahuwadi Unit is a Public Limited Company incorporated vide Certificate of Incorporation No.08/17806. Athani Sugars Ltd has entered into lease agreement with Udaysingrao Gaikwad Sahakari Sakhar Karkhana Limited, Sonawade- Bambawade, Taluka Shahuwadi, Dist: Kolhapur for a period of 22 years. The Environmental Clearance (EC) from STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY; Government of Maharashtra was granted for Expansion of Sugar from 2500 TCD to 8000 TCD and Proposed 35 MW Cogeneration Plant in 2021. EC copy is enclosed at **Enclosure I**.

Compliance of Specific and General Conditions mentioned in Environmental Clearance (EC) Letter SEIAA-EC-0000002357 dated July 8, 2021 is presented as follows-

No.	Environmental Clearance Conditions	Compliance towards the Conditions
A	SPECIFIC CONDITIONS	
1	Condition No 1 PP to implement the Guidelines for restoration of manufacturing industries after lockdown period issued by Ministry of Home Affairs, National Disaster Management Authority on 09.05.2020.	Industry has strictly followed guidelines for restoration of manufacturing industries after lockdown period issued by Ministry of Home affairs, National Disaster Management Authority on 09.05.2020.
2	Condition No 2 PP to prepare and implement construction management plan. PP to provide shelter, food, drinking water, sanitation facilities to the construction workers as per guidelines issued by the Competent Authority.	Industry has provided shelters, food, drinking water & Sanitation facilities to the construction workers. Annexure – XII – Photo. 2, 3, 4 & 5.
3	Condition No 3 PP to ensure to protect the natural water streams existing on site. PP to provide adequate size storm water drain as per contours on the site to avoid any unforeseen flooding emergency.	There is no any natural water stream existing on Site. Industry has provided drainage system to protect natural water streams and segregate at one place and connected to the ETP Inlet Drainage.
4	Condition No 4 PP to obtain approval from the Agriculture Department to use ETP sludge as manure.	Industry obtained sludge analysis report from Mahatma Fule Krishi Vidyapeeth, Pune w. r. to use of ETP Sludge as manure. Annexure – I

5	Condition No 5 PP to provide Continuous Emission Monitoring System (CEMS) for monitoring of air emissions and connect the same to the MPCB and CPCB servers.	Industry has installed CEMS system for monitoring of air emissions and connected the same to MPCB & CPCB Servers. Annexure-II.
6	Condition No 6 PP to provide sewage treatment plant for the treatment of domestic waste water.	The domestic wastewater quantity is likely to be less so Industry has provided soak pits for the treatment of domestic wastewater.
7	Condition No 7 PP to implement cane development plan for enhancement of per hectare yield of sugar cane. PP to promote drip irrigation for sugar cane cultivation in their jurisdiction.	Industry has carried out cane development plan with the help of Mahtma Fule Krishi Vidyapith, Kolhapur and Industry has always ready to promote drip irrigation for sugar cane cultivation in jurisdiction. Annexure – III.
8.	Condition No 8 PP to prepare and implement CER plan in consultation with the District Authority for development of social and environmental infrastructure in the Z.P Schools and Primary Health Centre in the study area of the proposed project as per OM issued by MoEF&CC dated 01.05.2018.	Industry is in the process to implement CER Plan in consultation with the District Authority for the development of social and environmental infrastructure in the Z.P Schools and Primary Health Centre. A correspondence with District Authority is attached in Annexure – IV.
9.	Condition No 9 PP to undertake Meyawaki plantation of native and indigenous trees in the proposed 33 % green belt as per the Forest Department, Govt. of Maharashtra circular no SaVaVi-2019/C.R.3/F-11, dated 25th June, 2019. The said plantation to be completed in the first year of operation of Environmental Clearance under expert guidance of Miyawaki experts / arborist.	The green belt development is a continuous process and we are doing it with so as to achieve the target of more than 33%. Nurseries and experts in the field have been consulted to identify the exact species to be planted. Photographs of Green belt plant enclosed at Annexure – XII – Photo. 1
10	Condition No 10 PP to ensure to provide Zero Liquid Discharge Effluent Treatment Plant.	Industry has upgraded Effluent Treatment Plant [ETP] system as per adequacy report of VSI, Pune. Also we have provide 1600 m ³ /day condensate polishing unit to achieve zero liquid discharge. Annexure – V.
11.	Condition No 11 PP to strictly observe the Solid Waste Management Rules, 2016 as amended time to time.	Noted.
12.	Condition No 12 PP to strictly observe the Hazardous and Other Wastes (Management & Trans boundary Movement) Rules, 2016 as amended time to time.	Condition is not Applicable because is agro based industry. No any Hazardous waste generated from sugar plant.

13	<p>Condition No 13 PP to identify all sources of fugitive air pollution on site and provide pollution control measures to mitigate pollution and meet the standard parameters stipulated in the Environment (Protection) Rules, 1986 amended time to time & Air (Prevention and Control of Pollution) Act, 1981 amended time to time.</p>	<p>Industry has provided wet scrubber for the boiler and it is attached to boiler stack. OCMS is installed and connected with the MPCB & CPCB Servers. Annexure – VI & Annexure – XII – Photo No. 6 ,7 & 8.</p>
14	<p>Condition No 14 PP to ensure storage of chemicals as per the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 amended time to time to ensure no release of any chemical to the atmosphere and leakage to the soil.</p>	<p>Industry were taking care of no release of any chemical to the atmosphere and leakage to the soil.</p>
15	<p>Condition No 15 PP to ensure transport, storage, handling and use of the flammable/toxic chemicals as per conditions stipulated in license/approval of the Petroleum & Explosive Safety Organization (PESO).</p>	<p>Condition is not Applicable because is agro based industry. No any flammable/toxic chemicals used in the sugar plant.</p>
16	<p>Condition No 16 PP to obtain approval and License from the Directorate of Industrial Health & Safety (DIHS) for proposed project and implement all condition stipulated therein. PP to carry out Safety Audit as stipulated in the Maharashtra Factories Rules, 1963 and ensure compliance of recommendation of the Audit.</p>	<p>Industry has obtained licence from Directorate of Industrial Health & Safety (DIHS) and followed all conditions stipulated therein. Also carried out Safety Audit from the authorised safety auditor in the month of January 2022 and submitted compliance too. Annexure – X.</p>
17	<p>Condition No 17 PP to provide solar energy for illumination of Administrative Building, Street Lights and parking Area.</p>	<p>Noted.</p>
18	<p>Condition No 18 PP to ensure use of briquette /bio coal/ pellets/ or any such suitable product derived from scientific processing of appropriate stream of dry waste/agricultural waste , not less than 50 % of the total fuel requirement to the boiler.</p>	<p>Noted.</p>
19	<p>Condition No 19 PP to provide roof top Rain Water Harvesting facility.</p>	<p>Noted.</p>

No.	Environmental Clearance Conditions	Compliance towards the Conditions																																			
B	GENERAL CONDITIONS																																				
20	<p>Condition No 1</p> <p>The project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Marathi language of the local concerned within seven days of issue of this letter, informing that the project has been accorded Environmental Clearance and copies of Environmental Clearance letter are available with the Maharashtra Pollution Control Board, website of the company and may also be seen at Website at http://parivesh.nic.in</p>	<p>Condition is complied. As per EIA notification within 7 days from the date of issues of the clearance letter, at least in the two local newspapers. An advertisement of accord of EC to Sugar unit has been published in two local newspapers one is local language (Dainik Lokmat) and English newspaper (Times of India) is dated 15.07.2021 & 16.07.2021 respectively.</p> <p>Advertisement copy is enclosed at Annexure-VII.</p>																																			
20 A	<p>Condition No 2</p> <p>The project Proponent shall upload the status of compliance (soft copies) of the conditions stipulated Environmental Clearance letter including monitoring data of air, water, soil, noise etc. on their website and shall update the same periodically. The half yearly compliance report shall simultaneously be submitted to the Maharashtra Pollution Controls Board, SEIAA and the Regional Office off MoEFCC at Nagpur, on 1st June & 1st December of each calendar year.</p>	<p>Six Monthly Reports will regularly be submitted to RO Office, MPCB & SEIAA, and also will upload the latest Six monthly compliance status reports on the website of the company. Last Six monthly reports are submitted on dt. 24.08.2023. Copy of Acknowledgment attached in Annexure-XIII</p>																																			
20B	<p>Condition No 3</p> <p>Separate fund shall be allocated for the implementation of Environmental Management Plan along with item wise break up and specific time line for its completion. The cost shall be included as part of the project cost. The funds earmarked for the environmental protection measures shall not be diverted for other purpose and year-wise expenditure should be reported to the MPCB and the SEIAA.</p>	<table border="1"> <thead> <tr> <th data-bbox="927 1178 1003 1329">Sr. No.</th> <th data-bbox="1003 1178 1211 1329">Environmental Aspect</th> <th data-bbox="1211 1178 1362 1329">Capital Expenditure Rs in Crores</th> <th data-bbox="1362 1178 1533 1329">Recurring Expenditure Rs in Crores (per annum)</th> </tr> </thead> <tbody> <tr> <td data-bbox="927 1329 1003 1415">1</td> <td data-bbox="1003 1329 1211 1415">Wet Scrubber for Boiler</td> <td data-bbox="1211 1329 1362 1415">3.00</td> <td data-bbox="1362 1329 1533 1415">0.35</td> </tr> <tr> <td data-bbox="927 1415 1003 1537">2</td> <td data-bbox="1003 1415 1211 1537">Water & Wastewater management</td> <td data-bbox="1211 1415 1362 1537">4.00</td> <td data-bbox="1362 1415 1533 1537">0.25</td> </tr> <tr> <td data-bbox="927 1537 1003 1593">4</td> <td data-bbox="1003 1537 1211 1593">Greening Drive</td> <td data-bbox="1211 1537 1362 1593">0.50</td> <td data-bbox="1362 1537 1533 1593">0.05</td> </tr> <tr> <td data-bbox="927 1593 1003 1650">5</td> <td data-bbox="1003 1593 1211 1650">Monitoring</td> <td data-bbox="1211 1593 1362 1650">0.30</td> <td data-bbox="1362 1593 1533 1650">0.05</td> </tr> <tr> <td data-bbox="927 1650 1003 1736">6</td> <td data-bbox="1003 1650 1211 1736">Environmental Cell</td> <td data-bbox="1211 1650 1362 1736">0.30</td> <td data-bbox="1362 1650 1533 1736">0.10</td> </tr> <tr> <td data-bbox="927 1736 1003 1858">7</td> <td data-bbox="1003 1736 1211 1858">Other aspects like Safety, Security etc.</td> <td data-bbox="1211 1736 1362 1858">0.50</td> <td data-bbox="1362 1736 1533 1858">0.05</td> </tr> <tr> <td colspan="2" data-bbox="927 1858 1211 1915" style="text-align: right;">Total →</td> <td data-bbox="1211 1858 1362 1915">08.60</td> <td data-bbox="1362 1858 1533 1915">0.85</td> </tr> </tbody> </table>				Sr. No.	Environmental Aspect	Capital Expenditure Rs in Crores	Recurring Expenditure Rs in Crores (per annum)	1	Wet Scrubber for Boiler	3.00	0.35	2	Water & Wastewater management	4.00	0.25	4	Greening Drive	0.50	0.05	5	Monitoring	0.30	0.05	6	Environmental Cell	0.30	0.10	7	Other aspects like Safety, Security etc.	0.50	0.05	Total →		08.60	0.85
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21	<p>Condition No 4</p> <p>A separate Environmental Management Cell with qualified personnel shall be set up for implementation of the stipulated environmental safeguards.</p>	<p>Industry has setup Environment Management Cell with qualified personnel for the implementation of the stipulated environmental safeguards. Annexure-VIII.</p>
22	<p>Condition No 5</p> <p>In the event of failure of any pollution control equipment, the manufacturing activity shall be immediately stopped safely till the effective functioning of pollution control equipment's is regained.</p>	<p>Noted.</p>
23	<p>Condition No 6</p> <p>A stack of adequate height based on DG set capacity shall be provided for control and dispersion of pollutant from DG set. (If applicable).</p>	<p>Two D.G. Sets of capacity 1 nos. of 750 KVA are provided under existing set up. Diesel @220 Lit/hr is required. DG sets are provided with Silencer and adequate stack height. DG sets are operated only during power failure situations. Adequate height of stack installed into the D.G. Sets for control & dispersion of pollutants from D. G. Set.</p>
24	<p>Condition No 7</p> <p>PP to strictly follow conditions stipulated in the Consent to Establish/Operate issued by the Maharashtra Pollution Control Board.</p>	<p>Industry is strictly following all the stipulations made by the Maharashtra Pollution Control Board (MPCB) and State Government. Therein, renewal of consent, submission of Environmental Statement (E.S.), Returns, etc. are being done regularly.</p>
25	<p>Condition No 8</p> <p>PP to provide separate drains for storm water and effluent, and ensure that, the storm water drains are dry all the time and in no case the effluent shall mix with the storm water drain.</p>	<p>Industry provided drains for storm water and effluent. Also ensure that the storm water drains are dry all the time and in no case the effluent shall mix with storm water drain.</p>
26	<p>Condition No 9</p> <p>Periodic Monitoring of ground water in the study area as marked in the Environmental Impact Assessment Report shall be undertaken and results analysed to ascertain any change in the quality of water. Results shall be regularly submitted to the Maharashtra Pollution Control Board.</p>	<p>Noted.</p>

27	<p>Condition No 10</p> <p>The overall noise levels in and around the factory premises shall be kept within the prescribed standard under the Environment (Protection) Act, 1986 and Rule, 1989 as amended from time to time by providing adequate noise control measures and protective equipment's like ear muff and ear plug etc.</p>	<p>Industry has regularly monitored noise levels in and around the factory premises to be kept within the prescribed standard under the Environment (Protection) Act, 1986 and Rule, 1989 as amended from time to time. Also provided protective equipment's like ear plug etc. to employee. Annexure – XI</p>
28	<p>Condition No 11</p> <p>Adequate safety measures shall be ensured to limit the risk zone within the factory premises. Leak detection system shall be installed for early detection and mitigation purpose.</p>	<p>Adequate safety measures shall be taken to limit the risk zone within the factory premises. Company provided safety shoes, helmets, hand gloves, goggles, safety harness (for height work.) for minimize the risk to the employee. Annexure – XII – Photo No. 9 & 10.</p>
29	<p>Condition No 12</p> <p>PP to scrupulously follow the requirements of Maharashtra Factories Act, 1948 & Rules 1963 as amended from time to time.</p>	<p>Industry will follow the requirements of Maharashtra Factories Act, 1948 & Rules 1963 as amended from time to time.</p>
30	<p>Condition No 13</p> <p>The Environmental Statement for each financial year ending on 31st March in Form-V as is mandated to be submitted by the Project Proponent to the concerned Pollution Control Board as prescribed under the Environment (Protection) Rule, 1989 as amended from time to time, it shall also be put on the website of the company along with the status of the compliance of the conditions stipulated in the Environmental Clearance Letter.</p>	<p>The environmental statement for each financial year ending 31st March in Form-V will be submitted to State Pollution Control Board as prescribed under the Environment (Protection) Rules 1986, and amended subsequently. Environmental Statement submitted on MPCB web portal is enclosed at Annexure – IX. The company will also put the status of compliance of environmental clearance conditions on its website and forward it to the Regional Offices of MoEFCC.</p>



STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

Environment department,
Room No. 217, 2nd floor,
Mantralaya, Annexe,
Mumbai- 400 032.
Date: July 8, 2021

To,
Athani Sugars Limited
at At Village-Sonawade-Bambawade Tehsil- Shahuwadi, Dist- Kolhapur, State - Maharashtra

Subject: Environment Clearance for Expansion of Sugar from 2500 TCD to 8000 TCD and Proposed 35 MW Cogeneration Plant at Village- Sonawade - Bambawade, Tehsil- Shahuwadi, District Kolhapur, Maharashtra by Athani Sugars Limited

Sir,

This has reference to your communication on the above mentioned subject. The proposal was considered as per the EIA Notification - 2006, by the State Level Expert Appraisal Committee-I, Maharashtra in its 189th -Day-1th meeting and recommend the project for prior environmental clearance to SEIAA. Information submitted by you has been considered by State Level Environment Impact Assessment Authority in its 220th meetings.

2. It is noted that the proposal is considered by SEAC-I under screening category 5(j) and 1 (d) as per EIA Notification 2006.

Brief Information of the project submitted by you is as below :-

1.Name of Project	Expansion of Sugar from 2500 TCD to 8000 TCD and Proposed 35 MW Cogeneration Plant at Village- Sonawade - Bambawade, Tehsil- Shahuwadi, District Kolhapur, Maharashtra by Athani Sugars Limited
2.Type of institution	Private
3.Name of Project Proponent	Athani Sugars Limited
4.Name of Consultant	ULTRATECH
5.Type of project	Industrial
6.New project/expansion in existing project/modernization/diversification in existing project	Addition in Sugar Factory 8000TCD (by 5500 TCD) And New Cogeneration Plant (35 MW)
7.If expansion/diversification, whether environmental clearance has been obtained for existing project	Not applicable
8.Location of the project	At Village-Sonawade-Bambawade Tehsil- Shahuwadi, Dist- Kolhapur, State - Maharashtra
9.Taluka	Shahuwadi
10.Village	Sonawade-Bambawade
Correspondence Name:	Mr Yogesh Patil
Room Number:	at Vishnuannanagar, Tehsil Athani,
Floor:	Post Navalihal-591 234,
Building Name:	Not applicable
Road/Street Name:	Not applicable
Locality:	Karnataka
City:	Dist. Belgaum,
11.Whether in Corporation / Municipal / other area	Grampanchayat Sonwade-Bamwade

SEIAA Meeting No: 220 Meeting Date: May 14, 2021 (SEIAA-STATEMENT-000001007)
SEIAA-MINUTES-0000003377
SEIAA-EC-0000002357

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Manisha Patankar Mhaiskar (Member Secretary SEIAA)

12.IOD/IOA/Concession/Plan Approval Number	District collector Kolhapur
	IOD/IOA/Concession/Plan Approval Number: Department of Industrial Policy and Promotion, Ministry of Commerce and Industries, Govt. of India
	Approved Built-up Area: 35000
13.Note on the initiated work (If applicable)	Not Applicable
14.LOI / NOC / IOD from MHADA/ Other approvals (If applicable)	Not Applicable
15.Total Plot Area (sq. m.)	289570
16.Deductions	0
17.Net Plot area	289570
18 (a).Proposed Built-up Area (FSI & Non-FSI)	FSI area (sq. m.): Not applicable
	Non FSI area (sq. m.): Not applicable
	Total BUA area (sq. m.): 35000
18 (b).Approved Built up area as per DCR	Approved FSI area (sq. m.):
	Approved Non FSI area (sq. m.):
	Date of Approval: 01-01-1900
19.Total ground coverage (m2)	Not applicable
20.Ground-coverage Percentage (%) (Note: Percentage of plot not open to sky)	Not applicable
21.Estimated cost of the project	2630000000

Government of Maharashtra

M. Patankar

22. Production Details

Serial Number	Product	Existing (MT/M)	Proposed (MT/M)	Total (MT/M)
1	Sugarcane crushing	2,500 TCD	5500 TCD	8000 TCD
2	Co-gen Power	0 MW	35 MW	35 MW

23. Total Water Requirement

Dry season:	Source of water	Kadvi - Warna River
	Fresh water (CMD):	400
	Recycled water - Flushing (CMD):	0
	Recycled water - Gardening (CMD):	1200
	Swimming pool make up (Cum):	Not applicable
	Total Water Requirement (CMD) :	2020
	Fire fighting - Underground water tank(CMD):	Not applicable
	Fire fighting - Overhead water tank(CMD):	Not applicable
	Excess treated water	Not applicable
Wet season:	Source of water	Not applicable
	Fresh water (CMD):	Not applicable
	Recycled water - Flushing (CMD):	Not applicable
	Recycled water - Gardening (CMD):	Not applicable
	Swimming pool make up (Cum):	Not applicable
	Total Water Requirement (CMD) :	Not applicable
	Fire fighting - Underground water tank(CMD):	Not applicable
	Fire fighting - Overhead water tank(CMD):	Not applicable
	Excess treated water	Not applicable
Details of Swimming pool (If any)	Not applicable	

24.Details of Total water consumed

Particulars	Consumption (CMD)			Loss (CMD)			Effluent (CMD)		
	Existing	Proposed	Total	Existing	Proposed	Total	Existing	Proposed	Total
Domestic	100	0	100	10	0	0	90	0	90
Industrial Process	250	550	800	40	120	160	0	640	640
Cooling tower & thermopack	300	1620	1920	100	1388	1488	200	232	432
Gardening	310	0	310	0	0	0	0	0	0

25.Rain Water Harvesting (RWH)	Level of the Ground water table:	10 to 15mt
	Size and no of RWH tank(s) and Quantity:	Not applicable
	Location of the RWH tank(s):	Not applicable
	Quantity of recharge pits:	Not applicable
	Size of recharge pits :	Not applicable
	Budgetary allocation (Capital cost) :	Not applicable
	Budgetary allocation (O & M cost) :	Not applicable
	Details of UGT tanks if any :	Not applicable

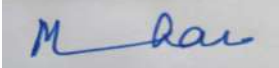
26.Storm water drainage	Natural water drainage pattern:	Not Applicable
	Quantity of storm water:	Not Applicable
	Size of SWD:	Not Applicable

27.Sewage and Waste water	Sewage generation in KLD:	90
	STP technology:	Modular STP
	Capacity of STP (CMD):	1 Modular STP of 100 KLD
	Location & area of the STP:	Near Admin office
	Budgetary allocation (Capital cost):	10lacs
	Budgetary allocation (O & M cost):	1 lac

28.Solid waste Management

Waste generation in the Pre Construction and Construction phase:	Waste generation:	Waste generation is very less as mostly fabrication work
	Disposal of the construction waste debris:	Waste generated during construction shall be re-used or sent to authorized recycler
Waste generation in the operation Phase:	Dry waste:	Office and Colony waste 73 Kg /day, Ash 36 TPD
	Wet waste:	130 Kg/day
	Hazardous waste:	Lube oil 15 Kg/day
	Biomedical waste (If applicable):	Not Applicable
	STP Sludge (Dry sludge):	ETP Sludge 88 Kg/day, STP Sludge approx 12 Kg/day
	Others if any:	Not Applicable
Mode of Disposal of waste:	Dry waste:	Office waste, empty drums/ bags etc. to authorized recycler, Ash for compost or to brick manufacturers
	Wet waste:	pit composting (existing)
	Hazardous waste:	Lube Oil sent to authorized recycler
	Biomedical waste (If applicable):	Not Applicable
	STP Sludge (Dry sludge):	Composting
	Others if any:	Not applicable
Area requirement:	Location(s):	Compost pit Near Canteen (existing)
	Area for the storage of waste & other material:	Not Applicable
	Area for machinery:	Not Applicable
Budgetary allocation (Capital cost and O&M cost):	Capital cost:	Not applicable
	O & M cost:	Not applicable

Government of Maharashtra



29. Effluent Characteristics

Serial Number	Parameters	Unit	Inlet Effluent Characteristics	Outlet Effluent Characteristics	Effluent discharge standards (MPCB)
1	pH	NA	4.5 - 6	6.5 - 8.5	5.5 - 9.0
2	SS	mg/L	500 - 1500	100	100
3	BOD	mg/L	1000 - 2500	100	100
4	COD	mg/L	2000 - 4000	250	250
5	TDS	mg/L	5000 - 12000	2100	2100
Amount of effluent generation (CMD):		872			
Capacity of the ETP:		900			
Amount of treated effluent recycled :		872			
Amount of water send to the CETP:		0			
Membership of CETP (if require):		Not required			
Note on ETP technology to be used		Tertiary treatment			
Disposal of the ETP sludge		Composting			

Government of
Maharashtra



30. Hazardous Waste Details

Serial Number	Description	Cat	UOM	Existing	Proposed	Total	Method of Disposal
1	Lube oil	5.1	Kg/day	5	10	15	Send to authorized recycler

31. Stacks emission Details

Serial Number	Section & units	Fuel Used with Quantity	Stack No.	Height from ground level (m)	Internal diameter (m)	Temp. of Exhaust Gases
1	Boiler	Bagasse, 2394 TPD	1	80	3	190

32. Details of Fuel to be used

Serial Number	Type of Fuel	Existing	Proposed	Total
1	Bagasse	0	2400	2400 PD

33. Source of Fuel in-house, bagasse is obtained from the cane crushed for sugar preparation

34. Mode of Transportation of fuel to site Not applicable

35. Energy

Power requirement:	Source of power supply :	MSEDCL and own
	During Construction Phase: (Demand Load)	as per requirement
	DG set as Power back-up during construction phase	as per requirement
	During Operation phase (Connected load):	12,200KW
	During Operation phase (Demand load):	NA
	Transformer:	NA
	DG set as Power back-up during operation phase:	2 nos 1250 KVA
	Fuel used:	hsd
	Details of high tension line passing through the plot if any:	Not applicable

