# JAWAHAR SHETKARI SAHAKARI SAKHAR KARKHANA LTD., HUPARI

Shri Kallappanna Awadenagar, Hupari-Yalgud 416 203, Tal.: Hatkanangale, Dist.: Kolhapur (Maharashtra) Phone (0230) 2450402 (5 Lines), Fax (0230) 2450401, E-mail : kprjsssk@gmail.com

Ref. No. MFG/ ETP/7/96 / 2021

Date - 23/11/2021.

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

Sub.: Submission of Six Monthly Environment Compliance report for period April 2021 to September 2021 w.r.t Co-gen Unit of 28.5 MW – M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd., Hupari, Shri Kallappanna Awadenagar, Hupari-Yalgud, Tal.: Hatkanangale, Dist.: Kolhapur, Maharashtra State.

Ref.: Environmental Clearance (EC) Letter No. ENV (NOC) 2005/1591/CR224/TC-II dated 27.08.2007.

Dear Sir,

This has reference to Environmental Clearance (EC) granted to our Co-gen Unit of 28.5 MW– M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd., Shri Kallappanna Awadenagar, Hupari-Yalgud, Tal.: Hatkanangale, Dist.: Kolhapur, MS.

We are submitting a six monthly compliance report for a period of April 2021 to September 2021.

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

Thanking you,

Your's faithfully For Jawahar S.S.S.K. Ltd.Hupari

> (M.G. Joshi) Managing Director

Encl.- As above

# Copy for information to:-

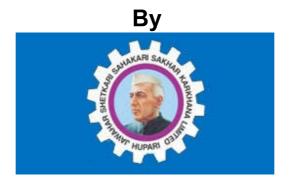
- Zonal Office Scientist 'E' Incharge, Central Pollution Control Board, 4th, Floor, Sakhar Bhavan, North T.T Nagar, Bhopal- 462003. Email – cpcb.bhopal@gov.in
- Member Secretary,
   Maharashtra Pollution Control Board,
   Kalpataru Point, 3<sup>rd</sup> & 4<sup>th</sup> Floor,
   Opp.Cine Planet,
   Near Sion Circle, Sion (E),
   Mumbai (Maharashtra) 400 022.
   Email mpcbmumbai@mpcb.gov.in
- Regional Officer, Maharashtra Pollution Control Board, Udyog Bhavan Building, Naer Collector Office, Kolhapur- 416 002. Email –rokolhapur@mpcb.gov.com

# SIX MONTHLY COMPLIANCE REPORT

(PERIOD APRIL 2021- SEPTEMBER 2021)

**FOR** 

# 28.5 MW Co-generation Plant



**JAWAHAR SHETAKARI S.S.K. LTD. (JSSSKL)** 

AT: Hupari, Yalgud SURVEY. NO.: 315/7 to 315/15, TAL.: HATKANANGALE, DIST.: KOLHAPUR, MAHARASHTRA

# Point wise Compliance towards Condition in Environment Clearance Letter

# **Brief Summary of the Project**

1 Name of Project : M/s. Jawahar Shetkari Sahakari Sakhar Karkhana

Ltd., (JSSSKL), Hupari

2. Clearance Letter No. & date : vide letter no. ENV (NOC) 2005/1591/CR224/TC-II,

dated 27th August 2007

3. Location: District & State/UT : Dist.: Kolhapur. State: Maharashtra.

4. Address for Correspondence : Shri Kallappanna Awadenagar, Hupari-Yalgud,

Tal.:Hatkanangale, Dist.: Kolhapur, Maharashtra 416 203.

5. Six Monthly Compliance for April 2021 to September 2021

Period

Six monthly (Period April 2021 to September 2021) Compliance report for Cogen Unit of Capacity 28.5 by M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd. (JSSSKL), Shri Kallappanna Awadenagar, Hupari-Yalgud, Tal. Hatkanangale, Dist.: Kolhapur, Maharashtra 416203.

