

**REPORT OF THE JOINT COMMITTEE IN COMPLIANCE WITH ORDER DATED 01/09/2023 OF THE HON'BLE NATIONAL GREEN TRIBUNAL (NGT) IN THE MATTER OF OA NO. 113/2023 (WZ), SHRI KAPIL BALIRAM BOMNALE & ORS VS DIRECTOR, M/S TWENTY-ONE SAKAHAR KARKHANA UNIT NO. 3 & ORS**

## **1.0 Background**

Grievance in the Original Application No. 113 of 2023 (WZ), titled Shri Kapil Baliram Bomnale & Ors Vs Director, M/s Twenty-One Sakahar Karkhana Unit No. 3 & Ors. as per order dated 01/09/2023 of the Hon'ble NGT is about the respondent industry i.e. M/s Twenty-One Sakahar Karkhana Unit No. 3, Survey nos. 313, 317, 321, 322, 325, 326, 327, 329 and 353, Shivani (Jamga), Taluka: Loha, District: Nanded (hereinafter referred as the industry) is discharging highly polluted effluent and wastewater outside the industry premises, which meets village nalah & ultimately meets the Godavari River. Further allegations as per the aforesaid Hon'ble NGT order are about that the industry is emitting blackish smoke, which is spreading over the crops grown on the agricultural fields of the applicants and causing damage to the crops.

Hon'ble NGT directed vide order dated 01/09/2023 (copy of Hon'ble NGT order, dated 01/09/2023 is given at **Annexure-1**) and relevant order is reproduced as below:

*"...12. We deem it just and proper to constitute a Joint Committee comprising one Member each of:-*

- (i). The Central Pollution Control Board (CPCB);*
- (ii). The Maharashtra Pollution Control Board (MPCB);*
- (iii). The District Collector; and*
- (iv). The District Agricultural Officer.*

*13. The MPCB shall be the nodal agency for coordination and logistic support.*

*14. The Joint Committee is directed to visit the site after informing the applicants and submit a report with respect to the allegations made in the present application, action taken at their end so far, its remedial measures and also the environmental compensation, which could be directed to be levied from the concerned respondent, within a period of four weeks.*

15. Applicants are directed to supply the required documents and copy of the application to MPCB for circulation of the same to the members of the Committee within a period of one week.

16. The report in the matter be submitted by the MPCB through e-filing by using portal of NGT in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF...”

## 2.0 Approach and methodology

In order to comply with the aforesaid Hon'ble NGT order, dated 01/09/2023; the Maharashtra Pollution Control Board (MPCB) vide email dated 25/09/2023 issued the joint committee constitution order dated 21/09/2023. Also, MPCB provided the background information and other relevant information to the joint committee for reference & deliberation in the aforesaid matter. Upon receipt of background information and nominee details from the nodal agency i.e. MPCB, the joint committee initially convened a virtual meeting on 26/10/2023 to discuss the way forward for compliance of the aforesaid Hon'ble NGT order. Upon deliberation, the joint committee decided to carry-out inspection cum monitoring of effluent, source emission & soil quality after resumption of cane crushing activities. Copy of the minutes of meeting of the joint committee dated 26/10/2023 is given at **Annexure-2**. Subsequently, upon receipt of information about the resumption of cane crushing activities and based on the mutual availability of the joint committee members, joint inspection cum monitoring of the industry was carried-out during 14/12/2023 & 15/12/2023.

The following joint committee members were present during the inspection:

- i. Shri Nishchal C., Scientist 'D', CPCB, Regional Directorate, Pune
- ii. Shri Shankar Kendule, Sub-Regional Officer, MPCB, Nanded
- iii. Shri Abhijeet Raut, District Collector, Nanded
- iv. Shri Bhausahab Barhate, District Superintendent Agriculture Officer, Nanded

Also, Shri Ravindra Kshisagar, Field Officer-MPCB, Sub-Regional Office, Nanded was present during the joint committee inspection.

Shri Yutik Patni, industry representative was present during the joint committee inspection and provided the visit coordination and information about environment management system.

As directed by the Hon'ble NGT vide order dated 01/09/2023, the joint committee through the nodal agency i.e. MPCB had informed the applicants vide letter/email dated 06/12/2023 about the scheduled inspection of the industry. The joint committee heard the representation as submitted by the applicants and briefed about the present issues and area under reference. The applicants accompanied the joint committee during the inspection cum monitoring and showed the alleged locations under reference. Subsequently, the joint committee carried-out inspection cum monitoring of the effluent treatment plant (ETP) and collected 8 hourly time-weighted composite effluent samples from inlet & final outlet of ETP; visited the alleged agricultural land(s) of the applicants, as showed by the applicants and collected representative soil samples. Also, the joint committee collected surface water & ground water samples from the locations, as showed by the applicants.

### **3.0 About the industry**

As per MPCB records, erstwhile the industry was owned & operated in the name of M/s Venkateshwara Agro Sugar Products Pvt. Ltd., and obtained Consent to Operate (CTO) on 19.03.2020, which was valid up to 31/07/2020. Thereafter, the said industry has been taken over (purchased) by M/s DVP Group in the month of June, 2019 & applied for CTO in the name of M/s Dharashiv Sakhar Karkhana Unit-III & obtained CTO in 12/11/2021. M/s. Dharashiv Sakhar Karkhana Unit-III had operated the industry for three cane crushing season i.e. 2019-2020, 2020-2021 & 2021-2022 with the cane crushing capacity of 3,500 TCD and renewed their CTO from time to time, the last CTO was obtained on 28/11/2022 which was valid up to 31/07/2023. Subsequently, the said industry was purchased by M/s TSL group in the year December, 2022 and operated in the name of M/s Twenty-One Sugars Pvt. Ltd., (Unit-III). It is gathered that the IEM application for name change is in process which was submitted to The Department for Promotion of Industry and Internal Trade, which is a Central Government Department under the Ministry of Commerce and Industry (vide Application Number: IEM/A/AMD/ACK/275676/2023). Hence, the

current CTO (Renewal) is granted by MPCB in the name of M/s Dharashiv Sakhar Karkhana Unit-III.

M/s Twentyone Sugars Ltd., (Unit-III) erstwhile name: M/s Dharashiv Sakhar Karkhana, Unit-III is situated at Survey no. 313, 317, 321, 322, 325, 326, 327, 329, 353, Shivani (Jamga), Tal. Loha, Dist. Nanded. The industry is having consent to operate (CTO) issued by Maharashtra Pollution Control Board (MPCB) vide no. Format1.0/CAC/UAN No. MPCB-CONSENT-0000177210/CR/2312001037, dated 09/12/2023, which was valid up to 31/07/2024 (Copy of CTO dated 09/12/2023 is given at **Annexure-3**), for manufacturing of following products:

S. no.	Product	Quantity, MT/month
1.	Sugar	12,600
2.	Molasses	4,725
3.	Press mud	4,200
4.	Bagasse	31,500

### 3.1 Water and effluent management

Main source of water for the sugar industry is Godavari River i.e. Vishnupuri Project on Godavari River and the industry has obtained permission from Executive Engineer, Nanded Irrigation Division (North), Nanded. The industry has provided separate flow meter and energy meter to the intake pipeline of river water. As per the records, the average daily consumption of fresh water during last cane crushing season is 235 m<sup>3</sup>/day and mainly used for process & utilities and domestic purpose.

The main sources of effluent generation from process are; mill house section, boiling house section (multiple effect evaporators), vacuum pans, centrifugal section, process condensate contaminated with concentrated juice, ancillary activities (rotary vacuum filter cleaning & gland leakages from pumps, pipelines etc.) and boiler blowdown streams. The management of process effluent & condensate and blowdown streams from utilities are briefed as follows:

- **Process effluent management:** Effluent generating from mill house section, centrifugal section & boiling house section is collected separately and channelized into ETP for treatment. The industry has provided ETP of reported designed capacity of 400 m<sup>3</sup>/day and the reported effluent

generation from the process is about 250 – 300 m<sup>3</sup>/day (at full cane crushing capacity). During last crushing season, the industry has utilized average 235 m<sup>3</sup>/day of fresh water and as per flow meter records, the industry has discharged average 300 m<sup>3</sup>/day of treated effluent from ETP to irrigation on 29 acre land (as per bi-lateral agreement with farmers) as per CTO conditions dated 09/12/2023. The various unit operations & processes of ETP are: Process effluent → Collection pit → DSM Screen → Oil & grease skimmer → Equalization tank → Neutralization tank (lime addition) → Primary clarifier → Activated sludge process → Secondary clarifier → Treated effluent collection tank → Pressure sand filter → Activated carbon filter → Treated effluent storage lagoon (15 days storage capacity) → Treated effluent discharged for irrigation on 29 acre land (as per bi-lateral agreement with farmers), as per CTO conditions, dated 09/12/2023.

- **Process condensate management:** As informed, excess process condensate from multiple effect evaporators, pan evaporators are collected and cooled in cooling towers. After cooling, the cooled condensate is partially recycled @ 700 m<sup>3</sup>/day to fulfil the cold-water requirement and the remaining excess condensate @ 480 – 500 m<sup>3</sup>/day is discharged for irrigation. Whereas, vapour condensate from pan evaporators is handled in spray pond and reused in the process.
- As informed, domestic wastewater generation from the industry is about 20 m<sup>3</sup>/day and managed through septic tank followed by soak pit and reused for gardening as per CTO conditions dated 09/12/2023.

#### **4.0 Monitoring by the joint committee**

The joint committee carried-out reconnaissance survey of the area under reference where the alleged incidences of deposition of fly ash on the crops grown on the agricultural fields of the applicants, alleged discharge of effluent into nalah/overflow of spray pond effluent into nalah and locations as shown by the applicants, where alleged discharge of effluent into natural ponds. During the joint inspection cum monitoring, the joint committee collected representative soil samples from the agricultural fields of the applicants; source emission sample from the captive co-gen

boiler; ambient air quality monitoring at three locations i.e. two at down wind direction & one at up wind direction, based on the pre-dominant wind direction and accessibility & availability of infrastructure facility to place the machines; 8 hourly time-weighted composite effluent samples from the ETP i.e. inlet of ETP, outlet of secondary clarifier & final outlet of ETP (treated effluent meant for discharge into irrigation, as per bi-lateral agreement with farmers i.e. as per CTO conditions dated 09/12/2023); and surface water & ground water samples from the nearby locations (natural ponds, dug wells & bore well) of the industry, as shown by the applicants where the alleged discharge of effluent was done by the industry in past.

All the aforesaid samples of soil, source emission, effluent, ambient air and surface & ground water were collected in presence of applicants and respondent industry. The effluent & water samples collected during the inspection were sent to MPCB Regional Laboratory at Aurangabad for analysis of various physicochemical parameters viz. pH, SS, TDS, Chloride, Sulphate, BOD, COD and O&G. Also, the source emission sample and ambient air quality samples were sent to MPCB Regional Laboratory at Aurangabad for analysis of PM (source emission) and PM<sub>10</sub> (ambient air). Whereas the soil samples collected during the inspection were sent to the District Agricultural Laboratory, Nanded for analysis of some of the feasible parameters viz. pH, Electrical conductivity, Organic carbon, NPK etc. Google image depicting locations of sampling of soil, ambient air, surface & ground water samples are given below.

S-1/AAQM-1	:	Agricultural land of Swati Bharat Jamge & Chatrapati Shrirang Jamge, Gat no. 327 and AAQM location-1
AAQM-2	:	AAQM location-2, near boundary of ETP of the industry and agricultural land of Shri Gopinath Datta Jamge
S-2	:	Agricultural land of Dwarkabai Shrirang Jamge, Gat no. 311
S-3	:	Agricultural land of Swati Bharat Jamge, Gat no. 330
S-4	:	Agricultural land of Gangabai Damodhar Jamge, Sanjay Damodhar Jamge & Sunil Damodhar Jamge, Gat no. 304
S-5/AAQM-3	:	Agricultural land of Umakant Madhavrao Bomnale, Pralhad Madhavrao Bomnale, Parmeshwar Gangadhar Bomnale, Shidheshwar Gangadhar Bomnale, Kondiba Gangadhar Bomnale, Nagesh Shivraj Bomnale & Shesherao Shivraj Bomnale, Gat no. 365 and AAQM location-3
S-6	:	Agricultural land of Shri, Sidheshwar Venkati Bhalke, Gat no. 350
S-7	:	Agricultural land of Shri, Venkati Shivappa Bhalke, Gat no. 447
S-8	:	Agricultural land of Shri, Baliram Raosaheb Bhalke, Gat no. 442
S-9	:	Agricultural land of Sau. Laxmibai Venkati Bhalke, Gat no. 449

S-10	:	Agricultural land of Sau Sarjabai Shsherao Bomnale, Gat no. 554
S-11	:	Agricultural land of Shri Umakant Madhavrao Bomnale, Gat no. 555
S-12	:	Agricultural land of Sau Saraswatibai Madhavrao Momnale, Gat no. 552
S-13	:	Agricultural land of Sau Sarjabai Shesherao Bomnale, Shri. Gangadhar Shesherao Bomnale & Shri, Shivraj Shesherao Bomnale, Gat no. 556
S-14	:	Agricultural land of Shri. Sarjabai Shesherao Bomnale, Gat no. 554
S-15	:	Agricultural land of Shri. Onkar Madhkar Bhalke, Gat no. 340
S-16	:	Agricultural land of Shri Balaji Bhimrao Bhalke & Madhukar Bhimrao Bhalke, Gat no. 338
S-17	:	Agricultural land of Shri. Madhukar Bhimrao Bhalke, Gat no. 356
S-18	:	Agricultural land of Shri Balaji Bhimrao Bhalke, Gat no. 355
1	:	ETP of the industry
2	:	Spray pond of the industry
3	:	Bagasse storage area of the industry
W-1	:	Natural pond-1 located within the industry premises, near entrance gate of industry
W-2	:	Natural pond-2 located within the industry premises, near entrance gate of industry
W-3	:	Dug well of Shri Siddeshwar Venkatesh Bhalke, Gat no. 350
W-4	:	Bore well near Jirga Maruti mandir



#### 4.1 Effluent monitoring

The joint committee collected grab effluent sample from inlet of ETP, outlet of secondary clarifier & treated effluent from final outlet of ETP and also collected 8 hourly time-weighted composite sample from inlet of ETP, outlet of secondary clarifier & treated effluent from final outlet of ETP, meant for discharge into irrigation (as per bi-lateral agreement with farmers i.e. as per CTO conditions dated 09/12/2023). The effluent samples were sent to MPCB Regional Laboratory at Aurangabad for analysis of various physicochemical parameters viz. pH, SS, TDS, Chloride, Sulphate, BOD, COD and O&G. Analysis results of the effluent samples collected from the ETP is depicted in the below Table-1 & 2 and copy of the analysis results of the same as submitted by MPCB vide email dated 09/01/2024 is given at **Annexure-4**.

**Table-1: Analysis results of effluent from ETP – Grab sampling**

Sampling location	Parameters							
	pH	SS	TDS	Chloride	Sulphate	BOD	COD	O&G
Inlet to ETP	5.6	510	2484	69.98	160.7	1350	4440	14.2
Final outlet of ETP	8.1	21	1084	80.97	192.25	42	124	BDL
<b>MPCB prescribed standards</b>	<b>6.5 – 9.0</b>	<b>100</b>	<b>2100</b>	<b>600</b>	<b>1000</b>	<b>100</b>	<b>250</b>	<b>10</b>

Note: Concentration of all parameters are expressed in mg/l, except pH; BDL: Below detectable limit.

**Table-2: Analysis results of effluent from ETP – Composite sampling**

Sampling location	Parameters						
	pH	SS	TDS	Chloride	Sulphate	BOD	COD
Inlet to ETP	5.7	570	2432	639.8	157.5	1550	4960
Final outlet of ETP	8.2	25	1144	76.98	198.05	46	128
<b>MPCB prescribed standards</b>	<b>6.5 – 9.0</b>	<b>100</b>	<b>2100</b>	<b>600</b>	<b>1000</b>	<b>100</b>	<b>250</b>

Note: Concentration of all parameters are expressed in mg/l, except pH.

##### 4.1.1 Surface and ground water quality monitoring

The joint committee also collected grab surface water & ground water samples from the nearby locations (natural ponds, dug wells & bore well) of the industry, as shown by the applicants where the alleged discharge of effluent was done by the industry in past. The water samples were sent to MPCB Regional Laboratory at Aurangabad for analysis of various physicochemical parameters viz. pH, SS, TDS, Chloride,

Sulphate, BOD, and COD. Analysis results of the surface water samples and ground water samples is depicted in the below Table-3 and copy of the analysis results of the same as submitted by MPCB vide email dated 09/01/2024 is given at **Annexure-4**.

**Table-3: Analysis results of surface water samples and ground water samples**

Sampling location	Parameters						
	pH	SS	TDS	Chloride	Sulphate	BOD	COD
Natural pond-1 located within the industry premises, near entrance gate of industry	7.6	40	1912	73.98	75.6	115	352
Natural pond-2 located within the industry premises, near entrance gate of industry	7.8	105	1824	129.96	37.08	105	300
Dug well of Shri Siddeshwar Venkatesh Bhalke, Gat no. 350, Shivani Jamga	8.2	11	922	179.94	121.7	21	84
Bore well near Jirga Maruti mandir, Shivani Jamga	8.1	14	938	217.93	70.55	8	36
Dug well of Shri Yede, Shivani Jamga (distribution well for irrigation)							
Odha nalah, Shivani Jamga	8.3	10	614	134.96	70.5	8	40

**Note:** Concentration of all parameters is expressed in mg/l, except pH.

#### 4.1.2 Source emission monitoring

The industry has installed 02 nos. of bagasse fired boilers (natural circulation water tube type) of 32 TPH capacity each for steam generation and provided common wet scrubber as air pollution control device (APCD) and common stack. The scrubbed water is collected in a collection cum settling tank and supernatant water from settling is collected in collection tank & reused for scrubbing, after make-up with fresh water. Settled particles (APCD residue) from the collection cum settling tank is removed on regular basis and sold to brick manufacturers along with boiler ash. During inspection, the joint committee carried-out source emission monitoring at the common stack attached to 32 TPH bagasse fired boilers. Analysis result of the source emission sample collected from the common stack attached to 32 TPH

bagasse fired boilers is depicted in the below Table-4 and copy of the analysis results of the same as submitted by MPCB vide email dated 09/01/2024 is given at **Annexure-4**.

**Table-4: Analysis result of source emission monitoring**

Sampling location	Parameter
	PM, mg/Nm <sup>3</sup>
Common stack attached to 32 TPH bagasse fired boilers, 02 nos.	158
<b>MPCB prescribed standards</b>	<b>150</b>

#### 4.1.3 Ambient air quality monitoring

The joint committee carried-out ambient air quality monitoring at three locations i.e. two at down wind direction & one at up wind direction, based on the pre-dominant wind direction, accessibility & availability of infrastructure facility to place the machines and also as per the suggestions made by the applicants. As the present alleged issue as per the grievance made by the applicants in the aforesaid OA is about emission of blackish smoke/soot particles from the industry, which is spreading over the crops grown on the agricultural fields of the applicants; the joint committee considering the nature of alleged issue has decided to carry-out ambient air quality monitoring in respect of PM<sub>10</sub> parameter only. Details of ambient air quality monitoring locations are depicted below.

- i. AAQM-1: At agricultural field of Shri Kondiba Gangadhar Bomnale, Gat No. 365 at Shivani Jamga Tal. Loha Dist. Nanded (North North-West direction of the industry's stack);
- ii. AAQM-2: Near boundary of ETP of the industry and agricultural land of Shri Gopinath Datta Jamge, Shivani Jamga Tal. Loha Dist. Nanded (South-West direction of the industry's stack); and
- iii. AAQM-3: At agricultural field of Ms. Swati Jamge, Gat No. 327 at Shivani Jamga Tal. Loha Dist. Nanded (East North-East direction of the industry's stack)

Analysis result of the ambient air quality monitoring is depicted in the below Table-5 and copy of the analysis results of the same as submitted by MPCB vide email dated 09/01/2024 is given at **Annexure-4**.

Table-5: Analysis results of ambient air quality monitoring

Monitoring location	Parameter
	PM <sub>10</sub> , µg/m <sup>3</sup>
AAQM-1: At agricultural field of Shri Kondiba Gangadhar Bomnale, Gat No. 365 at Shivani Jamga Tal. Loha Dist. Nanded (North North-West direction of the industry's stack)	203.67
AAQM-2: Near boundary of ETP of the industry and agricultural land of Shri Gopinath Datta Jamge, Shivani Jamga Tal. Loha Dist. Nanded (South-West direction of the industry's stack)	80.34
AAQM-3: At agricultural field of Ms. Swati Jamge, Gat No. 327 at Shivani Jamga Tal. Loha Dist. Nanded (East North-East direction of the industry's stack)	105.67
<b>National Ambient Air Quality Standards vide Notification dated 18/11/2009</b>	<b>100</b>

#### 4.1.4 Soil quality monitoring

The joint committee visited the alleged agricultural fields, as shown by the applicants and also collected representative soil samples from the agricultural fields of the applicants. Collected soil samples were sent to the District Agricultural Laboratory, Nanded for analysis of some of the feasible parameters viz. pH, Electrical conductivity, Organic carbon, NPK, Calcium carbonate, Calcium, Magnesium, Sodium, % Sand, Clay, Silt, Fine sand, Moisture, Water holding capacity, Virtual density, Special density, Plain strain, Visual Evoked Potential, Texture and micro elemental analysis viz. Copper, Iron, Zinc and Magnesium respectively. Analysis results of soil samples are depicted in the below Table-6 & 7 and copy of the analysis results of the same as submitted by District Agricultural Office, Nanded through MPCB vide email dated 25/01/2024 is given at **Annexure-5**.

Table-6: Analysis results of soil samples.

S. No.	Properties	Unit	Qualified Level	Soil sampling locations and analysis results									
				Swati Bharat Jamage, Gat no. 327		Chhatrapati Shrirang Jamge, Gat no. 327		Sidheshwar Vyankati Bhalke, Gat no. 350		Sidheshwar Gangadhar Bomnale, Gat no. 365		Shivraj Shesherao Bomnale, Gat no. 365	
				Result	Result Analysis	Result	Result Analysis	Result	Result Analysis	Result	Result Analysis	Result	Result Analysis
1	Acid (pH)	Acid	6.5-7.5	6.89	Neutral	6.84	Neutral	7.25	slightly alkaline	7.41	slightly alkaline	7.55	Medium alkaline
2	Base (EC)	ms/cm	0-1	0.12	Normal	0.19	Normal	0.12	Normal	0.15	Normal	0.19	More
3	Organic Carbon (OC)	%	0.40-0.60	0.48	Less	0.38	Less	0.53	Medium	0.3	Less	0.62	Medium
4	Nitrogen (N)	Kg/Hec.	280-420	288.51	Less	170.6	Less	282.24	Medium	176.87	Less	301.06	Medium
5	Phosphorous (P)	Kg/Hec.	14-21	30.7	Medium	17.76	Medium	14.12	Medium	10.34	Less	4.56	Very less
6	Potassium (K)	Kg/Hec.	15-200	496.4	More	549.2	More	686.5	More	390.78	More	591.45	More
7	Calcium carbonate (CaCO <sub>3</sub> )	%	2.5-5.0	3.75	Many more	3.13	Medium Limestone	7.5	More Limestone	7.5	More Limestone	5	Limestone
8	Calcium (Ca)	Mil. %	4- 9.9	26.76	Medium Limestone	23.53	More	36.76	More	32.94	More	48.24	More Limestone
9	Magnesium (Mg)	Mil. %	0.50-3.99	16.08	More	13.52	More	18.27	More	19.01	More	2.19	More
10	Sodium (Na)	Mil. %	May-15	3.1	More	11.38	Medium	4.47	Less	4.52	Less	11.86	Medium
11	Sand (coarse Sand)	%		43.85	Less	43.85	-	43.85	-	43.85	-	43.85	Medium
12	Clay	%		29.33	-	29.33	-	29.33	-	29.33	-	29.33	-
13	Silt	%		26.83	-	26.83	-	26.83	-	26.83	-	26.83	-
14	Fine sand	%		56.15	-	56.15	-	56.15	-	56.15	-	56.15	-
15	moisture	%		6.89	-	6.89	-	5.71	-	7.12	-	6.61	-
16	Water holding capacity (WHC)	%		43.22	-	43.22	-	49.85	-	44.16	-	45.41	-
17	Virtual	gm./cc		0.42	-	0.42	-	0.51	-	0.6	-	1	-

	Density (AD)												
18	Special Density (SD)	gm./cc		0.42	-	0.42	-	0.7	-	0.42	-	1.71	-
19	Plain strain (PS)	%		16.46	-	16.46	-	32.18	-	22.39	-	17.25	-
20	Visual Evoked Potential (VEP)	%		40.8	-	40.8	-	26.68	-	46.02	-	20.31	-
21	Texture	Texture		6	Silty Clay								

**Table-7: Analysis results of soil samples – micro elemental analysis.**

S . N o.	Prop erties	Re sul t	Qualifi ed Level	Resul t Analysis	Re sul t	Qualifie d Level	Result Analysis	Res ult	Qualifie d Level	Result Analysis	Res ult	Qualified Level	Result Analysis	Re sul t	Qualifie d Level	Result Analysis
		<b>Swati Bharat Jamage, Gat no. 327</b>		<b>Chhatrapati Shrirang Jamge, Gat no. 327</b>		<b>Sidhleshwar Vyankati Bhalke, Gat no. 350</b>		<b>Sidhleshwar Gangadhar Bomnale, Gat no. 365</b>		<b>Shivraj Shesherao Bomnale, Gat no. 365</b>						
1	Cu	2.12	0.20-99.99	Enough	0.48	0.20-99.99	Enough	1.16	0.20-99.99	Enough	2.50	0.20-99.99	Enough	0.30	0.20-99.99	Enough
2	Fe	9.24	4.5-99.99	Enough	6.10	4.5-99.99	Enough	3.28	4.5-99.99		2.66	4.5-99.99		3.38	4.5-99.99	
3	Zn	0.78	0.61-99.99	Enough	1.24	0.61-99.99	Enough	0.72	0.61-99.99	Enough	0.86	0.61-99.99	Enough	0.64	0.61-99.99	Enough
4	Mn	16.70	2.0-99.99	Enough	15.60	2.0-99.99	Enough	3.60	2.0-99.99	Enough	3.30	2.0-99.99	Enough	2.76	2.0-99.99	Enough