Energy saving by non-conventional method:

Not applicable

36. Detail calculations & % of saving:

Serial Number	Energy Conservation Measures	Saving %
1	Not applicable	Not applicable

37.Details of pollution control Systems		
Source	Existing pollution control system	Proposed to be installed
Boiler Stack	Boiler Stack	ESP
Budgetary allocation (Capital cost and O&M cost):	Capital cost:	Not applicable
	O & M cost:	Not applicable

38.Environmental Management plan Budgetary Allocation

a) Construction phase (with Break-up):

Serial Number	Attributes	Parameter	Total Cost per annum (Rs. In Lacs)
1	Environmental monitoring	PM10, PM2.5, SO2, NOx, CO, Equivalent noise level, Analysis of water for physical, chemical, biological parameters.	0.6
2	Air Environment	Water For Dust Suppression Air & Noise monitoring	1.50
3	Water Environment	Tanker water for construction Water monitoring	2.5


b) Operation Phase (with Break-up):

Serial Number	Component	Description	Capital cost Rs. In Lacs	Operational and Maintenance cost (Rs. in Lacs/yr)
1	Emission control Engineering	ESP & Stack	250	15
2	Water & Wastewater management	STP and ETP	100	25
3	Solid Waste	composting	25	5.0
4	Greening Belt	landscaping	50	10
5	Monitoring	Environment monitoring	0	5.0
6	Other aspects like Rain Water Harvesting, Safety, Security etc.	NA	26	12.0

39.Storage of chemicals (inflammable/explosive/hazardous/toxic substances)

Description	Status	Location	Storage Capacity in MT	Maximum Quantity of Storage at any point of time in MT	Consumption / Month in MT	Source of Supply	Means of transportation
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

40.Any Other Information

<p>SEIAA Meeting No: 220 Meeting Date: May 14, 2021 (SEIAA-STATEMENT-000001007) SEIAA-MINUTES-0000003377 SEIAA-EC-0000002357</p>	<div style="text-align: center;">  Manisha Patankar Mhaiskar (Member Secretary SEIAA) </div> <p style="text-align: center;">Page 8 of 12</p>
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Government of Maharashtra

Manisha Patankar Mhaiskar

	CRZ/ RRZ clearance obtain, if any:	Not applicable
	Distance from Protected Areas / Critically Polluted areas / Eco-sensitive areas/ inter-State boundaries	Not applicable
	Category as per schedule of EIA Notification sheet	5(j) and 1 (d)
	Court cases pending if any	Not applicable
	Other Relevant Informations	Not applicable
	Have you previously submitted Application online on MOEF Website.	Yes
	Date of online submission	01-01-1900

3. The proposal has been considered by SEIAA in its 220th meeting & decided to accord environmental clearance to the said project under the provisions of Environment Impact Assessment Notification, 2006 subject to implementation of the following terms and conditions:

Specific Conditions:

I	PP to implement the Guidelines for restoration of manufacturing industries after lockdown period issued by Ministry of Home Affairs, National Disaster Management Authority on 09.05.2020.
II	PP to prepare and implement construction management plan. PP to provide shelter, food, drinking water, sanitation facilities to the construction workers as per guidelines issued by the Competent Authority.
III	PP to ensure to protect the natural water streams existing on site. PP to provide adequate size storm water drain as per contours on the site to avoid any unforeseen flooding emergency.
IV	PP to obtain approval from the Agriculture Department to use ETP sludge as manure.
V	PP to provide Continuous Emission Monitoring System (CEMS) for monitoring of air emissions and connect the same to the MPCB and CPCB servers.
VI	PP to provide sewage treatment plant for the treatment of domestic waste water.
VII	PP to implement cane development plan for enhancement of per hectare yield of sugar cane. PP to promote drip irrigation for sugar cane cultivation in their jurisdiction.
VIII	PP to prepare and implement CER plan in consultation with the District Authority for development of social and environmental infrastructure in the Z.P Schools and Primary Health Centre in the study area of the proposed project as per OM issued by MoEF&CC dated 01.05.2018.
IX	PP to undertake Miyawaki plantation of native and indigenous trees in the proposed 33 % green belt as per the Forest Department, Govt. of Maharashtra circular no SaVaVi-2019/C.R.3/F-11, dated 25th June, 2019. The said plantation to be completed in the first year of operation of Environmental Clearance under expert guidance of Miyawaki experts / arborist.
X	PP to ensure to provide Zero Liquid Discharge Effluent Treatment Plant.
XI	PP to strictly observe the Solid Waste Management Rules, 2016 as amended time to time.
XII	PP to strictly observe the Hazardous and Other Wastes (Management & Trans boundary Movement) Rules, 2016 as amended time to time.
XIII	PP to identify all sources of fugitive air pollution on site and provide pollution control measures to mitigate pollution and meet the standard parameters stipulated in the Environment (Protection) Rules, 1986 amended time to time & Air (Prevention and Control of Pollution) Act, 1981 amended time to time.
XIV	PP to ensure storage of chemicals as per the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 amended time to time to ensure no release of any chemical to the atmosphere and leakage to the soil.
XV	PP to ensure transport, storage, handling and use of the flammable/toxic chemicals as per conditions stipulated in license/approval of the Petroleum & Explosive Safety Organization (PESO).

XVI	PP to obtain approval and License from the Directorate of Industrial Health & Safety (DIHS) for proposed project and implement all condition stipulated therein. PP to carry out Safety Audit as stipulated in the Maharashtra Factories Rules, 1963 and ensure compliance of recommendation of the Audit.
XVII	PP to provide solar energy for illumination of Administrative Building, Street Lights and parking Area.
XVIII	PP to ensure use of briquette /bio coal/ pellets/ or any such suitable product derived from scientific processing of appropriate stream of dry waste/agricultural waste , not less than 50 % of the total fuel requirement to the boiler.
XIX	11.PP to provide roof top Rain Water Harvesting facility.

General Conditions:

I	I. The project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Marathi language of the local concerned within seven days of issue of this letter, informing that the project has been accorded Environmental Clearance and copies of Environmental Clearance letter are available with the Maharashtra Pollution Control Board, website of the company and may also be seen at Website at http://parivesh.nic.in
II	II. The project Proponent shall upload the status of compliance (soft copies) of the conditions stipulated Environmental Clearance letter including monitoring data of air, water, soil, noise etc. on their website and shall update the same periodically. The half yearly compliance report shall simultaneously be submitted to the Maharashtra Pollution Controls Board, SEIAA and the Regional Office off MoEF&CC at Nagpur, on 1st June & 1st December of each calendar year.
III	III. Separate fund shall be allocated for the implementation of Environmental Management Plan along with item wise break up and specific time line for its completion. The cost shall be included as part of the project cost. The funds earmarked for the environmental protection measures shall not be diverted for other purpose and year-wise expenditure should be reported to the MPCB and the SEIAA.
IV	IV. A separate Environmental Management Cell with qualified personnel shall be set up for implementation of the stipulated environmental safeguards.
V	V. In the event of failure of any pollution control equipment, the manufacturing activity shall be immediately stopped safely till the effective functioning of pollution control equipment's is regained.
VI	A stack of adequate height based on DG set capacity shall be provided for control and dispersion of pollutant from DG set. (If applicable).
VII	VI. PP to strictly follow conditions stipulated in the Consent to Establish/Operate issued by the Maharashtra Pollution Control Board.
VIII	VII. PP to provide separate drains for storm water and effluent, and ensure that, the storm water drains are dry all the time and in no case the effluent shall mix with the storm water drain.
IX	VIII. Periodic Monitoring of ground water in the study area as marked in the Environmental Impact Assessment Report shall be undertaken and results analysed to ascertain any change in the quality of water. Results shall be regularly submitted to the Maharashtra Pollution Control Board.
X	IX. The overall noise levels in and around the factory premises shall be kept within the prescribed standard under the Environment (Protection) Act, 1986 and Rule, 1989 as amended from time to time by providing adequate noise control measures and protective equipment's like ear muff and ear plug etc.
XI	X. Adequate safety measures shall be ensured to limit the risk zone within the factory premises. Leak detection system shall be installed for early detection and mitigation purpose.
XII	XI. PP to scrupulously follow the requirements of Maharashtra Factories Act, 1948 & Rules 1963 as amended from time to time.
XIII	XII. The Environmental Statement for each financial year ending on 31st March in Form-V as is mandated to be submitted by the Project Proponent to the concerned Pollution Control Board as prescribed under the Environment (Protection) Rule, 1989 as amended from time to time, it shall also be put on the website of the company along with the status of the compliance of the conditions stipulated in the Environmental Clearance letter.

4. The environmental clearance is being issued without prejudice to the action initiated under EP Act or any court case pending in the court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision under EP Act or of the Hon'ble court will be binding on the project proponent. Hence this clearance does not give immunity to the project proponent in the case filed against him, if any or action initiated under EP Act.

5. In case of submission of false document and non-compliance of stipulated conditions, Authority/ Environment Department will revoke or suspend the Environment clearance without any intimation and initiate appropriate legal action under Environmental Protection Act, 1986.

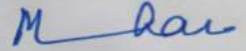
6. The Environment department reserves the right to add any stringent condition or to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the department or for that matter, for any other administrative reason.

7. Validity of Environment Clearance: The environmental clearance accorded shall be valid as per EIA Notification, 2006, and amendments by MoEF&CC Notification dated 29th April, 2015.

8. In case of any deviation or alteration in the project proposed from those submitted to this department for clearance, a fresh reference should be made to the department to assess the adequacy of the condition(s) imposed and to incorporate additional environmental protection measures required, if any.

9. The above stipulations would be enforced among others under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and rules there under, Hazardous Wastes (Management and Handling) Rules, 1989 and its amendments, the public Liability Insurance Act, 1991 and its amendments.

10. Any appeal against this Environment clearance shall lie with the National Green Tribunal (Western Zone Bench, Pune), New Administrative Building, 1st Floor, D-, Wing, Opposite Council Hall, Pune, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.



Manisha Patankar Mhaiskar (Member Secretary SEIAA)

Copy to:

1. SECRETARY MOEF & CC
2. IA- DIVISION MOEF & CC
3. MEMBER SECRETARY MAHARASHTRA POLLUTION CONTROL BOARD MUMBAI
4. REGIONAL OFFICE MOEF & CC NAGPUR
5. MUNICIPAL COMMISSIONER KOLHAPUR
6. REGIONAL OFFICE MPCB KOLHAPUR
7. MAHARASHTRA STATE ELECTRICITY DISTRIBUTION CO. LTD
8. COLLECTOR OFFICE KOLHAPUR
9. COLLECTOR OFFICE SANGLI

Government of
Maharashtra



Annexure - I = Sludge Testing Report



MAHATMA PHULE KRISHI VIDYAPEETH
DIVISION OF SOIL SCIENCE AND AGRICULTURAL CHEMISTRY
COLLEGE OF AGRICULTURE, PUNE-5

No. SSAC/SLA/AN/R/ 1428 /2020

Date: 09/03/2020

To,

Athani Sugars Limited.
Bambawade, Tal. Shahuwadi,
Dist. Kolhapur

Subject: Analytical report of sludge sample.....

Sir,

The analytical report of your plant sludge is as given below.

Parameter	Value
pH (1:10)	7.47
EC (dS m ⁻¹)	0.62
Moisture (%)	28.99
Org. Carbon (%)	5.94
C:N ratio	12.91:1
Total Nitrogen (%)	0.46
Total Phosphorus (%)	0.33
Total Potassium (%)	0.11
Ca (%)	0.22
Mg (%)	0.15
Fe (ppm)	2336
Mn (ppm)	3026
Zn (ppm)	2120
Cu (ppm)	1568

Note: 1) This report will not valid for any legal matter.
2) Above sample is suitable for crop production.

Yours faithfully,

Professor

Division of Soil Science and Agril. Chemistry,
College of Agriculture, Pune

DETAILS OF ONLINE MONITORING SYSTEM [STACK]

We are adopted online monitoring system for stack monitoring. It is connected to the CPCB & MPCB server. Measuring main parameter i.e. Total Particulate Matter.

Details of Online Monitoring System :

Make : Aaxis Nano Technologies Pvt Ltd.

Model : 21220923

Sensor Make : Shreetech

Approval like USEPA/MCERTS/TUV etc. : - TUV

Regular Calibration frequency suggested by manufacturer : Yearly

Details of Technology Provider (TP) :

Name of TP : Aaxis Nano Technologies Pvt. Ltd.

Name of responsible person : Mr. Binny Sharma

Address of TP : Plot No.: B. 46
Noida – 201301 [INDIA]
+917422897771

For your reference please find below link via we connected to CPCB server.

URL : <http://onlinecems.ecmpcb.in>

Id : AthaniS

ONLINE EMISSION MONITORING SYSTEM



INSTALLED SESONR



PANEL CUM DISPLAY BOARD

Annexure - III = Cane Development Report



MAHATMA PHULE KRISHI VIDYAPEETH
Rajarshi Chhatrapati Sahu Maharaj
College of Agriculture, Kolhapur

No. ACK/REC/ASU/4723 / of 2020,

Dated 06/02/2020

To,

The Executive Director & CFO,
ATHANNI SUGAR LIMITED,
At. Vishnuannanagar, Post: Navalihal
Tal. Athani, Dist. Belgavi.

Subject: Cane Development Plan to increase sugarcane
productivity in Shahuwadi Unit.

Reference: Your letter no. ASL/ADM/2019-20/1278 Dated
31/01/2020.

Sir,

In connection with the subject captioned above the requisite
information as desired is prepared by our Extension Agronomist,
Regional Extension Centre, is enclosed herewith.

Thanking you,

Encl: As above



Yours faithfully,
Associate Dean

Rajarshi Chhatrapati Shahu Maharaj
College of Agriculture, Kolhapur

**Sugarcane Development Programme By
RCSM College of Agriculture, Kolhapur
(Mahatma Phule Krishi Vidyapeeth, Rahuri)**

1.1 Introduction

Sugar Industry in India is the second largest rural based agro industry next to textiles. With steep escalation in crude oil prices; sugar industry got impetus during the last few years as large quantity of sugarcane in Brazil has been diverted for manufacture of Ethanol widening of gap between sugar consumption and production.

The sugar industry is eco friendly and offers renewable source of energy through use of its by product bagasse to produce power and molasses to manufacture Fuel Ethanol. Sugar industry provides livelihood to millions of farmers and providing a renewable source of energy through a clean development mechanism. Therefore, there is vast potential for its growth anticipated in the future years.

With the above in view, M/S Athani Sugars limited (ASL), leased the existing sugar plant Udaysingrao Gaikwad SSK Limited, Maharashtra. Considering the operational efficiency and the condition of the existing plant and machinery, ASL decided to add a high pressure Cogeneration plant for meeting the steam & power requirements for a 5000 TCD sugar plant.

1.2 Cane Development Programme:

The Cane Development Department of ASL is headed by Deputy General Manager, Deputy Manager, and Cane Officers etc. ASL is adopting two pronged strategy for developing cane in the area for meeting its future requirements in collaboration with the research recommendations of the Mahatma Phule Krishi Vidyapeeth, at the regional level research and extension officers/ staff on the one hand by bringing more area under sugarcane as also propagating high yield and high sucrose varieties.

The Company proposes to utilize the existing demarcated area of Bambavade, Sonawade, Wadicharan, Sarud, Shivare, Malewadi, Malkapur, Nile, Awali, Dewale etc. Manjare, Karanjfen, Nandgaon Talukas by undertaking cane development activities to meet the Additional requirement of sugarcane with approaching the Agriculture University.

Climate: Sugarcane is a tropical crop and thrives best in the regions with 750 to 1200 mm annual rainfall with hot humid climate during growth period and cool and dry climate during maturity. It is grown in subtropical climate also as in North



India under warm humid condition. The weather parameters of temperature, rainfall, humidity and light intensity play an important role in germination, tillering, growth and ripening of cane. Sometimes wind and hail storms affect sugarcane adversely. Sugarcane is usually grown under irrigation. Optimum temperature required to grow the sugarcane crop is that 20 to 26 °C.

1.3 Productivity:

At present the total area under Sugarcane available for crushing is 6153 ha. The average productivity is 65.00 t per ha. Which is less as compare to Central Zone of Maharashtra. There is scope to increase the present productivity with the improvement in cultivation practices and transfer of new technology among the farmers.

The productivity of sugarcane could be increased by:

- A) Supplying good seed material (from 3 tier well managed nursery).

Table No. 1: Fertilizer Management to Sugarcane seed nursery

Sr. No.	Time of application	FYM	N	P ₂ O ₅	K ₂ O
		(CL)	(kg/ha)		
1	At second ploughing	50	-	-	-
2	At planting	-	44	115	57
3	1 months after planting	-	44	-	-
4	2 months after planting	-	100	-	-
5	3 months after planting	-	54	-	-
6	4 months after planting	-	54	-	-
7	At earthing up	-	104	115	58
8	1 months after earthing up	-	48	-	-
9	2 month after earthing up	-	48	-	-
10	1 month before harvesting	-	104	-	-
	Total	100	600	230	115

- B) Introduction of sugar rich high yielding sugarcane varieties like **Co86032, CoC-671, CoM-265, Co 92005, Co 10001, CO 9057** etc.

- C) **Planting of sugarcane:** Planting with two eye bud setts by opening ridges and furrows is most common practice

Spacing: 1) For heavy (Medium to Deep Black) soil – 120 to 150 cm. 2) For light to medium soils – 100 to 120 cm.

Seed rate: The 25,000 two eye bud setts/ha in heavy soils. 30 thousand two eye bud setts/ha on light to medium soils. However the germination takes about 60 days from planting of setts. Therefore even and quick germination can be achieved by



transplanting of Nursery grown 1 to 1.5 months old seedlings. These also maintain the proper tillers around 40 to 50 thousands per acre, as per the planting distance.

Table 2: The seedlings requirement per acre

Sr. No.	Planting Distance (Ridges)	Distance between plants	Number of seedlings
1	120 cm.	60 cm.	5550
2	150 cm.	60 cm.	4450
3	180 cm.	60 cm.	3700
4	240 cm.	60 cm.	2780
5	Paired planting (120 x 240 cm.)	60 cm.	5000

- D) Adopting appropriate ratoon management practices which includes
- i) Stubble shaving
 - ii) Application of systemic fungicide 0.1 % Bavistin on stubbles.
 - iii) Trash management by applying Decomposing culture and Urea and SSP on the trash for early decomposing of trash.
 - iv) Application of Recommended dose of fertilizer (250:115:115 kg NPK per ha.) to Ratoon crop through Crowbar technique.

E) Balanced fertilizer application based on soil, plant analysis.

Fertiliser application on the basis of soil test:

Equations for fertiliser application to Sugarcane crop :

1) $FN = 4.76 T - 1.34 SN$

2) $FP_2O_5 = 1.24 T - 1.55 SP$

3) $FK_2O = 2.73 T - 0.21 SK$

Where, F = Quantity of nutrient

T = Targeted yield q ha⁻¹

SN = KMnO₄ 'N' kg ha⁻¹ (Soil Available 'N')

SP = Olsen's P kg ha⁻¹ (Soil Available 'P')

SK = NH₂OAC 'K' kg ha⁻¹ (Soil Available 'K')

If the soil test values are not available, apply the fertilizers as per recommendations for the crop as described in the Table No. 3



Table No. 3: Recommended Manuring Schedule for Sugarcane

Time of application	Adsali crop				Preseasonal crop				Suru crop			
	FYM	N	P ₂ O ₅	K ₂ O	FYM	N	P ₂ O ₅	K ₂ O	FYM	N	P ₂ O ₅	K ₂ O
	(CL)	(kg/ha)			(CL)	(kg/ha)			(CL)	(kg/ha)		
At second ploughing or at first harrowing	25	-	-	-	25	-	-	-	25	-	-	-
At planting	25	40	85	85	25	34	85	85	25	25	60	115
At 6 to 8 weeks after planting	-	160	-	-	-	136	-	-	-	100	-	-
At 12 to 16 weeks after planting	-	40	-	-	-	34	-	-	-	25	-	-
At earthing up	-	160	85	85	-	136	85	85	-	100	55	-
Total	50	400	170	170	50	340	170	170	50	250	115	115

F) Micro Irrigation and Fertigation to Sugarcane:

The conventional system of irrigation employing through different methods like flooding, furrow, bedding and border irrigation revolved around the concept of replenishing the moisture to field capacity only after depletion by 50-60 % of the Available Soil Moisture. The system did not permit the restricting of irrigation only to meet the requirement of the root zone, leading to excessive percolation and other losses. It, therefore, resulted in water logging, soil salinity and even drought like conditions in tail ends of the system. The overall irrigation efficiency has not been more than 40 % with the conventional methods or irrigation. In Maharashtra sugarcane with 2 to 3 % of sown area consumes 60 percent of water. Micro-irrigation system is an irrigation system with high frequency application of desired quantity of water in and around the root zone of plant system. It consists a network of pipes along with a suitable emitting device called emitter. The emitter is dripper, micro tube and micro-jet. Micro-irrigation system including fertigation is beneficial for saving of the fertilizer dose upto 25 %. The dose scheduled for Drip irrigation to sugarcane is given in Table 4.



Table No. 4. Soluble Fertilizer Management to Sugarcane

Sr. No.	Time of application (Weeks)	N	P ₂ O ₅	K ₂ O
		(kg/ha)		
1	1 to 4 weeks	30	9	9
2	5 to 9 weeks	70	32	14
3	10 to 12 weeks	100	51	32
4	21 to 26 weeks	--	-	37
	Total	200	93	92

Seed treatment with the bio-fertilizers like Acetobacter/Azotobacter and PSB will save the chemical dose of fertilizers.

The bio-products (press mud/compost) and micronutrient mixture for soil application.

Staggered planting throughout the period for cane availability during crushing season.

Location specific varietal trials of varieties in the pipeline

1.4 Plant Protection Measures

Appropriate integrated measures to control weeds, pests and diseases would be taken up depending upon the infestation

A) Seed treatment

In sugarcane the seed treatment is required to be done to enhance germination, growth, vigour, protection from pests and diseases and biological N fixation.

- 1) Soaking in water:** By soaking the setts in water the fresh weight of seed material is increased by 2 to 4% which results in better germination. Soak the seed material in water for 12 to 24 hrs. Soaking is useful if seed material is staled.
- 2) Lime water treatment:** This seed treatment is given if the seed material is of more age and showing dry eye buds. In this treatment the setts are soaked in limewater for 24 hrs. Limewater is prepared by dissolving 500 g of lime in 180 lit of water. This treatment improves the germination of dry eye buds.
- 3) Mercurial compound seed treatment:** To protect the setts and crop from fungal diseases and to improve germination, the setts are dipped in 0.25% areton (6%) or 0.5% agallol (3%) or 0.2% emison or 0.1% Bavistin for 2 to 3 minutes.
- 4) Hot water/air seed treatment:** This seed treatment is specially given to setts to be planted in seed nursery. The setts are treated with hot water of 50° C for two hours or 52° C for 1/2 hrs or hot air 52° C for 6 hrs or moist air 54° C for four hours or aerated steam 50° C for 2 hrs. This treatment



helps to control grassy shoot, red rot and ratoon stunting diseases of sugarcane and to some extent for controlling smut and other viral diseases. This also helps to convert sucrose to glucose, result in rapid development of all buds and lowers the level of growth regulating substance weakening of top dominance. Maintenance of constant temperature for a prescribed period should be observed under expert supervision.

5) Seed treatment with *Azotobacter* culture:

- i. Sugarcane setts are treated with *Azotobacter*, *Acetobacter*, *Azospirillum*, culture (To improve nitrogen fixation by non-symbiotic) and PSB (To improve Phosphorus fixation) bacteria. For this 1.25 kg each of bacterial culture (5kg) dissolved in 100 lit of water and setts are dipped in culture for 20 to 25 minutes. This seed treatment is give at last. The *Azotobacter* / *Acetobacter* culture may also be applied on the nodes (root band) by preparing paste of the culture or by uniform soil application. **OR**
- ii. Sugarcane setts are treated with *Acetobacter diazotrophica* 10 kg culture (To improve nitrogen fixation by non-symbiotic inside the root) and PSB 1.25 kg (To improve Phosphorus fixation) of bacterial culture dissolved in 100 lit of water and setts are dipped in culture for 20 to 25 minutes.

B) Diseases and their management

Sugarcane crop in Maharashtra suffers 30 number of diseases. Generally two types of disease attack sugarcane, those that are not carried by seed pieces and those that are mainly transmitted by seed pieces.