M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd; Hupari (JSSSKL) is an Integrated Project Complex of Sugar (12,000 TCD) & Co-gen (28.5 MW) located at Kallappanna Awadenagar, Hupari-Yalgud, Tal.: Hatkanangale, Dist.: Kolhapur, Maharashtra State. JSSSKL was established in 1990 under. The Maharashtra Co-operative Society Act 1960.Sugar factory is registered with Govt. of Maharashtra, Vide Certificate No. KPR/HLE/PRG (A)/30(S)/29-JAN-1990. In addition, it has been registered as Multi-State Co-operative Society Vide registration no. MSCS/CR-51/30-DEC-1994. First crushing season of Sugar Factory was undertaken in the year 1993-94. Environmental Clearance (EC) was Granted to 7,500 TCD Sugar and 28.5 Co-gen by Maharashtra Government vide letter no. ENV (NOC) 2005/1591/CR224/TC-II, dated 27<sup>th</sup> August 2007. Environment clearance is Enclosed at Enclosure-I. There after JSSSKL Planned to go for Expansion of Sugar Factory 7,500 TCD to 12,000 TCD for which Environmental Clearance (EC) was procured vide letter No.J-11011/38/2016-IA-II (I) Dated 20<sup>th</sup>December, 2016. There after JSSSKL Planned to go for Expansion of Sugar Factory 12,000 TCD to 16,000 TCD for which Environmental Clearance (EC) was procured vide letter No.F.No.IA-J-11011/146/2020-IA II (I) Dated 1<sup>st</sup> December, 2020.

Compliance of Specific and General Conditions mentioned in Environmental Clearance (EC) letter ENV (NOC) 2005/1591/CR224/TC-II, dated  $27^{th}$  August 2007 for period from April 2021 to September 2021 presented as follows-

Si N	r. [0	Environmental Clearance Conditions	Compliance towards the Conditions Stipulated
	1	Condition No.1	
		The Project Authority shall take adequate	<b>Complied:</b> Condition is being followed.
		safety precautions in handling the raw	Adequate safety measures for handling the raw

materials, plant and machinery and the products of the processes so as to avoid any damage / less of lie of property or environment.

material, plant and machinery are taken. Raw material used for Co-gen is bagasse, generated from own sugar factory. **65,520 MT/M** of bagasse is used for generation of electricity. Bagasse is transported to boiler through close conveyor belt. A Risk Assessment Report have been prepared for project complex. Therein, identified of hazard and mitigation measures has been suggested. Moreover, the fire hazard areas like bagasse storage yard, switchyard etc. have been provided with appropriate firefighting arrangements. Boiler interlock details is enclosed at **Annexure-I** 

# 2 | Condition No.2

The Project Authority shall provide personal protective equipments; impart training and medical facilities to the workers handling the hazardous / dangerous raw materials, finished products or processes.

Complied: The workers engaged in handling operations are provided with necessary Personal Protective Equipment's (PPEs) like safety helmet, shoes, goggles, face mask, dust mask, hand gloves, welder goggles, earmuffs, safety belts etc. Regular training is important for workers who are handling the hazardous / dangerous raw materials, finished products or processes etc. Moreover, annual health checkup of all workers is done through authorized and qualified doctor and records are maintained. Latest health checkup report dated 02.09.2021. Health checkup report is enclosed at Annexure-II.

# 3 | Condition No.3

The Project Authority shall prepare the onsite disaster management plan and should submit to the Director, Industrial Safety and Health. The copies of which shall also be submitted to the District Collector, Local Authority, Maharashtra Pollution Control Board (MPCB) and the Environment Department, Government of Maharashtra. The Project Authority shall submit the information to the Director, Industrial Safety and Health for preparation of the off-site disaster management plan. The Project Authority should carry out periodical rehearsal of the on-site disaster management plan.

Complied: As mentioned above a Risk Assessment Report have already prepared for entire project complex. Therein, identification of hazard and migration measures have been suggested. Moreover, the fire hazard areas like bagasse storage yard, switchyard etc. have been provided with appropriate firefighting arrangement. Periodic mock drills conducted for imparting training on handling hazardous situations and handling firefighting equipments. Latest Mock drill was conducted dated 15.06.2021.