Field location	Photograph	Details of location	Total area, ha	Type of crop
S-1	 <p data-bbox="712 719 1048 842">19° 1'40.9818"N 77° 7'45.10316"E Shivani Jamga Aurangabad Division Maharashtra 14 Dec 2023 16:55:03</p>	Agricultural land of Swati Bharat Jamge & Chatrapati Shrirang Jamge, Gat no. 327, Village Shivani Jamga, Tq. Loha, Dist. Nanded	1.12	Cotton
S-1	 <p data-bbox="712 1257 1048 1377">19° 1'41.18533"N 77° 7'44.98729"E Shivani Jamga Aurangabad Division Maharashtra 14 Dec 2023 16:53:12</p>			

Field location	Photograph	Details of location	Total area, ha	Type of crop
S-2		Agricultural land of Dwarkabai Shrirang Jamge, Gat no. 311, Village Shivani Jamga, Tq. Loha, Dist. Nanded	1.46	Cotton
S-2				

Field location	Photograph	Details of location	Total area, ha	Type of crop
S-3	 <p data-bbox="703 719 1048 842">19° 1'35.80485"N 77° 7'40.03349"E Shivani Jamga Aurangabad Division Maharashtra 15 Dec 2023 12:02:51</p>	Agricultural land of Swati Bharat Jamge, Gat no. 330, Village Shivani Jamga, Tq. Loha, Dist. Nanded	1.12	Cotton
S-4	 <p data-bbox="591 1273 1048 1380">19° 1'41.68849"N 77° 7'23.57974"E Unnamed Road Shivani Jamga Aurangabad Division Maharashtra 15 Dec 2023 12:16:19</p>	Agricultural land of Gangabai Damodhar Jamge, Sanjay Damodhar Jamge & Sunil Damodhar Jamge, Gat no. 304, Village Shivani Jamga, Tq. Loha, Dist. Nanded	0.4	Ground nut

Field location	Photograph	Details of location	Total area, ha	Type of crop
S-4		Agricultural land of Gangabai Damodhar Jamge, Sanjay Damodhar Jamge & Sunil Damodhar Jamge, Gat no. 304, Village Shivani Jamga, Tq. Loha, Dist. Nanded	1.0	Cotton
S-5		Agricultural land of Umakant Madhavrao Bomnale, Pralhad Madhavrao Bomnale, Parmeshwar Gangadhar Bomnale, Shidheshwar Gangadhar Bomnale, Kondiba Gangadhar Bomnale, Nagesh Shivraj Bomnale & Shesherao Shivraj Bomnale, Gat no. 365, Village Shivani Jamga, Tq. Loha, Dist. Nanded	1.7	Cotton

Field location	Photograph	Details of location	Total area, ha	Type of crop
S-6	 <p data-bbox="331 710 472 842">Latitude: 19.025217 Longitude: 77.13169 Elevation: 380.31±3 m Accuracy: 3.9 m Azimuth: 300° (NW) Pitch: -84.6° (20.8°) Time: 12-15-2023 14:32 Note: 350</p> <p data-bbox="902 821 1048 842">Powered by AngleCam</p>	Agricultural land of Shri, Sidheshwar Venkati Bhalke, Gat no. 350, Village Shivani Jamga, Tq. Loha, Dist. Nanded	1.78	Cotton
S-7	 <p data-bbox="331 1248 472 1377">Latitude: 19.013888 Longitude: 77.130356 Elevation: 365.28±6 m Accuracy: 6.0 m Azimuth: 152° (SE) Pitch: -87.8° (9.3°) Time: 12-15-2023 16:13 Note: 447</p> <p data-bbox="902 1356 1048 1377">Powered by AngleCam</p>	Agricultural land of Shri, Venkati Shivappa Bhalke, Gat no. 447, Village Shivani Jamga, Tq. Loha, Dist. Nanded	0.40	Cotton

Field location	Photograph	Details of location	Total area, ha	Type of crop
S-8		Agricultural land of Shri. Baliram Raosaheb Bhalke, Gat no. 442, Village Shivani Jamga, Tq. Loha, Dist. Nanded	0.40	Sorghum
S-9		Agricultural land of Sau. Laxmibai Venkati Bhalke, Gat no. 449, Village Shivani Jamga, Tq. Loha, Dist. Nanded	0.40	Cotton

Field location	Photograph	Details of location	Total area, ha	Type of crop
S-10	 <p>Latitude: 19.011504 Longitude: 77.118768 Elevation: 389.95±6 m Accuracy: 3.7 m Azimuth: 276.1 (W) Pitch: -80.3° (-6.9°) Time: 12-15-2023 15:27 Note: 553 Powered by AngleCam</p>	Agricultural land of Sau Sarjabai Shsherao Bomnale, Gat no. 554, Village Shivani Jamga, Tq. Loha, Dist. Nanded	0.55	Turmeric
S-11	 <p>Latitude: 19.010692 Longitude: 77.119452 Elevation: 378.04±12 m Accuracy: 11.0 m Azimuth: 254° (W) Pitch: -91.2° (-166.4°) Time: 12-15-2023 15:33 Note: 555 Powered by AngleCam</p>	Agricultural land of Shri Umakant Madhavrao Bomnale, Gat no. 555, Village Shivani Jamga, Tq. Loha, Dist. Nanded	0.80	Turmeric

Field location	Photograph	Details of location	Total area, ha	Type of crop
S-12	 <p>Latitude: 19.011394 Longitude: 77.1188 Elevation: 406.74±24 m Accuracy: 9.5 m Azimuth: 302° (NW) Pitch: -89.6° (-175.6°) Time: 12-15-2023 15:27 Note: 552</p> <p>Powered by AngleCam</p>	Agricultural land of Sau Saraswatibai Madhavrao Momnale, Gat no. 552, Village Shivani Jamga, Tq. Loha, Dist. Nanded	1.02	Cotton
S-13	 <p>Latitude: 19.011477 Longitude: 77.119483 Elevation: 375.41±6 m Accuracy: 4.1 m Azimuth: 152° (SE) Pitch: -73.5° (-11.0°) Time: 12-15-2023 15:31 Note: 556</p> <p>Powered by AngleCam</p>	Agricultural land of Sau Sarjabai Shesherao Bomnale, Shri. Gangadhar Shesherao Bomnale & Shri. Shivraj Shesherao Bomnale, Gat no. 556, Village Shivani Jamga, Tq. Loha, Dist. Nanded.	0.60	Turmeric

Field location	Photograph	Details of location	Total area, ha	Type of crop
S-14		Agricultural land of Shri. Sarjabai Shesherao Bomnale, Gat no. 554, Village Shivani Jamga, Tq. Loha, Dist. Nanded	0.60	Turmeric
S-15		Agricultural land of Shri. Onkar Madhkar Bhalke, Gat no. 340, Village Shivani Jamga, Tq. Loha, Dist. Nanded	0.40	Turmeric

Field location	Photograph	Details of location	Total area, ha	Type of crop
S-16	 <p>Latitude: 19.021484 Longitude: 77.13058 Elevation: 382.73±4 m Accuracy: 7.9 m Azimuth: 262° (W) Pitch: -67.7° (1.0°) Time: 12-15-2023 14:43 Note: 338</p> <p>Powered by <a href="#">AngleCam</a></p>	Agricultural land of Shri Balaji Bhimrao Bhalke & Madhukar Bhimrao Bhalke, Gat no. 338, Village Shivani Jamga, Tq. Loha, Dist. Nanded	0.40	Cotton
S-17	 <p>Latitude: 19.022274 Longitude: 77.131577 Elevation: 381.7±4 m Accuracy: 3.6 m Azimuth: 254° (W) Pitch: -81.5° (-6.9°) Time: 12-15-2023 14:39 Note: 356</p> <p>Powered by <a href="#">AngleCam</a></p>	Agricultural land of Shri. Madhukar Bhimrao Bhalke, Gat no. 356, Village Shivani Jamga, Tq. Loha, Dist. Nanded	0.67	Sorghum

Field location	Photograph	Details of location	Total area, ha	Type of crop
S-18	 <p>Latitude: 19.02183 Longitude: 77.128702 Elevation: 361.38±6 m Accuracy: 5.5 m Azimuth: 119° (SE) Pitch: -87.4° (-27.8°) Time: 12-15-2023 14:51 Note: 355</p> <p><i>Powered by angles.com</i></p>	Agricultural land of Shri Balaji Bhimrao Bhalke, Gat no. 355, Village Shivani Jamga, Tq. Loha, Dist. Nanded	0.30	Turmeric

## 5.0 Observations and findings

This report is outcome containing factual and action taken report of the said joint committee based on the preliminary information received from MPCB, followed by inspection & physical observations made in the industry and analysis results of environmental samples (effluent, source emission, soil quality, surface & ground water quality and ambient air quality) and information submitted by the industry through MPCB and subsequent discussions of the joint committee. The observations & findings of the joint committee are discussed as follows.

- i. As per the daily manufacturing report submitted by the industry for the present crushing season, 2023-24; cane crushing activities started w.e.f. 01/11/2023 and avg. cane crushed during November, 2023 is 1,620 TCD (min: 1,132 TCD & max: 3,350 TCD) against consented quantity of 2,500 TCD. Similarly, avg. cane crushed during December (up to date of joint committee inspection) is 2,012 TCD (min: 288 TCD & max: 2,743 TCD) against consented quantity of 2,500 TCD. Whereas, on few occasion, the maximum cane crushed per day varied from 2,743 to 3,350 TCD, which is more than the per day consented capacity of 2,500 TCD.
- ii. The joint committee collected and analysed OCEMS (effluent) data during the last crushing season w.e.f. 16/11/2022 to 05/03/2023, which is being transmitted to MPCB & CPCB servers. Based on the data analysis i.e. every 15 minutes' data, it is observed that the total data availability of installed OCEMS (effluent) sensors (parameters: pH, TSS, BOD, COD & flow) on the MPCB & CPCB servers during the aforesaid period is only 44.69%. Further, during the aforesaid period; aggregated per day data availability of installed OCEMS (effluent) sensors (parameters: pH, TSS, BOD, COD & flow) on the MPCB & CPCB servers is only 52.29% i.e. 57 entries of aggregated per day data out of total 109 entries. Out of the available 57 aggregated entries of per day data, the industry was found non-complied for 7 times for COD parameter i.e. exceedance of prescribed standard.

Further, based on the aforesaid data analysis, it is observed that about 48 – 56% times, the installed OCEMS (effluent) sensors are neither not working & not transmitting the real time data into MPCB & CPCB servers, which may be due to very poor O&M of installed OCEMS (effluent) sensors and ancillary IT

infrastructure. Thus not representing the representative & factual monitored data in respect of the aforesaid monitored parameters at final outlet of ETP.

- iii. The joint committee collected and analysed OCEMS (emission) data during the last crushing season w.e.f. 16/11/2022 to 05/03/2023, which is being transmitted to MPCB & CPCB servers. Based on the data analysis i.e. every 15 minutes' data, it is observed that the total data availability of installed OCEMS (emission) sensor (parameter: PM) on the MPCB & CPCB servers during the aforesaid period is only 13.81%.

Further, during the aforesaid period; aggregated per day data availability of installed OCEMS (emission) sensor (parameter: PM) on the MPCB & CPCB servers is only 20.18% i.e. 22 entries of aggregated per day data out of total 109 entries. Further, based on the aforesaid data analysis, it is observed that about 80 – 87% times, the installed OCEMS (emission) sensor is neither not working & not transmitting the real time data to MPCB & CPCB servers, which may be due to very poor O&M of installed OCEMS (emission) sensor and ancillary IT infrastructure. Thus not representing the representative & factual monitored data in respect of monitored parameter (PM) at the stack attached to co-gen boilers.

- iv. The industry has installed inline OCEMS sensors (effluent) for measurement of various parameters viz. pH, TSS, BOD, COD & flow in the output pipeline of the activated carbon filter (i.e. after tertiary treatment). During the joint committee inspection, the installed inline OCEMS (effluent) is found operational and the concentration of displayed parameters in the OCEMS panel are pH: 7.83; TSS: 2.8 mg/l; BOD: 14 mg/l and COD: 39.7 mg/l respectively. The quantity of treated effluent discharged for irrigation is 153 m<sup>3</sup>/day.

- v. The joint committee collected and analysed OCEMS (effluent) data during the present crushing season w.e.f. 01/11/2023 to 15/12/2023 (up to joint committee inspection), which is being transmitted to MPCB & CPCB servers. The aggregated per day data availability of installed OCEMS (effluent) sensors (parameters: pH, TSS, BOD, COD & flow) on the MPCB & CPCB

servers during the aforesaid period is 86.67% i.e. 39 entries of aggregated per day data out of total 45 entries.

- vi. The joint committee collected and analysed OCEMS (emission) data during the present crushing season w.e.f. 01/11/2023 to 15/12/2023 (up to joint committee inspection), which is being transmitted to MPCB & CPCB servers. The aggregated per day data availability of installed OCEMS (emission) sensor (parameter: PM) on the MPCB & CPCB servers during the aforesaid period is 95.56% i.e. 43 entries of aggregated per day data out of total 45 entries.
  
- vii. During source emission monitoring (i.e. on 14/12/2023 w.e.f. 11.00 hr to 13.00 hr) of the common stack attached to 32 TPH bagasse fired boilers, boiler-1 is operated @ 27.24 TPH (min: 26.7 TPH & max: 27.5 TPH) and boiler-2 is operated @ 11 TPH (min: 10.2 TPH & max: 11.4 TPH) respectively i.e boiler-1 & boiler-2 is found operated @ 85.12% & 34.4% load respectively. Whereas, on 14/12/2023 (24 hr); boiler-1 is operated @ 30.12 TPH (min: 24.7 TPH & max: 38.65 TPH) and boiler-2 is operated @ 15 TPH (min: 9.7 TPH & max: 22.4 TPH) respectively i.e boiler-1 & boiler-2 is found operated @ 94.12% & 46.9% load respectively. Further, during December, 2023 i.e. w.e.f. 01/12/2023 to 15/12/2023; boiler-1 is operated @ 27.30 TPH (min: 7.33 TPH & max: 38.65 TPH) and boiler-2 is operated @ 14.11 TPH (min: 2.09 TPH & max: 22.4 TPH) respectively i.e boiler-1 & boiler-2 is found operated @ 85.31% & 44% load respectively. Based on the aforesaid data, it is observed that the industry is operating one of the boiler at about 85% capacity and the other one @ < 50% capacity.
  
- viii. MPCB is carrying-out surveillance inspection of the industry on about regular basis w.r.t. monitoring of effluent & source emission. Based on MPCB records, during last crushing season 2022-23; MPCB has carried-out surveillance inspections of the industry on 30/11/2022; 17/12/2022; 07/01/2023 & 18/01/2023. During the said inspections, the industry was found non-complied w.r.t. discharge of treated effluent from final outlet of ETP more than the prescribed standards i.e. SS: 140; 1668 & 128 > 100 mg/l, BOD: 330;

525 & 262 > 100 mg/l, and COD: 800; 1,416 & 800 mg/l respectively, except during monitoring on 18/01/2023. Further, MPCB also observed violations w.r.t. overflow of spray pond effluent/discharge of effluent into nearby two nalahs during monitoring on 17/01/2023. Wherein, during the said monitoring; the concentration of BOD and COD in the two nalahs is observed to be 39.05 & 74 mg/l and 112 & 208 mg/l respectively.

Similarly, MPCB has carried-out surveillance inspection of the industry w.r.t. source emission on 07/01/2023 and 18/01/2023. During the said inspections, the industry was found non-complied w.r.t. discharge of source emission more than the prescribed standards i.e. PM: 163 > 150 mg/Nm<sup>3</sup>, except during monitoring on 18/01/2023.

- ix. During the present crushing season 2023-24, MPCB has carried-out surveillance inspection of the industry on 22/11/2023. During the said inspection, the industry was found non-complied w.r.t. discharge of treated effluent from final outlet of ETP more than the prescribed standards i.e. COD: 264 > 250 mg/l. Further, MPCB also observed violations w.r.t. overflow of spray pond effluent/discharge of effluent into nearby nalah during monitoring on 22/11/2023. Wherein, during the said monitoring; the concentration of BOD and COD in the nalah is observed to be 110 & 332 mg/l.

Similarly, MPCB has carried-out surveillance inspection of the industry w.r.t. source emission on 22/11/2023. During the said inspection, the industry was found non-complied w.r.t. discharge of source emission more than the prescribed standards i.e. PM: 153 > 150 mg/Nm<sup>3</sup>.

Based on the aforesaid monitoring results of effluent & emission carried-out by MPCB, it is evident that the industry is consistently non-complied w.r.t. discharge of treated effluent more than the prescribed standards and non-complied w.r.t. discharge of spray pond effluent/overflow into nearby nalahs. Also, the industry is non-complied w.r.t. discharge of source emission more than the prescribed standards. Accordingly, MPCB has issued warning notices and proposed directions to the industry, under the provisions of the Water & Air Acts.

- x. The industry has not provided wind breaking walls/enclosures around the bagasse storage area, as a result the bagasse particles are spreading to the nearby agricultural fields. The enclosures on the belt conveyor system & transfer point junction, meant for conveyance & discharge of bagasse into bagasse storage area is observed to be in dilapidated condition, as a result the bagasse particles are spreading to the nearby agricultural fields. Presently, the industry is practising application of ETP treated effluent on the open bagasse stockpiles through spray guns, in order to prevent diffuse emission/spreading of bagasse particles into the nearby agricultural fields and also to prevent the incidences of fire.
- xi. The industry has not provided adequate vent to the process cyclone of bagasse mixer in the press mud preparation section.
- xii. Apart from the existing pipeline network for conveyance of treated effluent into irrigation, the industry has provided several unsolicited pipelines without colour coding, direction & nomenclature around the boundary of ETP & nearby agricultural fields.
- xiii. The industry has provided 15 days treated effluent storage tank of reported capacity of 5,200 m<sup>3</sup> capacity (which is adequate in comparison to the daily effluent generation i.e. 315 m<sup>3</sup>/day x 15 days = 4,725 m<sup>3</sup>/day). The treated effluent from storage lagoon is discharged into irrigation on 29 acre land (as per bi-lateral agreement with farmers), as per CTO conditions, dated 09/12/2023. The treated effluent from the storage lagoon to the final dug well, from where it is distributed for irrigation is conveyed partly through above ground and partly through underground pipeline of reported dia of 3 inch. The industry has provided a flange type arrangement in the treated effluent conveyance pipeline at the bank of nalah, prior to discharge/conveyance into dug well. Undue & or illegal disposal of treated effluent/untreated/partially treated effluent into nalah through such type of provision of arrangements by the industry cannot be ruled-out. As such incidences of undue & illegal disposal of effluent are being alleged by the applicants in the OA filed before the Hon'ble NGT.

- xiv. The joint committee visited and carried-out inspection of all agricultural fields of the applicants in association with the representatives of the applicants. It is pertinent to observe that the crops grown (viz. cotton, jowar, ground nut and animal fodder etc.) on all the agricultural fields have been deposited with soot particles & or bagasse particles, which is being emitted from the stack (majority in downwind & cross wind directions).
- xv. The joint committee collected & analysed the copies of consent to operate issued by MPCB to other sugar industries in Maharashtra. Wherein it is observed that MPCB stipulated ESP as an air pollution control device (APCD) for the bagasse fired boiler under Schedule-II i.e. Terms & Conditions for Compliance of Air Pollution. Whereas, in the present case, MPCB has stipulated scrubber as an APCD for the bagasse fired boiler under Schedule-II i.e. Terms & Conditions for Compliance of Air Pollution. In general, the particulate matter removal efficiency of scrubber is about 90% and that of ESP is about 99%.
- xvi. Analysis results of the treated effluent sample (grab & composite) from the final out let of ETP, meant for discharge into irrigation reveals that the concentration of all the monitored parameters viz. pH, SS, TDS, Chloride, Sulphate, BOD, COD and O&G are within the MPCB prescribed discharge standards. During the grab effluent sampling, the joint committee also noted the values displayed in the OCEMS panel, which is being transmitted to MPCB & CPCB servers. Concentration of displayed parameters in the OCEMS panel is pH: 7.83; TSS: 2.8 mg/l; BOD: 14 mg/l and COD: 39.7 mg/l respectively. The quantity of treated effluent discharged for irrigation is 153 m<sup>3</sup>/day.

**[Please refer S. no. 4.1, as above]**

- xvii. Analysis results of the surface water & ground water samples from the nearby locations (natural ponds & dug well) of the industry reveals that the concentration of BOD and COD was observed to be 115 & 105 mg/l and 352 & 300 mg/l in the surface water samples collected from two natural ponds. Similarly, concentration of BOD and COD was observed to be 21 & 84 mg/l in

the ground water sample collected from dug well. The aforesaid reported concentration of BOD & COD from the natural ponds, located within the industry premises reveals episodal discharge of industrial effluent into the natural ponds and the same was alleged by the applicants in their OA filed to the Hon'ble NGT. Similarly, the reported concentration of BOD & COD from the open dug well (Shri Siddeshwar Venkatesh Bhalke, Gat no. 350, located near the spray pond of industry) also reveals contamination of ground water, which may be due to the percolation of spray pond effluent. Such episodal overflow & subsequent pondage of spray pond effluent within the industry premises was also reported by MPCB in their past surveillance inspections.

**[Please refer S. no. 4.1.1, as above]**

- xviii. Analysis result of the source emission sample collected from the common stack attached to 32 TPH bagasse fired boilers on 14/12/2023 reveals that the concentration of monitored parameter i.e. PM is found to be exceeding the MPCB prescribed standards PM: 158 > 150 mg/Nm<sup>3</sup>. Also, the based on the past surveillance inspection carried-out by MPCB, source emission sample collected from the common stack attached to 32 TPH bagasse fired boilers reveals that the concentration of monitored parameter i.e. PM is found to be exceeding the MPCB prescribed standards PM: 163 & 153 > 150 mg/Nm<sup>3</sup> during 07/01/2023 & 23/11/2023.

**[Please refer S. no. 4.1.2, as above]**

- xix. As per the report submitted by the District Agricultural Office, Nanded through MPCB vide email dated 25/01/2024, the representative soil samples collected across the alleged locations doesn't show about the degraded soil quality due to industrial emissions (bagasse soot particles) or due to industrial effluent discharges. Nevertheless, it is to mention that the one of the criteria parameter/indicator of industrial effluent discharges is enrichment of organic carbon in the soil. However, the concentration of organic carbon is found to be less percentage i.e. below the required range of 0.4 – 0.6 % at agricultural fields viz. Swati Bharat Jamage, Gat no. 327, Chhatrapati Shirang Jamge, Gat no. 327, Sidhsheshwar Gangadhar Bomnale, Gat no. 365. In other agricultural fields too, the monitored concentration of organic carbon is found

to be medium. Similarly, the monitored concentration of nitrogen is also found to be less i.e. below the required range of 280 – 420 Kg/Ha in the aforesaid agricultural fields. The analysis results of the soil samples w.r.t. micro elemental analysis also reveals that the concentration of various micro elements viz. Cu, Fe, Zn and Mn is found to be in adequate concentration. Though the industry is involved in sporadic illegal discharges of treated/partially treated/untreated effluent/spray pond effluent into nearby nalahs, the analysis results of the aforesaid soil samples doesn't reveal about deterioration of soil quality due to the said discharge from the industry. Nevertheless, it is to mention that all inspected agricultural fields are situated in the downwind & crosswind direction of the industry, and observed that the agricultural produce/crops have been deposited with the bagasse soot particles i.e. emission from bagasse fired boilers. Thereby deteriorating the product quality and apparently less market price for the particular agricultural produce.

**[Please refer S. no. 4.1.4, as above]**

- xx. As per the information provided by MPCB, various actions have been taken by MPCB against industry during last crushing season by means of issuing directions under the provisions of Water Act, 1974 and Air Act, 1981 for the various reported violations and non-compliances w.r.t. discharge of effluent more than the prescribed standards; discharge of emission more than the prescribed standards, illegal discharge of untreated/partially treated effluent/spray pond effluent into nearby natural drains, which ultimately confluences with Godavari River. Details of directions issued under the provisions of the Water Act, 1974 and Air Act, 1981 and reported violations and non-compliances is depicted in the below Table-8. Copy of various directions issued by MPCB is given at **Annexure-6** for kind reference. Some of the photographs taken during the joint committee inspection are given at **Annexure-7** for kind reference.

**Table-8: Compiled list of directions issued by MPCB to various sugar & distillery industries for the reported violations/non-compliances.**

S. no.	Date of violation and non-compliance	Reported violations and non-compliances	Nature of action taken
1.	19/01/2023	Failed to operate & maintain ETP properly, discharge of untreated /treated effluent outside the premises which further found contaminating the water/river bodies. Failed to operate & maintain the air pollution control system properly thereby boiler ash is spread on the complainant farmer crops located surrounding industry area.	Warning notice issued under the provisions of the Water (P & CP) Act, 1974 and the Air (P & CP) Act, 1981.
2.	13/11/2023	Overflow of spray pond, condensate water & treated /untreated effluent outside premise's which further meet to local nalah & finally meets Godavari River. Discharge of treated effluent from final outlet ETP and discharge of emission from the boiler, more than the prescribed standards.	Proposed directions issued under the provisions of the Water (P & CP) Act, 1974 and the Air (P & CP) Act, 1981.
3.	24/11/2023	Overflow of spray pond, condensate water & treated /untreated effluent outside premise's which further meet to local nalah & finally meets Godavari River. Not provided condensate polishing unit as per CTO.	Warning notice issued under the provisions of the Water (P & CP) Act, 1974 and the Air (P & CP) Act, 1981.
4.	29/12/2023	For various past non-compliances.	Proposal for taking further legal action vide No. MPCB-LEGAL_ACTIONS-190123005 to Regional Office, Chhatrapati Sambhaji Nagar

xxi. As per the information provided by the industry through MPCB to the joint committee vide email dated 21/12/2023 that the present industry (M/s TSL Group, operating in the name of M/s Twenty-One Sugars Pvt. Ltd., (Unit-III)), upon taking over the industry from the earlier owners/operators i.e. M/s Venkateshwara Agro Sugar Products Pvt. Ltd., and M/s DVP Group (M/s Dharashiv Sakhar Karkhana Unit-III) had augmented the existing environment management system and in the process by implementing various measures in the process, effluent & emission management. As per the said information shared, it is observed that the present industry had incurred total Rs. 7. 92

crores towards augmentation of existing EMS and in the process section for abatement of emission & effluent. Details of various measures implemented by the present industry are: installation and commissioning of two venturi type wet scrubbers attached to the boilers; installation of Fiberizer and Leveller in the process (to improve the quality of fuel i.e. bagasse); installation of new steam saving equipment like CIGAR, vapour line juice heaters, mechanical circulators etc.; practicing of re-use and recycling of excess condensate & installation of hydro jet cleaning system of evaporator body; installation of de-superheating system to further reduce the effluent generation; replacing old reciprocating compressors by installation & commissioning of new twin type lube air blowers to reduce the effluent generation; replacement of all older pumps with new pumps to avoid leakages & to improve efficiency; installation of new Magma system open crystallizer with new pumps, to reduce windage of sugar dust particles from the dry seed conveyer belts; conversion & installation of old DEVC Plus Quadraple evaporation system into modern Quintaple evaporation system with additional six numbers new evaporator bodies, to reduce the steam & bagasse consumption; and upgradation in ETP viz. installation of diffuser system in aeration tank, DSM screens for removal of primary solids & new twin lube air blowers to ensure proper aeration of effluent in aeration tank. Detailed activities in respect of each measure implemented along with the photographs, as provided by the industry are given at **Annexure-8**.