1. **The diseases carried by setts:-** Include red rot (Rangane), smut (Kajali), grassy shoot (Gavatalwad), Stem rot (Khodkuj), Leaf scald (Pangasha futane), Mosaic and ratoon stunting (vad kuntavya) that are most destructive. These diseases not only reduce yield of cane but also adversely affect the quality and recovery of juice.
2. **The diseases not carried by setts include: -** A) Air Born Diseases:- Pokka Boeing, Rust, Leaf Spots (Eye spot & leaf spot). B) Soil Born Diseases:- Pineapple (Ananas), Root rot and Wilt etc.

Preventive measures:

- Use of healthy disease free seed of pure variety.
- Treat the setts with Bavistin, mercurial compound or hot water/ hot moist air.
- Collection and destruction of affected plants
- Use of disease resistant varieties
- No ratoon should be maintained in infected fields.



- 1) **Red rot:** Caused by a fungus *Colletotrichum falcatum*. It appears in July and continues to develop till harvesting of the crop. Typical symptoms are seen inside the stalk. If stalks are split open, the pith is found reddish. The diseased tissues give alcoholic smell.

Control measures

- i. Follow the preventive measures as above
- ii. Do not ratoon the diseased crop, also do not plant sugarcane in the disease affected fields for three years.
- iii. Rogue out and burn the diseased cane.

- 2) **Whip smut:** Caused by *Ustilago scitaminea*. The disease is prevalent throughout the year, but is severe from April to July. Its incidence increases in ratoon crop. The disease appeared in the form of a long, black whip like structure at the apex of the stalk. The diseased clumps are usually taller and have more tillers than normal canes. The stalk becomes thin, primarily transmitted through diseased cane setts and secondary infection through wind borne spores blown from the smutted whip at the top.

Control measures

- i. Follow the preventive measures as above
- ii. No ratoon should be kept where the disease incidence is high.

- 3) **Wilt:** Caused by *Cephalosporium sacchari*. Yellowing and withering of crown leaves late in the season followed by rapid drying of the cane. The tissue of the stalk becomes brown or reddish brown but unlike red rot there exists no white band across. In advanced stage, the cane becomes hollow and the rind shrivels.

Control measures: Follow the preventive measures as stated earlier.

- 4) **Grassy shoot (Albino):** Caused by grassy shoot virus. The affected plants give rise to numerous thin tillers, with pale yellow and narrow leaves resembling grasses. Internodes of these tillers are much reduced particularly in ratoon.

Control measures: Follow the preventive measures as mentioned earlier.

- 5) **Ratoon stunting:** Caused by ratoon stunting virus. The affected crop remain stunted, with short and thin canes. The leaves are comparatively pale and roots are poorly developed. On splitting of cane, pink discolouration of the growing point. The disease is spread through seed setts and ratoon crop.

Control measures: Follow the preventive measures described earlier.

For all the above five diseases, set treatment by dipping in 0.25% solution of Agallol or Aretan for five minutes.

For diseases like smut, grassy shoot and ratoon stunting. Hot water treatment as 500 C for 2 hours or Hot air treatment of setts at 540 C for 8 hours. Knives should be sterilized with 5% solution of Lysol, PHA at 5%



6) **Red strip:** Caused by *Xanthomonas rubrilineans*. It appears from May onwards and found throughout the rainy season. First small watery green streaks arise and later on they become bright red and thin brown and cause rotting of tops in severe cases.

Control measures:

- i. Rogue out the affected tops of the canes and burnt them.
- ii. Select well drained fields for cane planting
- iii. Spray copper oxychloride 0.5% (2.5 kg in 500 lit of water) or Streptomycin.

C) Pest management in Sugarcane:

Cane crop is subject to attack by a large number of insect pests.

1) **Early shoot borer:** This pest attacks the crop in early stages of growth, when it is 2 or 3 months old. The *adsali* crop suffers from germination to November and *Suru* crop suffers from germination till May. Larvae feed on the central tissue portion of leaf whorl is thus cut off causing dead heart.

2) **Root borer:** Larvae bore at the base of the shoot and make tunnel downwards. Larvae damage by leading on the central tissue of the shoot. Due to which characteristic dead heart is produced. The dead heart cannot be pulled out easily and there is foul smell from dead heart. This pest is most active in dry conditions particularly in Month of May-June.

Control measures: 1) Eliminate alternate hosts. 2) Early light earthing up. 3) Cut affected shoots at the ground level. 4) Timely planting of cane of resistant variety. 5) Irrigate the field in the month of May-June. This will develop microclimate of high humidity, which is detrimental to the pest. 6) Spray 1000 ml of 20 % Chloropyriphos in 500 lit of water Nuvacron 40 EC 1.5 lit in 500 lit of water. Repeat spray after 15 days.

3) **Top shoot borer:** The moth of this pest is pure white in colour, larva is dirty white. The larvae feed on top shoot tissues and damage 3 to 4 internodes, due to which dead hearts are produced and causes sprouting of top buds.

Control measures: 1) Eliminate alternate host like sorghum, maize, grasses 2) Collection and destruction of egg masses 3) Use light trap. 4) Spray 1000 ml of 20 % Chloropyriphos in 500 lit of water Nuvacron 40 EC 1.5 lit in 500 lit of water. Repeat spray after 15 days

4) **Internode borer:** The larvae of this pest enter inside the internode by boring the stem. Due to this pest cane becomes weak and breaks with slight jerk of wind.



Control measures: 1) Spray 1000 ml of 20 % Chloropyriphos in 500 lit of water Nuvacron 40 EC 1.5 lit in 500 lit of water. Repeat spray after 15 days
2) Use light trap

- 5) **Pyrilla:** Both nymph and adult suck the sap from underside of the leaf and imports yellow colour to the leaves. *Pyrilla* reduces cane yield and sugar recovery heavily. *Pyrilla* also secrets honey dew which attracts black fungus. This fungus covers the entire leaf that directly affects the photosynthesis. This pest appears in April-May and activated upto August-Sept.

Control measures: 1) Collect egg masses and destroy it 2) Use pyrilla egg parasite *Tetrastichus pyrillae* 3) Dust 25 kg of 10% BHC/ha on occurrence immediately and repeat application after 2 to 3 weeks or 4) Rogar 30 EC 1000 ml or Malathion 50% 1000 ml or Monocrotophos 36 EC 825 ml + 1000 lit of water.

- 6) **Mealy bugs and Scale insects: Control measures** - 1) Burn the trash and other remanent of sugarcane after harvest 2) Spray 2625 ml of 30 % Dimethioate or 800 ml of 85 EC phosphomidon when pest is ocured.

- 7) **White grubs:** 1) Grow rotational crop of paddy by puddling. 2) Also use rotational crop like sunflower and use rotavator for removing stubbles of previous sugarcane. 3) Apply 5 ml of chloropyriphos per litre of water at planting of Adsali cane and at earthing up in suru crop. 4) Use biocontrol agent like *Metarizhum* @ 5 gm per lit. of water for drenching

- 8) **Wooly aphids:** The pest appears on the lower side of the leaves near midrib. Both nymphs and adults suck the cell sap from the leaves. It also excretes the honeydew like sticky substance, on which the black mould develops. It results in the reduction of yield and sugar recovery also.

Control measures - 1) Adopt Paired row system of planting 2) Pest infected seed setts should not be used for planting. 3) Set treatment with 200 ml chloropyriphos in 100 liters of water. 4) In early stages of infestation the affected leaves should be burnt out. 5) The economic thresh hold level exceeds 15% spray the crop with Verticillium 40 g/ Chlorpysiphos 15 ml/ Methyl Dimeton 12 ml/ Dimethioate 10 ml in 10 liters of water.

1.5 Cost Reduction

The cost of sugarcane production is high mainly because of more man days cost for cultural operations, harvesting, fertilizer cost, seed cost. To minimize the fertilizer cost, application of organic sources like Press mud, Bio compost, Bio-fertilizers, and growing leguminous pulse crops as inter crop would be taken up on commercial scale. By introducing new wider spacing viz. 5' & paired row (4 ½' x 2 ½') accommodation of inter crops and trash mulching for ratoons would be possible besides higher sucrose and better yield. This will pave way for mechanical intercultural operations and in future for introducing mechanical harvesters.



The main operations to be implemented include:

- Wider row spacing (5 feet and paired row)
- Leguminous crop (green manure crops)
- Organic manure (Pressmud, Bio compost, FYM, Vermi compost etc.)
- Bio-fertilizers (*Azospirillum*, *Phosphobacterium*, etc.)
- Bio pesticide (*Trichoderma viridi*, *Beauveria*, *Metarhizium*, etc.)
- Bio control agents (*Trichogramma chilonis*, *Trichogramma Japonicum*, *Lures* etc.)
- Drip irrigation
- Integrated nutrient management (Micronutrient spraying & Basal application)
- Integrated pest management practices
- Ratoon management practices viz. Stubble shaving and off barring, gap filling, FYM/Compost application etc.
- Introduction of Power Tillers, Mini Tractors and Trash shredder for intercultural operations in sugarcane cultivation

1.6 To achieve these objective, the cane development scheme should be implemented in such a way that :

- The varieties of cane should be selected in such a way that will give higher recovery and higher yield. The cane growers are only interested in high yield varieties to get a better return per acre of plantation.
- The varieties should be less prone to diseases and resistant to natural factors like – rats, jackals, water logging and high velocity winds.
- Well trained Cane Development staff to educate and implement the development scheme to achieve the above mentioned objective. The staff should be able to coordinate and motivate the cane growers to implement development scheme prepared under Cane Development Programme.
- Only the cane varieties suitable for the soil condition in the area, geographical condition of the land and practically proven variety should be introduced and encouraged. The new varieties should have a long life to give high yield and high recovery.
- Fertilizers, Pesticides, irrigation and periodical cleaning of sugarcane fields should be regularly, supervised and monitored by the cane development staff. The factory should arrange easy finance and loan to cane growers from Bank and Financial Institutions so that the Cane Development Programme is successfully executed. The top management must monitor it carefully and regularly.



Extension Agronomist,
Regional Extension Centre,
RCSM College of Agriculture, Kolhapur.



830

क्र.कार्या-६आरआरसी /आरआर/२०२०
जिल्हाधिकारी कार्यालय कोल्हापूर
दिनांक : २० /२/२०२०

प्रति,

अथनी शुगर्स लि. सोनवडे-बांबवडे
ता.शाहुवाडी, जि. कोल्हापूर
416213

विषय:- अथनी शुगर्स लि.सोनवडे-बांबवडे ता.शाहुवाडी यांचेकडून विकासकामावर खर्च करण्यासाठी उपलब्ध निधी खर्च करणेकरीता गावांची नावे उपलब्ध करून देणेबाबत.

संदर्भ:- आपलेकडील ASL/UnitII/sugar/ENV१२१/२०१८-१९ दि.१४/८/२०१९

उपरोक्त संदर्भीय विषयास अनुसरून आपलेकडील अथनी शुगर्स लि.सोनवडे-बांबवडे ता. शाहुवाडी विकासकामावर उपलब्ध निधी खर्च करणेकरीता गावांची नावे उपलब्ध करून देणेबाबत संदर्भीय पत्राने कळविणेत आले होते. त्यास अनुसरून उपमुख्य कार्यकारी अधिकारी,ग्रामपंचायत विभाग जिल्हा परिषद,कोल्हापूर यांचेकडून सोनवडे-बांबवडे ता.शाहुवाडी येथील कारखान्याच्या १० किमी त्रिज्या परिसरातील गावांची यादी मागणी करणेत आली असून ती यासोबत आपणास पुढील कार्यवाही साठी सादर करणेत येत आहे.

(श्रावण क्षीरसागर)

उपजिल्हाधिकारी (महसूल)कोल्हापूर

जावंक लिपिक
जिल्हाधिकारी कार्यालय,
कोल्हापूर.

जा.क्र.पंसशा/पंचायत/वशि-१०३/२०२०
पंचायत समित कार्यालय,शाहूवाडी
दिनांक:- ०८/०१/२०२०

प्रति,

मा.उपजिल्हाधिकारी (महसुल)
जिल्हाधिकारी कार्यालय,
कोल्हापूर,जि.कोल्हापूर

विषय:- अथणी शुगर्स लि,सोनवडे-बांबवडे,ता.शाहूवाडी,जि.कोल्हापूर यांचेकडून विकास कामावर खर्च करण्यासाठी उपलब्ध निधी खर्च करणेकरीता गावांची नांवे उपलब्ध करून देणेबाबत.

संदर्भ:- मा.उप मु.का.अ.(ग्रा.पं.) जि.प.कोल्हापूर यांचेकडील जा.क्र.काजिप/पंचायत/कावि-१७/
१९५८-५९/२०१९ दि.२३/१२/२०१९ रोजीचे पत्र.

उपरोक्त संदर्भिय विषयास अनुसरून अथणी शुगर्स लि., सोनवडे-बांबवडे ता.शाहूवाडी जि.कोल्हापूर यांनी विकास कामावर खर्च करण्यासाठी उपलब्ध निधी खर्च करणेकरीता गावांची नांवे उपलब्ध करून देणेबाबत यादी मागणी केली आहे. तरी अथणी शुगर्स लि., सोनवडे-बांबवडे ता.शाहूवाडी जि.कोल्हापूर यांना त्यांनी सुचविलेल्या विकास कामाकरिता कारखान्याच्या १० किमी त्रिज्या परिसरातील गावांची यादी खालीलप्रमाणे सादर करणेत आलेली आहे.

अ.क्र.	गावाचे नांव	अ.क्र.	गावाचे नांव
१	सोनवडे	१३	पाटणे
२	साळशी	१४	सपात्रे
३	पिशवी	१५	कोळगांव
४	खोतवाडी	१६	बांबवडे
५	खुटाळवाडी	१७	वरेवाडी
६	डोणोली	१८	सावे
७	परखंदळे	१९	थेरगांव
८	शितूर तर्फ मलकापूर	२०	शिंपे
९	सावडे बुद्रुक	२१	बजामेवाडी
१०	चरण	२२	शिराळे मलकापूर
११	वाडीचरण	२३	सावडे खुद
१२	गोगवे	२४	सरुड

२२/१/२०२०

का.

जिल्हाधिकारी कार्यालय-कोल्हापूर
कार्यासन क्र. १५
प्र. लिपिक

१५/०१/२०२०
११/३

१३८३

आपला विश्वासू,

गट विकास अधिकारी (वर्ग-१)
पंचायत समिती शाहूवाडी

प्रति माहितीसाठी सविनय सादर---

मा.उप मुख्य कार्यकारी अधिकारी (ग्रा.पं.) जि.प.कोल्हापूर

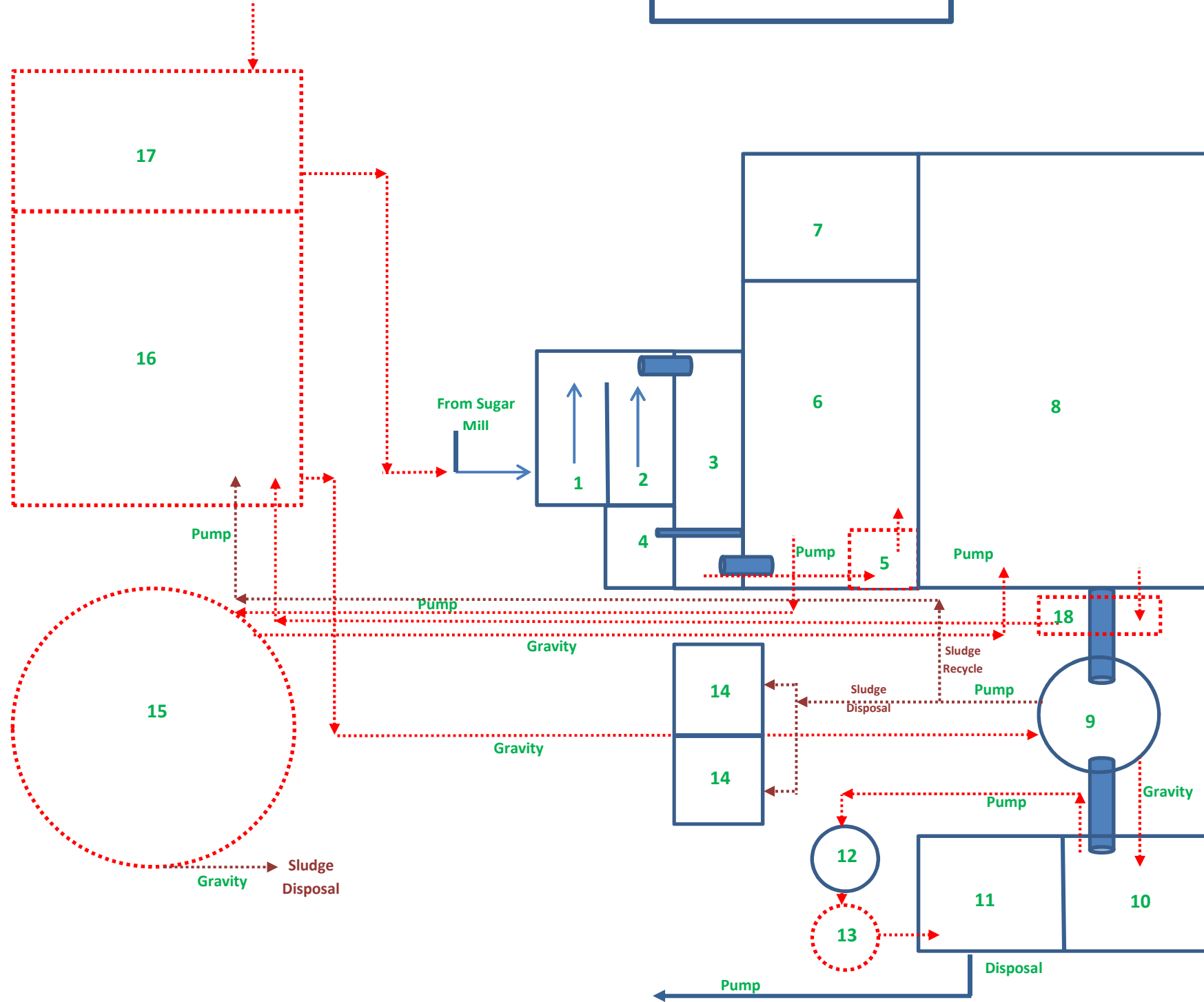
जिल्हाधिकारी कार्यालय- कोल्हापूर
कार्यासन- ६, वसुली/स्वा.सं.
दिनांक २०/०१/२०२०

२१/१
२१/१

२१/१

Annexure - V = Flow Chart of ETP

ETP FLOW DIAGRAM

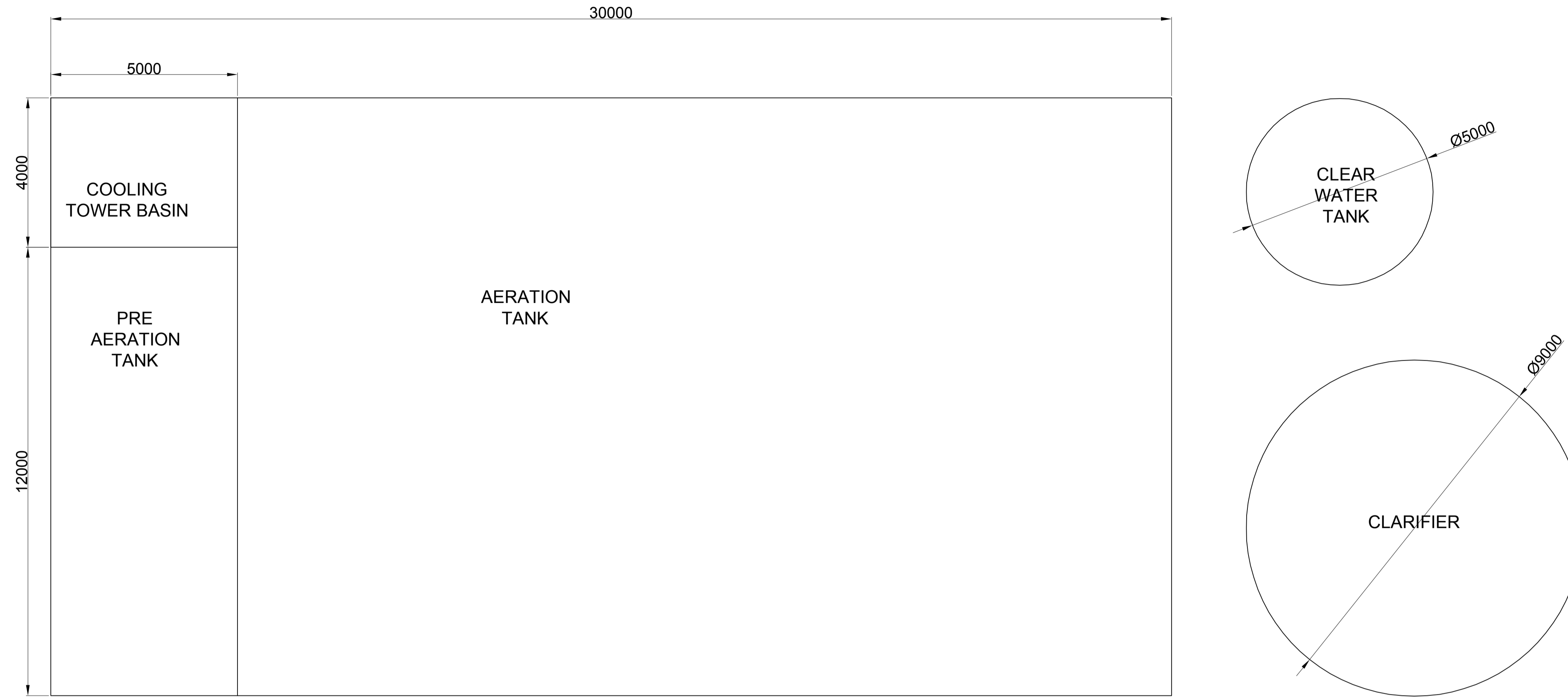


INDEX

1. Bar Screen (9.56 m³)
2. Bar Screen (9.56 m³)
3. Oil Skimmer(20.11 m³)
4. Oil Collection Chamber(2.52 m³)
5. Neutralization Tank (18 m³)
6. Equalization Tank (215.6 m³)
7. ETP Panel Room cum Lab
8. Existing Aeration Tank (Anaerobic Media Filter) (815.81m³)
9. Secondary Clarifier(136.83 m³)
10. Treated Tank(47.44 m³)
11. Final Treated Tank(56.65 m³)
12. Multi Grade Filter
13. Activated Carbon Filter
14. Sludge Drying Bed 2 nos. (140.62 m³)
15. Primary Clarifier (158.96 m³)
16. Aeration Tank (1125 m³)
17. Surge Tank (337.5 m³)
18. Pumping Tank cum Pre-aeration Tank (36.4 m³)



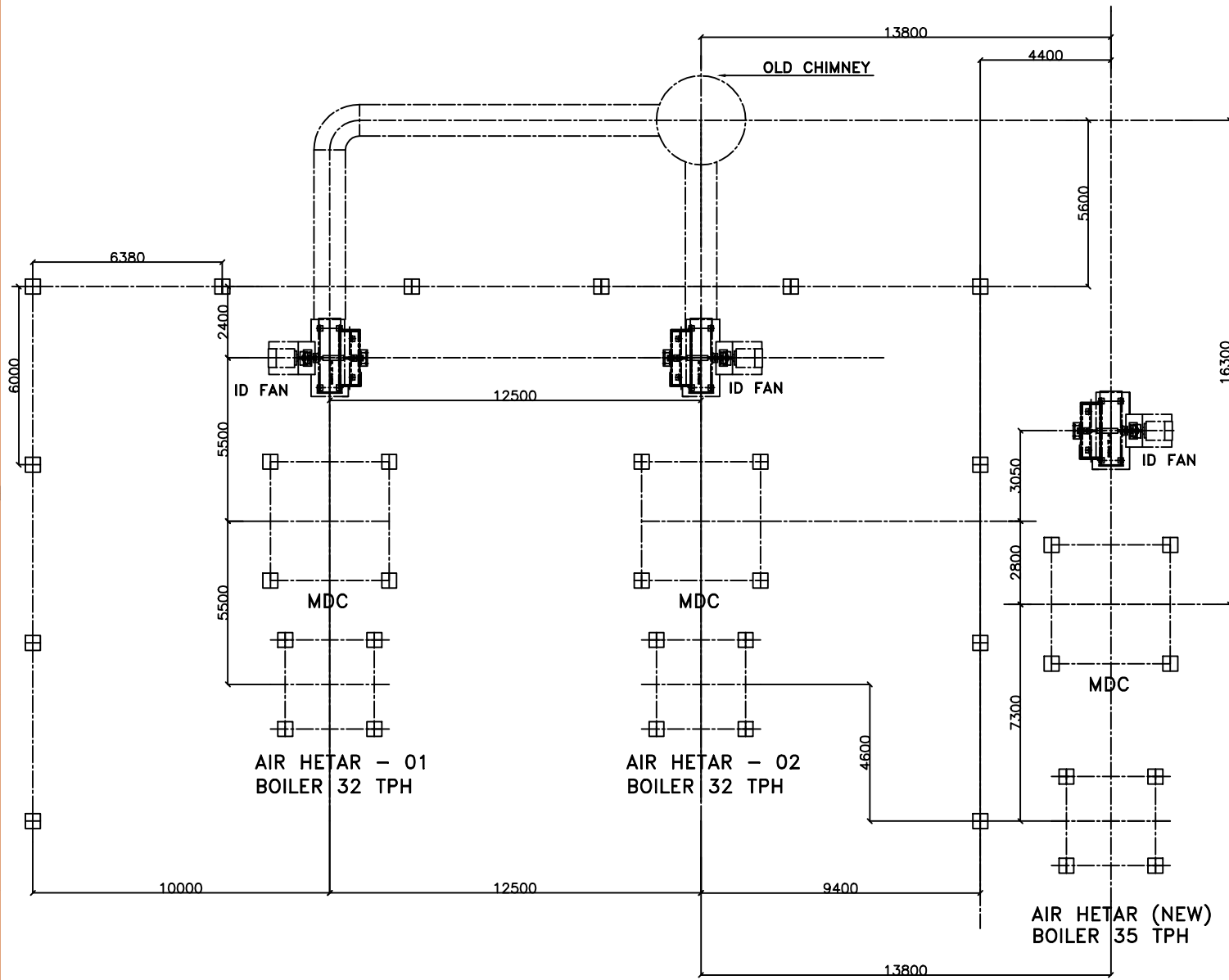
M/S ATHANI SUGAR LTD.,(SHAHUWADI UNIT)
Add:- Sonawade, Tal: Shahuwadi, Dist. Kolhapur, Maharashtra 416 213