# 4 | Condition No.4

The Project Authority shall comply with all statutory requirements for safe transportation of raw materials / finished products in case of trucks / tankers carrying hazardous raw material shall be washed and cleaned up within the plant premises, so as to ensure no pollution in the vicinity.

**Complied:** Not applicable. Since electricity generated is directly fed to MSEB grid.

# 5 Condition No.5

The Project Authority shall be use cleaner technology for the manufacturing process and the clean fuel for the operations so as to reduce process waste, liquid effluents and gaseous emissions.

**Complied:** In Co-gen plant electricity is generated using bagasse as fuel for steam generation. Bagasse is a renewable source of energy.

# 6 Condition No.6

The Project Authority shall treat the liquid effluents so as to confirm to the standards prescribed by MPCB. The disposal of the treated effluent shall be in accordance with the conditions imposed by MPCB / GOM (Government of Maharashtra / Government of India). The continuous monitoring facility for the effluent should be provided by the project authority. If the effluent quality exceeds the standards at any time, the corresponding units of the plant which are contributing the excessive pollutant load shall be stopped from the operations till the quality of pollutant discharged from those units are brought down to the required level. Under no circumstances, the quality of the effluent shall exceed the limits mentioned in the consent letter. The Authority should draw consumption plans and the time bound sincere efforts for the reductions ofwater consumption should be made.

**Complied:** Effluent generated from Co-gen plant operation mainly comprise of boiler blow downs- 150 CMD and DM backwash -10 CMD. This entire effluent is forwarded to Sugar ETP.

# 7 Condition No7

In case of the treated effluent is proposed to the utilized for land irrigation / gardening on the land owned by the project Authority, the sufficient area should be earmarked for the same purpose in consultation with the Agriculture Department. Under no circumstances, such an effluent should be allowed to flow outside the premises of the project. During Monsoon on heavy rainfall period, if the treated effluent cannot be

**Complied:** No effluent is discharge outside industrial premises. The treated effluent is being recycled and use for gardening in premises. Online monitoring system as well as flow meter already provided for ETP. ETP monitoring reports are attached is enclosed at **Annexure-III.** 

8	absorbed in the project land and there is likelihood of the effluent going into the nearby areas, the respective unit should be put out of operation immediately. For the purpose of effluent disposal, mechanical system (Sprinkler etc.) and shall make adequate arrangements for the storage of excessive effluent (impervious storage tank etc.) in consultation with MPCB.  Condition No.8  The Project Authority shall regularly and	Complied. Industry, regularly, conducts, soil
	The Project Authority shall regularly and periodically undertake soil testing of land which are being used for the disposal of the effluent and shall also undertake periodical and regular testing of water sources in the vicinity of the project.	<b>Complied:</b> Industry regularly conducts soil testing by approved laboratory of nearby farmers where treated effluent is used for irrigation. Copy of soil monitoring report is enclosed at <b>Annexure-III.</b>
9	The Project Authority shall control the air emissions as per the standards prescribed by MPCB. No change in the design of stack and fuel mix be done without the permission of MPCB. Minimum number of air quality monitoring stations should be set up in consultation with MPCB in the plant and nearby areas. The air quality should be monitored on regular basis. All the stacks of the plant should be provided with the continuous stack monitoring equipment and stack emission levels shall be recorded and submitted to the MPCB as per their directives.	Complied: ESP have been installed to Co-gen boiler of 20, 90& 75 TPH followed by stack of 75M& 72 M height. As per latest guidelines of CPCB, online monitoring system have been installed for Co-gen boiler stack. Therein, parameter like SPM is monitored continuously. Moreover, industry conducts self-monitoring w.r.t. Ambient Air, Stack Emissions, Noise as well as analysis of untreated and treated effluent on monthly basis. The same is done through an approved laboratory. The AAQ locations are selected in upwind and downwind directions. The report of the same are enclosed at Annexure-III.
10	Condition No.10  The process emissions shall meet the standards prescribed by MPCB. At no time, the emissions should be beyond the standards. The respective units which exceed the standard should be put out of order immediately and should not be restarted until the control systems are rectified.	The condition has been followed.
11	Condition No.11 The solid waste shall be treated and disposed off as prescribed in the authorization certificate granted by MPCB in accordance with the Hazardous Waste (Handling and Management) Rules, 1989 (Wherever applicable).	<b>Complied:</b> No hazardous waste is generate in Co-gen plant. Solids waste in form of boiler ash is generated and the same is given to farmers for use as manure. Also, given to brick manufacturer.