## **6.0 Approach methodology for assessing environmental compensation and environmental compensation as damages for contravening mandatory provisions of environmental laws**

In the present case, it is observed that the industry is non-complied w.r.t. following:

- a. Discharge of treated effluent more than the prescribed standards, as stipulated in the CTO issued by MPCB.
- b. Discharge of emission more than the prescribed standards, as stipulated in the CTO issued by MPCB.

- c. Accidental discharges of effluent/process condensate into the environment – Violation of terms & conditions for compliance of Water Pollution Control of CTO, dated 28/11/2022 issued under the Water (Prevention and Control of Pollution) Act, 1974 i.e. contravention of consent to operate conditions.
- d. Resuming manufacturing activities in the present cane crushing season without obtaining mandatory consent to operate (CTO) from MPCB as required under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, Hazardous & Other Waste (Management & Transboundary Movement) Rules, 2016 i.e. contravening mandatory provisions of environmental laws.
- e. Non installation of condensate polishing unit (CPU) for treatment of process condensate as required under the Terms & conditions for compliance of Water Pollution Control of CTO, dated 28/11/2022 issued under the Water (Prevention and Control of Pollution) Act, 1974 i.e. contravention of CTO conditions.

In the matter of Civil Appeal No. 10854 of 2016; M/s Goel Ganga Developers India Pvt. Ltd., Versus Union of India & Ors. the Hon'ble Supreme Court vide order dated 10/8/2018 upheld Rs. 05 crores on project proponent as levied by the Hon'ble NGT for contravening mandatory provision of Environment Laws and for not obtaining the consent from the Board. Vide para 57 of the said Hon'ble Supreme Court order, it has been directed that *"(...) The project proponent shall also pay a sum of Rs. 5 crores as damages, in addition to the above for contravening mandatory provisions of environmental laws."*

"Report of the CPCB In-house Committee on Methodology for Assessing Environmental Compensation and Action Plan to Utilize the Fund" outlines a formula for imposing environmental compensation on industrial units for violation of directions issued by regulatory bodies listing the instances for taking cognizance of cases fit for violation and levy environmental compensation. The same has also been referred by the Hon'ble NGT in its order (para 14 to 16) dated 28/8/2019 in the matter of Original Application No. 593/2017 titled Paryavaran Suraksha Samiti & Anr. Versus Union of India & Ors. The instances considered for levying Environmental Compensation (EC) in the said report are:

- a. Discharges in violation of consent conditions, mainly prescribed standards / consent limits.
- b. Not complying with the directions issued, such as direction for closure due to non-installation of OCEMS, non-adherence to the action plans submitted etc.
- c. Intentional avoidance of data submission or data manipulation by tampering the Online Continuous Emission / Effluent Monitoring systems.
- d. Accidental discharges lasting for short durations resulting into damage to the environment.
- e. Intentional discharges to the environment - land, water and air resulting into acute injury or damage to the environment.
- f. Injection of treated/partially treated/ untreated effluents to ground water.

Though few of the listed instances may not be directly applicable in the current matter for arriving at the damages amount for contravening mandatory provisions of environmental laws (operating without CTO, as required under the Water & Air Acts); contravention of mandatory CTO conditions (continued operation without installing CPU since last cane crushing season till present cane crushing season), an attempt is being made by the joint committee to assess the environmental compensation using the formula prescribed in the said CPCB report which may be taken as damages amount for contravening mandatory provisions of environmental laws. The formula takes into account of number of days' violation took place, pollution index of unit, scale of operation, location factor based on population and an amount factor in Rupees.

Therefore, for discharge/emission in violation of prescribed consent standards; accidental discharge/disposal of effluent/process condensate into the environment & contravening mandatory provisions of environmental laws (operating without CTO, as required under the Water & Air Acts) and contravention of mandatory CTO conditions (continued operation without installing CPU), the **Environmental Compensation (EC) in Rupees as mentioned in the aforesaid CPCB report = PI x N x R x S x LF**

Where,

EC is Environmental Compensation in Rupees

PI = Pollution Index of industrial sector/Project

N = Number of days of violation took place

R = A factor in Rupees for EC

S = Factor for scale of operation

LF = Location factor

**PI = Pollution Index of industrial sector/project**

Considering the industry under Red category as per CTO issued by MPCB vide no. Format-1.0/CC/UAN No. MPCB-CONSENT-0000147201/CR/2211002348, dated 28/11/2022 and renewal of CTO issued by MPCB vide no. Format1.0/CAC/UAN No. MPCB-CONSENT-0000177210/CR/2312001037, dated 09/12/2023. Hence, as per aforesaid CTOs, PI = 80.

**N = Number of days of violation** took place for which violation took place is the period between the day of violation observed and the day of compliance verified by CPCB/SPCB.

**R = A factor in Rupees, which** may be a minimum of 100 and maximum of 500. The aforesaid report also suggests to consider R as 250, as the Environmental Compensation in cases of violation. Hence, R = 250.

**S = Factor for scale of operation.**

For small S = 0.5, For medium S = 1 and larger unit S = 1.5. Considering the industry under Large scale as per CTE/CTO issued by MPCB. Hence, scale of operation; S is 1.5.

**LF = Location factor.** It is based on the population of the city/town and location of the industrial unit on the location of the industrial unit. For the industrial unit located within municipal boundary or upto 10km distance from the municipal boundary of the city/town, following factors (LF) may be used. Calculation of Location Factor based on population (million)

Sl. No.	Population (in million)	Location Factor (LF)
1.	1 to < 5	1.25
2.	5 to < 10	1.5
3.	10 and above	2

Note: #LF will be 1.0 in case unit is located >10km from municipal boundary and LF is presumed as 1 for city/town having population less than one million. For notified Ecologically Sensitive areas, for beginning, LF may be assumed as 2.0.

Hence, LF is taken as 1, as the unit is located >10 km from municipal boundary.

Considering the period when default/non-compliance is to be considered for assessing environmental compensation, the period of default/non-compliance has been taken into account from the day when the industry was found non-complied w.r.t. resuming manufacturing activities without obtaining mandatory CTO from MPCB; continued manufacturing activities without installation of CPU; discharge of effluent & emission more than the prescribed discharge standards; and accidental discharge of effluent/spray pond effluent into environment. Accordingly, the total period of violation is tabulated as below Table-9:

**Table-9: Computation of total period of violation based on the reported non-compliances by MPCB.**

S. no.	Period of violation		Total no. of days of violation	Remarks	EC in Rupees
1.	01/11/2023 (as per cane crushing data, industry started manufacturing activities)	09/12/2023 (CTO granted by MPCB on 09/12/2023)	39	Resuming manufacturing activities without obtaining mandatory CTO from MPCB (as per S. no. 26 of Schedule-IV: General Conditions of the earlier CTO, dated 28/11/2022 i.e. the industry has to make an application to MPCB for renewal of the consent at least 60 days before the date of the expiry of the consent. It is observed that the industry made an application to MPCB for renewal of existing CTO on 24/07/2023)	11,70,000
2.	16/11/2022 (as per RT8C final manufacturing)	05/03/2023 (as per RT8C final manufacturing)	110	Continued manufacturing activities during last	33,00,000

	report for the season 2022-23 submitted to Sugar Commissioner)	report for the season 2022-23 submitted to Sugar Commissioner)		cane crushing season & present cane crushing season without installation of CPU	
3.	01/11/2023 (as per daily manufacturing report for the season 2023-24)	15/12/2023 (till date of joint committee inspection – as on date the industry has not installed CPU)	45	(as per S. no. 1 (B) of Schedule-I: Terms & conditions for compliance of Water Pollution Control of earlier CTO, dated 28/11/2022)	13,50,000
4.	30/11/2022 (non-compliance observed by MPCB based on their surveillance inspection carried-out)	18/01/2023 (compliance observed by MPCB based on their surveillance inspection carried-out)	50	Discharge of effluent from ETP more than the prescribed discharge standards. The industry was repeatedly found non-complied w.r.t.	15,00,000
5.	21/11/2023 (non-compliance observed by MPCB based on their surveillance inspection carried-out)	15/12/2023 (compliance observed by joint committee)	25	discharge of effluent (for parameters: SS; BOD; COD) more than the prescribed standards during Nov, 22; Dec, 22; Jan, 23 & Nov, 23 respectively.	7,50,000
6.	07/01/2023 (non-compliance observed by MPCB based on their surveillance inspection carried-out)	18/01/2023 (compliance observed by MPCB based on their surveillance inspection carried-out)	12	Discharge of emission from stack more than the prescribed emission standards	3,60,000
7.	21/11/2023 (non-compliance observed by MPCB based on their surveillance inspection carried-out)	15/12/2023 (compliance observed by joint committee)	25		7,50,000
8.	18/01/2023 (non-compliance observed by MPCB w.r.t. accidental discharge of	05/03/2023 (end of manufacturing activities, as per RT8C final manufacturing report for the	47	Accidental discharge of effluent into environment (into nalah); overflow of spray pond effluent & condensate into	14,10,000

	effluent)	season 2022-23 submitted to Sugar Commissioner)		environment (into nalah, which further meets Godavari River). The industry was repeatedly found non-complied w.r.t. accidental discharge of effluent, spray pond effluent & condensate during Jan, 23; Nov, 23.	
9.	01/11/2023 (as per daily manufacturing report for the season 2023-24)	15/12/2023 (till date of joint committee inspection – no such instances of overflow of effluent & spray pond effluent was observed)	45		13,50,000
<b>Total period of violation (N), days and total EC in Rupees</b>			<b>398</b>		<b>1,19,40,000</b>

**Based on above:**

- a. environmental compensation w.r.t. s. no. 1, as above; as damages for contravening provisions under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981 i.e. operating without obtaining CTO from MPCB is worked out to be Rs. 11,70,000/- (Rupees Eleven Lakhs Seventy Thousand Only);
- b. environmental compensation w.r.t. s. no. 2 & 3, as above; as damages for contravening mandatory CTO conditions i.e. continued operation without installing CPU since last cane crushing season till present cane crushing season (as per S. no. 1 (B) of Schedule-I: Terms & conditions for compliance of Water Pollution Control of earlier CTO, dated 28/11/2022) is worked out to be Rs. 46,50,000/- (Rupees Forty-Six Lakhs Fifty Thousand Only);
- c. environmental compensation w.r.t. s. no. 4 & 5, as above; for discharge of effluent from ETP more than the prescribed discharge standards is worked out to be Rs. 22,50,000/- (Rupees Twenty-Two Lakhs Fifty Thousand Only);
- d. environmental compensation w.r.t. s. no. 6 & 7, as above; for emission from stack more than the prescribed discharge standards is worked out to be Rs. 11,10,000/- (Rupees Eleven Lakhs Ten Thousand Only);

- e. environmental compensation w.r.t. s. no. 8 & 9, as above; as damages for accidental discharge of effluent/spray pond effluent into environment (into nalah) is worked-out to be Rs. 27,60,000/- (Rupees Twenty-Seven Lakhs Sixty Thousand Only).

Therefore, total environmental compensation as applicable on the industry for contravening mandatory provisions of environmental laws (operating without CTO, as required under the Water & Air Acts); contravention of mandatory CTO conditions (continued operation without installing CPU); discharge/emission in violation of prescribed standards; and accidental discharge/disposal of effluent/spray pond effluent into the environment is worked out to be Rs. 1,19,40,000 /- (Rupees One Crore Nineteen Lakhs Forty Thousand Only).

## 6.0 Conclusions and Recommendations

- (a) Environmental compensation as damages for contravening provisions under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981

In view of the aforesaid violations of:

- i. Resuming manufacturing activities without obtaining mandatory CTO from MPCB (as per S. no. 26 of Schedule-IV: General Conditions of the earlier CTO, dated 28/11/2022), as required under the Water (Prevention and Control of Pollution) Act, 1974; the Air (Prevention and Control of Pollution) Act, 1981; and Hazardous & Other Wastes (Management & Transboundary Movement) Rules 2016:
  - Rs. 11,70,000/- (Rupees Eleven Lakhs Seventy Thousand Only);
- ii. Continued manufacturing activities during last cane crushing season & present cane crushing season without installation of CPU (as per S. no. 1 (B) of Schedule-I: Terms & conditions for compliance of Water Pollution Control of earlier CTO, dated 28/11/2022):
  - Rs. 46,50,000/- (Rupees Forty-Six Lakhs Fifty Thousand Only);

**(b)** Environmental compensation as damages for discharge of effluent and emission more than the prescribed standards

In view of the aforesaid violations of:

- i. Discharge of effluent from ETP more than the prescribed discharge standards and discharge of emission from stack more than the prescribed emission standards:
  - Rs. 33,60,000/- (Rupees Thirty-Three Lakhs Sixty Thousand Only);

**(c)** Environmental compensation as damages for accidental discharge of effluent/spray pond effluent into environment

In view of the aforesaid violations of:

- i. Accidental discharge of effluent into environment (into nalah) and overflow of spray pond effluent & condensate into environment (into nalah, which further meets Godavari River)
  - Rs. 27,60,000/- (Rupees Twenty-Seven Lakhs Sixty Thousand Only);

Therefore, total environmental compensation as applicable on the industry for contravening mandatory provisions of environmental laws (operating without CTO, as required under the Water & Air Acts); contravention of mandatory CTO conditions (continued operation without installing CPU); discharge/emission in violation of prescribed standards; and accidental discharge/disposal of effluent/spray pond effluent into the environment is worked out to be Rs. 1,19,40,000 /- (Rupees One Crore Nineteen Lakhs Forty Thousand Only). The aforesaid total environmental compensation as derived under s. no. 6 of this report, as deemed fit by the Hon'ble NGT, may be considered as environmental compensation as damages and may be levied on the industry.

**[Please refer Table-9 of Section 6, as above]**

- (d)** As all inspected agricultural fields are situated in the downwind & crosswind direction of the industry, and observed that the agricultural produce/crops have been deposited with the bagasse soot particles i.e. emission from bagasse fired boilers, the market price value for such agricultural produce may decrease. In the absence of such reported decrease of price value of the

agricultural produce, sold in the market (non-availability of data either in the original application submitted by the applicants or in the representation submitted by the applicants), the joint committee opined that estimation of decreased price value for such agricultural produce is scientifically not possible. Hence, such decreased price value may be estimated independently by the Agriculture Dept., upon receipt of relevant information (i.e. total no. & area of the beneficiaries, whose agricultural land is affected; total quantity of agricultural produce harvested & sold; decreased price value of the agricultural produce, sold in the market thereto during last crushing & as well as present crushing season).

- (e) The concentration of BOD & COD of the ground water samples at dug well of Shri Siddeshwar Venkatesh Bhalke, Gat no. 350, Shivani Jamga, has showed 21 mg/l & 84 mg/l. There is need of carrying-out detailed study and take time-bound action plan to contain further impact, if any. The joint committee, therefore, recommends the following as immediate measures:
- A detailed study shall be conducted through reputed institutes like Mahatma Phule Krishi Vidyapeeth, Parbhani/major Govt. Engineering Colleges/Institutes to prepare Detailed Project Report (DPR) for remediation of the contaminated ground water.
- (f) As per MPCB records, the industry has applied for expansion of existing sugar industry and also proposed for commissioning of new distillery in the existing premises. At present, the existing APCD "Wet Scrubber" seems to be inadequate in controlling the PM emissions, as the same is evident from the various surveillance inspections of MPCB that the monitored concentration of PM was found exceeded most of the times. Also, as evident from the joint committee inspection that the nearby agricultural fields found deposited with bagasse soot particles. In such circumstances, the industry may be directed to immediately augment the existing APCD and also to carry-out regular O&M, besides depositing the environmental compensation as damages for

discharge of emission from stack more than the prescribed discharge standards. Further, MPCB while granting new CTO to the industry (for expanded capacity & for new distillery) should mandatorily stipulate “ESP” as an APCD under Schedule-II i.e. Terms & Conditions for Compliance of Air Pollution to the new bagasse boiler and for distillery boiler, as applicable; in order to effectively contain PM emissions.

- (g)** At present, the industry has not installed condensate polishing unit (CPU) in compliance to the S. no. 1 (B) of Schedule-I: Terms & conditions for compliance of Water Pollution Control of earlier CTO, dated 28/11/2022 and as well as renewed CTO, dated 09/12/2023. In such circumstances, the industry may be directed to immediately channelize the said condensate stream to the existing ETP for treatment, besides depositing the environmental compensation as damages for contravening the mandatory CTO conditions, as above. Further, MPCB should ensure that the industry has installed new CPU for treatment of condensate while granting new CTO to the industry (for expanded capacity & for new distillery).
- (h)** The industry may be directed by MPCB to ensure seamless real time data transmittance of installed OCEMS (emission & effluent) to the servers of MPCB & CPCB. Also, may be directed to carry-out periodic calibration of the installed OCEMS sensors, as per the schedule specified by the OCEMS supplier.
- (i)** The industry may be directed to install wind breaking walls/enclosures around the bagasse storage area, in order to contain the dispersion of bagasse particles into the nearby agricultural fields. Also, to repair & or provide adequate enclosures to the bagasse conveyor system, in order to contain the dispersion of bagasse particles into the nearby agricultural fields.
- (j)** The industry may be directed to immediately dismantle unsolicited pipeline arrangements & T-junction arrangements provided/laid outside the industry premises. Also, proper color coding, nomenclature and flow direction should

be done for the remaining pipelines at the ETP and for the pipelines conveying treated effluent into the irrigation.

- (k) The industry may be directed to commission the treated effluent conveyance pipeline on the "Above Ground" only instead of "Underground". Such "Above Ground" treated effluent conveyance pipeline should have proper color coding, nomenclature and flow direction. Also, the industry may be directed to install electromagnetic flow meter and PTZ camera at the final distribution dug well to record the utilization of treated effluent into the irrigation and for surveillance purpose.



(Nishchal C.)  
Scientist 'D'  
CPCB, RD-Pune



(Shankar Kendule)  
Sub-Regional  
Officer, MPCB,  
Nanded



(Abhijeet Raut)  
District Collector,  
Nanded



(Bhausaheb  
Barhate),  
District  
Superintendent  
Agriculture Officer,  
Nanded

\*\*\*\*\*

Item No.1

(Pune Bench)

**BEFORE THE NATIONAL GREEN TRIBUNAL  
WESTERN ZONE BENCH, PUNE**

THROUGH PHYSICAL HEARING (WITH HYBRID OPTION)

**Original Application No.113/2023(WZ)**

Shri. Kapil Baliram Bomnale &amp; Ors.

.....Applicant(s)

*Versus*Director, M/s Twenty-One Sakahar Karkhana  
Unit No.3 & Ors.

....Respondent(s)

Date of hearing: 01.09.2023

**CORAM: HON'BLE MR. JUSTICE DINESH KUMAR SINGH, JUDICIAL MEMBER  
HON'BLE DR. VIJAY KULKARNI, EXPERT MEMBER**

Applicant : Mr. Dattatray Devale, Advocate

**ORDER**

1. This application has been filed with the prayers that crushing permission be not granted to the respondent No.1-M/s. Twenty-One Sakhar Karkhana Unit No.3 without its taking care of pollution, which is being spread by it; respondent No.4/District Collector, Nanded be directed not to grant any Environmental Clearance without an opportunity of hearing being given to the applicants; respondent No.3/MPCB be directed to initiate action for violation of consent conditions as the discharge of highly polluted effluent is being made outside the industry of respondent No.1 and air pollutants are also emitting out of it in violation of consent conditions; Joint Committee be constituted to prepare remedial action plan to take restoration measures by the respondent No.1.

2. The applicants are the farmers, who are local residents of the area where the sugar factory of respondent No.1 is situated i.e. at Survey Nos. 313, 317, 321, 322, 325, 326, 327, 329 and 353, Shivani (Jamga),

Taluka: Loha, District: Nanded, had made various complaints against the said factory alleging that it is manufacturing sugar, molasses, press-mud and bagasse, which is resulting in discharge of highly polluted effluent and waste water outside the premises of respondent No.1, which meets the village Nalla and ultimately meets the River-Godavari. It has caused serious damage to the crop of the applicants, who are 24 in number. The boilers, which are used in the industry, are emitting blackish smoke, which is spreading over nearby crops and causing serious damage to it.

3. The learned Counsel for applicants has drawn our attention to page nos.71 to 83 of the paper book, which are the complaints made by the applicants to the District Agricultural Officer, Krishi Adhikari Office, Nanded and various other authorities on several occasions. But no concrete action has been taken at their end. He has also drawn our attention to page nos.91 to 112 of the paper book, which is a visit report made by the officials of MPCB, where-in it is recorded that it was observed by them that over flow was there of spray pond; condensate water & treated/untreated effluent is found discharged outside industry premises, which further meet the village Nalla at a distance of 1.5 KM approx., which finally meet the Godavari river at a distance 5 Km. By visual observation, blackish smoke was observed and boiler ash was observed on the surrounding farmer crops.

4. Thereafter, our attention is drawn by the learned Counsel for the applicants to page no.141 of the paper book, which is a letter dated 20.01.2023 written by Expert Member (Udyan Vidya), Krishi Vigyan Kendra, Sagroli addressed to the Taluka Krishi Adhikari, Loha, where-in it has been recorded that when a visit was made on the complaint of residents of the locality (one of the applicants), ash was found spread on the agricultural crop of the farmers such as jawar, wheat, feed crops,

turmeric and vegetables crops etc. Fodder crops were found to be unfit for animal consumption.

5. Thereafter, our attention is drawn by the learned Counsel for the applicants to page no.113 to 138 of the paper book, which are Water Analysis Report as well as Air Analysis Report conducted by the MPCB and in some of these reports, the values of BOD, COD and other pollutants are found to be on higher side. In this regard, it is submitted that only Warning Notice dated 19.01.2023 has been issued by the MPCB, which is annexed at page nos.68 to 70 of the paper book and no concrete action has been taken so far.

6. In view of above, we find *prima facie* case adversely impacting on environment is made out, therefore, we deem it appropriate to admit this application and accordingly admit the same.

7. Registry is directed to issue Notice to the respondents, returnable within 04(four) weeks.

8. Applicants are directed to take necessary steps for service to the respondents by both ways (Dasti as well as by Registered Post) and also on available e-mail/WhatsApp and submit service affidavit within one week.

9. Applicants are also directed to provide copy of the application and relevant documents to the respondents within a week.

10. Respondents are directed to submit their reply affidavit within three weeks and also circulate the same to applicants as also other respondents by available e-mail.

11. Rejoinder, if any, is directed to be submitted within one week thereafter.

12. We deem it just and proper to constitute a Joint Committee comprising one Member each of:-

- (i). The Central Pollution Control Board (CPCB);
- (ii). The Maharashtra Pollution Control Board (MPCB);
- (iii). The District Collector; and
- (iv). The District Agricultural Officer.

13. The MPCB shall be the nodal agency for coordination and logistic support.

14. The Joint Committee is directed to visit the site after informing the applicants and submit a report with respect to the allegations made in the present application, action taken at their end so far, its remedial measures and also the environmental compensation, which could be directed to be levied from the concerned respondent, within a period of four weeks.

15. Applicants are directed to supply the required documents and copy of the application to MPCB for circulation of the same to the members of the Committee within a period of one week.

16. The report in the matter be submitted by the MPCB through e-filing by using portal of NGT in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF.

17. Registry is directed to put up this matter for further consideration on 20.11.2023.

Dinesh Kumar Singh, JM

Dr. Vijay Kulkarni, EM

September 01, 2023  
Original Application No.113/2023(WZ)  
P.Kr

Annexure-2

**MINUTES OF MEETING OF THE JOINT COMMITTEE CONSTITUTED BY THE HON'BLE NGT IN THE MATTER IN OA NO..112/2023 (WZ), SHRI KAPIL BALIRAM BOMNALE & ORS. VS DIRECTOR, M/S. TWENTY-ONE SAKHAR KARKHANA UNIT-III**

The Hon'ble NGT in the aforesaid matter vide order dated 01/09/2023 constituted a joint committee comprising of one member from Central Pollution Control Board, Maharashtra Pollution Control Board, The District Collector and The District Agriculture Officer. Grievance by the applicant(s) as per the aforesaid Hon'ble NGT matter are about discharge of highly polluted effluent outside the premises of M/s Twenty-One Sakahar Karkhana, which meets the village Nalla and ultimately meets the River-Godavari, thereby causing damage to the agricultural crops. Further allegations are about spreading of emission from the boiler & deposition of the same on the nearby agricultural crops causing damage. Copy of the said order dated 01/09/2023 of Hon'ble NGT is given at **Annexure-I**. The operative directions of the Hon'ble NGT to the aforesaid joint committee is to visit the site after informing the applicants and submit a report with respect to the allegations made in the present application, action taken at their end so far, its remedial measures and also the environmental compensation, which could be directed to be levied from the concerned respondent.