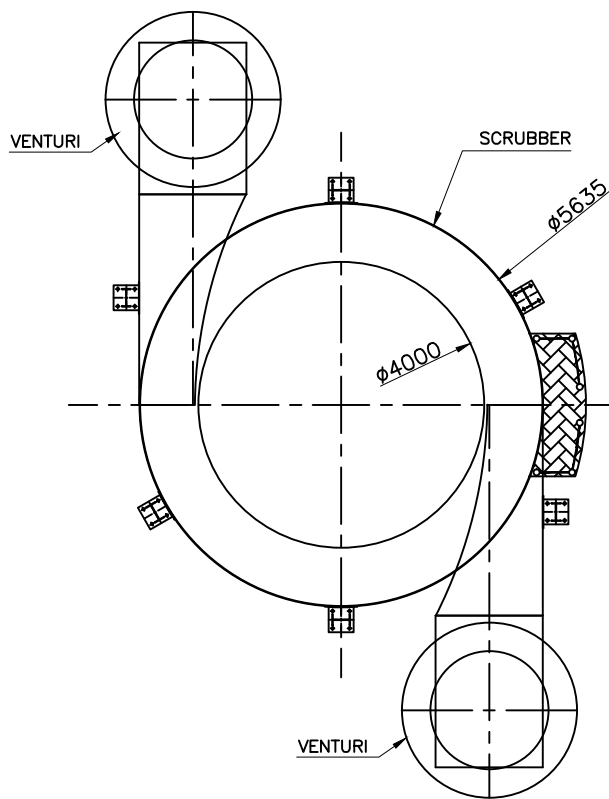
CPU SUGAR BAMBWADE

66 cubic mtr./Hr

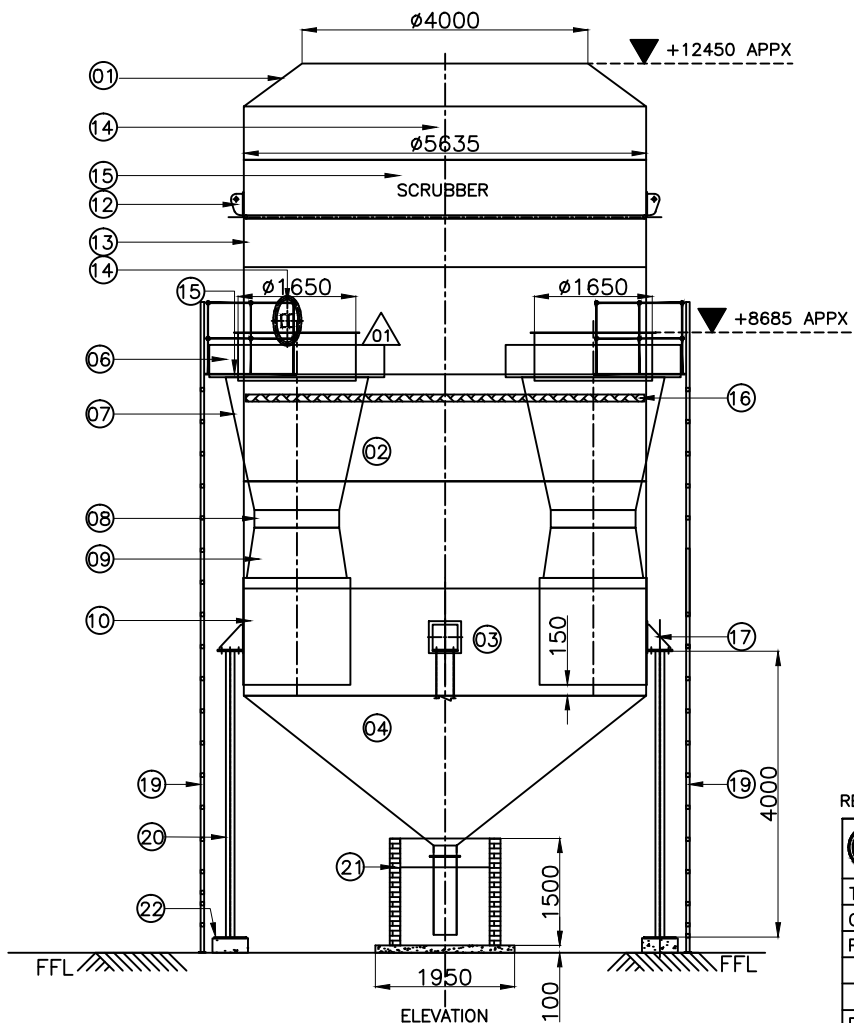
Annexure - VI = Wet Scrubber with Technical Specification



 SMB Engineers Private Limited HO - 401 GREEN PARK CHURCH ROAD MAROL ANDHERI (E) MUMBAI - 400 059 INDIA WORKS - PLOT NO. D6/S MDC TURBHE NAVI MUMBAI - 400 705 INDIA			
TITLE - GA OF PLANT LAYOUT			
CLIENT - MS. ATHANI SUGAR LTD.(KTK)			
P O NO - 4600004012		DTD.01.06.2022	
SCALE	 THIS DESIGN & DRAWING IS THE PROPERTY OF SMB ENGINEERS MUMBAI IT MUST NOT BE COPIED, SOLD OR REPRODUCED WITHOUT WRITTEN PERMISSION.		DO NOT SCALE IF IN ANY DOUBT PLEASE ASK
N T S	CHECKED BY	APPROVED BY	PROJECT CODE
	GANESH	MURTAZA	----
DWG NO - SMBPL/FAA 18234 - 01			REVISION
DRAWING DATE - 29-07-2022			01



PLAN



ELEVATION

NO	DESCRIPTION	UNIT	VALUE
01	WATER MAKE		WIL
02	STEAM GENERATION CAPACITY		2 X 32TPH
03	DESIGN STEAM PRESSURE		32 KG/CM ²
04	SUPER HEATER STEAM TEMP		485°C ±15
05	BOILER FUEL		BAGASSE
06	DUST LOAD, AT INLET		6000 mg/Nm ³
07	DUST LOAD, AT OUTLET		<100 mg/Nm ³
08	GRAVIMETRIC EFFICIENCY		97.5% > 10 MICRONS
09	TYPE OF WET SCRUBBER		HIGH EFFICIENCY VENTURI
10	RE-CIRCULATING PUMP CAP		100M ³ /Hr/15MTR/12.5HP
11	INLET GAS VOLUME		256000 M ³ /Hr
12	INLET GAS PRESSURE		280 mm WG
13	INLET GAS TEMP.		170°C
14	MAKE UP WATER		2.3 M ³ /Hr APPX.

DESIGN PARAMETERS

NO	ITEM	MATERIALS	SCOPE
01	TOP CONE	6 MM MS 2062	SMB
02	UPPER SHELL	6 MM MS 2062	SMB
03	BOTTOM SHELL	8 MM MS 2062	SMB
04	BOTTOM CONE	8 MM MS 2062	SMB
05	INLET DUCT	6 MM MS 2062	SMB
06	WATER TROUGH	8 MM MS 2062	SMB
07	CONVERGING CONE	8 MM MS 2062	SMB
08	THROAT	6 MM SS 304	SMB
09	DIVERGING CONE	6 MM SS 409	SMB
10	PLENUM CHAMBER (BOTT)	6 MM SS 409	SMB
10	PLENUM CHAMBER (TOP&SIDE)	8 MM MS 2062	SMB
11	INJECTION ENTRY (BOTT)	6 MM SS 409	SMB
11	INJECTION ENTRY (TOP&SIDE)	8 MM MS 2062	SMB
12	LIFTING HOOK	MS	SMB
13	WATER CURTAIN	MS	SMB
14	MANHOLE	MS	SMB
15	PLATFORM	MS	SMB
16	DE DUSTER	MS	SMB
17	BRACKET	MS	SMB
18	BRACKET TOP PLATE	MS 2062	SMB
19	LADDER	MS	SMB
20	SCRUBBER LEGS	ISMB 250	SMB
21	SEAL TANK	BRICK	CLIENT
22	BASE PLATE	MS 2062	SMB
23	RE CIRCULATING PUMP	BODY-CI, IMP-SS	SMB
24	PIPE FITTING & FLANGES	MS CLASS C	SMB
25			

TECHNICAL SPECIFICATION

REV. 01 COMMITMENT INCORPORATED AS PER EMAIL

SMB Engineers Private Limited
 HO - 401 GREEN PARK CHURCH ROAD MAROL ANDHERI (E) MUMBAI - 400 059 INDIA
 WORKS - PLOT NO. D8/5 MIDC TURBHE NAVI MUMBAI - 400 705 INDIA

TITLE - DETAILS OF VENTURI WET SCRUBBER (32 TPH)
 CLIENT - M/S ATHANI SUGAR LTD (KTK)

P O NO - 4600004012 DTD-1.06.2022

SCALE: N T S

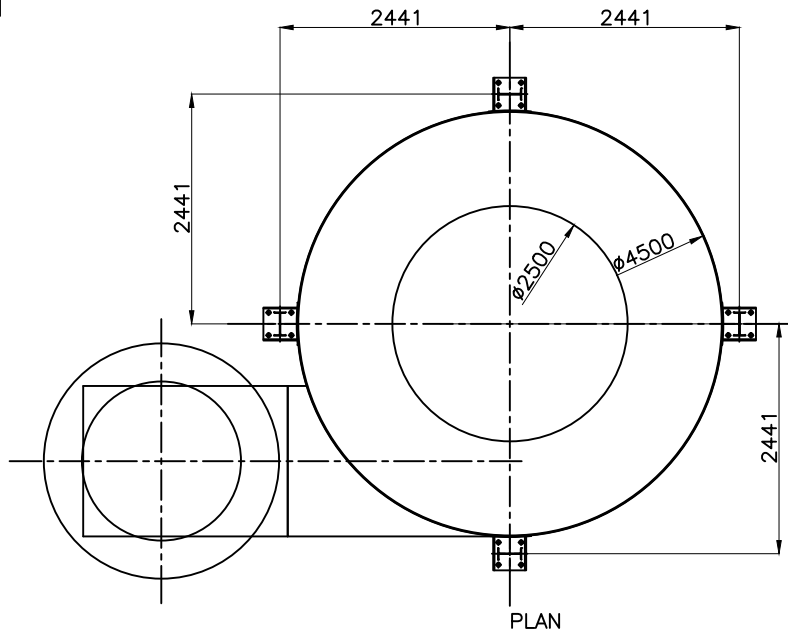
DRAWN BY: VINOD S
 CHECKED BY: GANESH
 APPROVED BY: MURTAZA

PROJECT CODE: ----
 REVISION: 01

DWG NO - SMBPL/FAA/18234 - 02
 DRAWING DATE - 09-06-2022

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35 TPH

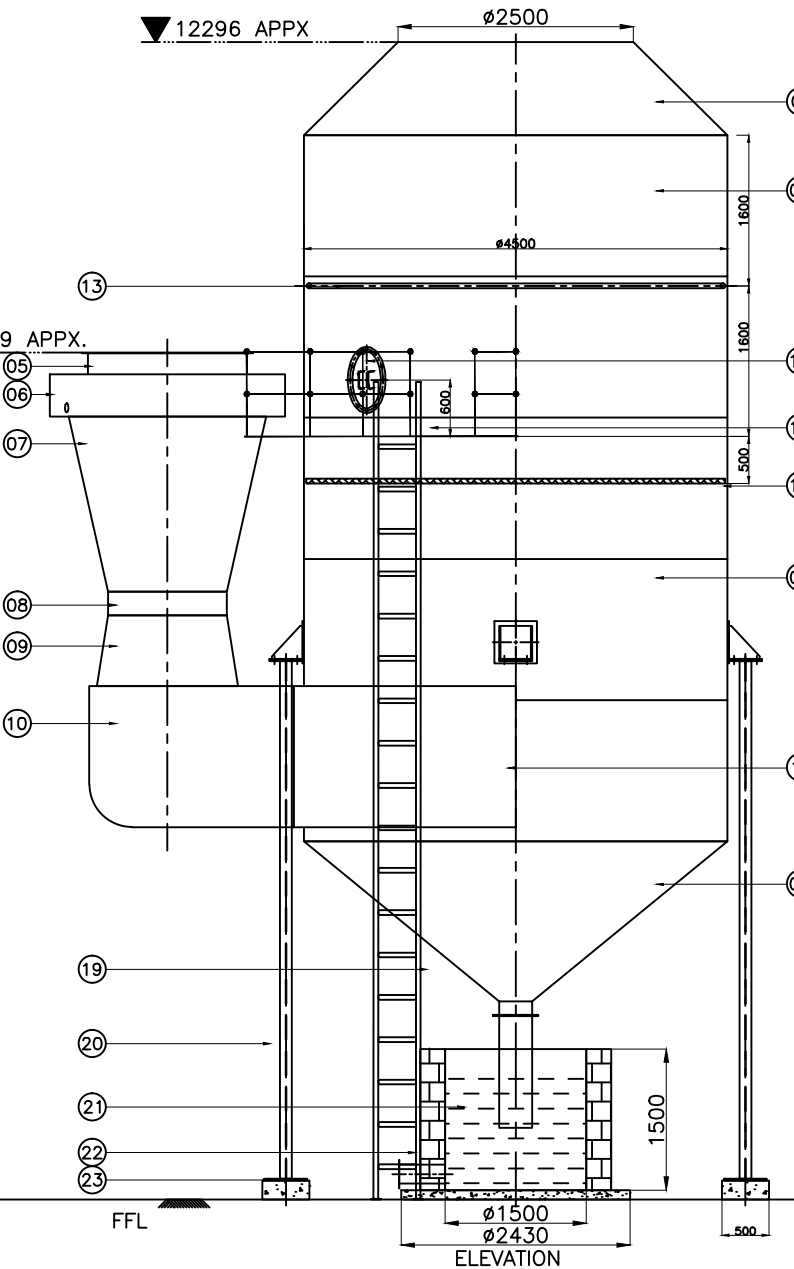


PLAN

14	MAKE UP WATER	1.25 M ³ /Hr APPX.
13	INLET GAS TEMP.	170°C
12	INLET GAS PRESSURE	180 mm WG
11	INLET GAS VOLUME	160000 M ³ /Hr
10	RE-CIRCULATING PUMP CAP	100M ³ /Hr/15MTR/12.5HP
09	TYPE OF WET SCRUBBER	HIGH EFFICIENCY VENTURI
08	GRAVIMETRIC EFFICIENCY	97.5% > 10 MICRONS
07	DUST LOAD, AT OUTLET	<100 mg/Nm ³
06	DUST LOAD, AT INLET	6000 mg/Nm ³
05	BOILER FUEL	BAGASSE
04	SUPER HEATER STEAM TEMP	485°C ±15
03	DESIGN STEAM PRESSURE	32 KG/CM ²
02	STEAM GENERATION CAPACITY	35 TPH
01	BOILER MAKE	WIL
NO	DESIGN PARAMETERS	

▼ 12296 APPX

▼ 8999 APPX.



ELEVATION

25			
24	PIPE FITTING & FLANGES	MS CLASS C	SMB
23	RE CIRCULATING PUMP	BODY-CI, IMP-SS	SMB
22	BASE PLATE	MS 2062	SMB
21	SEAL TANK	BRICK WORK	MILL
20	SCRUBBER LEGS	ISMB 250	SMB
19	LADDER A	MS	SMB
18	BRACKET TOP PLATE	MS 2062	SMB
17	BRACKET	MS	SMB
16	DE DUSTER	MS	SMB
15	PLATFORM A	MS	SMB
14	MANHOLE A	MS	SMB
13	LIFTING HOOK	MS	SMB
12	WATER CURTAIN	MS	SMB
11	SIDE & TOP PLATE	8 MM MS 2062	SMB
10	INJECTION ENTRY BOTTOM P	6 MM MS 409	SMB
09	SIDE & TOP PLATE	8 MM MS 2062	SMB
08	PLENUM CHAMBER BOTTOM P	6 MM MS 409	SMB
07	DIVERGING CONE	6 MM MS 409	SMB
06	THROAT	6 MM SS 304	SMB
05	CONVERGING CONE	8 MM MS 2062	SMB
04	WATER TROUGH	8 MM MS 2062	SMB
03	INLET DUCT	6 MM MS 2062	SMB
02	BOTTOM CONE	8 MM MS 2062	SMB
01	BOTTOM SHELL	8 MM MS 2062	SMB
00	UPPER SHELL	6 MM MS 2062	SMB
00	TOP CONE	6 MM MS 2062	SMB
ST	ITEM	MATERIALS	SCOPE
No	TECHNICAL SPECIFICATION		

SMB Engineers Private Limited
 HO - 401 GREEN PARK CHURCH ROAD MAROL ANDHERI (E) MUMBAI - 400 059 INDIA
 WORKS - PLOT NO. D6/S MIDC TURBHE NAVI MUMBAI - 400 705 INDIA

TITLE - DETAILS OF VENTURI WET SCRUBBER (35 TPH)
 CLIENT - M/S ATHANI SUGAR LTD (KTK)
 P O NO - 4600004012 DTD-01.06.2022

SCALE: N T S

DRAWN BY: VINOD I | CHECKED BY: GANESH | APPROVED BY: MURTAZA | PROJECT CODE: ----
 DWG NO - SMBPL/FAA/18234/02 | REVISION: 00
 DRAWING DATE - 03-06-2022

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Annexure – VII
ADVERTISEMENTS

लोकमत

• जाहीर निवेदन •

आम्हाला कळविण्यास आनंद होतो की, “राज्य पर्यावरण प्रभाव मूल्यांकन प्राधिकरण (एस.ई.आय.ए.ए.)”, महाराष्ट्र सरकार यांच्या दि. ०८/०७/२०२१ रोजीच्या पत्र क्र. SEIAA - EC - 0000002357 द्वारे “अथणी शुगर्स लि.” यांच्या सोनवडे-बांबवडे, ता. शाहूवाडी, जि. कोल्हापूर (महाराष्ट्र) येथील विस्तारित साखर कारखाना क्षमता २५०० टी. सी. डी. ते ८००० टी. सी. डी. व नवीन ३५ मेगावॉट विद्युत प्रकल्पास ‘पर्यावरण स्वीकृती’ मिळाली आहे. संबंधित कागदपत्रांच्या प्रती महाराष्ट्र प्रदूषण नियंत्रण मंडळ, कारखाना संकेतस्थळ आणि राज्य पर्यावरण प्रभाव मूल्यांकन प्राधिकरण (एस.ई.आय.ए.ए.)च्या अधिकृत संकेतस्थळावर उपलब्ध आहेत. <http://parivesh.nic.in>

**“अथणी शुगर्स लि.” शाहूवाडी युनिट, कोल्हापूर करिता
कार्यकारी संचालक**

Kolhapur Main
Page No. 5 Jul 15, 2021
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defaultter.

Date : 16.07.2021
Place: Dhule

Sd-
For ICICI Bank Ltd.

PUBLIC NOTICE

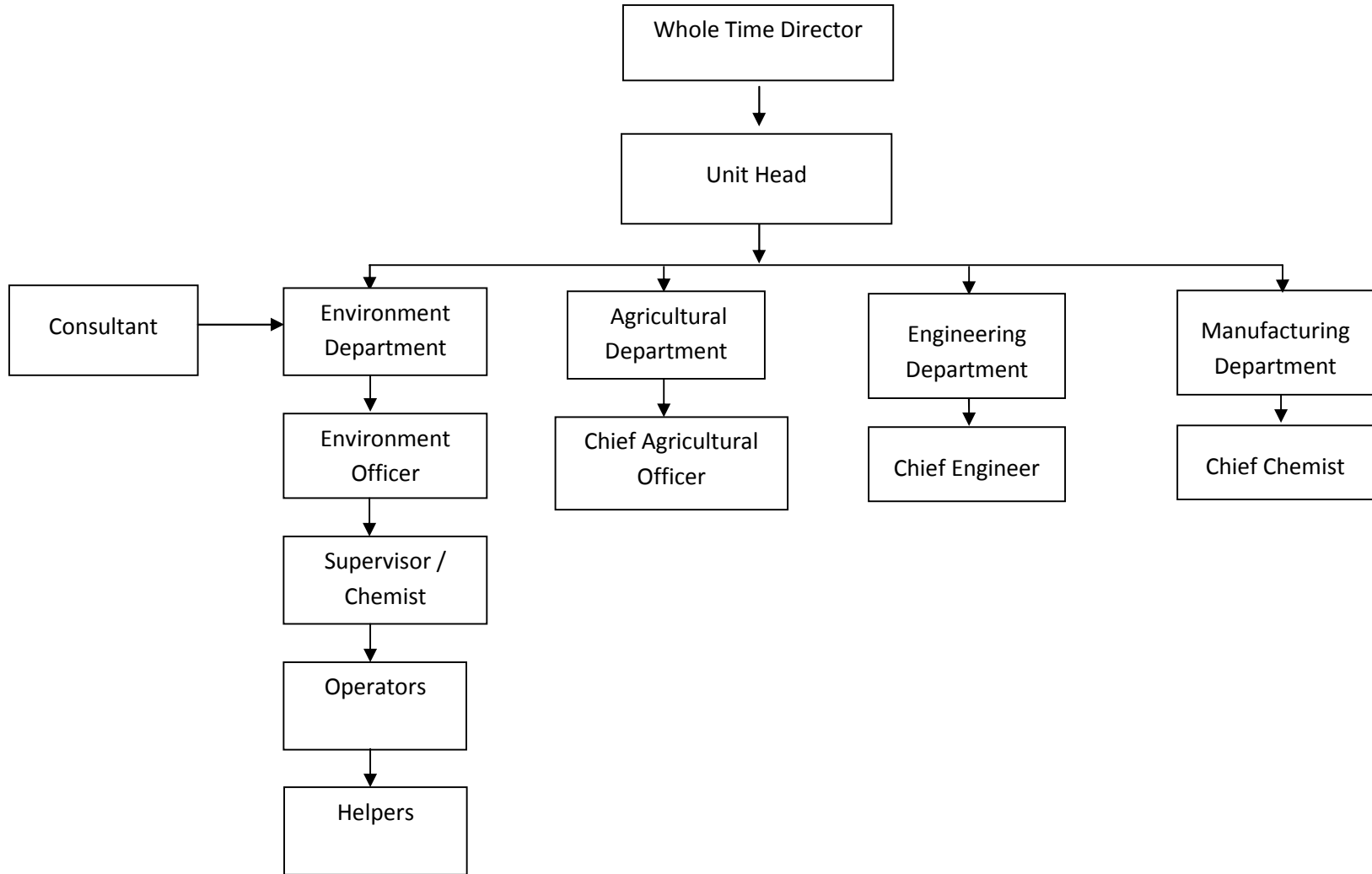
We are pleased to inform that “State Environment Impact Assessment Authority (SEIAA)”, Government of Maharashtra, has accorded an “Environment Clearance” vide its letter No. SEIAA - EC - 0000002357 dated 08/07/2021 for Expansion of Sugar from 2500 TCD to 8000 TCD and Proposed 35 MW Cogeneration Plant by Athani Sugars Limited located at Village - Sonawade - Bambawade, Tehsil - Shahuwadi, District - Kolhapur, Maharashtra.