12	Condition No. 12	
12	Condition No. 12  The project Authority shall take precautions so as to reduce other types of environment problems like noise, odour, thermal/heat and radio activity etc. (if applicable).	Complied: Major noise generating source are Boiler, Turbine, D.G. Set etc. The overall noise level in the around the plant area are maintained within the standards prescribed under Environment (Protection) Act, 1986 Rules. Workers working in noisy area are provided with personal protective equipment's such as earplug, earmuffs etc. The measures adopted under existing unit for controlling the same are proper housekeeping, sludge management in biological ETP units, steaming of major pipe lines, regular use of bleaching powder in the drains, efficient handling, prompt & proper disposal of press mud. No any radioactive substances are used in Co-gen plant.
13	Condition No. 13  The Project Authority shall set up environment management cell with a suitably qualified staff, to carry out various functions of the environment management. The Environment Management Plan should be prepared by the project authority shall also earmarked submitted to MPCB. The project Authority shall also earmarked funds for the Environment Management Cell and same shall not be diverted for any other purpose. The Project Authority shall prepare environment statement every year and copy of the same should be submitted to the MPCB.	Complied: The industry has an Environmental Management Cell (EMC) functioning. Members of the EMC are well qualified and experienced in their concerned fields. Structure of EMC is enclosed at Annexure – IV.
14	Condition No. 14  The cases of any disaster/accident/mishap due to handling raw materials, process, plant and machinery or finished products, the Project Authority shall be personally, jointly and severally be responsible for the event.	Noted.
15	Condition No. 15  Tree plantation programs should be undertaken at the rate of not less than 2500 trees per ha on the factory land, in consultation with the Forest Department of the state Government and MPCB.  Condition No. 16	Complied: Total 62,279 Nos. of trees have been planted in the factory premises. Out of the total plot of 246 Acres (99.55 Ha.), 83.20 Acres (34.00 Ha.) area comes under Greenbelt. This comes to about 34% of total plot area. Details and Photographs of Green belt is enclosed at Annexure -V.
16	Conginon 190, 10	

	This environment clearance is not transferable	The Condition is been followed by industry.
	and shall lapse after a period of 2 years from	
	the date on which the clearance is given,	
	unless the intended development is	
	commenced before the expiry of the period.	
17	Condition No. 17	
	The Project Authority must strictly adhere to	<b>Complied:</b> Industry is strictly following all the
	the stipulations made by MPCB/ Government	stipulations made by the Central Pollution
	of Maharashtra/ Government of India. The	Control Board (CPCB) as well as Maharashtra
	Project Authority shall submit the compliance	State Pollution Control Board (MPCB).
	report regarding conditions imposed by	
	MPCB/ Government of Maharashtra	
	(Environment Department)/ Government of	
	India before commencement of	
	production/activity.	
18	Condition No. 18	
	The Company should used a treated effluent	<b>Complied:</b> Effluent is treated in existing ETP.
	for afforestation and create a green belt	Treated effluent is used for gardening purpose
	around the factory premises with necessary	in the industrial premises.
	fencing around it.	

# Enclosure – I Copy of Environment Clearance Letter

# **GOVERNMENT OF MAHARASHTRA**

**窟** 2285 50 82 园 2202 59 46 No.ENV(NOC)2005/1591/CR224/TC-II ENVIRONMENT DEPARTMENT, Mantralaya, New Administrative Bldg., 15th floor, Madam Cama Marg, MUMBAI - 400 032.

Dated: 27 AUG 2007

To.

The Chairman /Managing Director, M/s. Jawahar Shetkari Sahakari Sakhar Kharkhana Ltd., Kallapanna Awade Nagar, Hupri Yalgud Road, Dist. Kolhapur

Sub: Environment clearance.

Sir.