In compliance with aforesaid order of the Hon'ble NGT, the four-member joint committee has been constituted by the nodal agency i.e. MPCB vide dated 25/09/2023 as below:

- i. Shri Nishchal C., Scientist 'D', CPCB, RD-Pune
- ii. Shri Shankar Kendule, Sub-Regional Officer, MPCB, Nanded
- iii. Shri Abhijeet Raut, District Collector, Nanded
- iv. Shri Bhausahab Barhate, District Superintendent Agriculture Officer, Nanded

Meeting of the joint committee constituted in compliance to the Hon'ble NGT order dated 01/09/2023 in the matter in OA no. 112/2023 (WZ), Shri Kapil Baliram Bomnale & Ors. Vs Director, M/S. Twenty-One Sakhar Karkhana Unit-III & Ors. was held on 26/10/2023 through video conference, to discuss the way forward for compliance of the aforesaid Hon'ble NGT order dated 01/09/2023.

Representative from MPCB, Sub-Regional Office, Nanded- welcomed all the members & briefed regarding constitution of the joint committee in compliance to the aforesaid order of the Hon'ble NGT (WZ), in OA No.113/2023 Shri.Kapil Baliram Bomnale & ors. Vs Director, M/s. Twenty One Sakhar karkhana (Presently known as M/s. Dharashiv Sakhar karkhan Unit-III) located at Shivani (Jamga) Tal. Loha Dist. Nanded. He informed that in their recent visit to industry the sugar factory was not in operation due to off season & as per discussion with the officials of sugar factory it is reported that sugar factory may restart in the mid-week of November, 2023.

Representative from CPCB, RD-Pune based on the inputs provided by MPCB w.r.t. non-operational status of the industry i.e. due to non-crushing season has expressed that as the Sugar industry being a seasonal industry, the joint committee shall visit the industry after resumption of sugar cane crushing season & when its operating at full sugar cane crushing capacity in order to collect the representative vigilance samples of industrial effluent, & source emission sample for analysis of notified parameters, in order to verify the efficacy of installed pollution control devices in respect of effluent treatment and source emission. Further, he also mentioned about collection of soil samples from the alleged agricultural fields around the industry along with collection of reference soil sample far away from the alleged location(s) for analysis of the soil quality parameters in respect of the requisite soil productivity parameters of interest & in consultation with the District Superintendent Agriculture Officer, Nanded

Representative from the District Collector, Nanded instructed the District Superintendent Agriculture Officer, Nanded to collect last five years data of crops & crop yield being taken by the farmers in the area under reference. He also instructed the nodal agency to convey the complainant about the meeting of the joint committee which is convened through video conference in the aforesaid matter

Representative from the District Superintendent Agriculture Officer, Nanded mentioned about the requisite resources for collection of soil samples and analysis of soil quality parameters of concern especially with regard to the parameters to be considered for assessment of crop productivity.

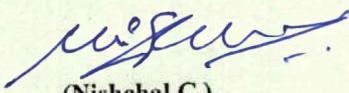
**Decisions:**

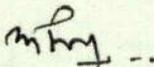
After detailed discussions, following decisions were taken by the joint committee:

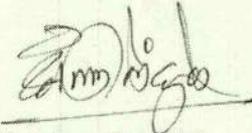
- i. Inspection cum monitoring of effluent, source emission and soil quality shall be carried-out upon resumption of sugar cane crushing season & also ensuring the full sugar cane crushing capacity in order to collect representative vigilance environmental samples.

- ii. Nodal agency was requested to pursue with the Regional Sugar Commissionerate, Nanded in order to obtain the information on resumption of cane crushing season and shall appraise the joint committee for the proposed inspection cum monitoring.
- iii. As per the directions of the Hon'ble NGT, nodal agency shall issue notice of information to the Applicant(s), prior to the joint committee inspection.
- iv. Nodal agency was requested to compile & provide the details to the joint committee about the observed past violations of the industry & subsequent actions taken thereto by the MPCB and copy of original application filed by the Applicant(s) for deliberation.
- v. Nodal agency shall submit the proceedings of the joint committee to the Hon'ble NGT through their counsel along with a prayer before the Hon'ble NGT to seek extension of two-month time period for submission of its report.

The meeting ended with vote of thanks to the chair.

  
(Nishchal C.)  
Scientist 'D'  
CPCB, RD-Pune

  
(Abhijeet Raut)  
District Collector, Nanded

  
(Shankar Kendule),  
Sub-Regional Officer,  
MPCB, Nanded

  
(Bhausaheb Barhate)  
District Superintendent Agriculture Officer,  
Nanded

# MAHARASHTRA POLLUTION CONTROL BOARD

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



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

No:- Format1.0/CAC/UAN No.MPCB-  
 CONSENT-0000177210/CR/2312001037

Date: 09/12/2023

To,  
 M/s. Twentyone Sugars Ltd (Unit III)  
 (Formerly known as M/s Dharashiv Sakhar Karkhana Unit III),  
 Survey no. 313, 317, 321, 322, 325,326, 327, 329,  
 353, Shivani (Jamga), Tal. Loha, Dist. Nanded,  
 Maharashtra.



**Sub: Renewal of consent to operate of sugar industry having 3500 TCD sugar cane crushing capacity.**

**Ref: 1. Earlier Consent having No.Format1.0/CC/UAN No.MPCBCONSENT-0000147201/CR/2211002348, Dtd. 28.11.2022**  
**2. Minutes of Consent Committee Meeting held on 06.11.2023.**

Your application No.MPCB-CONSENT-0000177210 Dated 24.07.2023

For: grant of Consent to Renewal under Section 26 of the Water (Prevention & Control of Pollution) Act, 1974 & under Section 21 of the Air (Prevention & Control of Pollution) Act, 1981 and Authorization under Rule 6 and Rule 18(7) of the Hazardous & Other Wastes (Management & Transboundary Movement) Rules 2016 is considered and the consent is hereby granted subject to the following terms and conditions and as detailed in the schedule I, II, III & IV annexed to this order:

- The Consent to Renewal is granted upto: 31.07.2024**
- The capital investment of the industry is Rs.109.27 Crs. (As per C.A Certificate submitted by industry).**
- Consent is valid for the manufacture of:**

Sr No	Product	Maximum Quantity	UOM
1	Sugar	12600	MT/M
2	Molasses	4725	MT/M
3	Press Mud	4200	MT/M
4	Bagasse	31500	MT/M

- Note: Total Sugar Cane Crushing capacity shall not exceed 3500 TCD.**
- Conditions under Water (P&CP) Act, 1974 for discharge of effluent:**

Sr No	Description	Permitted in CMD	Standards to	Disposal
1.	Trade effluent	315	As per Schedule - I	On land for irrigation
2.	Domestic effluent	20	As per Schedule - I	on land for irrigation

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

<i>Stack No.</i>	<i>Description of stack / source</i>	<i>Number of Stack</i>	<i>Standards to be achieved</i>
S-1	Boiler (32 TPH)	1	As per Schedule -II
S-2	Boiler (32 TPH)	1	As per Schedule -II
S-3	D.G. set (320 KVA)	1	As per Schedule -II
S-4	D.G. set (120 KVA)	1	As per Schedule -II

(As per previous consent of existing unit)

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

<i>Sr No</i>	<i>Type of Waste</i>	<i>Quantity</i>	<i>UoM</i>	<i>Treatment</i>	<i>Disposal</i>
1	ETP Sludge	1	MT/A	Composting	Used as Manure
2	Boiler Ash	10	MT/Day	Sale to Authorized Brick Manufacturer / Use in Manure	Sale to Authorized Brick Manufacturer / Use in Manure

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

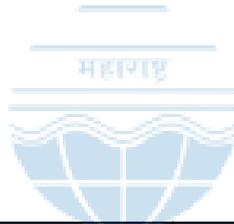
<i>Sr No</i>	<i>Type of Waste</i>	<i>HW Category.</i>	<i>Quantity &amp; UoM</i>	<i>Treatment</i>	<i>Disposal</i>
1	5.1 Used or spent oil	5.1	1.0 MT/A	Sale to MPCB authorized re-processor / recycler / CHWTSDF	Sale to MPCB authorized re-processor / recycler / CHWTSDF

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

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

8. The Board reserves the right to review, amend, suspend, revoke etc. this consent and the same shall be binding on the industry.
9. This consent should not be construed as exemption from obtaining necessary NOC/permission from any other Government authorities.
10. The applicant shall make an application for renewal of consent 60 days prior to date of expiry of the consent.
11. This consent shall be consider cancelled if industry violates the various environmental laws, rules and regulations.
12. Industry shall comply with the EIA notification, dtd. 14.09.2006 and Amendments thereto and consent shall treat as cancelled if industry violates the same.

13. Industry shall comply with the judgements/ orders passed or being passed by Hon'ble NGT in the matter of O.A. 113/2023.
14. This consent is issued without prejudice to orders /judgements passed / to be passed by Hon'ble NGT in the matter of Original Application No. 113/2023.
15. This consent is issued as per the Consent Appraisal Committee meeting dated 06.11.2023.
16. Industry shall submit Bank Guarantee of Rs. 25 Lacs towards compliance of consent conditions, operation & maintenance of pollution control systems and to achieve consented prescribed standards.
17. Industry shall stop production activity voluntarily in case of failure of operation and maintenance of the ETP / pollution control systems as preventive measures.
18. Industry shall extend all existing BGs towards O&M of pollution control systems and towards compliance of the Consent conditions.
19. The treated sewage shall be recycled for secondary purposes to the maximum extent and remaining shall be discharged on land for gardening within premise. In no case, sewage shall find its way for gardening / outside factory premises.
20. Industry shall send sewage / overflow of septic tank and soak pit into the aeration tank of ETP for further treatment & disposal.



**Received Consent fee of -**

<b>Sr.No</b>	<b>Amount(Rs.)</b>	<b>Transaction/DR.No.</b>	<b>Date</b>	<b>Transaction Type</b>
1	218540.00	TXN2307003336	24/07/2023	Online Payment
2	100000.00	TXN2308000142	01/08/2023	Online Payment

-

**Copy to:**

1. Regional Officer, MPCB, Aurangabad and Sub-Regional Officer, MPCB, Nanded
  - They are directed to ensure the compliance of the consent conditions.
  - They are directed to obtain top-up B.G. of Rs. \_\_\_ towards compliance of consent condition.
2. Chief Accounts Officer, MPCB, Sion, Mumbai

**SCHEDULE-I****Terms & conditions for compliance of Water Pollution Control:**

- 1) A] As per your application, you have Provided Effluent Treatment Plant (ETP) of designed capacity of 400.00 CMD consisting of Primary & Secondary treatment system for the treatment of 315.00 CMD industrial effluent.
- B] Industry shall provide CPU for recycle/reuse of treated effluent.
- C] The Applicant shall operate the effluent treatment plant (ETP) to treat the trade effluent so as to achieve the following standards prescribed by the Board or under EP Act, 1986 and Rules made there under from time to time, whichever is stringent.

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

- D] The treated effluent 315.00 CMD shall be disposed on land for irrigation on 4.20 hectares of own land /as per the bilateral agreement with farmers. In no any case treated/untreated effluent shall find its way outside the factory premises directly or indirectly.
- E] Industry shall operate Online Continuous Emission Monitoring System (OCEMS) and shall transmit Online Continuous Emission Monitoring System (OCEMS) data to Board's server directly through the data logger without any intermediate server.
- F] Trade effluent of 0.00 CMD generated from Co-gen shall be 100% recycle in process.
- G] CREP conditions for Sugar Factory
- Operation of ETP shall be started at least one month before starting of cane crushing to achieve desired MLSS. So as to meet prescribed standards from day one the operation of mill.
  - Waste water generation shall be reduced to 100 liters per tone of cane crushed.
  - Industry shall achieve zero discharge into in land surface water bodies.
  - 15 days' storage capacity tank shall be provided for treated effluent to take care during no demand for irrigation.

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

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

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

2) **A] As per your application, you have provided septic tank and soak pit for the treatment of 20 CMD sewage.**

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

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

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

3) The industry shall have bilateral agreement with the farmers on whose land the treated effluent is used for irrigation purposes and a copy of the agreements with validity shall be submitted to the Regional/Sub- Regional Office of the Board.

4) The industry shall create Environmental Cell by appointing an Environmental Engineer, Chemist and Agriculture expert for looking after day to day activities related to Environment and irrigation field where treated effluent is used for irrigation.

5) **CONDITIONS FOR MOLASSES STORAGE:**

(i) The molasses shall be properly collected and stored in steel tanks which shall be leak proof. At no stage of handling of molasses, there shall be leakage or spillage.

(ii) The capacity of tanks for storage of molasses shall be such that it will take care of bumper production of sugar, non-lifting of molasses etc.

(iii) All the area on which molasses are stored and handled should be provided with drain for diverting the spills to the treatment plant/ molasses tank. Suitable arrangements for accidental discharges of molasses from the tanks shall be provided to contain the same within factory premises.

(iv) Destruction of molasses and its disposal shall not be done without specific permission in writing from the authorized officer of the Board. Intimation of intention to destroy or dispose of the molasses shall be given to the Board at least 15 (fifteen) days in advance by registered post under intimation to the Sub-Regional officer and Regional officer of the Board under whose jurisdiction the factory is situated.

(v) The storage tanks shall be kept in good conditions all the year round with adequate maintenance. The tanks size and capacity per cm, height, total capacity in tonnes shall be displayed prominently near /on the tank.

(vi) The above conditions shall be in addition to and not in derogation of the provisions contained in the "Bombay Molasses Rules, 1955" and "Maharashtra Molasses Storage and Supply Regulation, 1965".

- 6) The Applicant shall provide Specific Water Pollution control system as per the conditions of EP Act, 1986 and rule made there under from time to time/ Environmental Clearance / CREP guidelines if applicable.
- 7) The Board reserves its rights to review plans, specifications or other data relating to plant setup for the treatment of waterworks for the purification there of & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions. The Applicant shall obtain prior consent of the Board to take steps to establish the unit or establish any treatment and disposal system or an extension or addition thereto.
- 8) The industry shall ensure replacement of pollution control system or its parts after expiry of its expected life as defined by manufacturer so as to ensure the compliance of standards and safety of the operation thereof.
- 9) The Applicant shall comply with the provisions of the Water (Prevention & Control of Pollution) Act, 1974 and as amended, by installing water meters, and other provisions as contained in the said act:

<b>Sr. No.</b>	<b>Purpose for water consumed</b>	<b>Water consumption quantity (CMD)</b>
1.	Industrial Cooling, spraying in mine pits or boiler feed	45.00
2.	Domestic purpose	30.00
3.	Processing whereby water gets polluted & pollutants are easily biodegradable	375.00
4.	Processing whereby water gets polluted & pollutants are not easily biodegradable and are toxic	0.00
5.	Grandening	0

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

**SCHEDULE-II****Terms & conditions for compliance of Air Pollution Control:**

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

Stack No.	Stack Attached To	APC System	Height in Mtrs.	Type of Fuel	Quantity & UoM	S%	SO <sub>2</sub>
S-1	Boiler (32 TPH)	Wet Scrubber	65	Baggase	33750 Kg/Day	0.20	135.00
S-2	Boiler (32 TPH)	Wet Scrubber	65	Baggase	33750 Kg/Day	0.20	135.00
S-3	D.G. set (320 KVA))	Acoustic enclosure	4.0	Diesel	50 Ltr/Hr	1.00	60.00
S-4	D.G. set (120 KVA))	Acoustic Enclosure	2.5	Diesel	70 Ltr/Hr	1.00	60.00

(As per previous consent of existing unit)

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

- 1 The Applicant shall provide ESP/ Bag filter/ Wet scrubber to the Bagasse fired boiler and Dust Collector to Sugar bagging section as an Air Pollution control equipments OR as per the conditions of EP Act, 1986 and rule made there under from time to time / Environmental Clearance / CREP guidelines.
- 2 The applicant shall operate and maintain above mentioned air pollution control system, so as to achieve the level of pollutants to the following standards:

Total Particulate matter	Not to exceed	150 mg/Nm <sup>3</sup>
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- 3 The Applicant shall obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or replacement/alteration well before its life come to an end or erection of new pollution control equipment.
  - 4 The Board reserves its rights to vary all or any of the condition in the consent, if due to any technological improvement or otherwise such variation (including the change of any control equipment, other in whole or in part is necessary).
  - 5 Industry should not use auxiliary fuel more than 15 % (as per amendment in EIA Notification 2009, power plant upto 15 MW based on Bio-mass and using auxiliary fuel as coal upto 15% are exempt.) as co-gen capacity is below 15 MW.
- 3) **The Applicant shall obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or replacement/alteration well before its life come to an end or erection of new pollution control equipment.**
- 4) **The Board reserves its rights to vary all or any of the condition in the consent, if due to any technological improvement or otherwise such variation (including the change of any control equipment, other in whole or in part is necessary).**

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

<b>Sr. No.</b>	<b>Consent(C2E/C2O/C2R)</b>	<b>Amt of BG Imposed</b>	<b>Submission Period</b>	<b>Purpose of BG</b>	<b>Compliance Period</b>	<b>Validity Date</b>
1	Consent to Operate	Rs. 25 Lacs	15 days	Towards Compliance of consent conditions and Operation & maintenance of pollution control system & to achieve consented prescribed standards	31.07.2024	31.01.2025.

**BG Forfeiture History**

<b>Srno.</b>	<b>Consent (C2E/C2O/C2R)</b>	<b>Amount of BG imposed</b>	<b>Submission Period</b>	<b>Purpose of BG</b>	<b>Amount of BG Forfeiture</b>	<b>Reason of BG Forfeiture</b>
NA						



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

- 1 The applicant shall provide facility for collection of environmental samples and samples of trade and sewage effluents, air emissions and hazardous waste to the Board staff at the terminal or designated points and shall pay to the Board for the services rendered in this behalf.
- 2 The applicant shall provide ports in the chimney/(s) and facilities such as ladder, platform etc. for monitoring the air emissions and the same shall be open for inspection to/and for use of the Board's Staff. The chimney(s) vents attached to various sources of emission shall be designated by numbers such as S-1, S-2, etc. and these shall be painted/ displayed to facilitate identification.
- 3 Whenever due to any accident or other unforeseen act or even, such emissions occur or is apprehended to occur in excess of standards laid down, such information shall be forthwith Reported to Board, concerned Police Station, office of Directorate of Health Services, Department of Explosives, Inspectorate of Factories and Local Body. In case of failure of pollution control equipment, the production process connected to it shall be stopped.
- 4 The applicant shall provide an alternate electric power source sufficient to operate all pollution control facilities installed to maintain compliance with the terms and conditions of the consent. In the absence, the applicant shall stop, reduce or otherwise, control production to abide by terms and conditions of this consent.
- 5 The firm shall submit to this office, the 30th day of September every year, the Environmental Statement Report for the financial year ending 31st March in the prescribed Form-V as per the provisions of rule 14 of the Environment (Protection) (Second Amendment) Rules, 1992.
- 6 The industry should comply with the Hazardous & Other Wastes (M & TM) Rules, 2016 and submit the Annual Returns as per Rule 6(5) & 20(2) of Hazardous & Other Wastes (M & TM) Rules, 2016 for the preceding year April to March in Form-IV by 30th June of every year.
- 7 An inspection book shall be opened and made available to the Board's officers during their visit to the applicant.
- 8 The industry shall constitute an Environmental cell with qualified staff/personnel/agency to see the day to day compliance of consent condition towards Environment Protection.
- 9 The applicant shall install a separate meter showing the consumption of energy for operation of domestic and industrial effluent treatment plants and air pollution control system. A register showing consumption of chemicals used for treatment shall be maintained.
- 10 The applicant shall bring minimum 33% of the available open land under green coverage/ plantation. The applicant shall submit a yearly statement by 30th September every year on available open plot area, number of trees surviving as on 31st March of the year and number of trees planted by September end.
- 11 The industry shall submit official e-mail address and any change will be duly informed to the MPCB.
- 12 If the MIDC pipeline is broken/ overflowing chamber, in such cases industry shall not discharge their treated effluent into MIDC drain, it shall be sent to CETP by tanker.

- 13 Industry should monitor effluent quality, stack emissions and ambient air quality monthly/quarterly.
- 14 The industry shall recycle/reprocess/reuse/recover Hazardous Waste as per the provision contain in the H&OW(M&TM) Rules 2016, which can be recycled/processed/ reused/ recovered and only waste which has to be incinerated shall go to incineration and waste which can be used for land filling and cannot be recycled/ reprocessed etc. should go for that purpose, in order to reduce load on incineration and landfill site/environment.
- 15 Industry shall strictly comply with the Water (P&CP) Act, 1974, Air (P&CP) Act,1981 and Environmental Protection Act,1986 and industry specific standard under EP Rules 1986 which are available on MPCB website(www.mpcb.gov.in).
- 16 Separate drainage system shall be provided for collection of trade and sewage effluents. Terminal manholes shall be provided at the end of the collection system with arrangement for measuring the flow. No effluent shall be admitted in the pipes/sewers downstream of the terminal manholes. No effluent shall find its way other than in designed and provided collection system.
- 17 Neither storm water nor discharge from other premises shall be allowed to mix with the effluents from the factory.
18. Conditions for D.G. Set
  - a) Noise from the D.G. Set should be controlled by providing an acoustic enclosure or by treating the room acoustically.
  - b) Industry should provide acoustic enclosure for control of noise. The acoustic enclosure/ acoustic treatment of the room should be designed for minimum 25 dB (A) insertion loss or for meeting the ambient noise standards, whichever is on higher side. A suitable exhaust muffler with insertion loss of 25 dB (A) shall also be provided. The measurement of insertion loss will be done at different points at 0.5 meters from acoustic enclosure/room and then average.
  - c) Industry should make efforts to bring down noise level due to DG set, outside industrial premises, within ambient noise requirements by proper siting and control measures.
  - d) Installation of DG Set must be strictly in compliance with recommendations of DG Set manufacturer.
  - e) A proper routine and preventive maintenance procedure for DG set should be set and followed in consultation with the DG manufacturer which would help to prevent noise levels of DG set from deteriorating with use.
  - f) D.G. Set shall be operated only in case of power failure.
  - g) The applicant should not cause any nuisance in the surrounding area due to operation of D.G. Set.
  - h) The applicant shall comply with the notification of MoEFCC, India on Environment (Protection) second Amendment Rules vide GSR 371(E) dated 17.05.2002 and its amendments regarding noise limit for generator sets run with diesel.
- 19 The industry should not cause any nuisance in surrounding area.
- 20 The industry shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standard in respect of noise to less than 75 dB (A) during day time and 70 dB (A) during night time. Day time is reckoned in between 6 a.m. and 10 p.m. and night time is reckoned between 10 p.m. and 6 a.m.
- 21 The applicant shall maintain good housekeeping.
- 22 The non-hazardous solid waste arising in the factory premises, sweepings, etc. be disposed of scientifically so as not to cause any nuisance / pollution. The applicant shall take necessary permissions from civic authorities for disposal of solid waste.

- 23 The applicant shall not change or alter the quantity, quality, the rate of discharge, temperature or the mode of the effluent/emissions or hazardous wastes or control equipment provided for without previous written permission of the Board. The industry will not carry out any activity, for which this consent has not been granted/without prior consent of the Board.
- 24 The industry shall ensure that fugitive emissions from the activity are controlled so as to maintain clean and safe environment in and around the factory premises.
- 25 The industry shall achieve the National Ambient Air Quality standards prescribed vide Government of India, Notification dtd. 16.11.2009 as amended.
- 26 The applicant shall make an application for renewal of the consent at least 60 days before the date of the expiry of the consent.

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This certificate is digitally & electronically signed.

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**JVS results of M/s. Dharashiv Suagar Operated by Twenty One Sugar Jamga Shivani Tal. Loha Dist. Nanded**

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**From :** sronanded@mpcb.gov.in

Wed, Jan 31, 2024 03:02 PM

**Subject :** JVS results of M/s. Dharashiv Suagar Operated by Twenty One Sugar Jamga Shivani Tal. Loha Dist. Nanded

📎 17 attachments

**To :** NISHCHAL C <nischal.cpcb@nic.in>

**Cc :** ravindra kshirsagar <ravindra.kshirsagar@mpcb.gov.in>

Sir,

Please find enclosed herewith Lab receipt of JVS results in respect of M/s. Dharashiv Suagar Operated by Twenty-One Sugar Jamga Shivani Tal. Loha Dist. Nanded

**JVS collected on 14.1.2023 & 15.12.2023**

1. Stack attached to boiler- BR-0060813
2. AAQM Kondiba Bomnale Gut No. 365 Jamga Tal. Loha Dist. Nanded- BR-0062061
3. AAQM Near ETP beside factory- BR-0062063
4. AAQM Swati Jamge Gut No. 327 Jamga Tal. Loha Dist. Nanded- BR-0062062
5. ETP Inle ( Grab)- BR-0062059
6. Collected from Secondary Clarifier ( Grab)- BR-0062058
7. ETP Outlet ( Grab)- BR-0062057
8. ETP Inlet ( Composite) - BR-0062065
9. Collected from Secondary Clarifier ( Composite)- BR-0062064
10. ETP Out let ( Composite) - BR-0062060
11. Collected from Small Pond Infront of factory- BR-0062067
12. Collected from Big Pond in front of factory -BR-0062066
13. Odha towards west side of factory -BR-0062071
14. Sample from Well of Shri Siddeshwar Venkatesh Bhalke Gut No. 350 Jamga Tal. Loha Dist. Nanded -BR-0062068
15. Well sample of Shri yedes well towards West side of factory at Shivani Jamga Tal.Loha Dist. Nanded -BR-0062072
16. Sample from Bore well near Jirga Maroti Mandir Shivani Jamga Tal. Tal. Loha Dist. Nanded ( @ 2.0 PM)-BR-0062069
17. Sample from Bore well near Jirga Maroti Mandir Shivani Jamga Tal. Tal. Loha Dist. Nanded ( @ 2.5 PM After 5 min.)- BR-0062070

This is submitted for further necessary action please.