Copies of the Clearance Letter are available with Maharashtra Pollution Control Board (MPCB), Company Website and may also been seen at the Website of “State Environment Impact Assessment Authority (SEIAA)”, Maharashtra at <http://parivesh.nic.in>

For Athani Sugars Ltd., Shahuwadi Unit, Managing Director.

Annexure - VIII

ENVIRONMENT CELL



Environment Management Cell Pattern & Reporting



Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2023

Unique Application Number

MPCB-ENVIRONMENT_STATEMENT-0000052691

Submitted Date

17-04-2023

PART A

Company Information

Company Name

Athani Sugars Ltd., Shahuwadi Unit (Leesee of Udaysingrao Gaikwad S.S.K. Ltd.,)

Application UAN number

MPCB-CONSENT-0000147829

Address

A/p- Sonawade-Bambawade, Tal- Shahuwadi, Dist Kolhapur

Plot no

229

Taluka

Shahuwadi

Village

A/p-Sonawade-Bambawade,

Capital Investment (In lakhs)

10925.66

Scale

L.S.I

City

Kolhapur

Pincode

416213

Person Name

Shri R. J. Deshmukh

Designation

Unit Head

Telephone Number

02312685822

Fax Number

Email

shahuwadiunit@athanisugars.com

Region

SRO-Kolhapur

Industry Category

Red

Industry Type

R12 Sugar (excluding Khandsari)

Last Environmental statement submitted online

yes

Consent Number

MPCB-CONSENT-0000051925

Consent Issue Date

25.09.2019

Consent Valid Upto

31-07-2021

Establishment Year

2014

Date of last environment statement submitted

Jun 4 2022 12:00:00:000AM

Industry Category Primary (STC Code) & Secondary (STC Code)

Product Information

Product Name

Sugar

Consent Quantity

90706

Actual Quantity

47260

UOM

MT/A

By-product Information

By Product Name

Molasses

Consent Quantity

44346

Actual Quantity

15180

UOM

MT/A

Press mud

44764

11823

MT/A

Bagasse

347510

95774

MT/A

Part-B (Water & Raw Material Consumption)

1) Water Consumption in m3/day

Water Consumption for Process	Consent Quantity in m3/day	Actual Quantity in m3/day
Cooling	744.00	558.00
Domestic	341.00	170.00
All others	30.00	5.00
Total	0.00	0.00
	1115.00	733.00

2) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
Trade Effluent	1100	530	CMD
Domestic Effluent	48	5	CMD

2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
Sugar (excluding Khandsari)	0.63	1.35	KL/A

3) Raw Material Consumption (Consumption of raw material per unit of product)

Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
Sugar Cane	8.20	7.42	MT/A
Lime	0.12	0.12	MT/A
Sulphur	0.02	0.02	MT/A

4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
Bagasse	123120	79911	MT/A

Part-C

Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

[A] Water

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
BOD	2.36	23.59	23.59	100	NA
COD	15.78	63.11	25.24	250	NA
TSS	1.74	17.43	17.43	100	NA

[B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/NM3) Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
TPM	241.27	39.13	26.09	150	NA

Part-D

HAZARDOUS WASTES

1) From Process

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
5.1 Used or spent oil	0.21	0.18	KL/A

2) From Pollution Control Facilities

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	KL/A

Part-E

SOLID WASTES

1) From Process

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
Boiler Ash	1305.99	1198.66	MT/A

2) From Pollution Control Facilities

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
ETP Sludge	2.28	2.50	MT/A

3) Quantity Recycled or Re-utilized within the unit

Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
5.1 Used or spent oil	0.21	0.18	KL/A

Part-F

Please specify the characteristics(in terms of concentration and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

1) Hazardous Waste

Type of Hazardous Waste Generated	Qty of Hazardous Waste	UOM	Concentration of Hazardous Waste
5.1 Used or spent oil	0.18	KL/A	Nil

2) Solid Waste

Type of Solid Waste Generated	Qty of Solid Waste	UOM	Concentration of Solid Waste
Boiler Ash	1198.66	MT/A	Nil

Part-G

Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.

Description	Reduction in Water Consumption (M3/day)	Reduction in Fuel & Solvent Consumption (KL/day)	Reduction in Raw Material (Kg)	Reduction in Power Consumption (KWH)	Capital Investment(in Lacs)	Reduction in Maintenance(in Lacs)
Treated Effluent is used for irrigation & agriculture purpose	720	0	0	0	0	0

Part-H

Additional measures/investment proposal for environmental protection abatement of pollution, prevention of pollution.

[A] Investment made during the period of Environmental Statement

<i>Detail of measures for Environmental Protection</i>	<i>Environmental Protection Measures</i>	<i>Capital Investment (Lacks)</i>
NA	NA	0

[B] Investment Proposed for next Year

<i>Detail of measures for Environmental Protection</i>	<i>Environmental Protection Measures</i>	<i>Capital Investment (Lacks)</i>
NA	NA	0

Part-I

Any other particulars for improving the quality of the environment.

Particulars

As per recommended by VSI a full-fledged ETP Plant is provided for better Operation & Maintenance.

Name & Designation

Shri. R. J. Deshmukh

UAN No:

MPCB-ENVIRONMENT_STATEMENT-0000052691

Submitted On:

17-04-2023



महाराष्ट्र शासन

औद्योगिक सुरक्षा व आरोग्य संचालनालय (कामगार विभाग)

परवाना क्रं : १०००६१६५

नमूना क्रमांक ४

(नियम ६ व ८ पाहणे)

कारखान्याची नोंदणी व कारखाना चालविण्याचा संबंधीचा परवाना

नोंदणी क्रमांक : १२३००१०७२१००८३३



कारखाने अधिनियम, १९४८ आणि त्यासंबंधी असलेले नियम यांच्या तरतुदीप्रमाणे अथनी शुगर्ज लिमिटेड शाहुवाडी यूनिट (लेसी ऑफ उदयसिंगरो गायकवाड एस एस के लीमीटेड) यांना खाली वर्णन केलेल्या जागेत कारखाना चालविण्यास परवाना देण्यात आला आहे.

या परवान्याच्या या जागेत कोणत्याही एका दिवशी १००० पर्यंत कामगार लावण्यास आणि २००० पेक्षा जास्त अश्वशक्ति उपयोगात आणण्यास परवानगी आहे.

या परवान्याची मुदत ३१ डिसेंबर २०२२ पर्यंत आहे.

परवान्याचे नूतनीकरण १ जानेवारी २०२३ ते ३१ डिसेंबर २०२४ पर्यंत करण्यात आले आहे.

दिनांक : १६-१२-२०२१

Signature valid



सह संचालक
औद्योगिक सुरक्षा व आरोग्य,
महाराष्ट्र राज्य, कोल्हापूर

परवाना दिलेल्या जागेचे वर्णन

परवाना दिलेल्या कारखान्याचे

अथनी शुगर्ज लिमिटेड शाहुवाडी यूनिट (लेसी ऑफ उदयसिंगरो गायकवाड एस एस के लीमीटेड)

Factory Name :

Athani Sugars Limited Shahuwadi Unit (Lessee of Udaysingrao Gaikwad S S K Ltd)

पत्ता :

सोनावडे-बाम्बवडे,,,,,,शाहुवाडी ,कोल्हापूर,महाराष्ट्र,४१६२१३

Address :

Sonawade-Bambwade,,,,,,Shahuwadi,Kolhapur,MAHARASHTRA,416213

कलम :

२(m)(i)

औद्योगिक वर्गीकरण :

१०७२१

कारखान्याच्या इमारतीचे नकाशे दिनांक २६.१२.२००२ च्या जावक क्रमांक DISH/KOP/१७१/२००२/PMP/VSM/९३५३ खाली मंजूर केले गेले आहेत.

This Certificate is digitally signed by on.

टिप : हा कारखान्याची नोंदणी व कारखाना चालविण्याचा परवाना आहे. हा परवाना देण्यात आल्यामुळे ज्या जागेत हा कारखाना स्थित आहे, त्या जागेस कोणतीही वैधता आपोआप बहाल होत नाही तसेच ज्या जागेत हा कारखाना स्थित आहे ती जागा आज दिनांक वेळेस अस्तित्वात असल्या संबंधात या परवान्यामुळे कोणताही हक्क व स्वामित्व सदरहू भोगवटदारास प्राप्त होत नाही

Annexure - X = Safety Audit Report

SAFETY AUDIT REPORT

(As per IS 14489: 1998)

PREPARED FOR

M/S ATHANI SUGARS LIMITED

SHAHUWADI UNIT

(LESSEE OF UDAYSINGRAO GAIKWAD SSK LIMITED)

A/P SONAWADE-BAMBAWADE.

TAL: SHAHUWADI DIST-KOLHAPUR -416213

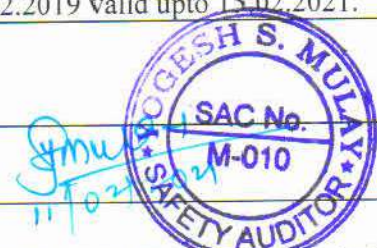
CONDUCTED BY

Mr. Yogesh S. Mulay

Certified Safety Auditor

JANUARY 2021

SCHEDULE II
(See Rule 8 &9)
Proforma for Safety Audit Report

Name and address of the factory	M/S Athani Sugars limited-Shahuwadi Unit (Lessee of Udaysingrao Gaikwad SSK Limited) At Sonavade Bambawade Tal shahuwadi Dist - Kolhapur 416213
Name of the Occupier	Mr. Yogesh S. Patil
Contact Details with Mail ID	Shahuwadiunit@athanisugars.com
Production activity	Manufacture of sugar and Co-Gen Plant
Date of Audit	12.01.2021
List of raw material with maximum storage quantity	Attached in report.
List of finished products with maximum storage quantity	Attached in report
Manufacturing process flow chart	Attached in report
P I Diagram of all plants (Chemical Factories)	Not applicable
Name of the Safety Auditor and Certificate No.	Mr. Yogesh S. Mulay. Certificate No.MS/DISH/SA/010 Dated 16.02.2019 valid upto 15.02.2021.
Whether enclosed Safety Audit Report as per IS 14489, or any such standards prevailing at the relevant time, whichever is latest	Yes.
Date and Signature of Safety Auditor	

I (Occupier) undertake to submit the action taken report on recommendations of Safety Audit on or before

Date:

Signature of the Occupier

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3. INTRODUCTION OF SAFETY AUDIT.....	5
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1. PREFACE

We have been appointed to carry out Safety audit of M/s Athani Sugars Limited-Shahuwadi Unit (Lessee of Udaysingrao Gaikwad SSK Limited) Located at Sonavade Bambawade Tal. Shahuwadi , Dist - Kolhapur.

This report summarizes the outcome of the Safety audit conducted on 12.01.2021

The assessment and the recommendations are based on the information made available to us and the actual observations during the site assessment. We appreciate the team co-operation during the assignment and the active involvement of the operatives and the management staff.

Every effort has been made to ensure that all statements and information provided in the report are given in good faith. The audit observations in the report are based on matters evidenced during the audit and the information supplied by the organization. All observations shall be considered horizontally for implementation wherever applicable in related fields.

Mr. Tushar Karkare (EHS Officer) was present as a coordinator along with operation team of respective departments and maintenance head at the time of plant audit.

Following areas were evidenced for compliance as coordinated by Coordinating team.

Cane Unloading area, mill section area, juice, pan and centrifugal and crystallizer, sugar packing and storage stores, maintenance workshop, CO-GEN plant and Bagass yard

Mr. Yogesh S. Mulay

Date: 11/02/2021



2. ORGANIZATION DETAILS

- | | | | |
|---|----------------------------------|---|--|
| 1 | Name and address of organization | : | M/s Athani Sugars limited (Shahuwadi Unit)*
Leased unit of Udaysingrao Gaikwaad SSK Limited
At Sonavade Bambawade Tal. Shahuwadi
Dist - Kolhapur 416213 |
| 2 | Contact Details | | |
| | Telephone No. | : | 02312685831. |
| | Email ID | : | Shahuwadiunit@athanisugars.com |
| 3 | Name of occupier. | : | Mr. Yogesh S. Patil |
| 4 | Production Activity | : | Manufacture of Sugar. |
| 6 | Total manpower | : | 603 |

Process Description Attached in report.

3. INTRODUCTION OF SAFETYAUDIT

A Safety Audit subjects each area of the company's activity to a systematic critical examination with the object of minimizing loss. Every component of the total system includes layout and construction of the plant, operating procedures, emergency plans, personal protection standards, accident records, etc. An audit – as in the field of accountancy-aims to disclose the strengths and weakness and the main areas of vulnerability or risk and is carried out by appropriately qualified personnel, including safety professionals.

Safety Audit is an integral & essential part of loss prevention strategy. The objectives of the safety audit are to look after the safety, health & welfare of employees in the industry, to maintain the high standards of safe operation and to improve them. There is growing recognition that accidents occurring in the industries can result not only in injuries to employees but also damage to commercial viability of the company.

Safety audit is a tool for ensuring that the plant and operating and maintenance procedures match the design intent and standards. It keeps the operating personnel alert to the process hazards; reviews operating procedures for necessary revisions; seeks to identify equipment or process changes that could have introduced new hazards; initiates application of new technology to existing hazards; and reviews adequacy of safety inspections.

Safety audit does not just take care of the physical hazards alone but covers the wide range of activities concerning safety to bring down loss of productions and increase in safety of employees & property. The major area which undergoes Safety Audit is:-

1. Management policy
2. Features of the process & design
3. Lay out and construction of the plant
4. Operating procedures
5. Emergency plans
6. Personnel protection standards

7. Accident records
8. Modification procedures
9. Fire protection system
10. Attitude towards training
11. The strength, weakness & the main area of risk are disclosed when audit is carried out by qualified experienced personnel.

In general, the objectives should cover the examination and qualitative assessment of all facts of safety of every activity. The activities should include research and development, design, occupational health and hygiene, environmental control, product and public Safety (including storage, packaging, labeling & transportation) as well as those associated directly with production-technical operations, maintenance, clearance certificates, emergency procedures, job description and operating instructions, training, housekeeping and personal attitudes.

The objectives of safety audit are to:

1. Verify compliance with established standards (regulations, internal policies and industry wise standards of practice);
2. Assess good management practices;
3. Assess the ability of the systems in place to ensure future compliance;
4. Assess risks from unregulated materials and practices; and
5. Make specific recommendations for correction action.

STATUTORY REQUIREMENTS OF SAFETY AUDIT

It must also be stressed however, that in the past though there was no specific statutory obligation for conduct of such audit, there was a definite but indirect statutory basis for adopting it. In particular, the amendments to the Factories Act redefining only top management as occupier, section 2(n) and incorporating a general duty on the occupier, (section 7A) calling on him to provide "A safe system of work". Thus carrying out a periodic safety audit and honestly

implementing its recommendations become a part of meeting this legal responsibility. Further though there was no specific provision, Factory inspector would call on management to carry out such an audit, and such directions have been given by inspectors in various companies, particularly those using hazardous process.

Further given the trends in modern safety legislation worldwide, mandatory safety audits has become part of Indian law after the EPA amendment 1994.

Under the "Manufacture, storage and import of Hazardous Chemical Rules 1989" framed under the Environment Protection Act 1986, companies using Hazardous chemicals above the threshold quantities specified are required to notify the site and submit various details of their safety systems. In the case of higher threshold quantity specified is crossed, a formal Safety report including systematic hazard identification and risk analysis is required to be carried out. In order to meet these requirements, many companies are now assigning compilation of such data preparation of these reports to the external consultants and including these in the scope of the safety audit.

As per provisions of Hazardous Chemicals Rules 1989, under EPA 1986 (29 of 1986) the Ministry of Environment & Forest (MOEF) has issued notification dtd.03.10.94 through rule no.10, independent Safety Audit with help of outside expert, the audit has been made mandatory, such audit be carried out once a year & same should be submitted within 30 days are some of the main points mentioned.

4. SCOPE & OBJECTIVE

SCOPE:

Safety Audit was conducted at M/s Athani Sugars Limited-Shahuwadi Unit(Lessee of Udaysingrao Gaikwad SSK Limited) Located at Sonavade Bambawade Tal Shahuwadi , Dist - Kolhapur on 12.01.2021 with reference to guidelines in IS 14489:1998 standard.

OBJECTIVE:

Safety audit prevent injuries and accidents. Audits are important to effective safety management as a continuous process of workplace safety planning, analysis and correction when needed.

Most injuries in the workplace occur due to unsafe behavior than unsafe conditions. Safety Audits focus on safety programs and behaviors while safety inspections focus on the facility, equipment and tools. Audits help analyze employee behavior and their understanding and compliance with safety procedures and programs.

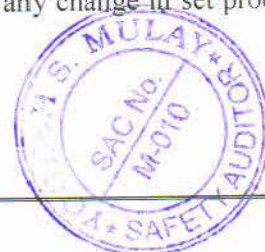
5. EXECUTIVESUMMERY

During the plant inspection round some observations were found out which are as follows

- Motivated employees with dynamic Leadership.
- People are clear and transparent while giving information and data.
- People are knowledgeable with high potential.
- Good infrastructure is provided in Plant and maintained and operated well.

OBSERVATIONS WHERE IMPROVEMENT IS NEEDED:

- Compliance to fencing and guarding of rotating and moving parts of machine shall with reference to Section 21 of The Factories Act 1948 shall be ensured..
- Requirements of firefighting measures shall comply with requirements framed under MFR 70 and 71B and National Building Code 2016. Fire extinguishers shall be maintained as per guidelines mentioned in IS 2190. Fire Hydrant line shall be operated in auto mode.
- All electrical panels shall be identified with Incoming power supply, list of authorized persons to work on panel and danger boards.
- Flash back arresters shall be ensured at all gas cutting sets at both Cylinder end and at Torch end.
- Gas cylinder storage shall confirm to Rule 21 of Gas cylinder Rule 2016.
- Requirement of Rule 44 of Indian Electricity Rule 1956 regarding first aid training shall be complied.
- All interlocks provided as a safety measure at juice boiling area, crystallization area, Boiler area COGEN and at moving conveyor shall be checked for reliability and ensured in working condition.
- Permit to work system shall be ensured for all high risk activities.
- Operational reliability shall be ensured for Safety measures followed for avoiding dust explosion with related to requirements in of National Fire Protection Association (NFPA) for Combustible Dust.
- Compliance to requirements of MFR 73-F regarding safety measures to be followed while working at fragile roof shall be ensured.
- Change control management system shall be ensured for any change in set process at turbine area.



- Requirement of pressure vessel testing shall confirm to **MFR 65**. Testing of Lifting tools and tackles shall be confirmed in line with **MFGR 64**.
- Cooling system at Molasses tanks shall be ensured in operation. Railings provided at top of molasses storage tank shall be of sufficient strength.
- Secondary containment shall be ensured at chemical storage containers.
- Requirements of occupational health center shall confirm to **MFR 73-W-1(c)**.
- Safe means of access shall be ensured at all areas where there are chances of fall hazard.
- Requirements of schedule 5 framed under MFR 57 regarding safety measures at centrifugal machines shall be complied.



6.AUDIT CHECKLIST AS PER ISS: 14489:1998.

HEALTH AND SAFETY POLICY

Sr.	Question	Observation	Recommendations
1.	Does the organization Have Health & safety Policy? (If yes, attach copy.)	Yes.	Evidenced policy displayed at plant Gate and in operation areas.
2.	Does the organization have a corporate Safety Policy? (If yes, attach copy.)	Yes	NIL
3.	Who has signed the Health and Safety Policy?	It is signed by occupier	NIL
4.	Whether it is prepared as per guidelines of the statutory provisions?	Reported Yes.	Compliance to requirements of MFR 73-L shall be ensured.
5.	When the Health and Safety Policy is declared & Adopted.	The Policy is declared and adopted on 04.09.2018	NIL.
6.	How many times it has been updated?	Not revised.	The policy shall be updated whenever any expansion or modification having implications on safety and health of workers at work is made. OR whenever new substance(s) or articles are introduced in the manufacturing process having implications on safety and health of persons exposed to such substances.
7.	Whether the policy is made known to all?	Yes. Displayed at prominent locations.	NIL
8.	Whether the Safety Policy is scrutinized by outside expert?	Reported Yes.	Policy shall be scrutinized to ensure all requirements of MFR 73-L are complied.
9.	What is the last date of updating?	04.09.2018	Evidenced policy signed by occupier on 04.09.2018
10.	Does it find a place in the annual report?	No	Safety Policy may be added in annual report.

SAFETY AND HEALTH ORGANISATION -A) SAFETY DEPARTMENT

11.	Does the factory have a Safety Department?	Yes.	Safety Officer is appointed.
12.	If yes, Furnish the following information? A. Head of Safety department. B. Designation: C. Qualification: D. Experience: E. Status: F. Strength of Safety Department:	Shri: Tushar Karkare EHS Officer. MEM ADIS 11 Yrs. Head 01	Compliance to Maharashtra safety officers(Duties, qualifications and conditions of services) Rules 1982 shall be ensured.
13.	Does the Head of Safety Department / Safety Officer report to the Chief Executive	Yes. Reports to plant head and occupier	Compliance to Reporting of safety officer shall comply to Maharashtra safety officers(Duties, qualifications and conditions of services) .
14.	How often the Safety Officer is retrained in the latest techniques of total Safety Managements? What is the frequency of retraining?	By attaining seminar and attaining trainings planned by corporate office.	The Safety officer shall be given opportunity to attend various training programs, seminars organized by Safety Institutions like CLI, NSC, in view to update his knowledge with respect to latest trends/developments etc.
15.	What additional duties the Safety Officer is required to do?	Environment and irrigation.	Duties of safety officer shall confirm to Maharashtra safety officer (Duties, qualification and conditions of service) Rules 1982.
16.	What is the power of the Safety officer?	Safety Officer can stop the operation against any violation/unsafe act/conditions.	Duties of safety officer shall confirm to Maharashtra safety officer (Duties, qualification and conditions of service) Rules 1982.

SAFETY COMMITTEE (S).

17.	Does the factory have a safety committee(s)?	Yes.	Compliance to MFR 73-J shall be ensured.
18.	Is the tenure of the Safety Committee is as per Statute?	Yes. It's of two years.	The tenure of the Safety Committee is of two years.
19.	How are the members of Safety Committee selected? (Elected / Nominated)	Persons from each department are nominated as members of committee.	Requirements of MFR 73-J (2) regarding representative of committee shall be complied.
20.	How often are the meetings of Safety Committee held?	It is reported that Safety committee meetings are held quarterly. MOM not maintained.	MOM of safety committee shall be maintained.
21.	What are the subjects? Are the Problems discussed in meetings? (Attach a copy of agenda and minutes of last meeting.)	The subjects related to safety i.e. Unsafe Conditions, Workers' requirements of PPEs, Training Program, and Accident Analysis are discussed in the meetings.	The Safety Committee shall discuss all matters concerning health, safety, environment, and plan for safety awareness programmed such as education, training workshops etc. The committee shall discuss the reports of safety, environmental and occupational health surveys, emergency plans, safety audits, risk assessment and implementation of the recommendations. Carry out health and Safety surveys and identify the causes of accidents and suggest corrective measures.
22.	How are the recommendations of the committee implemented?	The recommendations of the committee are implemented through HOD.	The recommendations of the Committee shall be submitted to Factory manager and all heads of departments. The concerned department takes the action in that effect. The review is taken in next meeting.

23.	Are the minutes of the Safety Committee Meetings are circulated among the members?	NA as no MOM maintained.	The minutes of the meeting are circulated among all the members.
24.	Are the minutes forwarded to the trade union (s) and chief executive and occupier	Yes	Compliance shall be continued.
25.	How the Management and Trade Union play their active roles in supporting and accepting the committee recommendations?	Management plays positively towards the recommendations positively by providing necessary resources required for safety implementing.	NIL
26.	How are the Safety Committee members apprised of the latest developments in Safety, Health and Environment?	Through internal trainings	The Safety Committee members shall be apprised of latest developments in Safety, Health and Environment by making available various journals, arranging seminars, meetings with experts etc.