I am directed to refer to your letter dated 11th October,2006, on the subject mentioned above and to state that the Environment Department of the State Government has no objection from the environmental angle to permit you expansion of sugarcane crushing capacity from 5000 TCD to 7500 TCD (from Five Thousand TCD to Seven Thousand Five Hundred TCD only) and Co-Generation from 24 MW to 28.5 MW at, Kallapanna Awade Nagar, Hupri Yalgud Road) Dist. Kolhapur, Maharashtra State subject to the following conditions & general conditions stipulated in the Annexure.

These stipulations will be enforced among others under the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 alongwith their amendments.

The above permission is without prejudice to any other permissions required under any of the laws, bye-laws or regulations in force and that the Government may impose any additional conditions from time to time for control of pollution, if necessary.

Yours faithfully,

(Surendra Jadhav)

Deputy Secretary to Government

ENCL: As above.

- The Project Authority shall take adequate safety precautions in handling the raw materials, plant and machinery and the products of the processes so as to avoid any damage / less of lie of property, or environment.
- 2. The Project Authority shall provide personal protective equipments, impart training and medical facilities to the workers handling the hazardous / dangerous raw materials, finished products or processes.
- The Project Authority shall prepare the on-site disaster management plan and should submit to the Director, Industrial Safety and Health. The copies of which shall also be submitted to the District Collector, Local Authority, Maharashtra Pollution Control Board (MPCB) and the Environment Department, Government of Maharashtra. The Project Authority shall submit the information to the Director, Industrial Safety and I-fealth for the preparation of the off-site disaster management plan. The Project Authority should carry out periodical rehearsal of the on-site disaster management plan.
- 4. The Project Authority shall comply with all statutory requirements for safe transportation of raw materials / finished products in case of trucks / tankers carrying hazardous raw material shall be washed and cleaned up within the plant premises, so as to ensure no pollution in the vicinity.
- 5. The Project Authority shall use cleaner technology for the manufacturing process and the clean fuel for the operations so as to reduce process waste, liquid effluents and gaseous emissions.
- 6. The Project Authority shall treat the liquid effluents so as to confirm to the standards prescribed by MPCB. The disposal of the treated effluent shall be in accordance with the conditions imposed by MPCB /| GOM (Government of Maharashtra / Government of India). The continuous monitoring facility for the effluents should be provided by the project authority. If the effluent quality exceeds the standards at any time the corresponding units of the plant which are contributing the excessive pollutant load shall be stopped from the operations till the quality of pollutant discharged from those units are brought down to the required level. Under no circumstances, the quality of the effluent shall exceed the limits mentioned in the consent letter. The Project Authority should draw water consumption plans and the time bound sincere efforts for the reduction of water consumption should be made.
- 7. In case the treated effluent is proposed to the utilized for land irrigation / gardening on the land owned by the Project Authority, the sufficient area should be earmarked for the same purpose in consultation with the Agriculture Department. Under no circumstances, such an effluent should be allowed to flow outside the premises of the project. During Monsoon on heavy rainfall period, if the treated effluent can not be absorbed in the project land and there is likelihood of the effluent going into the nearby areas, the respective unit should be put out of operation immediately. For the purpose of effluent disposal, mechanical system (Sprinkler etc.) and shall make adequate arrangements for the storage of excessive effluent (impervious storage tank etc.) in consultation with MPCB.
- 8. The Project Authority shall regularly and periodically undertake soil testing of the land which are being used for the disposal of the effluent and shall also undertake periodical and regular testing of water sources in the vicinity of the project.
- The Project Authority shall control the air emissions as per the standards prescribed by MPCB. No change in the design of stack and fuel mix be done without the permission of MPCB. Minimum number of air quality monitoring

stations should be set up in consultation with MPCB in the plant and nearby areas. The air quality should be monitored on regular basis. All the stacks of the plant should be provided with the continuous stack monitoring equipment and the stack emission levels shall be recorded and submitted to the MPCB as per their directives.