**Regards,**

**Shankar S Kendule**

**Sub-Regional Officer,**

**Maharashtra Pollution Control Board, Nanded**

**J "SAVE PAPER"-THINK BEFORE YOU PRINT!**

**From:** SRO Nanded

**Sent:** Wednesday, January 31, 2024 2:39 PM

**To:** NISHCHAL C <nischal.cpcb@nic.in>

**Cc:** R.G.Kshirsagar <ravindra.kshirsagar@mpcb.gov.in>

**Subject:** JVS results of M/s. Dharashiv Suagar Operated by Twenty One Sugar Jamga Shivani Tal. Loha Dist. Nanded

Sir,

Please find enclosed herewith Lab receipt of JVS results in respect of M/s. Dharashiv Suagar Operated by Twenty-One Sugar Jamga Shivani Tal. Loha Dist. Nanded

**JVS collected on 14.1.2023 & 15.12.2023**

18. Stack attached to boiler- BR-0060813
19. AAQM Kondiba Bomnale Gut No. 365 Jamga Tal. Loha Dist. Nanded- BR-0062061
20. AAQM Near ETP beside factory- BR-0062063
21. AAQM Swati Jamge Gut No. 327 Jamga Tal. Loha Dist. Nanded- BR-0062062
22. ETP Inle ( Grab)- BR-0062059
23. Collected from Secondary Clarifier ( Grab)- BR-0062058
24. ETP Outlet ( Grab)- BR-0062057
25. ETP Inlet ( Composite) - BR-0062065
26. Collected from Secondary Clarifier ( Composite)- BR-0062064
27. ETP Out let ( Composite) - BR-0062060
28. Collected from Small Pond Infront of factory- BR-0062067
29. Collected from Big Pond in front of factory -BR-0062066
30. Odha towards west side of factory -BR-0062071
31. Sample from Well of Shri Siddeshwar Venkatesh Bhalke Gut No. 350 Jamga Tal. Loha Dist. Nanded -BR-0062068
32. Well sample of Shri yedes well towards West side of factory at Shivani Jamga Tal.Loha Dist. Nanded -BR-0062072
33. Sample from Bore well near Jirga Maroti Mandir Shivani Jamga Tal. Tal. Loha Dist. Nanded ( @ 2.0 PM)-BR-0062069
34. Sample from Bore well near Jirga Maroti Mandir Shivani Jamga Tal. Tal. Loha Dist. Nanded ( @ 2.5 PM After 5 min.)- BR-0062070

This is submitted for further necessary action please.

**Regards,**

***Shankar S Kendule***

**Sub-Regional Officer,**

**Maharashtra Pollution Control Board, Nanded**

***J "SAVE PAPER"-THINK BEFORE YOU PRINT!***

***POWER BEHIND ENVIRONMENT...M.P.C.B.***

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-  **Stack 14.12.2023.pdf**  
16 KB
  
-  **AAQM Kondiba Bomnale Gut No. 365 Jamga.pdf**  
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-  **AAQM Near ETP Beside Sugar factory.pdf**  
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-  **AAQM Swati Jamge Gut No. 327 Jamga.pdf**  
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-  **OTHERS (Sample from Well of Shri Siddeshwar Venkatesh Bhalke Gut No. 350.pdf**  
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**OTHERS (Sample from Bore well near Jirga Maroti Mandir Shivani Jamga**



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# 836 MAHARASHTRA POLLUTION CONTROL BOARD

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Report Outward No.: MPCB/RL-Aurangabad/Source Emission/23-24/12/37  
Date: 28/12/2023 10:45 AM

## Analysis Report-Air (Source Emission)

### Client/Industry/location Name & Address

M/s. Twentyone Sugars Ltd (Unit III) (Formerly known as M/s Dharashiv Sakhar Karkhana Unit III)  
R12 Sugar ( excluding Khandsari)

### Sample Details

<b>Field Sample ID :</b>	BR-0060813
<b>Laboratory Sample Code :</b>	MPCB/RL-Aurangabad/STK/23-24/196
<b>Sample Details (Water/Air/HW) :</b>	Air
<b>Sample Volume Received :</b>	
<b>Sample Collected By :</b>	FO-Nanded (Shri.Ravindra G. Kshirsagar ) (SRO-Nanded)
<b>Seal No. :</b>	255
<b>Type of Industry / Location details :</b>	red
<b>Sample Collected On :</b>	Dec 14 2023 01:10:00:000PM

Sr.No	Parameter	Result	Unit	Method of analysis
1	SO <sub>2</sub>	29	mg/m <sup>3</sup>	
2	Total Particulate Matter	158	mg/Nm <sup>3</sup>	

**Report Type:** final

**Report generated on:** 26/12/2023 11:25 AM

**Complied by:** Dr Mahesh Rakh

**Approved by:** Dr Mahesh Rakh

**Reviewed on Date:** 28/12/2023 10:45 AM

**Reviewed by:** Shantilal Nagare

**Shantilal Nagare**  
Senior Scientific Officer,  
I/c Regional Laboratory,  
Aurangabad,

\* Electronic report does not require signature

# 838 MAHARASHTRA POLLUTION CONTROL BOARD

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Report Outward No.: MPCB/RL-Aurangabad/Ambient/23-24/12/3  
Date: 28/12/2023 10:40 AM

## Analysis Report-Air (Ambient)

### Client/Industry/location Name & Address

M/s. Twentyone Sugars Ltd (Unit III) (Formerly known as M/s Dharashiv Sakhar Karkhana Unit III)  
R12 Sugar ( excluding Khandsari)

### Sample Details

<b>Field Sample ID :</b>	BR-0062062
<b>Laboratory Sample Code :</b>	MPCB/RL-Aurangabad/AMB/23-24/24
<b>Sample Details (Water/Air/HW) :</b>	Air
<b>Sample Volume Received :</b>	
<b>Sample Collected By :</b>	FO-Nanded (Shri.Ravindra G. Kshirsagar ) (SRO-Nanded)
<b>Seal No. :</b>	255
<b>Type of Industry / Location details :</b>	red
<b>Sample Collected On :</b>	Dec 14 2023 06:30:00:00PM

Sr.No	Parameter	Starting Time	Closing Time	Result	Unit	Method of analysis
1	PM10	14-12-2023 18:30	15-12-2023 02:30	113	$\mu\text{g}/\text{m}^3$	
2	PM10	15-12-2023 02:30	15-12-2023 10:30	61	$\mu\text{g}/\text{m}^3$	
3	PM10	15-12-2023 10:30	15-12-2023 18:30	143	$\mu\text{g}/\text{m}^3$	

**Report Type:** final

**Report generated on:** 19/12/2023 05:35 PM

**Complied by:** Dr Mahesh Rakh

**Approved by:** Dr Mahesh Rakh

**Reviewed on Date:** 28/12/2023 10:39 AM

**Reviewed by:** Shantilal Nagare

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# 840 MAHARASHTRA POLLUTION CONTROL BOARD

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Report Outward No.: MPCB/RL-Aurangabad/Ambient/23-24/12/4  
Date: 28/12/2023 10:36 AM

## Analysis Report-Air (Ambient)

### Client/Industry/location Name & Address

M/s. Twentyone Sugars Ltd (Unit III) (Formerly known as M/s Dharashiv Sakhar Karkhana Unit III)  
R12 Sugar ( excluding Khandsari)

### Sample Details

<b>Field Sample ID :</b>	BR-0062063
<b>Laboratory Sample Code :</b>	MPCB/RL-Aurangabad/AMB/23-24/25
<b>Sample Details (Water/Air/HW) :</b>	Air
<b>Sample Volume Received :</b>	
<b>Sample Collected By :</b>	FO-Nanded (Shri.Ravindra G. Kshirsagar ) (SRO-Nanded)
<b>Seal No. :</b>	255
<b>Type of Industry / Location details :</b>	red
<b>Sample Collected On :</b>	Dec 14 2023 07:00:00:000PM

Sr.No	Parameter	Starting Time	Closing Time	Result	Unit	Method of analysis
1	PM10	14-12-2023 19:00	15-12-2023 03:00	67	$\mu\text{g}/\text{m}^3$	
2	PM10	15-12-2023 03:00	15-12-2023 11:00	66	$\mu\text{g}/\text{m}^3$	
3	PM10	15-12-2023 11:00	15-12-2023 19:00	108	$\mu\text{g}/\text{m}^3$	

**Report Type:** final

**Report generated on:** 19/12/2023 05:36 PM

**Complied by:** Dr Mahesh Rakh

**Approved by:** Dr Mahesh Rakh

**Reviewed on Date:** 28/12/2023 10:36 AM

**Reviewed by:** Shantilal Nagare

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Report Outward No.: MPCB/RL-Aurangabad/Ambient/23-24/12/2  
Date: 28/12/2023 10:42 AM

## Analysis Report-Air (Ambient)

### Client/Industry/location Name & Address

M/s. Twentyone Sugars Ltd (Unit III) (Formerly known as M/s Dharashiv Sakhar Karkhana Unit III)  
R12 Sugar ( excluding Khandsari)

### Sample Details

<b>Field Sample ID :</b>	BR-0062061
<b>Laboratory Sample Code :</b>	MPCB/RL-Aurangabad/AMB/23-24/23
<b>Sample Details (Water/Air/HW) :</b>	Air
<b>Sample Volume Received :</b>	
<b>Sample Collected By :</b>	FO-Nanded (Shri.Ravindra G. Kshirsagar ) (SRO-Nanded)
<b>Seal No. :</b>	255
<b>Type of Industry / Location details :</b>	red
<b>Sample Collected On :</b>	Dec 14 2023 06:00:00:000PM

Sr.No	Parameter	Starting Time	Closing Time	Result	Unit	Method of analysis
1	PM10	15-12-2023 10:00	15-12-2023 18:00	203	$\mu\text{g}/\text{m}^3$	
2	PM10	15-12-2023 14:00	15-12-2023 22:00	162	$\mu\text{g}/\text{m}^3$	
3	PM10	14-12-2023 18:00	15-12-2023 02:00	246	$\mu\text{g}/\text{m}^3$	

**Report Type:** final

**Report generated on:** 19/12/2023 05:35 PM

**Complied by:** Dr Mahesh Rakh

**Approved by:** Dr Mahesh Rakh

**Reviewed on Date:** 28/12/2023 10:42 AM

**Reviewed by:** Shantilal Nagare

\* Electronic report does not require signature

**MAHARASHTRA POLLUTION CONTROL BOARD  
REGIONAL LABORATORY, AURANGABAD**

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Aurangabad 431 210

<b>NABL Certificate No.:</b>	<b>Validity</b>
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<b>Laboratory MoEF Recognition :</b>	<b>Validity</b>
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<b>Test Report No.: MPCB/RL-Aurangabad/JVS/23-24/01/33</b>	<b>Date: 05/01/2024 04:26 PM</b>
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**Analysis Report-Water (JVS)**

<b>Field Sample ID :</b>	BR-0062065		
<b>Name &amp; Address of the Industry</b>	M/s. Twentyone Sugars Ltd (Unit III) (Formerly known as M/s Dharashiv Sakhar Karkhana Unit III) R12 Sugar ( excluding Khandsari)		
<b>Sampling Location :</b>	ETP (Inlet)		
<b>Lab code :</b>	MPCB/RL-Aurangabad/JVS/23-24/496		
<b>Sampling Method(s) :</b>		<b>Sample Details (Water/Air/HW) :</b>	Water
<b>Sampling drawn by (Officer name):</b>	FO-Nanded (Shri.Ravindra G. Kshirsagar )	<b>Sample Volume Received :</b>	
<b>Sample submitted by (Name) :</b>	FO-Nanded (Shri.Ravindra G. Kshirsagar ) (SRO-Nanded)	<b>Seal No. :</b>	255
<b>Date of Sample Collection.(dd/mm/yyyy) :</b>	14/12/2023 10:45 PM	<b>Date of Sample receipt to Laboratory (dd/mm/yyyy) :</b>	18/12/2023 05:28 PM
<b>Analysis start Date (dd/mm/yyyy). :</b>	18/12/2023 06:35 PM	<b>Analysis end Date (dd/mm/yyyy). :</b>	05/01/2024 02:58 PM

**Test Report**

Sr.No	Parameter	Results	Unit	Method Adopted
1	pH	5.7		As per SOP
2	Total Dissolved Solids(TDS)	2432.0	mg/l	As per SOP
3	Suspended Solids ( SS )	570.0	mg/l	As per SOP
4	Biochemical Oxygen Demand (BOD)	1550.0	mg/l	As per SOP
5	Chloride	639.80	mg/l	As per SOP

Sr.No	Parameter	Results	Unit	Method Adopted
6	Chemical Oxygen Demand (COD)	4960.0	mg/l	As per SOP
7	Sulphate	157.50	mg/l	As per SOP

Abbreviations: - BDL=Below Detectable limit, N.D.=Not Detected, N.A.= Not Analyzed, \* Not covered under NABL scop.

**Comment (if any):**

**Comment for Amended Report:**

**Remark: - Note: This test report refers only to the sample submitted for the testing.**

**Results Compiled by:** Dr Mahesh Rakh

**Results Approved by:** Dr Mahesh Rakh

**Results Reviewed by:** Shantilal Nagare

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Note :

- 1 . Results relate only to the sample/s tested, only in case of samples submitted by customer & not drawn by MPCB.
2. Samples will be preserved for a period 10 days from the delivery of Test Certificate.
3. Customer complaint register is available at laboratory.
4. The Contents of this Report shall not be reproduced in part or in full without written approval of laboratory.
5. MU values will be reported on request.

**Shantilal Nagare**  
Senior Scientific Officer,  
I/c Regional Laboratory,  
Aurangabad,

End of The Report

**MAHARASHTRA POLLUTION CONTROL BOARD  
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<b>Laboratory MoEF Recognition :</b>	<b>Validity</b>
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<b>Test Report No.: MPCB/RL-Aurangabad/JVS/23-24/01/30</b>	<b>Date: 05/01/2024 04:15 PM</b>
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**Analysis Report-Water (JVS)**

<b>Field Sample ID :</b>	BR-0062059		
<b>Name &amp; Address of the Industry</b>	M/s. Twentyone Sugars Ltd (Unit III) (Formerly known as M/s Dharashiv Sakhar Karkhana Unit III) R12 Sugar ( excluding Khandsari)		
<b>Sampling Location :</b>	ETP (Inlet)		
<b>Lab code :</b>	MPCB/RL-Aurangabad/JVS/23-24/493		
<b>Sampling Method(s) :</b>		<b>Sample Details (Water/Air/HW) :</b>	Water
<b>Sampling drawn by (Officer name):</b>	FO-Nanded (Shri.Ravindra G. Kshirsagar )	<b>Sample Volume Received :</b>	
<b>Sample submitted by (Name) :</b>	FO-Nanded (Shri.Ravindra G. Kshirsagar ) (SRO-Nanded)	<b>Seal No. :</b>	255
<b>Date of Sample Collection.(dd/mm/yyyy) :</b>	14/12/2023 11:50 AM	<b>Date of Sample receipt to Laboratory (dd/mm/yyyy) :</b>	18/12/2023 05:22 PM
<b>Analysis start Date (dd/mm/yyyy). :</b>	18/12/2023 06:34 PM	<b>Analysis end Date (dd/mm/yyyy). :</b>	05/01/2024 02:56 PM

**Test Report**

Sr.No	Parameter	Results	Unit	Method Adopted
1	pH	5.6		As per SOP
2	Total Dissolved Solids(TDS)	2484.0	mg/l	As per SOP
3	Suspended Solids ( SS )	510.0	mg/l	As per SOP
4	Biochemical Oxygen Demand (BOD)	1350.0	mg/l	As per SOP
5	Chloride	69.98	mg/l	As per SOP

Sr.No	Parameter	Results	Unit	Method Adopted
6	Chemical Oxygen Demand (COD)	4440.0	mg/l	As per SOP
7	Sulphate	160.70	mg/l	As per SOP
8	Oil & Grease	14.2	mg/l	As per SOP

Abbreviations: - BDL=Below Detectable limit, N.D.=Not Detected, N.A.= Not Analyzed, \* Not covered under NABL scop.

**Comment (if any):**

**Comment for Amended Report:**

**Remark: - Note: This test report refers only to the sample submitted for the testing.**

**Results Compiled by:** Dr Mahesh Rakh

**Results Approved by:** Dr Mahesh Rakh

**Results Reviewed by:** Shantilal Nagare

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**Shantilal Nagare**  
Senior Scientific Officer,  
I/c Regional Laboratory,  
Aurangabad,

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**MAHARASHTRA POLLUTION CONTROL BOARD  
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<b>NABL Certificate No.:</b>	<b>Validity</b>
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<b>Laboratory MoEF Recognition :</b>	<b>Validity</b>
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<b>Test Report No.: MPCB/RL-Aurangabad/JVS/23-24/01/32</b>	<b>Date: 05/01/2024 04:24 PM</b>
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**Analysis Report-Water (JVS)**

<b>Field Sample ID :</b>	BR-0062064		
<b>Name &amp; Address of the Industry</b>	M/s. Twentyone Sugars Ltd (Unit III) (Formerly known as M/s Dharashiv Sakhar Karkhana Unit III) R12 Sugar ( excluding Khandsari)		
<b>Sampling Location :</b>	ETP (Outlet from Secondary Clarifier of ETP)		
<b>Lab code :</b>	MPCB/RL-Aurangabad/JVS/23-24/495		
<b>Sampling Method(s) :</b>		<b>Sample Details (Water/Air/HW) :</b>	Water
<b>Sampling drawn by (Officer name):</b>	FO-Nanded (Shri.Ravindra G. Kshirsagar )	<b>Sample Volume Received :</b>	
<b>Sample submitted by (Name) :</b>	FO-Nanded (Shri.Ravindra G. Kshirsagar ) (SRO-Nanded)	<b>Seal No. :</b>	255
<b>Date of Sample Collection.(dd/mm/yyyy) :</b>	14/12/2023 10:40 PM	<b>Date of Sample receipt to Laboratory (dd/mm/yyyy) :</b>	18/12/2023 05:27 PM
<b>Analysis start Date (dd/mm/yyyy). :</b>	18/12/2023 06:35 PM	<b>Analysis end Date (dd/mm/yyyy). :</b>	05/01/2024 02:57 PM

**Test Report**

Sr.No	Parameter	Results	Unit	Method Adopted
1	pH	8.2		As per SOP
2	Total Dissolved Solids(TDS)	1994.0	mg/l	As per SOP
3	Suspended Solids ( SS )	43.0	mg/l	As per SOP
4	Biochemical Oxygen Demand (BOD)	52.5	mg/l	As per SOP
5	Chloride	78.98	mg/l	As per SOP

Sr.No	Parameter	Results	Unit	Method Adopted
6	Chemical Oxygen Demand (COD)	168.0	mg/l	As per SOP
7	Sulphate	198.05	mg/l	As per SOP

Abbreviations: - BDL=Below Detectable limit, N.D.=Not Detected, N.A.= Not Analyzed, \* Not covered under NABL scop.

**Comment (if any):**

**Comment for Amended Report:**

**Remark: - Note: This test report refers only to the sample submitted for the testing.**

**Results Compiled by:** Dr Mahesh Rakh

**Results Approved by:** Dr Mahesh Rakh

**Results Reviewed by:** Shantilal Nagare

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**Shantilal Nagare**  
Senior Scientific Officer,  
I/c Regional Laboratory,  
Aurangabad,

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**MAHARASHTRA POLLUTION CONTROL BOARD  
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<b>Laboratory MoEF Recognition :</b>	<b>Validity</b>
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<b>Test Report No.: MPCB/RL-Aurangabad/JVS/23-24/01/31</b>	<b>Date: 05/01/2024 04:20 PM</b>
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**Analysis Report-Water (JVS)**

<b>Field Sample ID :</b>	BR-0062060		
<b>Name &amp; Address of the Industry</b>	M/s. Twentyone Sugars Ltd (Unit III) (Formerly known as M/s Dharashiv Sakhar Karkhana Unit III) R12 Sugar ( excluding Khandsari)		
<b>Sampling Location :</b>	ETP (Outlet)		
<b>Lab code :</b>	MPCB/RL-Aurangabad/JVS/23-24/494		
<b>Sampling Method(s) :</b>		<b>Sample Details (Water/Air/HW) :</b>	Water
<b>Sampling drawn by (Officer name):</b>	FO-Nanded (Shri.Ravindra G. Kshirsagar )	<b>Sample Volume Received :</b>	
<b>Sample submitted by (Name) :</b>	FO-Nanded (Shri.Ravindra G. Kshirsagar ) (SRO-Nanded)	<b>Seal No. :</b>	255
<b>Date of Sample Collection.(dd/mm/yyyy) :</b>	14/12/2023 10:30 PM	<b>Date of Sample receipt to Laboratory (dd/mm/yyyy) :</b>	18/12/2023 05:24 PM
<b>Analysis start Date (dd/mm/yyyy). :</b>	18/12/2023 06:34 PM	<b>Analysis end Date (dd/mm/yyyy). :</b>	05/01/2024 02:56 PM

**Test Report**

Sr.No	Parameter	Results	Unit	Method Adopted
1	pH	8.2		As per SOP
2	Total Dissolved Solids(TDS)	1144.0	mg/l	As per SOP
3	Suspended Solids ( SS )	25.0	mg/l	As per SOP
4	Biochemical Oxygen Demand (BOD)	46.0	mg/l	As per SOP
5	Chloride	76.98	mg/l	As per SOP

Sr.No	Parameter	Results	Unit	Method Adopted
6	Chemical Oxygen Demand (COD)	128.0	mg/l	As per SOP
7	Sulphate	198.05	mg/l	As per SOP

Abbreviations: - BDL=Below Detectable limit, N.D.=Not Detected, N.A.= Not Analyzed, \* Not covered under NABL scop.

**Comment (if any):**

**Comment for Amended Report:**

**Remark: - Note: This test report refers only to the sample submitted for the testing.**

**Results Compiled by:** Dr Mahesh Rakh

**Results Approved by:** Dr Mahesh Rakh

**Results Reviewed by:** Shantilal Nagare

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Note :

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**Shantilal Nagare**  
Senior Scientific Officer,  
I/c Regional Laboratory,  
Aurangabad,

End of The Report

**MAHARASHTRA POLLUTION CONTROL BOARD  
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Aurangabad 431 210

<b>NABL Certificate No.:</b>	<b>Validity</b>
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<b>Laboratory MoEF Recognition :</b>	<b>Validity</b>
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<b>Test Report No.: MPCB/RL-Aurangabad/JVS/23-24/01/27</b>	<b>Date: 05/01/2024 04:11 PM</b>
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**Analysis Report-Water (JVS)**

<b>Field Sample ID :</b>	BR-0062057		
<b>Name &amp; Address of the Industry</b>	M/s. Twentyone Sugars Ltd (Unit III) (Formerly known as M/s Dharashiv Sakhar Karkhana Unit III) R12 Sugar ( excluding Khandsari)		
<b>Sampling Location :</b>	ETP (Outlet)		
<b>Lab code :</b>	MPCB/RL-Aurangabad/JVS/23-24/491		
<b>Sampling Method(s) :</b>		<b>Sample Details (Water/Air/HW) :</b>	Water
<b>Sampling drawn by (Officer name):</b>	FO-Nanded (Shri.Ravindra G. Kshirsagar )	<b>Sample Volume Received :</b>	
<b>Sample submitted by (Name) :</b>	FO-Nanded (Shri.Ravindra G. Kshirsagar ) (SRO-Nanded)	<b>Seal No. :</b>	255
<b>Date of Sample Collection.(dd/mm/yyyy) :</b>	14/12/2023 11:10 AM	<b>Date of Sample receipt to Laboratory (dd/mm/yyyy) :</b>	18/12/2023 05:21 PM
<b>Analysis start Date (dd/mm/yyyy). :</b>	18/12/2023 06:34 PM	<b>Analysis end Date (dd/mm/yyyy). :</b>	05/01/2024 01:19 PM

**Test Report**

Sr.No	Parameter	Results	Unit	Method Adopted
1	pH	8.1		
2	Total Dissolved Solids(TDS)	1084.0	mg/l	
3	Suspended Solids ( SS )	21.0	mg/l	
4	Biochemical Oxygen Demand (BOD)	42.0	mg/l	
5	Chloride	80.97	mg/l	

Sr.No	Parameter	Results	Unit	Method Adopted
6	Chemical Oxygen Demand (COD)	124.0	mg/l	
7	Sulphate	192.25	mg/l	
8	Oil & Grease	BDL	mg/l	

Abbreviations: - BDL=Below Detectable limit, N.D.=Not Detected, N.A.= Not Analyzed, \* Not covered under NABL scop.

**Comment (if any):**

**Comment for Amended Report:**

**Remark: - Note: This test report refers only to the sample submitted for the testing.**

**Results Compiled by:** Dr Mahesh Rakh

**Results Approved by:** Dr Mahesh Rakh

**Results Reviewed by:** Shantilal Nagare

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**Shantilal Nagare**  
Senior Scientific Officer,  
I/c Regional Laboratory,  
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Aurangabad 431 210

**NABL Certificate No.:**

**Validity**

**Laboratory MoEF Recognition :**

**Validity**

**Test Report No.:** MPCB/RL-Aurangabad/JVS/23-24/01/34

**Date:** 05/01/2024 04:27 PM

**Analysis Report-Water (JVS)**

<b>Field Sample ID :</b>	BR-0062066		
<b>Name &amp; Address of the Industry</b>	M/s. Twentyone Sugars Ltd (Unit III) (Formerly known as M/s Dharashiv Sakhar Karkhana Unit III) R12 Sugar ( excluding Khandsari)		
<b>Sampling Location :</b>	OTHERS (From Big Pond located at in front of factory at west side)		
<b>Lab code :</b>	MPCB/RL-Aurangabad/JVS/23-24/497		
<b>Sampling Method(s) :</b>		<b>Sample Details (Water/Air/HW) :</b>	Water
<b>Sampling drawn by (Officer name):</b>	FO-Nanded (Shri.Ravindra G. Kshirsagar )	<b>Sample Volume Received :</b>	
<b>Sample submitted by (Name) :</b>	FO-Nanded (Shri.Ravindra G. Kshirsagar ) (SRO-Nanded)	<b>Seal No. :</b>	255
<b>Date of Sample Collection.(dd/mm/yyyy) :</b>	15/12/2023 01:05 PM	<b>Date of Sample receipt to Laboratory (dd/mm/yyyy) :</b>	18/12/2023 05:30 PM
<b>Analysis start Date (dd/mm/yyyy). :</b>	18/12/2023 06:35 PM	<b>Analysis end Date (dd/mm/yyyy). :</b>	05/01/2024 03:00 PM

**Test Report**

Sr.No	Parameter	Results	Unit	Method Adopted
1	pH	7.6		As per SOP
2	Total Dissolved Solids(TDS)	1912.0	mg/l	As per SOP
3	Suspended Solids ( SS )	40.0	mg/l	As per SOP
4	Biochemical Oxygen Demand (BOD)	115.0	mg/l	As per SOP
5	Chloride	73.98	mg/l	As per SOP

Sr.No	Parameter	Results	Unit	Method Adopted
6	Chemical Oxygen Demand (COD)	352.0	mg/l	As per SOP
7	Sulphate	75.60	mg/l	As per SOP

Abbreviations: - BDL=Below Detectable limit, N.D.=Not Detected, N.A.= Not Analyzed, \* Not covered under NABL scop.