SAFETY BUDGET

27.	What is the annual Safety budget?	Reported @ Rs.4 Lacs. It is sanctioned as and when required.	NIL
28.	How much percentage is this budget of the total turnover of the company?	Details not available.	Details of expenses incurred on safety shall be maintained.
29.	How much budget has utilized till date?	Reported @ Rs.4Lacs.	NIL
30.	Is the Safety budget adequate?	Reported Yes	Sufficient safety budget shall be ensured.
31.	How is the Safety budget arrived at?	Through formal approval.	The safety budget shall be based on the estimates of expenditure required to be incurred on various works such as purchase of safety equipments and PPE, modifications, training programs, seminars, celebration of safety.
32.	What is the pattern of expenditure in last five years?	Approx.Rs.5 lacs.	The expenditure incurred on safety shall be compared with that of allocation and any rise / fall shall be taken

			in to account, while making the provisions.
33.	What are the approved sanctions for the expenditure in this budget?	No approved sanction.	NIL.
34.	Does this budget get reflected in the annual report of the company?	Yes.	Safety budget shall be reflected in the annual report of the organisation.

ACCIDENT REPORTING, INVESTIGATION AND ANALYSIS.

35.	Whether the accident data for the last three years for reportable and non-reportable accidents is available?	Yes.	Accident data for all accidents including fatal, serious, reportable, non-reportable and no injury accidents shall also be maintained. Accident data of each year including Frequency Rate, Severity Rate and Incidence Rate etc. shall be maintained.
36.	Is there any system of classifying and analysing the near-miss incidence and accidents? If yes, Give details.	Yes. Accidents are categorized as Major(Reportable) and Non reportable (Minor, first aid).	System compliance shall be ensured.
37.	Are all near miss incidents and accidents reported and investigated?	Reported Yes. Records are not maintained.	Records of investigation shall be maintained.
38.	For how many years the accident reports are retained?	It is reported that The accident reports are maintained for 3 years. Record not made available for review.	Records of all incidents shall be maintained.
39.	By whom accident statistics and data are maintained data?	Accident data is maintained by time office.	NIL.
40.	How is the top management apprised of these data?	The data is brought to the notice of top management through online system.	System compliance shall be ensured.
41.	Is the accident statistics effectively utilized? If yes, How?	Reported Yes.	Accident data shall be effectively used to avoid the recurrences, by taking corrective steps through the lessons learnt from past accident investigation and analysis.

42.	What nature of injuries occurred during last three years?	Injury due to Slippery Hazard, burn, scratch, injury, Blunt injury fatality (2017) due to fall from height.	All such incidences shall be investigated to find out causes and effective steps shall be taken to eliminate the recurrences. Details of all incidents shall* be maintained.
43.	How do you ensure the implementation of the recommendations to avoid the recurrence of the incidences and accidents?	After discussion in meetings, CAPA are finalized for implementing. Follow ups are taken till compliances through online system.	The recurrences of the incidences and accidents shall be avoided by taking corrective action as per recommendations. i.e. To eliminate unsafe conditions and unsafe actions.

SAFETY INSPECTIONS.

44.	What type of Safety inspections are carried out and what is their frequency?	Periodic Statutory inspections are carried out by Statutory Authorities. Internal inspections are carried out by EHS officer and HODs.	In addition, It is suggested to carry out plant inspections as detailed. 1. Periodic Inspections: Planned inspections of machinery, equipment, tools and all other parts of the plant shall be carried out at regular intervals. 2. Intermittent Inspections: Unannounced inspections shall be made by the Safety Department / Heads of Department, General Manager, Production Manager, Supervisor and Safety Committee. 3. Continuous Inspections: of plant, machinery, tools & tackles and Personal Protective Equipment's, by some selected employees e.g. Maintenance Manager, Foreman, Electrician etc. shall be carried out.
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			<p>4. Special Inspections: are those which are occasionally made to locate hazards which are suspected to be present in certain situations or processes .e.g.</p> <ol style="list-style-type: none"> 1. Inspections during Industrial / Fire / Electricity Safety week. 2. Inspections of new installation / process. 3. Inspection for investigation of accidents / dangerous occurrence. 4. Health Survey. 5. Inspections of hand tools, scaffolds, personal protective equipments, interlocking and other guards, lighting and ventilation etc.
45.	Is there any system of internal inspection	EHS officer and HOD carry out inspections. Details of inspections not maintained.	The system of Periodic, Intermittent, and continuous and special inspections shall be followed as explained above. Records of all inspections carried out shall be maintained.
46.	Who does the inspections?	EHS Officer and HODS	NIL
47.	Are the check-lists are prepared for the inspections?	No	Operation wise checklist for the inspections shall be prepared.
48.	To whom the recommendations are submitted?	To HOD and Top management.	The recommendations shall be submitted to the Heads of concerned department, Safety Committee, Maintenance Manager and Factory Manager.

SAFETY EDUCATION AND TRAINING

(A) TRAINING.

49.	Is there any training department?	No separate training department.	EHS officer takes care of safety trainings.
50.	Is there any program of induction training?	Yes. Induction training is imparted at shop floor along with operation training. Details of training are not maintained.	Induction training to contract employees shall be ensured. Details of all trainings shall be maintained.
51.	Mention the duration of induction training for each employee?	1 Hr.	Sufficient period shall be ensured for contractor training to make aware all details about safety.
52.	Whether the assessment of the training of the worker is done or not?	No	Procedure for training assessment shall be framed and followed.
53.	What infra-structure facilities with audio-visual support are available?	The training hall capacity of 200 participants is available.	Sufficient infra structure shall be made available for trainings.
54.	Do the programs cover the Plant Safety Rules, Hazard Communication and any other safety rules or procedures unique to the plant or specific departments?	Yes	Operation specific Hazard trainings shall be imparted.
55.	Whether the training programmes are conducted in local language?	Yes	The training programs are conducted in local language of participants.
56.	Whether the visits to Safety Institutions / Organizations are arranged.	No.	Arrange visits of safety personnel to safety Organization such as CLI, NSC, etc.

(B) PERIODIC TRAINING / RETRAINING

57.	Are all employees trained and what is the frequency of training?	It was reported that more than 80% employees are trained. Trainings are planned on six monthly basis. Details of training imparted are not maintained.	All the workers shall be given basic safety training and On-Job trainings of Safe Operating Procedures and refreshed at regular intervals so that unsafe actions could be avoided. Details of all training shall be maintained.
58.	Does the training program cover Safety & Health aspects? If so, How much? (In terms of	Reported Yes. Details not maintained.	All the workers shall be given basic safety training and On-Job trainings of Safe

	number of sessions / hours.)		Operating Procedures and refreshed at regular intervals so that unsafe actions could be avoided.
59.	Do the trained supervisors train their own employees in Safety and Health aspects?	Reported Yes.	Knowledge sharing sessions shall be arranged and it shall be ensured that trained supervisors are training their own employees.
60.	Is the retraining given whenever new hazard / process change are followed / introduced?	Reported Yes. Details not maintained.	The concerned workers shall be given On-Job trainings of new Safe Operating Procedures and refreshed at regular intervals so that unsafe actions could be avoided.
61.	How are the senior management personnel trained in Safety and Health?	No procedure available	The senior management personnel shall be trained in Safety and Health by deputing to various training programmes arranged by Safety Organizations like CLI, NSC, various Safety Committees and other Safety Personnel.
62.	How many employees have been trained in Safety & Health in last five years? Give break-up with details.	Reported 70%. Details are maintained.	The data of training of workers / staff in each department shall be maintained for each year.
63.	How many man-days / hours are used in training the employees?	Details are maintained.	Training data showing the details such as, Venue, Dates, Duration, and Topics covered, Names of Faculty members, Names of Participants and Test Results etc. shall be maintained.
64.	How do you ensure that the training is put to use by the employees trained Safety & Health?	Through feedback from HOD.	It can be ascertained by observation in a day to day working and noting the deviations from Safe Operating Procedure.
65.	What is the training plan for the next two years? Give details.	No plan prepared.	Complete Training Program Plan at least for one year shall be prepared in advance and shall be intimated to all

			concerned / displayed on the notice board.
66.	What documentation system has been established regarding Safety and Health Training?	Training attendance sheet, training effectiveness sheets are maintained.	The details of Safety and Health Training showing the details such as, Venue, Name, Dates, Duration, Topics covered, Names of Faculty members, Names of Participants and Test Results etc. shall be maintained.

(C) SAFETY COMMUNICATION/ MOTIVATION/PROMOTION.

67.	Does the factory have safety suggestion schemes? Give details.	Suggestions are received orally at safety committee meeting and in training sessions. Details are not maintained.	All employees shall be motivated for suggestions for improving safety at workplace.
68.	Does your factory participate in National Awards/ Suggestion schemes?	No.	Efforts shall be made to participate in National Awards/ Suggestion schemes.
69.	Has your factory been awarded during last five years?	No.	NIL.
70.	Are Safety contests organized in the factory? Give details.	No	Various quiz and competitions shall be arranged throughout year to increase awareness among employees.
71.	What are the Publications of your organization? Do they include the information on Safety And Health subjects?	No	NIL.
72.	Is the Literature on Safety and Health made available to employees?	Yes. Abstract from newsletter are displayed on notice boards.	The Literature on Safety and Health in the form of Magazines, Bulletins etc. shall be made available to employees. The articles on Safety shall be displayed on notice board.
73.	How is the Safety & Health publicized in your factory? a. Bulletin boards. b. Post- serious accidents. c. News letter d. Others	Safety Posters & Banners	Safety & Health shall be publicized by displaying various circulars, newsletters, bulletins and results of various Safety Competitions on notice

			board and displaying Safety Posters in workrooms.
74.	Does the organization celebrate Safety Day / Week or organize Safety Exhibition?	Yes	Day is celebrated
75.	When was the last Safety Day / Week celebrated?	4 th March 2020.	Safety day was celebrated.

FIRST AID.

76.	Is adequate number of First-Aid boxes provided? Give location details.	Yes. Total 4 boxes are provided in operation areas.	Requirements of Notices to be displayed at first aid boxes framed under MFR 77 shall be complied.
77.	Is there any First-Aid / ambulance room provided?	Yes.	Compliance to Requirements of MFR 76 and 77 framed under Section 45 of The Factories Act 1948 shall be ensured.
78.	Are qualified / trained First-Aiders available in each shift?	No qualified first aid trainers available.	At least one person trained in first aid shall be ensured in each shift. Necessary trainings shall be arranged by authorized agency.
79.	How many qualified / trained First-Aiders are available at each plant / department?	NA.	At least one person trained in first aid shall be ensured in each shift. Necessary trainings shall be arranged
80.	How many persons are trained / given refresher training in First-Aid in each year?	NIL.	Details of persons trained in first aid shall be maintained.

OCCUPATIONAL HEALTH CENTER.

81.	Whether Occupational Safety and Health Centre is provided?	No Occupational safety and health centre provided.	Requirements of 73-W-1-c shall be complied.
82.	Does it conform to the provisions of existing legislation?	NA Occupational safety and health centre provided	Requirements of 73-W-1-c shall be complied.
83.	Are the medical attendants / Doctors available in each shift?	NA as Occupational safety and health centre provided	Requirements of 73-W-1-c shall be complied.
84.	Is ambulance van is available in each shift?	Yes.	Conformance to requirements of MFR 73-X regarding ambulance van shall be ensured.
85.	Any liaison with the nearest hospital(s)? Give details.	Yes. Liaisoning with Dr. Shirguppe and Dr. Dalvi,	NIL

		Bambawade is made to avail services in case of emergency.	
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GENERAL WORKING CONDITIONS.

HOUSEKEEPING.

86.	Are all the passages, floors and the stairway in good condition?	Yes.	Compliance to requirements of section 32 shall be ensured.
87.	Do you have the system to deal with the spillage?	Yes	Spill kits shall be provided in all operation area to contain spills.
88.	Do you have sufficient disposable bins, clearly marked and whether these are suitably located?	Yes	Disposable bins shall be marked conspicuously.
89.	Are drip trays positioned whenever necessary?	Yes.	NIL.
90.	Do you have adequate localized extraction and scrubbing facilities for dust, fumes & gases	Yes.	NIL.
91.	Whether walkways are clearly marked and free from obstacles?	No	All walkways shall be clearly marked and kept free of obstruction at all times.
92.	Do you have any inter-departmental competition for good housekeeping?	No	Best performing Employees/teams shall be motivated through inter department competitions.
93.	Has your organization elaborated good housekeeping practices & standards and made them known to the employees.	Yes.	The program and check list for monitoring good housekeeping practices shall be formulated and brought in to practice.
94.	Are there any working conditions that make the floors slippery? If so, what measures are taken to make them safe?	Yes during rainy season.	Precautionary measure shall be adapted to avoid hazards due to slippery areas.
95.	Does the company have adequate measures to suppress polluting dust arising out from road transport?	Yes	Roads are concreted.

NOISE.

96.	Are there any machines / processes generating noise?	Yes. Fabrizer, centrifugal, compressor Turbine area, boiler house.	All areas generating high noise shall be identified.
97.	Was any noise study conducted?	Yes. Monthly by third party during operation season. Evidenced report dated 05.03.2020 by equinox.	Noise Study shall be conducted to ensure compliance to schedule XXIV of MFR 114.
98.	Which are the areas of high noise level?	Fabrizer, centrifugal, compressor Turbine area, boiler house.	The workers working in and around high noise level area shall be provided with Personal Protective Equipments such as ear plugs / ear muffs and the use of the same shall be insisted up on them.
99.	Have engineering and administrative controls been implemented to reduce the noise exposure below permissible limits?	Yes. Acoustic enclosures to DG sets. Precautionary boards provided. Earplugs are provided.	Efforts shall be made to minimize the noise level by proper maintenance, correct balancing etc.
100.	Is there a system of subjecting of all those employees who work in high noise level area, to periodic audiometric test?	Yes. Medical examination was conducted in 2018.	During noise level test, if the noise level is found to be more than the permissible level, i.e. 90 Db A, the workers exposed to noise level exceeding the maximum permissible exposure level as mentioned in Schedule XXIV of Rule 114 Of M.F.R.1963, shall be subjected to an audiometric examination by Certifying Surgeon, within 14 days of his employment and there after every 12 months. Records of medical examination shall be maintained in form 7.
101.	Whether the workers made aware of the ill effects of high noise?	Yes.	The workers shall be made aware of the ill effects of high noise level.
102.	Whether any personal protective equipment along with ear plugs / muffs are provided and used?	Yes. Ear Plugs and ear muffs are provided.	Use of Personal Protective Equipments shall be insisted up on the workers.

VENTILATION.

103.	Whether natural ventilation is adequate or not?	It seems adequate.	Compliance to requirements of MFR 22-A shall be ensured.
104.	Whether dust / fumes / hot air is generated in the process? Give details.	Yes. Dust, Fumes & Hot air (Steam) is generated. Bagass dust is generated in operation area.	Safety measures shall be adapted to avoid hazard due to steam and fumes generated during process.
105.	Is there any exhaust / dilution ventilation system in any section of the plant?	Yes	NIL.
106.	Whether any ventilation studies have been carried out?	No.	Compliance to requirements of MFR 22-A shall be ensured.
107.	Is periodic / preventive maintenance of ventilation system carried out and record is maintained?	Yes.	Evidenced preventive maintenance plan. Found satisfactory.
108.	Does any ventilation system recirculation the exhausted air in the work area?	No.	NIL.
109.	Is the work environment assessed and monitored?	No	Workplace monitoring shall be carried to assess air born contaminants at workplace.
110.	Whether Personal Protective Equipments are given to workers exposed to dust / fumes and gases? Give details.	PPEs are provided.	NIL.

ILLUMINATION.

111.	Was the study carried out for the assessment of illumination level?	No	Conformance to requirements of MFR 35 shall be ensured.
112.	Is there any system of periodical cleaning and replacing the lighting fittings / lamps in order to ensure that they give the intended illumination levels?	Yes.	Cleaning is carried out by maintenance department on weekly basis.
113.	Are the workers subject to Periodic Optometry Test and record maintained? Give details	Yes. During medical examination.	Records of medical examination shall be maintained.

HAZARD IDENTIFICATION AND CONTROL.

114.	Is the entire hazard areas identified?	No	Hazard associated with operation (Hazard identification and Risk Assessment study) shall be identified and safety measures shall be adapted.
115	What are the types of hazards? (Physical-Noise, Heat, Fire, Explosion etc Chemical-Fire, Explosion, Toxic Release etc.)	<ul style="list-style-type: none"> • Chemical exposure, • Fire, • Explosion at LPG and other pressure vessels, , • Noise • Toxic Release, • Dust, • Fall from height, • Fall of material • Caught in between, • Contact with rotating parts, • Burn , • Slippery hazard. • Electrocution, • Dust explosion. • Contact with hot surface/steam and syrup. • Fall from Roof top • Collapse of structure 	<ul style="list-style-type: none"> • Hazard associated with sugar plant shall be identified and safety measures shall be adapted accordingly. • For activities involving risk to health and safety of employees, permit to work shall be followed strictly. • Compulsory use of Operation specific PPEs shall be ensured. • Preventive maintenance of all equipment's shall be ensured at scheduled frequency. • All rotating parts of machines shall be ensured safe guarded to avoid hazard due to contact with /engulfing into rotating parts . • Rubber mats of sufficient IR value shall be ensured in front of all electrical installations. • Storage of pressurized cylinders shall conform to rule 21 of gas cylinder Rules, 2016. • Fire prevention system shall ensure to requirements of MFR 70, 71-B, IS 2190 and National Building Code 2016. • Compliance to Requirements of National Fire Protection

			<p>Association (NFPA) for Combustible Dust shall be ensured.</p> <ul style="list-style-type: none"> • All pressure vessels shall be tested at scheduled interval with reference to MFR 65. • Requirements of MFR 73-F regarding working on roof top shall be complied. • Structural stability shall be ensured.
116.	What steps have been taken to prevent these hazards? Give details.	<p>Training is provided to all employees.</p> <p>Efforts are made to safe guard rotating parts of machine .</p> <p>Earthings ensured in all areas where there are chances of static charge generation.</p> <p>Fire extinguishers and hydrant line are provided.</p> <p>Hydrant line for bagass storage.</p>	<p>In addition,</p> <ul style="list-style-type: none"> • Hazard associated with sugar plant shall be identified and safety measures shall be adapted accordingly. • Permit to work system for activities involving risk to health and safety of employees, shall be followed strictly. • Compulsory use of Operation specific PPEs shall be ensured. • Preventive maintenance of all equipment's shall be ensured at scheduled frequency. • All rotating parts of machines shall be ensured safe guarded to avoid hazard due to contact with /engulfing into rotating parts . • Rubber mats of sufficient IR value shall be ensured in front of all electrical installations. • Storage of pressurized cylinders shall confirm to rule 21 of gas cylinder Rules, 2016. • Fire prevention system shall ensured in line with

			<p>requirements of MFR 70, 71-B, IS 2190 and National Building Code 2016.</p> <ul style="list-style-type: none"> • Requirements of National Fire Protection Association(NFPA) for Combustible Dust shall be complied. • All pressure vessels shall be tested at scheduled interval with reference to MFR 65. • Requirements of MFR 73-F regarding working on roof top shall be complied. • All lifting tools and tackles shall be tested with reference to MFR 64.
117.	Are there any Safety interlocks, alarms and trip system? Give details.	Interlocks for temp. (High and Low) at juice boiler area. DCS control at COGEN area. Pressure interlocks are boiler area	All interlocks shall be tested at regular interval for system reliability.
118.	Are these tested periodically? How often? Specify.	Reported Yes.	Safety interlocks, alarms and trips shall be tested as per manufacturer's guidelines.
119.	Are there any ambient monitoring devices with alarms for leakage of hazardous materials? Give details.	No.	NIL.
120.	Are Safety Audit or HAZOP or any other studies carried out and the recommendations implemented?	Safety audit conducted on July, 2018 No HAZOP study carried out.	Compliance to all recommendations mentioned in safety audit report shall be ensured.
121.	What has been the major modification done in Plant / Process and has the approval of the concerned Competent Authority?	Yes. Modification is made and approved by the concerned competent authority. Evidenced approval letter with reference no. PLN/Jt	Any modification in the Plant / Process, in future, shall be approved from Jt. Director Industrial Safety & Health.

		DISH/KOP-171-2002/PMP/9353/2002 VSM/ dated 26.12.2002.	
122.	What decision and monitoring equipment are available and used for checking the environmental conditions in and around the plant? Give details.	Online monitoring system installed at boiler area.	Operation reliability of installed system shall* be ensured.

TECHNICAL ASPECT.
SAFE OPERATING PROCEDURES.

123.	Are written Safe Operating Procedures available for all processes?	Separate safe operating procedures are not available	Safe Operating Procedures in the local language shall be prepared and communicated to all operation team.
124.	Whether the written Safe Operating Procedures displayed or made available and explained in the local language to the workers?	NA as no SOP prepared.	The written Safe Operating Procedures for each machine, in the local language shall be explained to the workers and made available to them as well as displayed.
125.	Whether the Safe Operating Procedures are prepared jointly by the Plant and safety departments?	NA as no SOP prepared	Safe operating procedures shall be prepared jointly by plant and safety management.
126.	What system is used to ensure that the existing Safe Operating Procedures are updated? Give details.	NA as no SOP prepared	Safe Operating Procedures shall be reviewed and modified on the basis of experience / problems faced if any.
127.	Have the workers been informed of the consequences of failure to observe the S.O.P.	NA as no SOP prepared	The workers shall be informed of the consequences of failure to observe the S.O.P. Records of all communications shall be maintained
128.	Are the contractor workers educated and trained to observe Safety at workplace?	NA as no SOP prepared	NIL
129.	Whether the contractor workers are permitted on process / operation?	NA as no SOP prepared	Compatibility of contract employee shall be ensured before permitting him directly in operations.

WORK PERMIT SYSTEM.

130.	What necessary type of work permits exists in your factory? Give details	Yes. Height work permit is followed.	Formal procedure for issuing permit system shall be followed effectively for system reliability in all operation areas. Following work permits are suggested in plant. <ul style="list-style-type: none">• Hot work• Confined space entry permit• Electrical work permit.• General works permit for all other activities involving high risk to health and safety of employees.
131.	What are the hazardous chemicals handled?	Sulphur and lime	All hazardous chemicals used in plant shall be stored in dedicated areas only. MSDS of chemicals shall be made available in area. All workers shall be made aware about the hazardous nature of the chemicals and safety measures to be followed while handling chemicals.
132.	Are the keys kept for individual locks that are used for electrical lock-outs with the supervisor concerned?	Yes at some locations.	LOTO system is suggested in area.

WASTE DISPOSAL SYSTEM.

133.	Is identification done for various types of wastes? Give details.	Yes. Used / spent oil, ETP Sludge , boiler ash	Evidenced with MPCB consent UAN No. 0000051925/CR/CAC-1909000954 dated 25.09.2019 valid upto 31.07.2021.
134.	Are these quantities less than those specified by the Hazardous waste Management and Handling Rules 1989?	Yes.	NIL.
135.	What is their disposal Mode?	As per MPCB guidelines.	Compliance to MPCB guidelines shall be ensured.

136.	What are the system / measure adopted for controlling air, water and land pollution?	Necessary precautions are taken as per the norms of M.P.C.B.	Compliance to MPCB guidelines shall be ensured.
137.	What is the system of effluent treatment plant and whether the Competent Authority adopts it?	ETP provided.	Compliance to MPCB guidelines shall be ensured.
138.	How are the treated effluent used?	Treated effluent i.e. water for agriculture.	Compliance to MPCB guidelines shall be ensured.

PERSONAL PROTECTIVE EQUIPMENTS (PPE).

139.	Has a list of required P. P. Es for each area / operation been developed and the required PPE is made available to the workers?	Required P. P. Es for each area / operation have been developed / decided according to the operational hazards in each area and accordingly the suitable P. P. Es is made available.	Operation specific PPE matrix shall be prepared and displayed in all operation areas.
140.	Are the Safety Department and the workers consulted in the selection of PPE?	Yes.	The Safety officer and workers is consulted in selection of PPE.
141.	Have the workers been trained in proper use of PPE?	Yes.	Verbal instructions are given to the workers.
142.	What are the system of replacement / issue of PPE?	The PPES are replaced as and when found damaged / not suitable for use / demands by the workers.	System to be continued.
143.	What are the arrangements for safe custody and storage of PPE provided to the workers?	The lockers are provided.	NIL.
144.	Are the contractors workers provided with the required PPE? Who is responsible? Give details.	Yes	Records of issue of PPE to workers shall be maintained.
145.	Are the PPEs conforming to any Standard? Give details.	Reported that all PPEs are of applicable IS standard.	The PPEs shall conform to relevant Indian / British standards.
146.	Give the details of PPE and also specify the responsibility for their inspection and maintenance.	Safety goggle, Helmet, are used in plant. Dept. Head/and supervisor is responsible for inspection & maintenance of PPEs.	The store keeper / maintenance manager shall check the PPEs after receipt from supplier, and at the time of issue as well as replacement.

FIRE PROTECTION.