- 10. The process emissions shall meet the standards prescribed by MPCB. At no time, the emissions should be beyond the standards. The respective units which exceed the standard should be put out of order immediately and should not be restarted until the control systems are rectified.
- 11. The solid waste shall be treated and disposed off as prescribed in the authorization certificate granted by MPCB in accordance with the Hazardous Waste (Handling and Management) Rules, 1989 (wherever applicable)
- 12. The Project Authority shall take precautions so as to reduce other types of environmental problems like noise, odour, thermal / heat and radio activity etc. (if applicable).
- 13. The Project Authority shall set up environment management cell with a suitably qualified staff, to carry out various functions of the environment management. The Environment Management Plan should be prepared by the project authority shall also earmarked submitted to MPCB. The Project Authority shall also earmarked funds for the Environment Management Cell and same shall not be diverted for any other purpose. The Project Authority shall prepare environment statement every year and copy of the same should be submitted to the MPCB.
- 14. The cases of any disaster / accident / mishap due to handling raw materials, process, plant and machinery or finished products, the Project Authority shall be personally, jointly and severally be responsible for the event.
- 15. Tree plantation programs should be undertaken at the rate of not less than 2500 trees per halon the factory land, in consultation with the Forest Department of the State Government and MPCB.
- 16. This environment clearance is not transferable and shall lapse after a period of 2 years from the date on which the clearance is given, unless the intended development is commenced before the explicy of the period.
- 17. The Project Authority must strictly adhers to the stipulations made by MPCB / Government of Maharashtra / Government of India. The Project Authority shall submit the compliance report regarding conditions imposed by MPCB / Government of Maharashtra (Environment Department) / Government of India before commencement of production / activity.
- 18. The Company should used a treated effluent for afforestation and create a green belt around the factory premises with necessary fencing around it.

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# **Annexure** – **I**Boiler Interlock Details

### **Boiler Interlock**

# **Fuel Handling System:**

- 1. Main bagasse carrier tripped, previous carriers RBC belts tripped.
- 2. Pull cord & belt SWA switch provided for emergency operation.

# **Ash Handling System:**

Ash conditioner tripped. Ash conveying system tripped.

# **FAN Interlock System:**

- 1. ID Fan stopped or tripped then FD fan, SA fan and fuel handling system are tripped.
- 2. FD Fan stopped or tripped then SA Fan and fuel handling system are tripped.
- 3. SA Fan stopped or tripped the fuel handlings system are tripped.

### **Drum Level Interlock:**

1. Drum level greater than 80% or less than 20% FD Fan tripped.

# **Bagasse Feeder Interlocks:**

1. SA Fan air pressure for fuel feeding less than 250mmWc or both SA fan stopped or tripped.

# **Feed Pump Interlock:**

1. Deareator level less than 30% or suction pressure less than 1 Kg/cm² or suction valve close. All any above conditions or any one of above conditions occur then feed pump tripped.

# **ESP Interlock System:**

1. Purge air blower stopped or tripped or ESP inlet flue gas temperature less than 130 °C or ESP hopper level hi hi alarm then ESP TRCC tripped.

# **Boiler Alarm**

- 1. Fuel feeding air pressure for bagasse less than 350mmWc.
- 2. ESP inlet Temperature less than 140 °C.
- 3. Main steam pressure less than 40 Kg/cm<sup>2</sup>.
- 4. Main steam Temperature less than 400 ℃.
- 5. Deareator level less than 50%.
- 6. Deareator level greater than 90%.
- 7. Deaerator temperature less than 105 °C.
- 8. Deareator temperature greater than 110 ℃.

# **Turbine Interlock System**

# **Turbine Tripping Interlock:**

- 1. Lube oil pressure less than 1.8 kg/cm<sup>2</sup>.
- 2. Control oil pressure less than 7.8 kg/cm<sup>2</sup>.
- 3. Turbine inlet pressure less than 38 kg/cm<sup>2</sup>.
- 4. Turbine inlet temperature less than 350 ℃.
- 5. Exhaust pressure greater than 1.45 kg/cm<sup>2</sup>.