**Comment (if any):**

**Comment for Amended Report:**

**Remark: - Note: This test report refers only to the sample submitted for the testing.**

**Results Compiled by:** Dr Mahesh Rakh

**Results Approved by:** Dr Mahesh Rakh

**Results Reviewed by:** Shantilal Nagare

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<b>NABL Certificate No.:</b>	<b>Validity</b>
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<b>Laboratory MoEF Recognition :</b>	<b>Validity</b>
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<b>Test Report No.: MPCB/RL-Aurangabad/JVS/23-24/01/35</b>	<b>Date: 05/01/2024 04:29 PM</b>
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**Analysis Report-Water (JVS)**

<b>Field Sample ID :</b>	BR-0062067		
<b>Name &amp; Address of the Industry</b>	M/s. Twentyone Sugars Ltd (Unit III) (Formerly known as M/s Dharashiv Sakhar Karkhana Unit III) R12 Sugar ( excluding Khandsari)		
<b>Sampling Location :</b>	OTHERS (From Small Pond located in front of factory at west side)		
<b>Lab code :</b>	MPCB/RL-Aurangabad/JVS/23-24/498		
<b>Sampling Method(s) :</b>		<b>Sample Details (Water/Air/HW) :</b>	Water
<b>Sampling drawn by (Officer name):</b>	FO-Nanded (Shri.Ravindra G. Kshirsagar )	<b>Sample Volume Received :</b>	
<b>Sample submitted by (Name) :</b>	FO-Nanded (Shri.Ravindra G. Kshirsagar ) (SRO-Nanded)	<b>Seal No. :</b>	255
<b>Date of Sample Collection.(dd/mm/yyyy) :</b>	15/12/2023 01:15 PM	<b>Date of Sample receipt to Laboratory (dd/mm/yyyy) :</b>	18/12/2023 05:31 PM
<b>Analysis start Date (dd/mm/yyyy). :</b>	18/12/2023 06:35 PM	<b>Analysis end Date (dd/mm/yyyy). :</b>	05/01/2024 03:00 PM

**Test Report**

Sr.No	Parameter	Results	Unit	Method Adopted
1	pH	7.8		As per SOP
2	Total Dissolved Solids(TDS)	1824.0	mg/l	As per SOP
3	Suspended Solids ( SS )	105.0	mg/l	As per SOP
4	Biochemical Oxygen Demand (BOD)	105.0	mg/l	As per SOP
5	Chloride	129.96	mg/l	As per SOP

Sr.No	Parameter	Results	Unit	Method Adopted
6	Chemical Oxygen Demand (COD)	300.0	mg/l	As per SOP
7	Sulphate	37.08	mg/l	As per SOP

Abbreviations: - BDL=Below Detectable limit, N.D.=Not Detected, N.A.= Not Analyzed, \* Not covered under NABL scop.

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**Comment for Amended Report:**

**Remark: - Note: This test report refers only to the sample submitted for the testing.**

**Results Compiled by:** Dr Mahesh Rakh

**Results Approved by:** Dr Mahesh Rakh

**Results Reviewed by:** Shantilal Nagare

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**Laboratory MoEF Recognition :**

**Validity**

**Test Report No.:** MPCB/RL-Aurangabad/JVS/23-24/01/37

**Date:** 05/01/2024 04:35 PM

**Analysis Report-Water (JVS)**

<b>Field Sample ID :</b>	BR-0062071		
<b>Name &amp; Address of the Industry</b>	M/s. Twentyone Sugars Ltd (Unit III) (Formerly known as M/s Dharashiv Sakhar Karkhana Unit III) R12 Sugar ( excluding Khandsari)		
<b>Sampling Location :</b>	OTHERS (Odha towards West side of factory at Shivani Jamga Tal. Loha Dist. Nanded)		
<b>Lab code :</b>	MPCB/RL-Aurangabad/JVS/23-24/502		
<b>Sampling Method(s) :</b>		<b>Sample Details (Water/Air/HW) :</b>	Water
<b>Sampling drawn by (Officer name):</b>	FO-Nanded (Shri.Ravindra G. Kshirsagar )	<b>Sample Volume Received :</b>	
<b>Sample submitted by (Name) :</b>	FO-Nanded (Shri.Ravindra G. Kshirsagar ) (SRO-Nanded)	<b>Seal No. :</b>	255
<b>Date of Sample Collection.(dd/mm/yyyy) :</b>	15/12/2023 03:00 PM	<b>Date of Sample receipt to Laboratory (dd/mm/yyyy) :</b>	18/12/2023 05:34 PM
<b>Analysis start Date (dd/mm/yyyy). :</b>	18/12/2023 06:36 PM	<b>Analysis end Date (dd/mm/yyyy). :</b>	05/01/2024 03:04 PM

**Test Report**

Sr.No	Parameter	Results	Unit	Method Adopted
1	pH	8.3		As per SOP
2	Total Dissolved Solids(TDS)	614.0	mg/l	As per SOP
3	Suspended Solids ( SS )	10.0	mg/l	As per SOP
4	Biochemical Oxygen Demand (BOD)	8.0	mg/l	As per SOP

Sr.No	Parameter	Results	Unit	Method Adopted
5	Chloride	134.96	mg/l	As per SOP
6	Chemical Oxygen Demand (COD)	40.0	mg/l	As per SOP
7	Sulphate	70.50	mg/l	As per SOP

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**Comment (if any):**

**Comment for Amended Report:**

**Remark: - Note: This test report refers only to the sample submitted for the testing.**

**Results Compiled by:** Dr Mahesh Rakh

**Results Approved by:** Dr Mahesh Rakh

**Results Reviewed by:** Shantilal Nagare

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**Test Report No.:** MPCB/RL-Aurangabad/JVS/23-24/01/28

**Date:** 05/01/2024 04:13 PM

**Analysis Report-Water (JVS)**

<b>Field Sample ID :</b>	BR-0062058		
<b>Name &amp; Address of the Industry</b>	M/s. Twentyone Sugars Ltd (Unit III) (Formerly known as M/s Dharashiv Sakhar Karkhana Unit III) R12 Sugar ( excluding Khandsari)		
<b>Sampling Location :</b>	OTHERS (Outlet from Secondary Clarifier of ETP)		
<b>Lab code :</b>	MPCB/RL-Aurangabad/JVS/23-24/492		
<b>Sampling Method(s) :</b>		<b>Sample Details (Water/Air/HW) :</b>	Water
<b>Sampling drawn by (Officer name):</b>	FO-Nanded (Shri.Ravindra G. Kshirsagar )	<b>Sample Volume Received :</b>	
<b>Sample submitted by (Name) :</b>	FO-Nanded (Shri.Ravindra G. Kshirsagar ) (SRO-Nanded)	<b>Seal No. :</b>	255
<b>Date of Sample Collection.(dd/mm/yyyy) :</b>	14/12/2023 11:30 AM	<b>Date of Sample receipt to Laboratory (dd/mm/yyyy) :</b>	18/12/2023 05:22 PM
<b>Analysis start Date (dd/mm/yyyy). :</b>	18/12/2023 06:34 PM	<b>Analysis end Date (dd/mm/yyyy). :</b>	05/01/2024 01:20 PM

**Test Report**

Sr.No	Parameter	Results	Unit	Method Adopted
1	pH	8.1		
2	Total Dissolved Solids(TDS)	1104.0	mg/l	
3	Suspended Solids ( SS )	43.0	mg/l	
4	Biochemical Oxygen Demand (BOD)	50.0	mg/l	
5	Chloride	82.97	mg/l	

Sr.No	Parameter	Results	Unit	Method Adopted
6	Chemical Oxygen Demand (COD)	164.0	mg/l	
7	Sulphate	202.00	mg/l	
8	Oil & Grease	BDL	mg/l	

Abbreviations: - BDL=Below Detectable limit, N.D.=Not Detected, N.A.= Not Analyzed, \* Not covered under NABL scop.

**Comment (if any):**

**Comment for Amended Report:**

**Remark: - Note: This test report refers only to the sample submitted for the testing.**

**Results Compiled by:** Dr Mahesh Rakh

**Results Approved by:** Dr Mahesh Rakh

**Results Reviewed by:** Shantilal Nagare

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<b>Laboratory MoEF Recognition :</b>	<b>Validity</b>
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<b>Test Report No.: MPCB/RL-Aurangabad/JVS/23-24/01/36</b>	<b>Date: 05/01/2024 04:33 PM</b>
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**Analysis Report-Water (JVS)**

<b>Field Sample ID :</b>	BR-0062070		
<b>Name &amp; Address of the Industry</b>	M/s. Twentyone Sugars Ltd (Unit III) (Formerly known as M/s Dharashiv Sakhar Karkhana Unit III) R12 Sugar ( excluding Khandsari)		
<b>Sampling Location :</b>	OTHERS (Sample from Bore well near Jirga Maroti Mandir Shivani Jamga Tal. Loha Dist. Nanded)		
<b>Lab code :</b>	MPCB/RL-Aurangabad/JVS/23-24/501		
<b>Sampling Method(s) :</b>		<b>Sample Details (Water/Air/HW) :</b>	Water
<b>Sampling drawn by (Officer name):</b>	FO-Nanded (Shri.Ravindra G. Kshirsagar )	<b>Sample Volume Received :</b>	
<b>Sample submitted by (Name) :</b>	FO-Nanded (Shri.Ravindra G. Kshirsagar ) (SRO-Nanded)	<b>Seal No. :</b>	255
<b>Date of Sample Collection.(dd/mm/yyyy) :</b>	15/12/2023 02:05 PM	<b>Date of Sample receipt to Laboratory (dd/mm/yyyy) :</b>	18/12/2023 05:34 PM
<b>Analysis start Date (dd/mm/yyyy). :</b>	18/12/2023 06:36 PM	<b>Analysis end Date (dd/mm/yyyy). :</b>	05/01/2024 03:03 PM

**Test Report**

Sr.No	Parameter	Results	Unit	Method Adopted
1	pH	8.2		As per SOP
2	Total Dissolved Solids(TDS)	912.0	mg/l	As per SOP
3	Suspended Solids ( SS )	10.0	mg/l	As per SOP
4	Biochemical Oxygen Demand (BOD)	6.0	mg/l	As per SOP

Sr.No	Parameter	Results	Unit	Method Adopted
5	Chloride	203.94	mg/l	As per SOP
6	Chemical Oxygen Demand (COD)	32.0	mg/l	As per SOP
7	Sulphate	70.55	mg/l	As per SOP

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**Results Compiled by:** Dr Mahesh Rakh

**Results Approved by:** Dr Mahesh Rakh

**Results Reviewed by:** Shantilal Nagare

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**Laboratory MoEF Recognition :**

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**Test Report No.:** MPCB/RL-Aurangabad/JVS/23-24/01/48

**Date:** 05/01/2024 04:32 PM

**Analysis Report-Water (JVS)**

<b>Field Sample ID :</b>	BR-0062069		
<b>Name &amp; Address of the Industry</b>	M/s. Twentyone Sugars Ltd (Unit III) (Formerly known as M/s Dharashiv Sakhar Karkhana Unit III) R12 Sugar ( excluding Khandsari)		
<b>Sampling Location :</b>	OTHERS (Sample from Bore well near Jirga Maroti Mandir Shivani Jamga Tal. Loha Dist. Nanded)		
<b>Lab code :</b>	MPCB/RL-Aurangabad/JVS/23-24/500		
<b>Sampling Method(s) :</b>		<b>Sample Details (Water/Air/HW) :</b>	Water
<b>Sampling drawn by (Officer name):</b>	FO-Nanded (Shri.Ravindra G. Kshirsagar )	<b>Sample Volume Received :</b>	
<b>Sample submitted by (Name) :</b>	FO-Nanded (Shri.Ravindra G. Kshirsagar ) (SRO-Nanded)	<b>Seal No. :</b>	255
<b>Date of Sample Collection.(dd/mm/yyyy) :</b>	15/12/2023 02:00 PM	<b>Date of Sample receipt to Laboratory (dd/mm/yyyy) :</b>	18/12/2023 05:32 PM
<b>Analysis start Date (dd/mm/yyyy). :</b>	18/12/2023 06:35 PM	<b>Analysis end Date (dd/mm/yyyy). :</b>	05/01/2024 03:15 PM

**Test Report**

Sr.No	Parameter	Results	Unit	Method Adopted
1	pH	8.1		As per SOP
2	Total Dissolved Solids(TDS)	938.0	mg/l	As per SOP
3	Suspended Solids ( SS )	14.0	mg/l	As per SOP
4	Biochemical Oxygen Demand (BOD)	8.0	mg/l	As per SOP

Sr.No	Parameter	Results	Unit	Method Adopted
5	Chloride	217.93	mg/l	As per SOP
6	Chemical Oxygen Demand (COD)	36.0	mg/l	As per SOP
7	Sulphate	70.55	mg/l	As per SOP

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**Comment (if any):**

**Comment for Amended Report:**

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**Results Compiled by:** Dr Mahesh Rakh

**Results Approved by:** Dr Mahesh Rakh

**Results Reviewed by:** Shantilal Nagare

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**Test Report No.:** MPCB/RL-Aurangabad/JVS/23-24/01/44

**Date:** 05/01/2024 04:30 PM

**Analysis Report-Water (JVS)**

<b>Field Sample ID :</b>	BR-0062068		
<b>Name &amp; Address of the Industry</b>	M/s. Twentyone Sugars Ltd (Unit III) (Formerly known as M/s Dharashiv Sakhar Karkhana Unit III) R12 Sugar ( excluding Khandsari)		
<b>Sampling Location :</b>	OTHERS (Sample from Well of Shri Siddeshwar Venkatesh Bhalke Gut No. 350 Shivani Jamga Tal. Loha Dist. Nanded)		
<b>Lab code :</b>	MPCB/RL-Aurangabad/JVS/23-24/499		
<b>Sampling Method(s) :</b>		<b>Sample Details (Water/Air/HW) :</b>	Water
<b>Sampling drawn by (Officer name):</b>	FO-Nanded (Shri.Ravindra G. Kshirsagar )	<b>Sample Volume Received :</b>	
<b>Sample submitted by (Name) :</b>	FO-Nanded (Shri.Ravindra G. Kshirsagar ) (SRO-Nanded)	<b>Seal No. :</b>	255
<b>Date of Sample Collection.(dd/mm/yyyy) :</b>	15/12/2023 02:00 PM	<b>Date of Sample receipt to Laboratory (dd/mm/yyyy) :</b>	18/12/2023 05:31 PM
<b>Analysis start Date (dd/mm/yyyy). :</b>	18/12/2023 06:35 PM	<b>Analysis end Date (dd/mm/yyyy). :</b>	05/01/2024 03:12 PM

**Test Report**

Sr.No	Parameter	Results	Unit	Method Adopted
1	pH	8.2		As per SOP
2	Total Dissolved Solids(TDS)	922.0	mg/l	As per SOP
3	Suspended Solids ( SS )	11.0	mg/l	As per SOP
4	Biochemical Oxygen Demand (BOD)	21.0	mg/l	As per SOP

Sr.No	Parameter	Results	Unit	Method Adopted
5	Chloride	179.94	mg/l	As per SOP
6	Chemical Oxygen Demand (COD)	84.0	mg/l	As per SOP
7	Sulphate	121.70	mg/l	As per SOP

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**Comment (if any):**

**Comment for Amended Report:**

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**Results Compiled by:** Dr Mahesh Rakh

**Results Approved by:** Dr Mahesh Rakh

**Results Reviewed by:** Shantilal Nagare

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4. The Contents of this Report shall not be reproduced in part or in full without written approval of laboratory.
5. MU values will be reported on request.

**Shantilal Nagare**  
Senior Scientific Officer,  
I/c Regional Laboratory,  
Aurangabad,

End of The Report

**MAHARASHTRA POLLUTION CONTROL BOARD  
REGIONAL LABORATORY, AURANGABAD**

Phone no. : 0240-2993004  
Visit us at : <http://mpcb.gov.in>  
mail : [soaurangabadlab@mpcb.gov.in](mailto:soaurangabadlab@mpcb.gov.in)



Regional Laboratory, Aurangabad,  
Maharashtra Pollution Control Board, A-4/1, Paryavaran Bhavan, Behind Dhoot Hospital, Chikalhana MIDC  
Aurangabad 431 210

<b>NABL Certificate No.:</b>	<b>Validity</b>
------------------------------	-----------------

<b>Laboratory MoEF Recognition :</b>	<b>Validity</b>
--------------------------------------	-----------------

<b>Test Report No.: MPCB/RL-Aurangabad/JVS/23-24/01/38</b>	<b>Date: 05/01/2024 04:36 PM</b>
--	----------------------------------

**Analysis Report-Water (JVS)**

<b>Field Sample ID :</b>	BR-0062072		
<b>Name &amp; Address of the Industry</b>	M/s. Twentyone Sugars Ltd (Unit III) (Formerly known as M/s Dharashiv Sakhar Karkhana Unit III) R12 Sugar ( excluding Khandsari)		
<b>Sampling Location :</b>	OTHERS (Shri yedes well towards West side of factory at Shivani Jamga Tal. Loha Dist. Nanded)		
<b>Lab code :</b>	MPCB/RL-Aurangabad/JVS/23-24/503		
<b>Sampling Method(s) :</b>		<b>Sample Details (Water/Air/HW) :</b>	Water
<b>Sampling drawn by (Officer name):</b>	FO-Nanded (Shri.Ravindra G. Kshirsagar )	<b>Sample Volume Received :</b>	
<b>Sample submitted by (Name) :</b>	FO-Nanded (Shri.Ravindra G. Kshirsagar ) (SRO-Nanded)	<b>Seal No. :</b>	255
<b>Date of Sample Collection.(dd/mm/yyyy) :</b>	15/12/2023 03:20 PM	<b>Date of Sample receipt to Laboratory (dd/mm/yyyy) :</b>	18/12/2023 05:34 PM
<b>Analysis start Date (dd/mm/yyyy). :</b>	18/12/2023 06:36 PM	<b>Analysis end Date (dd/mm/yyyy). :</b>	05/01/2024 03:04 PM

**Test Report**

Sr.No	Parameter	Results	Unit	Method Adopted
1	pH	8.0		As per SOP
2	Total Dissolved Solids(TDS)	532.0	mg/l	As per SOP
3	Suspended Solids ( SS )	12.0	mg/l	As per SOP
4	Biochemical Oxygen Demand (BOD)	6.0	mg/l	As per SOP

Sr.No	Parameter	Results	Unit	Method Adopted
5	Chloride	69.98	mg/l	As per SOP
6	Chemical Oxygen Demand (COD)	32.0	mg/l	As per SOP
7	Sulphate	143.50	mg/l	As per SOP

Abbreviations: - BDL=Below Detectable limit, N.D.=Not Detected, N.A.= Not Analyzed, \* Not covered under NABL scop.

**Comment (if any):**

**Comment for Amended Report:**

**Remark: - Note: This test report refers only to the sample submitted for the testing.**

**Results Compiled by:** Dr Mahesh Rakh

**Results Approved by:** Dr Mahesh Rakh

**Results Reviewed by:** Shantilal Nagare

*# This is an Electronically generated report does not require signature*

Note :

- 1 . Results relate only to the sample/s tested, only in case of samples submitted by customer & not drawn by MPCB.
2. Samples will be preserved for a period 10 days from the delivery of Test Certificate.
3. Customer complaint register is available at laboratory.
4. The Contents of this Report shall not be reproduced in part or in full without written approval of laboratory.
5. MU values will be reported on request.

**Shantilal Nagare**  
Senior Scientific Officer,  
I/c Regional Laboratory,  
Aurangabad,

End of The Report

---

## Information in the Hon'ble NGT matter in OA no. 113 of 2023 - reg.

---

**From :** sronanded@mpcb.gov.in  
**Subject :** Information in the Hon'ble NGT matter in OA no. 113 of 2023 - reg.  
**To :** NISHCHAL C <nischal.cpcb@nic.in>  
**Cc :** roaurangabad@mpcb.gov.in, lo@mpcb.gov.in, lo1@mpcb.gov.in

Tue, Jan 09, 2024 03:13 PM

 3 attachments

Sir,

Please find enclosed herewith asked information in training mail

This is submitted for information and further necessary action.

**Regards,**  
**Shankar S Kendule**  
**Sub-Regional Officer,**  
**Maharashtra Pollution Control Board, Nanded**  
**J "SAVE PAPER"-THINK BEFORE YOU PRINT!**  
**POWER BEHIND ENVIRONMENT...M.P.C.B.**

---

**From:** NISHCHAL C <nischal.cpcb@nic.in>  
**Sent:** Monday, January 8, 2024 7:59 PM  
**To:** SRO Nanded <sronanded@mpcb.gov.in>  
**Cc:** RO Aurangabad <roaurangabad@mpcb.gov.in>; Netra Chaphekar <lo@mpcb.gov.in>  
**Subject:** Information in the Hon'ble NGT matter in OA no. 113 of 2023 - reg.

Sir,

This has reference to the joint committee inspection carried-out in compliance to the Hon'ble NGT matter in OA no. 113 of 2023 (WZ), Shri Kapil Baliram Bomnale & Ors Vs Director, M/s Twenty-One Sakahar Karkhana Unit No. 3 & Ors. In this regard, it is requested to provide the information on the following:

- a. RT 8 (C) report of the industry for last crushing season;
- b. Compiled list of directions issued by MPCB to the industry for the reported non-compliances of discharge/emission standards (tabular form-start date of violation/direction & compliance observed date/direction revocation date) during last crushing season till the Hon'ble NGT order dated 01/09/2023;
- c. Analysis results of effluent samples, surface water, ground water, ambient air and source emission - decoded results;
- d. Photographs along with coordinates of the alleged agricultural fields visited by the agriculture officer and analysis results of soil samples by the Agriculture Dept.;
- e. Report on compensation assessed by the Agriculture Dept., based on the applicable methodology i.e. for crop yield/crop damage etc.;

# 871

Regards,

Nishchal C.