147.	Indicate on a plant layout the location, number (Quantity) and types of portable fire extinguishers available?	Location not displayed in plant.	The location, type and capacity of the fire extinguishers along with hydrant line provided shall be marked on the plant layout plan and the same shall be displayed at conspicuous place.
148.	Is the firefighting system and equipment approved, tested and maintained as per relevant standard?	Yes.	Firefighting measure shall be in accordance with MFR 71-B, IS 2179 and IS 13039.
149.	What is the inspection and maintenance schedule of the above extinguishers? Who performs these functions?	Fire extinguishers are inspected and serviced by external agency. Details not available.	Compliance to IS 2190 shall be ensured. Records of all inspection shall be maintained.
150.	Which areas of the plant are covered by the Fire Hydrants? Indicate the locations of the Hydrant Points and how the required pressure maintained in the system and ensured?	Bagass storage area is covered with hydrant points. System is operated in manual mode.	Fire hydrant system shall be maintained in auto mode. Locations of hydrant point shall be pointed in plant layout and displayed at conspicuous places.
151.	What is the capacity of dedicated water reservoir for supply to the hydrants? What is the source of water?	Water reservoir capacity: 30 lac Ltr. (For fire and operation). Source of water: River	Fire water availability based on Fire load and as per requirement of MFR71-B shall be ensured.
152.	i). How is the power supply to the Hydrant Pumps ensured? ii). What is the alternate source of supply in case of power failure? Give details.	MSEDCL as main source. Alternate Power supply is maintained through DG Set.	NIL
153.	Are all personnel conversant with the fire prevention and protection measures? Give details.	Yes. Fire fighting personnel as well as officers and supervisors are conversant with fire prevention and protection measures.	Key persons in the plant and 100% security personnel shall be conversant with fire prevention and protection measures.
154.	What percentage of plant personnel staff and officers, have been trained in the use of portable fire extinguishers?	Yes.	Competency of fire fighting team shall be ensured.
155.	Do you have fixed or automatic Fire Fighting installations in any section of plant?	No	Fire hydrant line shall be maintained in auto mode for operation.
156.	Are the fire alarms adequate and free from obstruction?	Siren is provided for emergency	Adequate fire alarms shall be ensured in plant

		communication.	
157.	Do you have a fire department? If yes, Give details.	No. Separate fire department. Security team works as fire department.	Compatibility of Security personnel shall be ensured and improved if required.
158.	What is the system for conducting mock drills? Give details.	Fire fighting mock drills is conducted six monthly to make personnel conversant with the job. Report not available.	Mock drills considering all emergencies shall be planned.
159.	Do you have any Mutual Aid Scheme with any of your neighbouring industry or any local organization?	NA	NO mutual group in area
160.	Give details of existing Fire resistant walls & doors?	NA. NO Fire resistant walls & doors provided.	NIL
161.	Do you have any system of colour coding for pipe lines of hazardous chemicals? Give details including marking of flow directions.	NA	No fire resistant walls and doors provided in plant.
162.	Are there any safe containers for the movement of small quantities of hazardous chemicals? Give details.	NA	No hazardous chemicals handled in small quantities.
163.	Are all self-closing fire doors in good condition and free from obstruction?	NA. No self closing doors provided.	NIL.
164.	How many major /minor incidents of fires were there in the factory during last five years? Give department / Plant wise.	NIL	NIL
165.	Have all the fires / incidences have been investigated and corrective action taken? Give break-up.	Reported NIL. Details not maintained.	Records of all major/minor fire incidents shall be maintained.

EMERGENCY PREPAREDNESS.

166.	Is there an on-site emergency plan for your factory?(attach a copy of the plan).	Yes.	NIL
167.	What is the frequency of conducting mock drills of onsite emergency plan?	Mock drills are conducted six monthly. Details not maintained.	Details of all mock drill shall be maintained.

168.	What is the number and location of emergency control centres, assembly points?	Emergency Control Centre - Security office. 2. Assembly Point are identified in plant near sugar godown.	Areas shall be identified with displaying in local language.
169.	Whether emergency team or the key personnel identified?	Yes. Emergency team is identified in Onsite emergency plan.	NIL
170.	Are suitable and adequate protective and rescue equipment available? How the emergency rescue team is trained to use these equipments?	Yes.	Refresher trainings shall be conducted for using required PPEs like SCBA during emergencies.
171.	How is the emergency communication with local bodies and other organizations ensured?	Through Landline, & mobile phones etc.	Uninterrupted power supply shall be ensured.
172.	Is any alternate power source identified? Give details.	D.G. and power generated in COGEN plant is provided.	DG set shall be maintained in auto mode
173.	What is the Medical emergency response system? Give details.	For medical emergencies, first aid boxes are kept in the departments. The services of factory medical officer are available for 24 hours. Serious patients can be shifted to hospitals with help of ambulance.	For medical emergencies, the team members shall be prompt for giving first aid and making arrangement for hospitalization.
174.	Are you member of Any Mutual Aid Group of your area? If so, Give details.	No.	There is no Mutual Aid Group in the area.
175.	How many emergency alarm systems are available? Give details.	1 Emergency Siren is provided.	Adequate number of emergency alarms shall be provided.

PLANT LAYOUT AND AREA CLASSIFICATION.

176.	What is the system of classification of hazardous zones in the plant for electrical installations? Specify.	With reference to IS 5572, there is no Hazardous area However Bagass storage area is hazardous area as far as fire hazard is considered.	Sufficient fire protection and fighting measures shall be ensured at bagass storage area.
177.	Whether periodic inspection and a qualified person do preventive maintenance of	Yes.	NIL

	electrical installation and record is maintained?		
178.	Whether plant layout with area classification has been displayed at appropriate place(s)	NA	NIL

STATIC ELECTRICITY.

179.	Whether the process(s) and equipment generating and accumulating static charge has been identified? Give details.	All machines cable trays and pipelines are generating static charges.	All machines, cable trays and pipeline shall be earthed to dissipate static charges developed.
180.	Whether all such equipments are properly bonded and earthed?	Yes	NIL
181.	How is the electrical resistance for earthing circuits maintained? Are periodic inspections done and recorded?	Earth pits are maintained by providing earthings with earthing powder. Pits are maintained in moisture condition. Periodic inspection of pits is carried out yearly.	Construction and maintenance of pits shall confirm to IS 3043.
182.	Are adequate earthing arrangements made at the terminal points where hazardous chemicals are handled through pipes?	NA no chemicals handled through pipelines.	NIL
183.	Are anti-static charge devices fitted wherever necessary?	N.A. No anti-static charge devices installed.	NIL
184.	Whether these devices are periodically checked and maintained by a qualified person?	N.A.	NIL

PRESSURE VESSELS (FIRED & UNFIRED)

185.	Give the details of the plants, piping and vessels, which are operated at a pressure greater than the atmospheric pressure?	<ul style="list-style-type: none"> • Air Receivers. • Air / Steam / Vapour pipe lines etc • Centrifugal machines. are operated at a pressure greater than the atmospheric pressure. 	It shall be ensured that All piping and vessels which are operated at a pressure greater than the atmospheric pressure are identified with maximum operating pressure. Ref: MFR 65-6(1)
186.	How is it is ensured that the working pressure inside the pressure vessels / plants will not	Safety Valves and pressure gauges are provided.	All safety valves shall be tested for its working at scheduled interval as per

	exceed their maximum working pressure for which it is designed?		manufacturer's instructions. Pressure gauges shall be calibrated periodically.
187.	What means of isolating the pressure vessels or means to prevent rise in pressure are installed?	Yes. The air compressors are kept in Auto, so that it will start as soon as pre-set minimum pressure is reached and will trip when the pre-set maximum pressure is attained. In addition, Safety Valve is provided.	Compliance to requirements of MFR 65-3(c) shall be ensured.
188.	What standard / codes of practice are adopted for design, fabrication, operation and maintenance of pressure vessels and records maintained?	N.A.	Pressure plants are not manufactured.
189.	How is the pressure vessels tested? Give details.	It is reported that pressure vessels are not tested by competent person.	Testing schedule shall confirm to requirements of MFR 65(4) and MFR 73-A .
190.	Are there any competent person's test reports?	NA as no testing carried out.	Testing of record shall be maintained in form no. 13.
191.	How are the recorded results verified?	NA as no testing carried out.	During examination, maintenance personnel should be present and note down the data and verify the same with test reports.
192.	Give details of safety devices available for these pressure vessels?	Auto cut of switch & Safety valves are provided on air receivers.	Requirements of Safety devices to pressure vessel shall ensured to requirements of MFR 65(3) .
193.	Whether log-book for pressure plants has been maintained?	Yes.	Log book containing information such as design pressure, safe operating pressure, safety valve setting, and details of test reports shall be maintained.

NEW EQUIPMENT REVIEW.

194.	What is the system of effecting any change in the existing plant, equipment or process? Whether it is the approved by the competent authority?	Yes.	Any changes in plant, equipment or process is to be effected; DISH shall be approved the same.
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195.	Whether the P & I diagrams and other related documents are updated accordingly?	NA	NIL
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LIFTING MACHINES AND TACKLES.

196.	Whether all the lifting machines are marked with their SWL?	Yes.	NIL
197.	Are all the examinations and tests documented in the prescribed form?	No test carried out.	All lifting tools and tackles shall be tested by competent person as per schedule prescribed in MFR 64.
198.	Are all the examination and tests carried out & certified by competent person(s)? Give details.	Reported that no examinations carried out.	All lifting tools and tackles shall be tested by competent person as per schedule prescribed in MFR 64.
199.	Are adequate lifting tackles provided at all the places where it is required? Give details.	Yes.	NIL.
200.	Are the trained operators engaged for operating the equipment? Give details.	Yes. The trained operators engaged for operating the equipment.	Competency mapping of crane drivers is suggested.
201.	What is the system of training such operators?	Trained operators are appointed.	Based on competency mapping, skill enhancement trainings shall be provided.
202.	Are the lifting machines & tackles maintained in good condition and record maintained?	Yes	NIL.

MOBILE EQUIPMENT AND VEHICULAR TRAFFIC.

203.	Are all the mobile equipment's in good condition?	Yes. Tractor is used.	NIL
204.	Are trained drivers engaged for fork-lift trucks?	N.A.	No forklift provided in operation.
205.	What is the system of identifying these drivers from other drivers?	N.A.	No forklift provided in operation.
206.	What system do you adopt to assess their standard of driving as poor / fair / satisfactory / good?	N.A.	No forklift provided in operation.

207.	Are there adequate numbers of warning signs / signals provided?	No.	Adequate no. Of warning signs and signals shall be provided in all operation areas.
208.	Are the hazards associated with transportation within the plant identified and safety measures taken? Give details.	No.	Hazard associated * with transportation shall be identified and corrective measures shall be adapted accordingly.

ACCESS.

209.	Is adequate and safe access provided in all places where the workers need to work?	Yes.	Requirements of section 32 shall be complied.
210.	Is all such access in good condition?	Yes.	NIL.
211.	Are all portable access platforms necessary? If yes, A. Are these sufficient? B. Are these regularly inspected? C. Are these readily available? D. Are these provided with toe-boards and railings?	Yes. The portable access platforms may be required during off-season for maintenance work.	If at all portable access platforms are to be used, the same must be strong, sturdy, with suitable hand railing and toe boards and fastened firmly preventing slipping.
212.	Oiling and Greasing points A. Are these located and extended to safe place, clear of moving parts? B. Are these easily accessible? C. Are these liable to drip into walkways? D. Whether such workers are trained and provided with fit-tight clothing and the register of the same is maintained?	Yes Yes No Yes. Form no. 10 not maintained.	NIL. NIL. NIL. The workers required to oil or grease shall be provided with tight-fit clothing as per Rule 59 read with Sec.22 of F.A.1948.The register of workers attending machinery shall be maintained in Form No.10
213.	Are all drain covers in good condition and fitting flush?	Yes.	NIL.

MATERIAL HANDLING.

214.	Are there adequate storage facilities available?	Yes.	NIL.
215.	Are these areas clearly defined?	Yes	The areas are clearly defined.
216.	Are all racks and steel ages in good condition?	Yes	NIL.
217.	Have you adequate equipment for handling materials?	Yes.	NIL.
218.	Do the workers know the hazards associated with manual material handling?	Reported Yes.	All workers shall be made aware about the hazards associated with manual material handling.
219.	Where manual handling is necessary, are the workers been trained?	Reported Yes.	Workers shall be trained in safe procedures to be followed while manual material handling.
220.	Do they practice this?	Yes.	Workers shall be insisted to follow safe manual material handling procedures.
221.	Do workers follow safe procedures for storage of materials?	Reported Yes.	Workers shall be insisted to follow safe manual material handling procedures.
222.	Whether contractor workers are trained in safety?	Yes	Competency of all employees shall be ensured.
223.	What is the system of handing over plant to the maintenance department and receiving back?	Through discussion in meeting.	Formal procedure to be followed while handing over plant to maintenance shall be drafted and followed.
224.	Is the system consistently applied?	Yes	NIL.
225.	What is the system of preventive and predictive maintenance and how do you ensure its effectiveness? Give details.	Preventive and predictive maintenance plan is prepared and followed.	Schedule shall be prepared as per manufacturers guidelines and followed strictly.

TANK STORAGE VESSEL AREA

226.	Whether it is pressure vessel or not?	No pressurized tanks.	NIL.
227.	Give storage vessels designations? (Exceeding threshold quantities specified in MSIHC Rules 1989?	Separate area and below threshold quantities specified in MSIHC Rules 1989.	NIL

228.	Give the names of storage materials in each of them?	Molasses	All storage tanks shall be identified with material stored and maximum capacity of storage.
229.	What are the vessels sizes (capacity in tones)?	2 tanks of capacity 9000 MT each.	
230.	What is the material of construction for each vessel and what standards followed in designing / fabricating the vessel?	MS.	NIL
231.	What are the operating pressures and temperatures?	At atmosphere pressure & Room temperature.	NIL.
232.	What are the vessels locations? (Please indicate on site plan or plot plan.)	Isolated from operation area.	NIL.
233.	Indicate whether vessels are above ground / underground?	Above ground.	NIL.
234.	If any of the tanks storing flammable material, whether electrical installations are flameproof or not/	NA as no flammable material stored.	NIL
235.	Are these storage vessels bunded / dyked?	No dyke walls observed to molasses storage tanks.	Separate dyke of sufficient capacity are recommended to all storage tanks.
236.	If yes, What is the capacity of the bunds / dykes?	No dyke walls observed to Molasses storage tanks.	Separate dyke of sufficient capacity are recommended to all storage tanks.
237.	Are the vessels properly bonded and earthed and whether periodically checked and record maintained.	Yes.	Storage vessels of flammable liquids shall be properly earthed. Earth resistance shall be measured at regular intervals and record of the same shall be maintained.(Ref: Rule 127 of The petroleum Rules 1976.)
238.	How are vessels isolated in the event of a mishap?	They are located in separate area. No provision is made to isolate tank in case of emergency.	Provision shall be made to isolate the tanks from other tank area in case of emergency.
239.	Are the vessels fitted with remotely controlled isolation valves?	No.	Vessels shall be fitted with remotely controlled isolation valves.
240.	Are vessels provided with emergency vent, relief valve, bursting disc, level indicator, pressure gauge, and overflow	Yes	NIL.

	line?		
241.	Where do such vents discharged?	To atmosphere	NIL.
242.	Are the vessels provided with alarms for high level, high temperature and high pressure?	No.	All vessels shall be provided with alarms* for high level, high temperature and high pressure
243.	Are stand by empty tanks provided for emptying in case of emergencies?	No	Stand by empty tanks shall be provided for emptying in case of emergencies
244.	What are the provisions made for fire fighting/tackling emergency situations around the storage vessels?	Fire extinguisher is provided.	Availability of water reservoir to be calculated based of Fire load in area.
245.	Has any consequence analysis been carried out for these vessels? (If yes give details)	No	Consequence analysis shall be carried out for storage tanks.
246.	What periodical testing is carried out on the vessels to find out the integrity of the vessels?	No	Periodical testing shall be carried out on the storage tanks to find out the integrity of the vessels.
247.	Whether the approved competent persons certify these tests?	NA	No test carried out.
248.	Whether log sheets are filled up on daily basis for recording the parameters of these vessels?	Yes.	Daily check record is maintained.

ON-SITE GAS CYLINDERS STORAGE AREA

249.	What is the various gas cylinders used in the plant? (give details)	LPG, Oxygen,	NIL.
250.	What are the storage facilities?	Ventilated area.	Storage requirements for cylinders shall confirm to Rule 21 of Gas cylinder rule 2016.
251.	What are the measures taken for combating any emergency in the cylinders storage area?	Fire extinguisher are provided.	NIL.
252.	Are valid licenses available for storing all these cylinders?	N.A as it was reported that storage is within limit.	Storage licenses from concern departments shall be obtained, if storage limits exceeds prescribed limits.

253.	Whether integrity test certificates are obtained from the suppliers of the cylinders?	N.A.	Integrity test certificates may be obtained on sample basis from the suppliers.
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COMMUNICATION SYSTEM ADOPTED IN PLANT.

254.	Is public address system available in all plant areas?	Mobile, & landline phones are provided.	The public address system with uninterrupted power supply shall be provided.
255.	Are public address system provided with uninterrupted power supply?	N.A.as no PA system provided.	The public address system with uninterrupted power supply shall be provided.
256.	Whether the public address system is checked periodically for its proper functioning?	N.A. as no PA system provided.	The public address system shall be checked periodically for its proper functioning.
257.	Is there any hot line provided to Fire Station?	No	Separate line shall be provided for fire station for communication in case of emergency.
258.	What are the means of communicating emergency in the plants?	Telephone and cell phones	NIL.

TRANSPORTATION

259.	What potentially hazardous materials are transported to or from the site (including wastes)?	Molasses are transported from site.	NIL
260.	What modes of transport are used :i) Road? ii) Rail? iii) Pipelines?	Road.	NIL.

ROAD

261.	Does the company employ licensed vehicle of its own/outside sources?	Outside Sources	NIL.
262.	Are the loading/unloading procedures on-site and safety precautions displayed?	No.	Loading/unloading procedure on-site and safety precautions shall be displayed at site.
263.	Are loaded tankers or trucks parked in a specific area on-site	Yes.	Area shall be identified as tanker parking area.
264.	Do all truck and tanker drivers carry TREM card or instruction	Reported Yes.	Availability of TREM card shall be checked at security

	booklet?		checkpoint.
265.	Do all truck and tanker drivers get training in handling emergencies during transport	Yes.	Competency to handle emergency shall be ensured.

RAIL

266.	What hazardous materials are transported by rail?	NIL	No material transported by train.
267.	Does the company have a direct siding on site?	No	No material transported by train.
268.	Are tankers or others wagons used in transportation?	No.	No material transported by train.

PIPELINES

269.	What materials are transported to and from the site by pipeline?	N.A.	No material transported to and from site.
270.	Are the pipelines underground or over ground?	N.A.	No material transported to and from site
271.	Are corrosion protection measures employed in pipelines?	N.A.	No material transported to and from site
272.	Whether intermediate booster pumps are used?	N.A.	No material transported to and from site
273.	What are the minimum, maximum and average transfer rates?	N.A.	No material transported to and from site
274.	Are the pipelines extended in the public domain?	N.A.	No material transported to and from site
275.	Are the pipelines dedicated for each type of chemicals?	N.A.	No material transported to and from site
276.	Are the pipelines fitted with safety equipment such as leak detector, automatic shut-off valves etc?	N.A.	No material transported to and from site
277.	What is the frequency and method of testing of the pipeline?	N.A.	No material transported to and from site
278.	Is there written procedure for tackling leakages in pipeline?	N.A.	No material transported to and from site

TYPES OF RECORDS EXAMINED DURING THE SAFETY AUDIT

1. OS&H policy	: Available.
2. Safety organization chart.	: Available.
3. Training records on safety fire and first-aid.	: Not Available.
4. Record of plant safety inspections.	: Not Available.
5. Accident investigation reports	: Not Available.
6. Record of tests and examinations of equipment and structures as per statutes	: Not Available.
7. Safe operating procedures for various operations.	: Not Available.
8. Record of work permits.	: Not Available.
9. Maintenance and testing records of firefighting equipment.	: Not Available.
10. Medical records of employees	: Not Available.
11. Material safety data sheets	: Available.
12. On site emergency plans and record of Mock Drills	: OSEP Available. Record of mock drill not available.
13. Records of waste disposal	: Available.
14. Records of effluent discharges to the environment.	: Available.
15. Housekeeping inspection records.	: Not Available.
16. Minutes of safety committee meetings.	: Not Available.
17. Approval of layouts and other approval from statutory authority	: Available.
18. Records of any modifications carried out	: Available.
19. Maintenance procedure records	: Not Available.
20. Calibration and testing records.	: Available.
21. Shut down maintenance procedures	: Not Available.
22. In service inspection manuals, records of material handling.	: Available.
23. Safety budget	: Available.
24. Inspection book and other statutory records	: Not Available.
25. Records of previous audits	: Available.
26. Safety in transportation of hazardous substances.	: Not Available.

7. Onsite Observations

Sr.	Areas for improvement	Suggestion/Remark.
1	Safety at Security gate area.	<ul style="list-style-type: none"> • It is suggested to have a comprehensive list of key persons to be communicated in case of emergency at security gate. • The list shall be displayed at conspicuous areas in all operation areas. • Copy of emergency preparedness shall be made readily available in area.
2	Material handling at Cane unloading and other areas.	<ul style="list-style-type: none"> • Interlock provided for load lifted and SWL of crane shall be checked for system reliability. • All lifting tools and tackles shall be tested at scheduled frequency as mentioned in MFR 64 by competent person • EOT crane operation in cane unloading area shall be carried out by skilled persons only. Competency of operation shall be ensured. • SOP for cane unloading shall be prepared and displayed in language understood by majority of workers. • Safe cage/railings shall be ensured to avoid fall hazard wherever required, • Ensure safe access and egress are provided to vehicles carrying sugarcane to avoid hazard due to caught in between. • Condition of crane safety limit switches, brakes, mechanical stoppers shall be ensured in healthy condition. • It shall be ensured that All rotating parts of machines are safe guarded. (Ref: Section 21 of The Factories Act, 1948.) • Area shall be restricted for unauthorized entry. *Observation related to EOT crane inspection and report maintenance shall be implemented horizontally at all lifting tools/tackles

3	Operation areas(Fibrizer area): Feeder, Leveler and Chopper	<ul style="list-style-type: none"> • At Fibrizer area, Area shall be identified as high noise area. Precautionary notice for compulsory use of hearing protection in this area shall be displayed at entrance of area. • All rotating parts of machines shall be guarded sufficiently to protect from hazard due to caught in between. (Ref: Section 21 of The Factories Act, 1948.) • Requirements of Section 24-(2)of The Factories Act, 1948 regarding provision of suitable device for cutting off power in case of emergency shall be ensured complied at rack elevator. • Pull chords installed for stopping conveyor in case of emergency shall be ensured in operation at all times. • Inspection shall be carried out at elevator to avoid any hazards due to caught in between.
4	Safety in raw juice extraction and boiling area	<ul style="list-style-type: none"> • Calibration of thermocouples installed at juice boiler area, at scheduled frequency shall be carried out. • Safety measures shall be followed to avoid exposure to leaked steam. • Necessary precautions shall be carried out to avoid hazard due splashing of boiling juice. • Good housekeeping practices shall be ensured to avoid fall, slips and trips while working in the area • All running nip points of drives and mill rolls shall be guarded sufficiently. • Always use LOTO when working near on mill rollers. • Availability of eye wash/body showers shall be ensured in nearby area. • Compulsory use of operation specific PPEs shall be ensured. Suitable ear protection while working in mill area shall be ensured. • Provide and maintain safe access for working in mill area. • Suitable guard rails shall also be provided with toe boards. • Safety measures to be followed to avoid

		<p>hazard due to explosion /fire at boiling areas.</p> <ul style="list-style-type: none"> • Before supplying steam to any equipment / pipe line it shall be ensured that there is no residual condensate in the pipe line and steam shall be allowed slowly to avoid effect of water hammer.
5	Clarification/Evaporation area Safety	<ul style="list-style-type: none"> • All heating vessels shall be tested prior to take into operation. Manholes and other openings shall be provided with secured fittings • All chemicals shall be handled safely as per guidelines provided in MSDS .Abstract of MSDS shall be displayed in area. • Use of Operation specific PPEs shall be ensured. • Availability of eye wash/body showers shall be ensured in nearby area. • Availability of railings shall be ensured at all locations where there are chances of fall of person from height. • Steam pressure and temperature of the raw juice heaters shall be maintained properly. • Periodic testing of raw juice heaters shall be carried out with reference to MFR 65. • Provide proper railing to all open tanks to avoid falling into tanks. • Work permit system i.e. entry into the vessels (tanks) shall be strictly followed.
6	At sulphur cracking operations, sulphur is bought from storage area in bags. There are chances of dust explosion during transportation. Sufficient safety measures to be followed while transporting are not displayed.	Necessary safety measures to be followed while transporting sulphur shall be displayed both at storage and at usage area. All workers shall be made aware about hazards of transportation.
7	At sulphur cracking process. Steam is supplied for cracking operation. Temperature and pressure interlocks are provided .	Interlocks shall be checked as per manufacturers recommendations for system reliability. Calibration of pressure gauges and thermocouples shall be carried out at scheduled frequency for system reliability.

8	With reference to MSDS of sulphur it shall be protected from hot liquid. Emergency eye wash facility to use in case of emergency in case of potential splash exposure not provided in area.	Readily accessible means of drenching with water and eye wash facility for flooding in case of emergency shall be made available in area. Ref: MFR 73Y(b).
9	Safety at Conveyor used for sugar bag transferring to godown	<ul style="list-style-type: none"> • Operation of Pull chord to stop the conveyor in case of emergency shall be ensured. • Special precautions shall be followed for avoiding hazards of fire due to friction in rotating parts.
10	Safety at Bagging area due to dust explosion due to static charge or any other means	<ul style="list-style-type: none"> • All silos and other conveyors where static charge is generated shall be sufficiently earthed to avoid accumulation of static charge generated. Continuity of earthing shall be ensured. • Necessary measures shall be followed to avoid dust explosion. Operational efficiency of installed system for dust extraction shall be ensured. • Compliance to Requirements of National Fire Protection Association (NFPA) for Combustible Dust shall be ensured. • Hot work system shall be followed in this area. • Storage of sugars bags shall be in such a way that it should not create fall hazard.
10	At molasses storage tank area, Tanks of are installed for molasses storage. Internal circulation system is provided to avoid foam formation. Canopy is provided at top of tanks for discharging generated gases. Water circulation system from outside tanks is provided. Dyke walls not provided to storage tanks.	<p>Working of internal circulation system Shall be ensured for system reliability.</p> <p>Operational efficiency of water circulation System shall be ensured for intended purpose. Dyke wall of sufficient capacity shall be provided. Necessary measure to collect the contain from dyke shall be made available</p>
11	Regarding Pressure vessel testing and Maintenance, It is reported that pressure vessels are not tested by competent person.	Compliance to Requirements of MFR 65 regarding safety measures for pressure vessel and pressure vessel testing shall be ensured. All pressure vessels shall be identified with max. working pressure and last examination date (MFR 65-6-(1)).

		All requirements of MFR 65 related to pressure vessel safety shall be complied.
12	Safety related to electrically energized equipments	<ul style="list-style-type: none"> • Area shall be identified in legible manner. • Rubber mats of sufficient IR value shall be ensured in front of panels sufficiently to protect from hazard due to electrocution. • Panels shall be identified with incoming voltage supply. • List of authorized persons authorized to work on panels shall be displayed. • Open cable entry glands shall be sealed. • Precautionary notice to isolate the panel from incoming power supply shall be displayed at site. • Fire buckets filled with clean dry sand and fire extinguisher suitable for extinguishing electrical fire shall be provided at entrance of power receiving area. (Ref. Rule 43(1) of Indian Electricity Rules 1956 and MFR Rule 71-B(iii).
13	Safety at Gas cutting set (Oxy-LPG)	<ul style="list-style-type: none"> • Availability of Flash back arresters shall be ensured at all gas cutting sets at both cylinder and torch end. • Hose pipes shall be secured with double clamps to avoid hazard due to accidental slippage from fitting. • Storage of gas cylinders shall conform to requirements of Rule 21 of Gas cylinder Rule 2016.
14	Maintenance of first aid boxes in operation areas.	<p>The name of the trained first aider shall be displayed near first aid box with his contact number.</p> <p>Box shall be maintained in hygienic condition. Requirements of MFR 76 of Maharashtra Factories Rules, 1963 shall be complied.</p>

15	Safety at maintenance workshop area,	<ul style="list-style-type: none"> • Safe guards shall be ensured to all rotating part of machine. • Safe operating procedures shall be prepared and communicated to all employees working in area in local language. • Use of Operation specific PPE shall be ensured by workers.
16	Maintenance of earth pits	<ul style="list-style-type: none"> • All earth pits shall be identified with unique pit no. test date of pit resistance, resistance at the time of testing,. • All machines shall be earthed sufficiently to dissipate static charge generated. • All earth pits shall confirm to requirements of IS 3043.
17	<p>Firefighting measures.</p> <p>Fire extinguishers are provided in plant as a means of fire fighting.</p> <p>Hydrant line is provided in Bagass storage area only.</p>	<ul style="list-style-type: none"> • Fire hydrant line in bagasse storage area shall be maintained as per IS 3844: 1989. 'Code of practice for installation and maintenance of internal hydrants and hose reel on premises. • The line shall be maintained in auto mode for operation. • Requirement of fire water shall be sufficient enough based on fire load. • Requirements of MFR 70 and 71B and National building code 2016 shall be complied. • All fire extinguishers shall be maintained with reference to IS 2190. • Competency of fire fighting team shall be ensured through regular mock drills and refresher trainings.
18	Safety at switch yard	<ul style="list-style-type: none"> • Area shall be properly identified. • Unauthorized entry restriction board shall be displayed in area. • List of persons authorized to work in area shall be displayed. • Proper fencing shall be done to avoid unauthorized entry in area. • Danger board (IS 2551/IE Rule 35) shall be displayed. • Alternate exit (Emergency Exit) shall be

		<p>provided in area.</p> <ul style="list-style-type: none"> • CPR chart(Instruction for restoring person suffering from electric shock) shall be displayed in area in Local language. It shall be ensured that all authorized persons in area are acquainted with and are competent to apply above instructions. (Ref. Rule 44 of Indian Electricity Rules 1956) • Fire buckets filled with clean dry sand and fire extinguisher suitable for extinguishing electrical fire shall be provided in power receiving area. (Ref. Rule 43(1) of Indian Electricity Rules 1956 and MFR Rule 71-B(iii).
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Boiler and GOGEN area

1	Safety at Conveyor used for transferring bagasse to boiler and Bagasse storage at bagasse yard	<ul style="list-style-type: none"> • Ensure and maintain pull cord interlock system on both sides of the conveyor, train person on how to use it in case of an emergency. • Special precautions shall be followed for avoiding hazards of fire due to friction in rotating parts of conveyor • Sufficient fire fighting measures shall be ensured at Bagasse storage yard based on fire load. Hydrant system provided shall be maintained in auto mode for operation. • Use of operation specific PPEs shall be ensured while working in area. • Area shall be restricted for unauthorized persons. Necessary displays shall be ensured at security gate. • All machinery generating static charge shall be identified and proper earthing shall be ensured. Earth Pit shall confirm to IS 3043. • Preventive maintenance of conveyor motors in bagasse yard shall be carried out regularly to avoid spark generation. • Suitable and safe access for working near conveyor shall be ensured • Provision of incidental tool for maneuvering bagasse to safe distance shall be ensured.
2	Boiler operation	<ul style="list-style-type: none"> • It shall be ensured that moisture in bagasse supplied to boiler is at acceptable level to ensure complete combustion. • ID and FD fans shall be interlocked with

		<p>boiler operation</p> <ul style="list-style-type: none"> • Pre Start checks shall be carried out for entire boiler system at the start. • All safety interlocks for controlling variation in temperature and pressure of boiler steam shall be tested at regular interval to ensure system reliability to avoid over pressure and temperature caused faulty gauge, inoperable trip system, due to improper combustion of fuel. • Measures shall be ensured to avoid hazard due to hot water and hot steam pipeline leakage, Exposure to the hot surface of pipeline or machineries, by hot fly ash. • Interlocks provided for boiler water level control shall be checked at scheduled frequency to avoid water tube bursting. • Safe means of access with guardrail system to all the floors shall be ensured at all platforms. <p>Ref: Section 32 of The Factories act, 1948.</p> <ul style="list-style-type: none"> • Permit shall be obtained while working in dust/ash handling system. • Preventive maintenance shall be carried out as per manufacturers guidelines to avoid steam leakages • Compliance to Statutory testing of boiler and other accessories shall be ensured. • It shall be ensured that Induced Draught and Forced Draught Fans of Boiler are interlocked with the feed pump/ low water level, so that in case of low water level or failure of Boiler water feed pump, the fans will be stopped avoiding overheating of the boiler tubes.
3	<p>Operation of DCS control mechanism DCS controlled system is provided for boilers operation. Steam pressure, temperature and fuel supply are controlled through DCS control system. ID fans are provided for removing flue gas from boiler furnace.</p>	<ul style="list-style-type: none"> • Preventive maintenance of boiler shall be ensured as per manufacturer's instruction. • All interlocks provided Steam pressure, temperature and fuel supply shall be tested as per manufacturer's guidelines. • Change control mechanism shall be ensured while performing any changes in DCS panels.
4	<p>Turbine operation area</p>	<ul style="list-style-type: none"> • Area shall be identified as high noise area. Necessary notice for compulsory use of hearing protection shall be displayed in area.

		<ul style="list-style-type: none"> • Sufficient measures shall be ensured to avoid Damage on generator due to lack of lubrication in coupling shaft, Damage on generator due to lack of lubrication in coupling shaft • Measures shall be ensured to avoid explosion on cooling oil, Explosion in turbine due to cooling system failure, Explosion in turbine due to cooling system failure, Fire on cooling oil.
5	Chemical handling area	<ul style="list-style-type: none"> • Secondary containment shall be ensured for chemical storage containers to contain the chemicals in case of accidental leakage. • SOP for material loading/unloading shall be displayed in respective areas. • Total Floor of area where corrosive chemicals are handled shall be ensured made of impervious, corrosion resistant material and shall be so constructed to avoid collection of any corrosive chemical. • Requirements/quantity of Eye shower/bottle shall be ensured in chemical handling area in accordance with Requirement of MFR 73Y.

8. REFERENCES

- IS: 14489-1998 (Code of Practice for Occupational Safety & Health Audit)
- Factories Act, 1948
- The Indian Electricity Rules, 1956
- Public Liability Insurance Act 1991
- Cylinder Rule 1981
- Water Act 1974, Air Act 1981 and Solid Waste Management 1986

9. ANNEXURE:

Health and safety policy



अथनी शुगर्स लिमिटेड, शाहूवाडी युनिट नं. २

पर्यावरण, आरोग्य व सुरक्षितता धोरण

उद्दीष्ट :

पर्यावरण, आरोग्य व सुरक्षितता यांच्या पध्दती व्यवस्थापनाद्वारे आमचे कर्मचारी बाह्य व अज्ञातवाद्या आरोग्य व सुरक्षिततेची जाळणी घेणे तसेच आमची कृतपाकन पध्दती पर्यावरणापुरक ठेवणे.

उद्देश :

कंपनीमध्ये पर्यावरण आरोग्य व सुरक्षितता यांच्यामध्ये सातत्य ठेवणे. पर्यावरण आरोग्य व सुरक्षितता हे आमच्या प्रमुख उद्दीष्टांपैकी महत्त्वाचे भाग असून आम्ही आमचे कृतपाकन व प्रकल्प यानसून आरोग्य व पर्यावरण यांचे संजतवाही प्रकारे व्यवस्थापन होणारे नाही यासाठी व्यापक आधीच अवलंब करू.

- व्यवस्थापनास लागू असणा-या सर्व कायदेशीर तरतुदींचे पालन.
- पेशावर्गीय प्रशिक्षणासद्वारे सर्व कर्मचा-यांचा सहभाग.
- सर्व स्तरातील कर्मचा-यांच्या कामांमध्ये पर्यावरण आरोग्य व सुरक्षितता यांचा अभ्यास व निरीक्षण करणे.
- कंपनीमध्ये प्रवेश करणारे सर्व बाह्य, पुरवठादार, कंत्राटदार आणि इतर यांचेकडून व्यवस्थापनाचे सर्व आरोग्य सुरक्षितता व पर्यावरण नियम व कडीचे पालन होत आहे याची खात्री करणे.
- शेजारी मंडीत व विश्व असेसमेंट या उत्कृष्ट कार्यपध्दतीद्वारे अपघात व संबंधित दुकाने टाळणे.
- प्रदूषण प्रतिबंध व नैजर्जिक ऊर्जा सोतोचे पालन करणे.
- पर्यावरण, आरोग्य व सुरक्षितता कार्यपध्दतीमध्ये सततत्वपूर्ण सुधारणा करणे.

हे धोरण कंपनीतील सर्व कर्मचारी व कंपनीची निगडीत अवलेख्या सर्व घटकाना साहित करून कंपन्यात आले आहे.

अपघात हे सोडून देताना याच कंपनी व्यवस्थापनाचा पूर्ण जिबाज असून आमचे ध्येय "शून्य अपघात" हेच आहे.

आम्ही या आरोग्य सुरक्षितता व पर्यावरण धोरणाची कटिबद्ध आहोत.

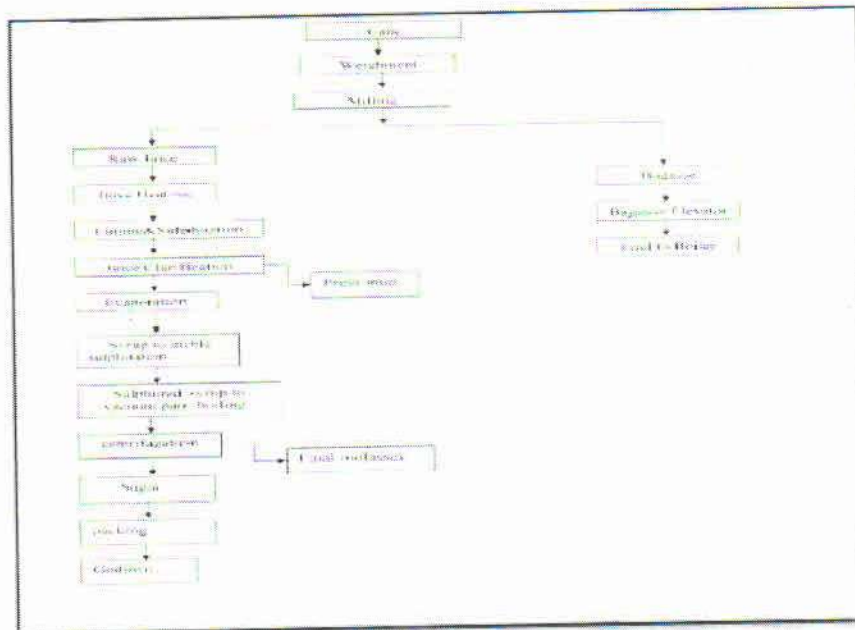
दि.

Process flow chart

MANUFACTURING PROCESS

The major unit operations are shown in figure these are

1. Extraction of juice
2. Clarification
3. Evaporation
4. Crystallization
5. Centrifugation



Details of raw material and finished products



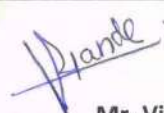
RAW MATERIALS & FINISHED GOODS

The main raw material for sugar unit is sugarcane. Final Product is White Crystal Sugar. The details are given below:

Sr. No.	Raw Material ((MT/M))		Final Product (MT/M)		By Product (MT/M)	
	1	Sugarcane	75000	White Crystal Sugar	9500	Bagasse
					Molasses	3500
					Press mud	3500



Recognised by Ministry of Environment and Forests (MoEF) / Central Pollution Control Board Govt. of India (CPCB) and ISO/IEC 17025:2017 (NABL), ISO 9001:2015, ISO 45001 : 2018 and ISO 14001 : 2015 Certified Company




TEST REPORT				
Test Report No: -	GESEC/PRO/2023-24/12/1181	Report Date	26/12/2023	
Sample ID: -	GESEC/PRO/2023-24/12/1181			
Name & Address of the Customer	M/s. Athani Sugars Ltd., Bambawade Unit (Sugar Unit) Bambawade, Tal.: Shahuwadi, Dist.: Kolhapur			
Ambient Noise Sample Details				
Type	Ambient Noise			
Sampling done by	GESEC			
Standard method	As Per IS: 9989:2020			
Date of Sampling	Sample Receipt Date	Analysis Start Date	Analysis End Date	
18/12/2023	20/12/2023	20/12/2023	26/12/2023	
Name Of Instrument	Sound Level Meter	Date Of Calibration	21.02.2023	
Calibration Certificate No.	SSEC/ME/61	Due Date of Calibration	20.02.2024	
Test Location	Unit	Average Noise Level Readings		CPCB Standards dB(A)
		Day (10.30 PM)	Night (10.10 PM)	
Near Main Gate	dB(A)	60.2	58.2	75 dB (A) & 70 dB(A)
Near Store	dB(A)	57.3	55.0	
Near weigh Bridge	dB(A)	64.3	61.5	
Near ETP Plant	dB(A)	53.7	50.2	
Near Sugar Go down	dB(A)	61.4	58.7	
		75 dB (A)	70 dB(A)	
Remark-				
➤ Central Pollution Control Board (CPCB) has prescribed 75 dB (A) as an upper limit of Noise Level during the Day Time & 70 dB (A) during the Night Time.				
				 Mr. Vinod Hande (Technical Manager) Reviewed & Authorized By
END OF REPORT				

Terms and conditions

1. The report is refer only to the sample tested and not applies to the bulk.
2. The results shown in this test report may differ based on various factors including temperature, humidity, pressure, retention time etc.
3. The test report cannot be reproduced wholly or in part and cannot be used for promotional or publicity purpose without the written consent of laboratory, GESEC.
4. Samples will be retained for a period of seven (7) days after completion of analysis. Longer retention periods can be arranged, on request of the customer.
5. We strictly maintain the confidentiality of all test result of sample(s) collected by us/ supplied by customer and not revel to third party unless required by the statutory or legal requirement.
6. MoEF approved Lab by Govt. of India. From date. 16/02/2022 to 29/02/2024.



Recognised by Ministry of Environment and Forests (MoEF) / Central Pollution Control Board Govt. of India (CPCB) and ISO/IEC 17025:2017 (NABL), ISO 9001:2015, ISO 45001 : 2018 and ISO 14001 : 2015 Certified Company

TEST REPORT				
Test Report No: -	GESEC/PRO/2023-24/12/1182		Report Date	26/12/2023
Sample ID: -	GESEC/PRO/2023-24/12/1182			
Name & Address of the Customer	M/s. Athani Sugars Ltd., Bambawade Unit (Sugar Unit) Bambawade, Tal.: Shahuwadi, Dist.: Kolhapur			
Work Zone Noise Sample Details				
Type	Work Zone Noise			
Sampling done by	GESEC			
Standard method	As Per IS: 9989:2020			
Date of Sampling	Sample Receipt Date	Analysis Start Date	Analysis End Date	
18/12/2023	20/12/2023	20/12/2023	26/12/2023	
Name of Instrument	Sound Level Meter	Date of Calibration	21.02.2023	
Calibration Certificate No.	SSEC/ME/60	Due Date of Calibration	20.02.2024	
Test Location	Unit	Average Noise Level Readings		The Factories Act 1948, standards
		Day (12:15 PM)	Night (10:40 P.M.)	
Mill Section	dB(A)	87.2	84.9	≤ 90
Boiling Section	dB(A)	78.5	74.1	
Remark-				
➤ The Factories' Act, 1948 has prescribed Noise Level threshold limit for 8 hours' exposure as 90 dB (A).				
				 Mr. Vinod Hande (Technical Manager) Reviewed & Authorized By

END OF REPORT

Terms and conditions

1. The report is refer only to the sample tested and not applies to the bulk.
2. The results shown in this test report may differ based on various factors including temperature, humidity, pressure, retention time etc.
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6. MoEF approved Lab by Govt. of India. From date. 16/02/2022 to 29/02/2024.

Annexure – XII PHOTOGRAPHS

Photo.1 – Green Belt









Photo.2 – Provided Shelters to the Contractor Labors



Photo.3 – Provided Sanitation Facility to the Contractor Labors



Photo.4 – Provided Drinking Water Facility to all workers



Photo. 5 – Hotel for the refreshments to all workers

ONLINE EMISSION MONITORING SYSTEM FOR STACK



Photo. 6 - INSTALLED SENSOR



Photo. 7 - PANEL CUM DISPLAY BOARD

Photo.8 - ONLINE EFFLUENT MONITORING SYSTEM FOR ETP





Photo No. 9 – Distribution of Safety Measures to Employees

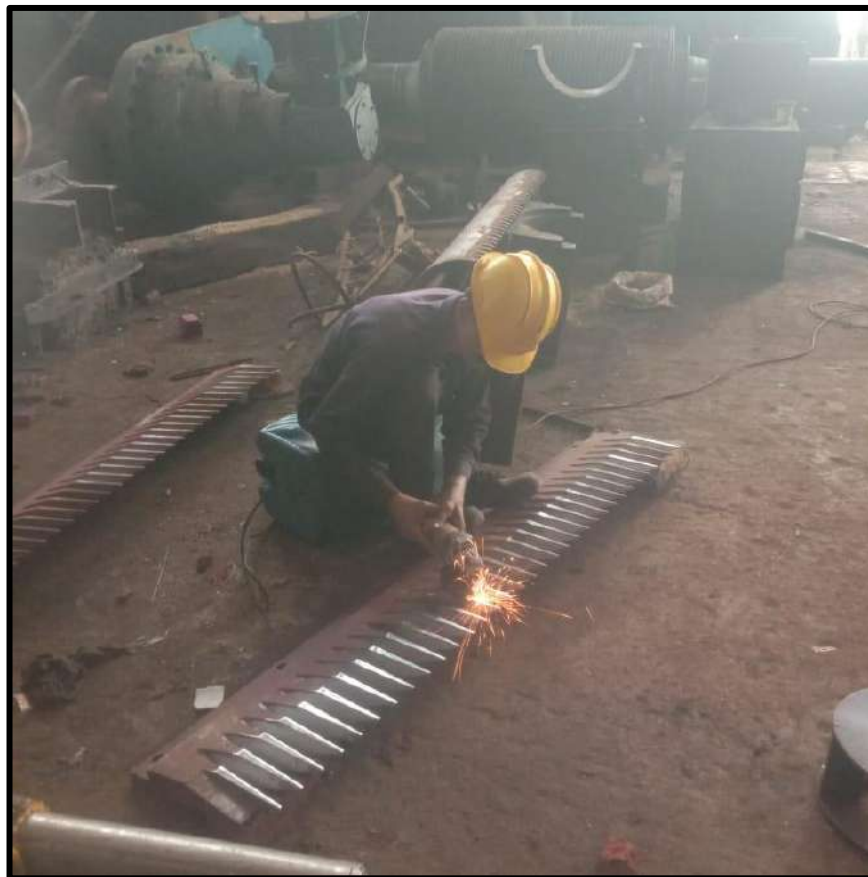


Photo No. 10 – Wearing of Safety Measures at Work Place.



Tushar Karkare <tusharkarkare.env19@gmail.com>

**ASL2 : Sugar - Six Monthly Compliance Report w.r.t M/s. Athani Sugars Limited.,
Located at Sonawade, Tal. Shahuwadi, Dist.: Kolhapur, Maharashtra State.**

1 message

Tushar Karkare <tusharkarkare@athanisugars.com>

Thu, Aug 24, 2023 at 4:03 PM

To: EC Compliances <ecompliance-mh@gov.in>

Cc: EC Compliances <ms@mpcb.gov.in>, "MPCB : Kolhapur" <rokolhapur@mpcb.gov.in>, "ASL : Deshmukh Sir" <rjdeshmukh@athanisugars.com>, "ASL : Yogesh Sir" <yogeshpatil@athanisugars.com>

Bcc: "Vendor : Rajkumar Jain" <assist.envirotech@gmail.com>, "ASL : CC" <marutipatil@athanisugars.com>

**To,
The Regional Officer
MoEFCC; Regional Office (WCZ),
Ground Floor, East Wing,
New Secretariat Building,
Civil Lines, Nagpur – 440001**

Subject: Submission of Six Monthly Environment Compliance report for the period January 2023 to June 2023 w.r.t "Expansion of Sugar from 2500 TCD to 8000 TCD and Proposed Cogeneration Plant. 35 MW

Ref : Environmental Clearance granted by **State Level Environment Impact Assessment Authority; Government of Maharashtra, SEIAA-EC-0000002357** dated **July 8, 2021.**

Respected Sir,

This has reference to Environmental Clearance (EC) granted to our Sugar unit of 2500 TCD to 8000 TCD – **M/s. Athani Sugars Limited**, located at Village- Sonawade - Bambawade, Tehsil- Shahuwadi, District Kolhapur, Maharashtra.

As per General Conditions & Special Conditions in the EC letter, we are submitting a six-monthly compliance report for the period of January 2023 to June 2023 .

We hope the details furnished by us are in accordance with your requirements.

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Thanking You,
Yours Faithfully

M/S Athani Sugars Limited., Shahuwadi Unit (Sugar)

 **Final Compliance Report..pdf**
20344K