Senior Environmental Engineer

Mob: +91 97220 17220

Central Pollution Control Board, Regional Directorate - Pune, Maharashtra  
(Ministry of Environment, Forest & Climate Change, Govt. of India)



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 **Compliance .pdf**  
96 KB

 **R T 8C 2022-23.pdf**  
10 MB

 **Results - 14 & 15 Dec- 23.pdf**  
131 KB

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**Analysis results of M/s Dharashiv Sakhar Karkhana (Unit III) Shivani Jamga Tal. Loha Dist. Nanded (Operated by M/s. Twentyone Sugars Ltd (Unit III)**

**ETP Grab Sampling**

Sr. No.	Parameter	Limit	Date of Collection		
			14.12.2023 ETP Inlet ( Grab)	14.12.2023 Outlet from Secondary Clarifier ( Grab)	14.12.2023 ETP Outlet (Grab)
1	pH	6.5 to 9.0	5.6	8.1	8.1
2	BOD	100 mg/lit	1350.0	50.0	42.0
3	COD	250 mg/lit	4440.0	164.0	124.0
4	SS	100 mg/lit	510.0	43.0	21.0
5	O & G	10 mg/lit	14.2	BDL	BDL
6	TDS	2100 mg/lit	2484.0	1104.0	1084.0
7	Chloride	600 mg/lit	69.98	82.97	80.97
8	Sulphate	1000 mg/lit	160.70	202.0	192.25

**ETP Composite Sampling**

Sr. No.	Parameter	Limit	Date of Collection		
			14.12.2023 ETP Inlet (Composite)	14.12.2023 Outlet from Secondary Clarifier (Composite)	14.12.2023 ETP Outlet (Composite)
1	pH	6.5 to 9.0	5.7	8.2	8.2
2	BOD	100 mg/lit	1550.0	52.5	46.0
3	COD	250 mg/lit	4960.0	168.0	128.0
4	SS	100 mg/lit	570.0	43.0	25.0
5	O & G	10 mg/lit	---	---	---
6	TDS	2100 mg/lit	2432.0	1994.0	1144.0
7	Chloride	600 mg/lit	639.80	78.98	76.98
8	Sulphate	1000 mg/lit	157.50	198.05	198.05

Sr. No.	Parameter	Limit	Date of Collection		
			15.12.2023 From Big Pond located in front of factory	15.12.2023 From Big Pond located in front of factory	15.12.2023 From well of Shri Siddeshwar Venkatesh Bhalke Gut No. 350 Shivani Jamga Tal. Loha Dist. Nanded
1	pH	6.5 to 9.0	7.6	7.8	8.2
2	BOD	100 mg/lit	<b>115.0</b>	<b>105.0</b>	21.0
3	COD	250 mg/lit	<b>352.0</b>	<b>300.0</b>	84.0
4	SS	100 mg/lit	40.0	105.0	11.0
5	O & G	10 mg/lit	---	---	---
6	TDS	2100 mg/lit	1912.0	1824.0	922.0
7	Chloride	600 mg/lit	73.98	129.96	179.94
8	Sulphate	1000 mg/lit	75.60	37.08	121.70

Sr. No.	Parameter	Limit	Date of Collection	
			15.12.2023 From well of Shri Yedes towards west side of factory at Shivani Jamga Tal. Loha Dist. Nanded	15.12.2023 From Odha towards west side of factory at Shivani Jamga Tal. Loha Dist. Nanded
1	pH	6.5 to 9.0	8.0	8.3
2	BOD	100 mg/lit	6.0	8.0
3	COD	250 mg/lit	69.98	40.0
4	SS	100 mg/lit	12.0	10.0
5	O & G	10 mg/lit	---	---
6	TDS	2100 mg/lit	532.0	614.0
7	Chloride	600 mg/lit	69.98	134.96
8	Sulphate	1000 mg/lit	143.50	70.50

Sr. No.	Parameter	Limit	Date of Collection	
			15.12.2023 From Bore well near Jirga Maroti Mandir at Shivani Jamga Tal. Loha Dist. Nanded @ 2.00 PM	15.12.2023 From Bore well near Jirga Maroti Mandir at Shivani Jamga Tal. Loha Dist. Nanded @ 2.05 PM
1	pH	6.5 to 9.0	8.1	8.2
2	BOD	100 mg/lit	8.0	6.0
3	COD	250 mg/lit	36.0	32.0
4	SS	100 mg/lit	14.0	10.0
5	O & G	10 mg/lit	----	----
6	TDS	2100 mg/lit	938.0	912.0
7	Chloride	600 mg/lit	217.93	203.94
8	Sulphate	1000 mg/lit	70.55	70.55

**Stack Emission:**

			<b>Date of Collection</b>
Sr. No.	Parameter	Consent Limit	<b>14.12.2023</b>
1	PM	150 mg/Nm <sup>3</sup>	<b><u>158</u></b>
	So <sub>2</sub>	---- mg/Nm <sup>3</sup>	<b>29</b>

AAQM

<b>Sr. No.</b>	<b>Location</b>	<b>Date of collection</b>	<b>PM 100 ug/m3</b>
1	AAQM carried out at Kondiba Bomnale Gut No. 365 at Shivani Jamga Tal. Loha Dist. Nanded	14.12.2023 (18.00 -2.00)	<u>203</u>
		15.12.2023 (2.00 – 7.30)	<u>162</u>
		15.12.2023 (10.00 – 18.00)	<u>246</u>

<b>Sr. No.</b>	<b>Location</b>	<b>Date of collection</b>	<b>PM 100 ug/m3</b>
2	AAQM carried out at Swati Jamge Gut No. 327 at Shivani Jamga Tal. Loha Dist. Nanded	14.12.2023 (18.30-10.30)	<u>113</u>
		15.12.2023 (10.30-2.30)	61
		15.12.2023 (2.30-18.30)	<u>143</u>

Sr. No.	Location	Date of collection	PM 100 ug/m3
3	AAQM carried out Near ETP of Sugar Factory towards west side at Shivani Jamga Tal. Loha Dist. Nanded	14.12.2023 (19.00 -3.00)	67
		15.12.2023 (3.00-11.00)	66
		15.12.2023 ( 3.00- 19.00)	<u>108</u>

**Soil testing reports**

---

**From :** sronanded@mpcb.gov.in

Thu, Jan 25, 2024 05:14 PM

**Subject :** Soil testing reports 1 attachment**To :** NISHCHAL C <nischal.cpcb@nic.in>

PFA Soil testing reports of ShivaniJamga

Sent from [Outlook for Android](#)

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 विशेष मृद नमुना तपासणी.pdf  
2 MB

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## जमीन आरोग्य पत्रिका (सुपि.पातळी)

नमूना प्रकार	विशेष	जमीन आरोग्य पत्रिका क्रमांक	2715132013400327
प्रयोगशाळा नमूना क्रमांक	2712P202300002001	गांव	शिवनी जामगा
शेतक-याचे नाव	स्वाती भरत जामगे	तालुका	लोहा
सर्व्हेल गट क्रमांक	327	जिल्हा	नांदेड
	भ्रमणध्वनी	0	

## तपासणी अहवाल

अ.क्र.	माती परीक्षणातील गुणधर्म	एकक	योग्य प्रमाण	परीक्षणातील मिळालेले प्रमाण	प्रमाणाचे विश्लेषण
1	साम् (pH)	साम्	6.5-7.5	6.89	उदासीन
2	क्षारता (EC)	(मिसा/सेंमी)	0-1	0.12	साधारण
3	सॅद्रिय कार्बन (OC)	(टक्के)	0.40-0.60	0.48	मध्यम
4	नत्र (N)	(किलो/हे)	280-420	288.51	मध्यम
5	स्फुरद (P)	(किलो/हे)	14-21	30.70	भरपूर
6	पालाश (K)	(किलो/हे)	150-200	496.40	अत्यंत भरपूर
7	मूक्त चूना (CaCO <sub>3</sub> )	(टक्के)	2.5-5.0	3.75	मध्यम चुनखडी
8	कॅल्शियम (Ca)	(मिलीई %)	4-9.99	26.76	जास्त
9	मॅग्नेशियम (Mg)	(मिलीई %)	0.50-3.99	16.08	जास्त
10	सोडियम (Na)	(मिलीई %)	5-15	3.10	कमी
11	वाळ (Coarse sand)	(टक्के)		43.85	-
12	चिकण (Clay)	(टक्के)		29.33	-
13	पोयटा (Silt)	(टक्के)		26.83	-
14	बारीक वाळ (Fine Sand)	(टक्के)		56.15	-
15	आर्द्रतेचे प्रमाण (Moisture)	(टक्के)		6.27	-
16	जलधारणा शक्ति (WHC)	(टक्के)		49.26	-
17	आभासी घनता (AD)	(ग्रॅम/सीसी)		0.69	-
18	विशिष्ट घनता (SD)	(ग्रॅम/सीसी)		0.87	-
19	सच्छिद्रतेचे प्रमाण (PS)	(टक्के)		30.76	-
20	आकारमानातील वाढ (VEP)	(टक्के)		28.32	-
21	पोत (Texture)	पोत		6.00	चिकण पोयटा

टिप - 1. सदरचा अहवाल कोर्टाच्या कामासाठी चालणार नाही.

2. विविध खतांचे संयोजन परिगणनेसाठी कृषिक ऑप मधील खत गणकयंत्राचा वापर करावा.

जिल्हा मृद सेवेक्षण व मृद चाचणी अधिकारी नांदेड  
सॉइल टेस्टिंग लॅब नांदेड

फोन: 542 79. 21-Jan-2024



## जमीन आरोग्य पत्रिका (सुपि.पातळी)

नमूना प्रकार विशेष जमीन आरोग्य पत्रिका क्रमांक 2715132013400327  
 प्रयोगशाळा नमूना क्रमांक 2712P202300003001 गांव शिवनी जामगा  
 शेतक-याचे नाव छत्रपती श्रीरंग जामगे तालुका लोहा  
 सर्व्हे | गट क्रमांक 327 भ्रमणध्वनी 0 जिल्हा नांदेड

## तपासणी अहवाल

अ.क्र.	माती परीक्षणातील गुणधर्म	एकक	योग्य प्रमाण	परीक्षणातील मिळालेले प्रमाण	प्रमाणाचे विश्लेषण
1	साम् (pH)	साम्	6.5-7.5	6.84	उदासीन
2	क्षारता (EC)	(मिसा/सेंमी)	0-1	0.19	साधारण
3	सेंद्रिय कार्बन (OC)	(टक्के)	0.40-0.60	0.38	कमी
4	नत्र (N)	(किलो/हे)	280-420	170.60	कमी
5	स्फुरद (P)	(किलो/हे)	14-21	17.76	मध्यम
6	पालाश (K)	(किलो/हे)	150-200	549.20	अत्यंत भरपूर
7	मुक्त चुना (CaCO <sub>3</sub> )	(टक्के)	2.5-5.0	3.13	मध्यम चुनखडी
8	कॅल्शियम (Ca)	(मिलीई %)	4-9.99	23.53	जास्त
9	मॅग्नेशियम (Mg)	(मिलीई %)	0.50-3.99	13.52	जास्त
10	सोडियम (Na)	(मिलीई %)	5-15	11.38	मध्यम
11	वाळ (Coarse sand)	(टक्के)		43.85	-
12	चिकण (Clay)	(टक्के)		29.33	-
13	पोयटा (Silt)	(टक्के)		26.83	-
14	बारीक वाळ (Fine Sand)	(टक्के)		56.15	-
15	आर्द्रतेचे प्रमाण (Moisture)	(टक्के)		6.89	-
16	जलधारणा शक्ति (WHC)	(टक्के)		43.22	-
17	आभासी घनता (AD)	(ग्रॅम/सीसी)		0.42	-
18	विशिष्ट घनता (SD)	(ग्रॅम/सीसी)		0.42	-
19	सच्छिद्रतेचे प्रमाण (PS)	(टक्के)		16.46	-
20	आकारमानातील वाढ (VEP)	(टक्के)		40.80	-
21	पोत (Texture)	पोत		6.00	चिकण पोयटा

टिप - 1. सदरचा अहवाल कोर्टाच्या कामासाठी चालणार नाही.

2. विविध खतांचे संयोजन परिगणनेसाठी कृषिक ऑप मधील खत गणकयंत्राचा वापर करावा.



जिल्हा मृद सर्वेक्षण व मृद चाचणी अधिकारी नांदेड  
 साँडल टेस्टिंग लॅब नांदेड

जा.क्र. 543/दि 21-Jan-2024

## जमीन आरोग्य पत्रिका (सुपि.पातळी)

नमूना प्रकार विशेष जमीन आरोग्य पत्रिका क्रमांक 2715132013400350  
 प्रयोगशाळा नमूना क्रमांक 2712P202300004001 गांव शिवनी जामगा  
 शेतक-याचे नाव सिद्धेश्वर व्यकटी तालुका लोहा  
 सर्व्हे | गट क्रमांक 350 भ्रमणध्वनी 0 जिल्हा नांदेड

## तपासणी अहवाल

अ.क्र.	माती परीक्षणातील गुणधर्म	एकक	योग्य प्रमाण	परीक्षणातील मिळालेले प्रमाण	प्रमाणाचे विश्लेषण
1	साम् (pH)	साम्	6.5-7.5	7.25	किंचित अल्कली
2	क्षारता (EC)	(मिसा/सेमी)	0-1	0.12	साधारण
3	संद्रिय कार्बन (OC)	(टक्के)	0.40-0.60	0.53	मध्यम
4	नत्र (N)	(किलो/हे)	280-420	282.24	मध्यम
5	स्फुरद (P)	(किलो/हे)	14-21	14.12	मध्यम
6	पालाश (K)	(किलो/हे)	150-200	686.50	अत्यंत भरपूर
7	मूक्त चूना (CaCO <sub>3</sub> )	(टक्के)	2.5-5.0	7.50	जास्त चुनखडी
8	कॅल्शियम (Ca)	(मिलीई %)	4-9.99	36.76	जास्त
9	मॅग्नेशियम (Mg)	(मिलीई %)	0.50-3.99	18.27	जास्त
10	सोडियम (Na)	(मिलीई %)	5-15	4.47	कमी
11	वाळू (Coarse sand)	(टक्के)		43.85	-
12	चिकण (Clay)	(टक्के)		29.33	-
13	पोयटा (Silt)	(टक्के)		26.83	-
14	बारीक वाळू (Fine Sand)	(टक्के)		56.15	-
15	आर्द्रतेचे प्रमाण (Moisture)	(टक्के)		5.71	-
16	जलधारणा शक्ति (WHC)	(टक्के)		49.85	-
17	आभासी घनता (AD)	(ग्रॅम/सीसी)		0.51	-
18	विशिष्ट घनता (SD)	(ग्रॅम/सीसी)		0.70	-
19	सच्छिद्रतेचे प्रमाण (PS)	(टक्के)		32.18	-
20	आकारमानातील वाढ (VEP)	(टक्के)		26.68	-
21	पोत (Texture)	पोत		6.00	चिकण पोयटा

टिप - 1. सदरचा अहवाल कोर्टाच्या कामासाठी चालणार नाही.

2. विविध खतांचे संयोजन परिगणनेसाठी कृषिक ऑप मधील खत गणकयंत्राचा वापर करावा.



जिल्हा मृद सेवेक्षण व मृद चाचणी अधिकारी नांदेड  
 सॉइल टेस्टिंग लॅब नांदेड

जा.क्र. 544/19 21-Jan-2024



## जमीन आरोग्य पत्रिका (सुपि.पातळी)

नमूना प्रकार

विशेष

जमीन आरोग्य पत्रिका क्रमांक 2715132013400365

प्रयोगशाळा नमूना क्रमांक 2712P202300005001

गांव

शिवनी जामगा

शेतक-याचे नाव

सिद्धेश्वर गंगाधर

तालुका

लोहा

सर्व्हे | गट क्रमांक

बोसनाळे  
365

भ्रमणध्वनी 0

जिल्हा

नांदेड

## तपासणी अहवाल

अ.क्र.	माती परीक्षणातील गुणधर्म	एकक	योग्य प्रमाण	परीक्षणातील मिळालेले प्रमाण	प्रमाणाचे विश्लेषण
1	साम् (pH)	साम्	6.5-7.5	7.41	किंचित अल्कली
2	क्षारता (EC)	(मिसा/सेमी)	0-1	0.15	साधारण
3	संद्रिय कार्बन (OC)	(टक्के)	0.40-0.60	0.30	कमी
4	नत्र (N)	(किलो/हे)	280-420	176.87	कमी
5	स्फुरद (P)	(किलो/हे)	14-21	10.34	कमी
6	पालाश (K)	(किलो/हे)	150-200	390.78	अत्यंत भरपूर
7	मूक्त चूना (CaCO <sub>3</sub> )	(टक्के)	2.5-5.0	7.50	जास्त चुनखडी
8	कॅल्शियम (Ca)	(मिलीई %)	4-9.99	32.94	जास्त
9	मॅग्नेशियम (Mg)	(मिलीई %)	0.50-3.99	19.01	जास्त
10	सोडियम (Na)	(मिलीई %)	5-15	4.52	कमी
11	वाळू (Coarse sand)	(टक्के)		43.85	-
12	चिकण (Clay)	(टक्के)		29.33	-
13	पोयटा (Silt)	(टक्के)		26.83	-
14	बारीक वाळू (Fine Sand)	(टक्के)		56.15	-
15	आर्द्रतेचे प्रमाण (Moisture)	(टक्के)		7.12	-
16	जलधारणा शक्ति (WHC)	(टक्के)		44.16	-
17	आभासी घनता (AD)	(ग्रॅम/सीसी)		0.60	-
18	विशिष्ट घनता (SD)	(ग्रॅम/सीसी)		0.42	-
19	सच्छिद्रतेचे प्रमाण (PS)	(टक्के)		22.39	-
20	आकारमानातील वाढ (VEP)	(टक्के)		46.02	-
21	पोत (Texture)	पोत		6.00	चिकण पोयटा

टिप - 1. सदरचा अहवाल कोर्टाच्या कामासाठी चालणार नाही.

2. विविध खतांचे संयोजन परिगणनेसाठी कृषिक अॅप मधील खत गणकयंत्राचा वापर करावा.

जिल्हा मृदु सर्वेक्षण व मृदु चाचणी अधिकारी नांदेड  
सॉइल टेस्टिंग लॅब नांदेड

21-Jan-2024

## जमीन आरोग्य पत्रिका (सुपि.पातळी)

नमूना प्रकार	विशेष	जमीन आरोग्य पत्रिका क्रमांक	2715132013400365
प्रयोगशाळा नमूना क्रमांक	2712P202300006001	गांव	शिवनी जामगा
शेतक-याचे नाव	शिवराज शेषेराव बोमनाळे	तालुका	लोहा
सर्व्हे   गट क्रमांक	365	जिल्हा	नांदेड
	भ्रमणध्वनी	0	

## तपासणी अहवाल

अ.क्र.	माती परीक्षणातील गुणधर्म	एकक	योग्य प्रमाण	परीक्षणातील मिळालेले प्रमाण	प्रमाणाचे विश्लेषण
1	साम् (pH)	साम्	6.5-7.5	7.55	मध्यम अल्कली
2	क्षारता (EC)	(मिसा/सेमी)	0-1	0.19	साधारण
3	सॅद्रिय कार्बन (OC)	(टक्के)	0.40-0.60	0.62	साधारण भरपूर
4	नत्र (N)	(किलो/हे)	280-420	301.06	मध्यम
5	स्फुरद (P)	(किलो/हे)	14-21	4.56	अत्यंत कमी
6	पालाश (K)	(किलो/हे)	150-200	591.45	अत्यंत भरपूर
7	मूक्त चूना (CaCO <sub>3</sub> )	(टक्के)	2.5-5.0	5.00	जास्त चुनखडी
8	कॅल्शियम (Ca)	(मिलीई %)	4-9.99	48.24	जास्त
9	मॅग्नेशियम (Mg)	(मिलीई %)	0.50-3.99	2.19	मध्यम
10	सोडियम (Na)	(मिलीई %)	5-15	11.86	मध्यम
11	वाळू (Coarse sand)	(टक्के)		43.85	-
12	चिकण (Clay)	(टक्के)		29.33	-
13	पोयटा (Silt)	(टक्के)		26.83	-
14	बारीक वाळू (Fine Sand)	(टक्के)		56.15	-
15	आर्द्रतेचे प्रमाण (Moisture)	(टक्के)		6.61	-
16	जलधारणा शक्ति (WHC)	(टक्के)		45.41	-
17	आभासी घनता (AD)	(ग्रॅम/सीसी)		1.00	-
18	विशिष्ट घनता (SD)	(ग्रॅम/सीसी)		1.71	-
19	सच्छिद्रतेचे प्रमाण (PS)	(टक्के)		17.25	-
20	आकारमानातील वाढ (VEP)	(टक्के)		20.31	-
21	पोत (Texture)	पोत		6.00	चिकण पोयटा

टिप - 1. सदरचा अहवाल कोर्टाच्या कामासाठी चालणार नाही.

2. विविध खतांचे संयोजन परिगणनेसाठी कृषिक अॅप मधील खत गणकयंत्राचा वापर करावा.



जिल्हा मृदू सर्वेक्षण व मृदू चाचणी अधिकारी नांदेड  
सॉइल टेस्टिंग लॅब नांदेड

जा.क्र. 546/19  
21-Jan-2024

## जमीन आरोग्य पत्रिका (सुपि.पातळी)

नमूना प्रकार सूक्ष्म मुलदव्ये जमीन आरोग्य पत्रिका क्रमांक 2715132013400327  
 योगशाळा नमूना क्रमांक 2712M202300040001 गांव शिवनी जामगा  
 तक-याचे नाव स्वाती भारत जामगे तालुका लोहा  
 वर्क 1 गट क्रमांक 327 भ्रमणध्वनी 0 जिल्हा नांदेड

क्र.	माती परीक्षणातील गुणधर्म	परीक्षणातील मिळालेले प्रमाण	योग्य प्रमाण	प्रमाणाचे विश्लेषण	शिफारस
1	तांबे (Cu)	2.12 (पीपीएम)	0.20-99.99	पुरेसे	
2	लोह (Fe)	9.24 (पीपीएम)	4.5-99.99	पुरेसे	
3	जस्त (Zn)	0.78 (पीपीएम)	0.61-99.99	पुरेसे	
4	मंगल (Mn)	16.70 (पीपीएम)	2.0-99.99	पुरेसे	

- सदरचा अहवाल कोर्टाच्या कामासाठी चालणार नाही.
- विविध खतांचे संयोजन परिगणनेसाठी कृषिके अॅप मधील खत गणकयंत्राचा वापर करावा.



जिल्हा मृद सर्वेक्षण व मृद चाचणी अधिकारी नांदेड  
 सॉइल टेस्टिंग लॅब नांदेड

जा.क्र. 537/दि 21-January-2024

## जमीन आरोग्य पत्रिका (सुपि.पातळी)

नमूना प्रकार सूक्ष्म मुलदव्ये  
 प्रयोगशाळा नमूना क्रमांक 2712M202300041001  
 शेतक-याचे नाव छत्रपती श्रीरंग जामगे  
 सर्व्हे 1 गट क्रमांक 327

जमीन आरोग्य पत्रिका क्रमांक 2715132013400327

गांव शिवनी जामगा  
 तालुका लोहा  
 जिल्हा नांदेड

भ्रमणध्वनी 0

क्र.	माती परीक्षणातील गुणधर्म	परीक्षणातील मिळालेले प्रमाण	योग्य प्रमाण	प्रमाणाचे विश्लेषण	शिफारस
1	तांबे (Cu)	0.48 (पीपीएम)	0.20-99.99	पुरेसे	
2	लोह (Fe)	6.10 (पीपीएम)	4.5-99.99	पुरेसे	
3	जस्त (Zn)	1.24 (पीपीएम)	0.61-99.99	पुरेसे	
4	मंगल (Mn)	15.60 (पीपीएम)	2.0-99.99	पुरेसे	

- सदरचा अहवाल कोर्टाच्या कामासाठी चालणार नाही.
- विविध खतांचे संयोजन परिगणनेसाठी कृषिक ऑप मधील खत गणकयंत्राचा वापर करावा.



जिल्हा मृद सेवेक्षण व मृद चाचणी अधिकारी नांदेड  
 साईल टेस्टिंग लॅब नांदेड

जा.प्र. 538/दि 21-January-2024

## जमीन आरोग्य पत्रिका (सुपि.पातळी)

नूना प्रकार सूक्ष्म मुलदव्ये जमीन आरोग्य पत्रिका क्रमांक 2715132013400350  
 गोगशाळा नमूना क्रमांक 2712M202300042001 गांव शिवनी जामगा  
 तक-याचे नाव सिद्धेश्वर व्यंकटी भालके तालुका लोहा  
 र्हे 1 गट क्रमांक 350 भ्रमणध्वनी 0 जिल्हा नांदेड

फ.	माती परीक्षणातील गुणधर्म	परीक्षणातील मिळालेले प्रमाण	योग्य प्रमाण	प्रमाणाचे विश्लेषण	शिफारस
	तांबे (Cu)	1.16 (पीपीएम)	0.20-99.99	पुरेसे	
	लोह (Fe)	3.28 (पीपीएम)	4.5-99.99	पुरेसे	लागवडीच्या वेळी सेंद्रीय खतासोबत फेरस सल्फेट(हिराकस) 25 ते 30 किलो प्रति हेक्टर जमिनीतून द्यावे
	जस्त (Zn)	0.72 (पीपीएम)	0.61-99.99	पुरेसे	
	मंगल (Mn)	3.60 (पीपीएम)	2.0-99.99	पुरेसे	

- सदरचा अहवाल कोर्टाच्या कामासाठी चालणार नाही.
- विविध खतांचे संयोजन परिगणनेसाठी कृषिक अॅप मधील खत गणकयंत्राचा वापर करावा.



जिल्हा मृद सर्वेक्षण व मृद चाचणी अधिकारी नांदेड  
 साँडल टेस्टिंग लॅब नांदेड

क्र. 539/दि. 21-January-2024

## जमीन आरोग्य पत्रिका (स्पि.पातळी)

नमूना प्रकार	सूक्ष्म मुलदव्ये	जमीन आरोग्य पत्रिका क्रमांक	2715132013400365
प्रयोगशाळा नमूना क्रमांक	2712M202300043001	गांव	शिवनी जामगा
शेतक-याचे नाव	सिद्धेश्वर गंगाधर बोमनाळे	तालुका	लोहा
सर्व्हे 1 गट क्रमांक	365	जिल्हा	नांदेड
	भ्रमणध्वनी	0	

क्र.	माती परीक्षणातील गुणधर्म	परीक्षणातील मिळालेले प्रमाण	योग्य प्रमाण	प्रमाणाचे विश्लेषण	शिफारस
1	तांबे (Cu)	2.50 (पीपीएम)	0.20-99.99	पुरेसे	
2	लोह (Fe)	2.66 (पीपीएम)	4.5-99.99		लागवडीच्या वेळी सेंद्रीय खतासोबत फेरस सल्फेट(हिराकस) 25 ते 30 किलो प्रति हेक्टरी जमिनीतून द्यावे
3	जस्त (Zn)	0.86 (पीपीएम)	0.61-99.99	पुरेसे	
4	मंगल (Mn)	3.30 (पीपीएम)	2.0-99.99	पुरेसे	

- प 1. सदरचा अहवाल कोर्टाच्या कामासाठी चालणार नाही.  
2. विविध खतांचे संयोजन परिगणनेसाठी कृषिक ऑप मधील खत गणकयंत्राचा वापर करावा.



जिल्हा मृदा सर्वेक्षण व मृदा चाचणी अधिकारी नांदेड  
साईल टेस्टिंग लॅब नांदेड  
नांदेड, दि. 21-January-2024

नांदेड, दि. 21-January-2024



जमीन आरोग्य पत्रिका (सुपि.पातळी)

नमूना प्रकार	सूक्ष्म मुलदव्ये	जमीन आरोग्य पत्रिका क्रमांक	2715132013400365
योगशाळा नमूना क्रमांक	2712M202300044001	गांव	शिवनी जामगा
शेतकऱ्याचे नाव	शिवराज शेषराव बोमनाळे	तालुका	लोहा
प्लॉट नं. गट क्रमांक	365	जिल्हा	नांदेड
	भ्रमणध्वनी	0	

क्र.	माती परीक्षणातील गुणधर्म	परीक्षणातील मिळालेले प्रमाण	योग्य प्रमाण	प्रमाणाचे विश्लेषण	शिफारस
1	तांबे (Cu)	0.30 (पीपीएम)	0.20-99.99	पुरेसे	
2	लोह (Fe)	3.38 (पीपीएम)	4.5-99.99		लागवडीच्या वेळी सेंद्रीय खतासोबत फेरस सल्फेट (हिराकस) 25 ते 30 किलो प्रति हेक्टर जमिनीतून द्यावे
3	जस्त (Zn)	0.64 (पीपीएम)	0.61-99.99	पुरेसे	
4	मंगल (Mn)	2.76 (पीपीएम)	2.0-99.99	पुरेसे	

- प 1. सदरचा अहवाल कोर्टाच्या कामासाठी चालणार नाही.  
2. विविध खतांचे संयोजन परिगणनेसाठी कृषिक ऑप मधील खत गणकयंत्राचा वापर करावा.



जिल्हा मृद सेवेक्षण व मृद चाचणी अधिकारी नांदेड  
साँडल टेस्टिंग लॅब नांदेड

क्र. 9, 541/दि. 21-January-2024

**MAHARASHTRA POLLUTION CONTROL BOARD**  
**SUB-REGIONAL OFFICE, NANDED**

Annexure-6

Tel. No. 242492  
Fax No. 02462-242492



Lahoti Complex, 2<sup>nd</sup> floor  
Near Shivaji Putla,  
Vazirabad, NANDED-431601

No. MPCB/SROND/TB- MPCB/WN/2301190008

Dtd. 19/01/2023

To,  
M/s. 21 Sugar Ltd  
Village Shivni (Jamga),  
Tal- Loha, Dist-Nanded.

Sub: - Warning notice for non-compliance of Consent Conditions.

Ref: - 1. Consent granted by Board vide dated 28.11.2022.

2. Compliant received from Shri. Gangadhar Bomnale & others, Village Shivani (Jamga), Tq. Loha, Dist. Nanded. Dated 17.01.2023
3. Board Officials Visit to your unit on 18.01.2023.

It is obligatory and mandatory on your part to abide by the consent conditions granted to your unit under section 26 of the Water (Prevention & Control of Pollution) Act 1974 & under Section 21 of the Air (Prevention & Control of Pollution) Act, 1981 and Authorization / Renewal of Authorization under the Hazardous and Other Wastes (Management and Trans boundary Movement) Rules, 2016 to your unit located at Village Shivni (Jamga), Tal- Loha, Dist-Nanded in the area declared under the provision of Water Act, Air Act & Authorization under the provision of Hazardous Waste (M & H) Rules & Amendments there to time to time accordingly.

This office has receipt of compliant from Shri. Gangadhar Bomnale & others, Village Shivani (Jamga), Tq Loha, Dist. Nanded against your unit regarding damaging of their agriculture crops & causing health problems due to emission of fly ash from the chimney & discharging of polluting water/bagasse from your industry.

To verify the fact the board official of this office paid visit to your unit on 18.01.2023 & from the record available to this office It is noticed that,

1. You have failed to operate & maintain ETP properly & thereby the discharged of untreated/treated effluent was found outside the factory premises which further found contaminating the water/river bodies.
2. You have failed to operate & maintain the Air Pollution Control System properly thereby the black smoke was observed from the chimney & boiler ash were seen/spread on the complainant farmer crops located nearby surrounding factory area.

From above, it seems that you have failed to comply the conditions stipulated in the consent granted by the board under the provision of said Act. Therefore you are here by warn to take immediate effective steps to stopped the causing water & air pollution in to nearby surrounding area & submit the steps taken towards compliance of prevention of such as untreated effluent contaminating water & river bodies & not to cause air pollution to nearby surrounding area. Your reply in this regard towards upgradation of ETP/APC system shall submit this office within a period of 7 days to receipt of this notice. Otherwise it will be assumed that you have nothing to say & this office will recommend your case for further appropriate action under the provision of Water (P&CP) Act, 1974 & Air (P&CP) Act, 1981 to higher authority accordingly which may please be noted.

(R. U. Patil)  
Sub-Regional Officer  
M.P.C.Board, Nanded

Copy submitted for information:-  
The Regional Officer, MPCB Aurangabad.

## MAHARASHTRA POLLUTION CONTROL BOARD

Tel.No. (0240) 29930004



Regional Office, Paryavaran Bhavan, A-4/1, MIDC Area, Chikalthana, Behind Daynik Lokpatra, Near Seth Nandlal Dhoot Hospital, Jalna Road, Chhatrapati Shambhajnagar-431 210.

Visit us at [www.mpcb.gov.in](http://www.mpcb.gov.in)  
E-mail: [roaurangabad@mpcb.gov.in](mailto:roaurangabad@mpcb.gov.in)

No.MPCB/PD/ 231130003

Date: 13/11/2023.

To,  
M/s. Dharashiv Sakhar Karkhana Unit-III,  
(Formerly known as M/s. Venkateshwar Agro Sugar Products Pvt. Ltd)  
313, 317, 321, 322, 325,326, 327, 329, 353, Shivani (Jamga),  
Tal-Loha, Dist-Nanded.

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

**Ref:** 1. Consent granted by the MPC Board vide No. Format1.0/CC/UAN No.MPCB CONSENT-0000147201/CR/2211002348 on 28.11.2022, Valid Upto 31.07.2023.  
2. Complaint received from Shri. Gangadhar Sheserao Bomnale, resident of village Shivani (JA), Tal-Loha, Dist-Nanded regarding Air pollution & water pollution problem to the Board on 16.01.2023.  
3. Visit of official of the Board to your unit on 17.01.2023.  
4. Warning Notice issued by SRO Nanded Dtd. 19.01.2023.  
5. Agriculture Report received from S.S Mandals Krishi Vigyan Kendra, Nanded, Dtd.20.01.2023.

.....

**WHEREAS**, the Maharashtra Pollution Control Board has granted Consent to Operate u/s 26 of the Water (Prevention and Control of Pollution) Act, 1974 and u/s 21 of the Air (Prevention and Control of Pollution) Act, 1981 on 28.11.2022, which was valid upto 31.07.2023, subject to certain terms and conditions.

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

**AND WHEREAS**, the Board has received a complaint reg.. Air pollution & water pollution Problem from Shri. Gangadhar Sheserao Bomnale, resident of village Shivani (JA), Tal-Loha, Dist-Nanded on 16.01.2023.

**AND WHEREAS**, in order to verify the complaint dtd.16.01.2023, the officials of the Board visited the site in question on 17.01.2023 and observed as follows:-

- i. During visit overflow of spray pond, condensate water & treated / untreated effluent found discharged outside industry premises which further meet to local village Nalla at a distance of 1.5 Km approx. This nalla finally meet to Godavari river at a distance of 5 Km.
- ii. During visit blackish smoke observed from the stack & boiler ash on the surrounding farmer crops. Also S.S Mandals Krishi Vigyan Kendra, Nanded submitted Agricultural report stating that during their visit ash observed on the Agricultural crops like Wheet, Jawar, turmeric, Tomato, Ladyfinger, watermelon etc, and the productivity has been reduced due to deposition of ash on the plants.

**AND WHEREAS**, it appears from the analysis results of ETP Outlet, JVS collected on 07.01.2023 that the parameters like **Biological Oxygen Demand (BOD)**, **Chemical Oxygen Demand (COD)**, **Suspended Solids (SS) & Total Dissolved Solids (TDS)**. are exceeding the limits prescribed by the Board. Also the results of JVS of Nalla water at Bhalke Farm & Nalla water at west side of industry collected on 07.01.2023, the parameters like **Biological Oxygen Demand (BOD)**, & **Sulphate** are exceeding the standards.

**AND WHEREAS**, the analysis results of Stack emission monitoring carried out on 07.01.2023, that the parameter **Particulate matter (PM)** is exceeding the limits prescribed by the Board

**AND WHEREAS** it has been observed that you have failed to comply with the conditions stipulated in the Consent granted by the Board and thereby discharging untreated effluent into the environment / into the nearby nalla, which meets to river Godavari also discharging air emissions and thereby causing water & air pollution into the environment, affecting health of citizens.

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

1. Why your consent shall not be refused / revoked?
2. Why your industrial activities shall not be closed down?
3. Why the competent Authorities shall not be directed to disconnect water / electricity supply to your unit ?

**892**

: 3 :

You are hereby given an opportunity to respond within 7 days from issuance of these directions, failing which, MPCB will initiate legal action against your unit without giving any further notice in accordance with the provisions of the Water (prevention & Control of Pollution) Act, 1974 and Air (Prevention & Control of Pollution) Act, 1981, which please note.

  
(Sujit Dholam)  
Regional Officer.  
Chhatrapati Sambhajnagar.

Copy submitted for information to: The Member Secretary, MPCB, Mumbai

Copy f.w.cs.to:- 1. Principal Scientific Officer MPCB, Mumbai.  
2. Law Officer (P & L Division), MPCB, Mumbai.

Copy to: The Sub Regional Officer, Nanded - He is directed to serve the copy of the direction and take follow up and ensure the compliance of the aforesaid directions.

**MAHARASHTRA POLLUTION CONTROL BOARD**

Tel. No. 02462-242492

Email. sronanded@mpcb.gov.in



Sub-Regional Office,  
Lahoti Complex, 2nd floor  
Near Shivaji Putla,  
Vazirabad, Nanded.

**"Your Service is our Duty"**

No. MPCB/SROND/ 2710 277

Date: 24 / 11 / 2023

**To,**

**M/s. Dharashiv Sakhar Karkhana Unit III),**  
(Formerly known as M/s. Venkateshwar Agro Sugar Products Pvt. Ltd.,)  
Shivani (Jamga), Tal. Loha, Dist. Nanded,

**Sub:** - Warning notice for the noncompliance of consent conditions.

**Ref:-**1) Consent granted by the MPC Board vide dtd. 28/11/2022 which is valid up to 31.07.2023 & applied for renewal  
2) Proposed direction No. MPCB/PD/2311130003 dtds. 13.11.2023  
3) Visit of Board officials to your industry and complainant on 21.11.2023  
4) Complaint by Shetkari Kruti Samiti AT Jamga Shivani Tal. Loha Dist. Nanded received on 22.11.2023

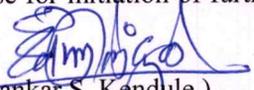
Maharashtra Pollution Control Board has granted consent to your unit under Various Environmental Acts such as Water (Prevention & Control of Pollution) Act, 1974 and Air (Prevention & Control of Pollution) Act, 1981 and authorization under the provision of Hazardous waste (Management & Handling) Rules 2016, subject to certain terms & conditions. It is obligatory on your part to comply with the conditions prescribed in the consent.

This office is in receipt of Compliant from Shetkari Kruti Samiti At Jamga Shivani Tal. Loha Dist. Nanded vide letter under ref. 3. Accordingly, board officials have caused visit to your industry and met complainant on 21.11.2023 and During visit following non compliances were observed: -

1. Spray pond Overflow is found discharged in to nearby nalla leading to the odha behind industry.
2. Not connected the back wash effluent pipe t of tertiary treatment Sludge drying beds.
3. Blackish smoke emissions were noticed from boiler stack.
4. You have not provided Condensate Pulsing unit as per consent condition
5. Emission of bagasse particles were found from bagasse feeding section

This shows your negligent attitude towards implementation of water (Prevention & control of pollution) Act, 1974, Air (Prevention and Control of pollution) Act, 1981 and Hazardous waste (Management, Handling & Transboundary Movement) Rule 2016 also towards pollution & pollution control matters.

In the view of above, you are instructed to submit your clarification /explanation for above non compliances & submit detail action taken report in this regard within 7 days from the date of receipt of this notice. Failing which this office will be constrained to recommend your case for initiation of further legal action as deem fit in the case, which may please be noted.

  
(Shankar S. Kendule )  
Sub Regional Officer, Nanded

**Copy submitted for information and necessary action to:-**  
Regional Officer, M. P. C. Board, Chatrapati Sambhaji nagar

Annexure-7

**Photograph-1: Grab effluent sampling at final outlet of ETP i.e. from 15 days treated effluent storage tank.**



**Photograph-2: Grab effluent sampling at outlet of secondary clarifier of ETP.**



**Photograph-3: Grab effluent sampling at inlet of ETP.**



**Photograph-4: Grab sampling at natural pond-1, located within the industry premises, near entrance gate of industry.**



**Photograph-5:** Grab sampling at natural pond-2, located within the industry premises, near entrance gate of industry.



**Photograph-6:** Water sampling at dug well of Shri Siddeshwar Venkatesh Bhalke, Gat no. 350, Shivani Jamga.



**Photograph-7:** Water sampling at bore well near Jirga Maruti mandir, Shivani Jamga.



**Photograph-8:** Water sampling at dug well of Shri Yede, treated effluent collection for distribution into irrigation.



**Photograph-9: Unsolicited flexible pipelines, outside the industry premises.**



**Photograph-10: Open stock pile of bagasse storage with sprinkler arrangement, resulting in fugitive emission/carry over of bagasse particles into nearby agricultural fields.**



**Photograph-11: Lack of adequate vent to the process cyclone of bagasse mixer in the press mud preparation section, carry over of bagasse particles into nearby agricultural fields.**



**Photograph-12: Lack of adequate cover system to the bagasse conveyor belt system, resulting in fugitive emission/carry over of bagasse particles into nearby agricultural fields.**

## **Details on improvements in factory w.r.t Pollution Control & its Expenditure**

Twentyone Sugars Ltd has made further significant improvement in the effluent treatment measures which are commissioned and implemented before start of the season in 2023. The TSL has also undertaken the following, amongst other, measures:

1. TSL, while operating the plant under POA from DSKL for the crushing season starting November 2022 had already installed and commissioned two venturi type wet scrubbers on two boilers and conducted maintenance to reduce emissions at a total cost of INR 23,65,900/-

*(Enclosure 1- Invoice Folder)*

*(Photographs Annexure A)*

2. To improve the quality of fuel (bagasse), all the cane preparatory devices, mainly including Fiberizer and Leveller has been reconditioned & repaired by Imco Ltd., Mumbai & successfully installed and several other parts such as pins, brushes etc., have been replaced at a total cost of INR 20,17,800/-.

*(Enclosure 2 & 3 – Invoices)*

*(Photographs Annexure B)*

3. To reduce generation of flue gases, new Steam Saving equipment like Cigar, Vapour Line Juice Heaters, Mechanical Circulators etc., have been specifically designed by ISGEC. The same have been installed and commissioned at a cost of INR 6.5 Crores.

*(Enclosure 4 – PO-ISGEC)*

*(Photographs Annexure C)*

4. To reduce the effluent generation, a new system for re-use and recycling of excess condensate has been installed & commissioned. All the conventional methods

such as tube cleaning by various chemicals, wet brushing which were in use by the erstwhile owners of the factory have been entirely removed. A new technique of Hydrojet cleaning has been adopted which will significantly reduce effluent generation. Total cost of INR 2,71,400/- incurred on these improvements.  
*(Enclosure – 5 Invoice)*

5. A new inline de-superheating technique has been adopted to further reduce the effluent generation. The new technique has eliminated the earlier main source of effluent generation at site for ongoing crushing season at a total cost of INR 4,72,000/-.

*(Photographs Annexure D)*

*(Enclosure – 6 Invoice)*

6. The old reciprocating compressors have been replaced by installation and commission of new twin type lube air blowers having a speed of 1000m/hr. to reduce the effluent generation at a cost of INR 3,71,110/-.

*(Enclosure – 7)*

7. Most of the pumps across the factory having an older design have been replaced with new modern pumps. Further all supply tanks have been repaired to prevent the leakages from Pump for the improvement of effluent quality at a cost of INR 5,38,073/-

*(Enclosure -8 Folder)*

8. To reduce windage of sugar dust particles from the dry seed conveyer belts, a new Magma system open crystallizer with new pumps having 40 MT capacity has been designed, installed and commissioned. At a cost of INR 18,29,000/-

*(Enclosure- 9 Invoices)*

*(Photographs Annexure E)*

9. To reduce addition of excess water into Spray Channels, newly designed Waste Heat Recovery equipment's as well as to reduce the steam & bagasse consumption, the old DEVC Plus Quadruple evaporation system is converted into modern Quintuple evaporation system with additional six numbers new evaporator bodies & Equipment has been installed and commissioned for the ongoing crushing season by ISGEC.

*(Enclosure - 4)*

10. New and modern techniques of Diffuser Technology for aeration have been adopted, DSM screens for removal of primary solid contents have been installed and commissioned and new twin lube air blowers having excess margin for proper aeration of effluent has been installed and commissioned at a cost of INR 64,18,610/-

*(Enclosure - 10 Folder)*

*(Photographs Annexure F)*

A total cost of INR **7.92 Crores** has been incurred by TSL only for ensuring environmental norms

## Annexure A: Wet Scrubber

### Two Type Venturi Scrubber





Shivani Jamga, Maharashtra, India  
24GJ+X9W, Shivani Jamga, Maharashtra 431708, India  
Lat 19.027139°  
Long 77.130936°  
11/10/23 10:33 AM GMT +05:30

## Annexure B

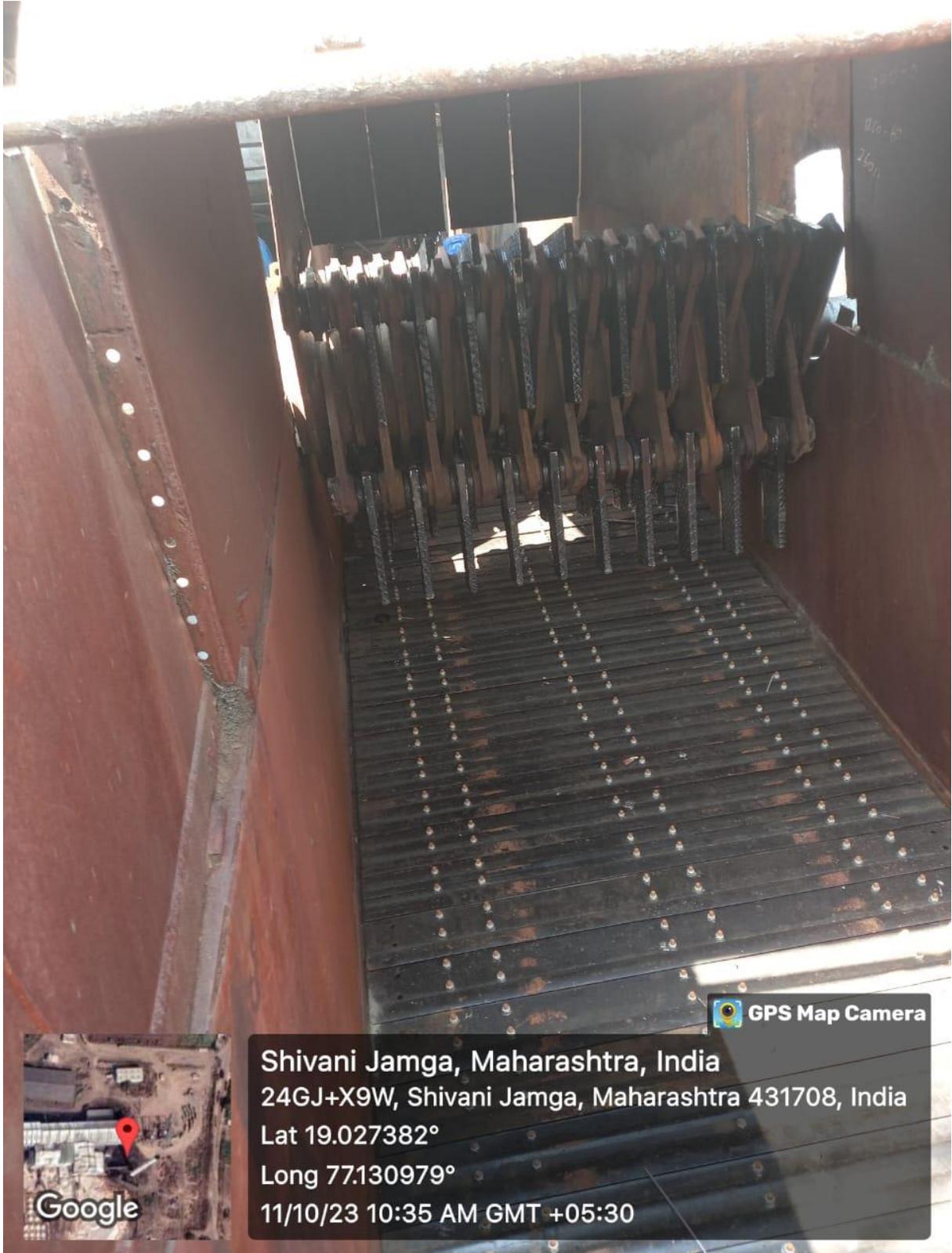
### Fiberizor & Leveller

#### (Fiberizor)



903

Leveller



GPS Map Camera



Shivani Jamga, Maharashtra, India  
24GJ+X9W, Shivani Jamga, Maharashtra 431708, India  
Lat 19.027382°  
Long 77.130979°  
11/10/23 10:35 AM GMT +05:30

## Annexure C

Cigar, Vapour Line juice Heater, Mechanical Circulator

Cigar



# 905

## Vapour Line juice Heater



 GPS Map Camera



**Shivani Jamga, Maharashtra, India**

Venkateshwara Agro Sugar Pro. Pvt. Ltd Shivani (Ja), Loha,  
24GJ+X3M, Shivani Jamga, Maharashtra 431708, India

Lat 19.027419°

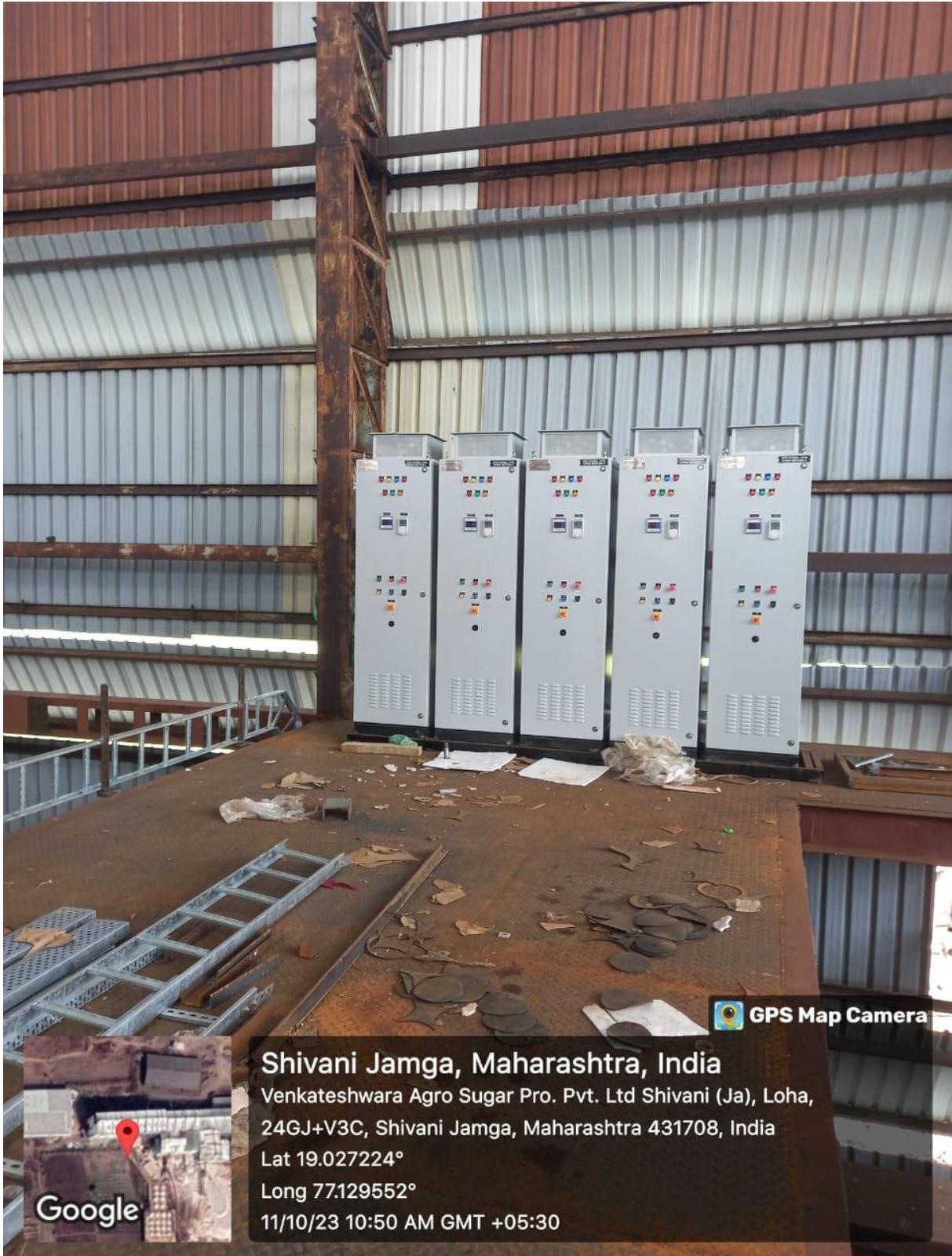
Long 77.129421°

11/10/23 10:42 AM GMT +05:30

## Mechanical Circulation Drive



## Mechanical Circulation Panel



## Annexure D

### New Desuperheating Technique



## Annexure E : Crystallizer



 GPS Map Camera



**Shivani Jamga, Maharashtra, India**

Venkateshwara Agro Sugar Pro. Pvt. Ltd Shivani (Ja), Loha,

24GJ+V3C, Shivani Jamga, Maharashtra 431708, India

Lat 19.027375°

Long 77.129762°

11/10/23 10:53 AM GMT +05:30

## Annexure F: ETP Up gradations





GPS Map Camera



**Shivani Jamga, Maharashtra, India**  
Venkateshwara Agro Sugar Pro. Pvt. Ltd Shivani (Ja), Loha,  
24GJ+V3C, Shivani Jamga, Maharashtra 431708, India  
Lat 19.025602°  
Long 77.128602°  
27/10/23 10:28 AM GMT +05:30



 GPS Map Camera



**Shivani Jamga, Maharashtra, India**  
Venkateshwara Agro Sugar Pro. Pvt. Ltd Shivani (Ja), Loha,  
24GJ+V3C, Shivani Jamga, Maharashtra 431708, India  
Lat 19.025602°  
Long 77.128602°  
27/10/23 10:28 AM GMT +05:30



GPS Map Camera



**Shivani Jamga, Maharashtra, India**  
Venkateshwara Agro Sugar Pro. Pvt. Ltd Shivani (Ja), Loha,  
24GJ+V3C, Shivani Jamga, Maharashtra 431708, India  
Lat 19.025602°  
Long 77.128602°  
27/10/23 10:27 AM GMT +05:30



 GPS Map Camera



**Shivani Jamga, Maharashtra, India**  
Venkateshwara Agro Sugar Pro. Pvt. Ltd Shivani (Ja), Loha,  
24GJ+V3C, Shivani Jamga, Maharashtra 431708, India  
Lat 19.025662°  
Long 77.128638°  
27/10/23 10:23 AM GMT +05:30



 GPS Map Camera

**Shivani Jamga, Maharashtra, India**  
Venkateshwara Agro Sugar Pro. Pvt. Ltd Shivani (Ja), Loha,  
24GJ+V3C, Shivani Jamga, Maharashtra 431708, India  
Lat 19.025598°  
Long 77.12864°  
27/10/23 10:25 AM GMT +05:30





GPS Map Camera



**Shivani Jamga, Maharashtra, India**  
Venkateshwara Agro Sugar Pro. Pvt. Ltd Shivani (Ja), Loha,  
24GJ+V3C, Shivani Jamga, Maharashtra 431708, India  
Lat 19.025598°  
Long 77.12864°  
27/10/23 10:25 AM GMT +05:30