# Vibration Alarm and Trip Condition (Turbine, Gearbox and Alternator):

Sr. No.	TAG	Service Name	Alarm H	Trip HH	Alarm L	Alarm LL
1.	ZI-801	Axial Displacement	0.4mm	0.6mm	0.4mm	0.6mm
2.	ZI-802	Axial Displacement	0.4mm	0.6mm	0.4mm	0.6mm
3.	ZI-801	Turbine front bearing vibration X-axis	76 μ	99 μ		
4.	ZI-802	Turbine front bearing vibration Y-axis	76 μ	99 μ		
5.	ZI-803	Turbine rear bearing vibration X-axis	76 μ	99 μ		
6.	ZI-804	Turbine rear bearing vibration Y-axis	76 μ	99 μ		
7.	ZI-805	GB High speed DE vibration X-axis.	65 μ	125 μ		
8.	ZI-806	GB High speed DE vibration Y-axis.	65 μ	125 μ		
9.	ZI-807	GB High speed NDE vibration X-axis.	65 μ	125 μ		
10.	ZI-808	GB High speed NDE vibration Y-axis.	65 μ	125 μ		
11.	ZI-809	GB Low speed NDE vibration X-axis.	90 μ	150 μ		
12.	ZI-810	GB Low speed NDE vibration Y-axis.	90 μ	150 μ		
13.	ZI-811	GB Low speed DE vibration X-axis.	90 μ	150 μ		
14.	ZI-812	GB Low speed DE vibration Y-axis.	90 μ	150 μ		
15.	ZI-813	Alternator front vibration X-axis.	178 μ	232 μ		
16.	ZI-814	Alternator front vibration Y-axis.	178 μ	232 μ		
17.	ZI-816	Alternator rear vibration X-axis.	178 μ	232 μ		
18.	ZI-817	Alternator rear vibration Y-axis.	178 μ	232 μ		
19.		Exciter field volt	200 V	200 V		
20.		Exciter field current	25 A	25 A		

# Bearing Temperature, Alarm and Trip Condition (Turbine, Gearbox):

Sr. No.	SESOR	ALARM	TRIP
1.	Turbine thrust active top bearing temperature.	95℃	120℃
2.	Turbine thrust non active top bearing temperature.	95℃	120℃
3.	Turbine front bearing temperature.	110℃	120℃
4.	Turbine rear bearing temperature.	110℃	120℃
5.	Turbine active bearing bottom temperature.	95℃	120℃
6.	Turbine non active bearing bottom temperature.	95℃	120℃
7.	Gearbox high speed front bearing temperature.	100℃	120℃
8.	Gearbox high speed rear bearing temperature.	100℃	120℃
9.	Gearbox low speed front bearing temperature.	85℃	120℃
10.	Gearbox low speed rear bearing temperature.	85℃	120℃

# **Bearing Gear Motor Interlock System:**

- 1. Lube oil pressure greater than 1.95 kg/cm² then barring gear motor start permissive.
- 2. Turbine RPM less than 250 RPM then barring gear motor start permissive.

# Annexure— II Health Check Up Reports

# Form No 7 (Prescribed under Rule 18 (7)) HEALTH REGISTER

Certifying Surgeon DR.ARVIND MANE MBBS DPH AFIH.(Mumbai)

From: 03/09/2021 To 02/09/2022

mpany Name : JAWAHAR SHETKARI SAHAKARI KARKHANA LTD.

Sr. No.	Emp. No.	Name		Age	Sex	Dept of employement of present work	Date of leaving or transfer to other wor	Reason for leaving Transfer of discharg	Nature of job or occupation	Raw material or bye product handled	Exam. Date	Result of Medical Examination	If suspended from work, state period of suspension with detailed reasons	Certified fit to resume duty on with signature of Certifying Surgeon	If Certificate of unfitness or suspention issued to worker	Signature with gate certifying surgeon.
	2086	MR. TATOBA B PATIL	45 1	52	M	•	NA	NA			03/09/2021	Fit	NA	Fit	NA	
	1570	MR. SADASHIV B KUMBHAR		47	M		NA	NA ·			93/09/2021	Fit	NA .	Fit	NA .	
	-0007	MR. RAMESH'R CHAVAN	**	53	M		NA	NA.		4	.03/09/2021	Fit	NA	Fit	NA	
	1259	MR. RAJESH R BAWACHE	2 0 2	48	M	-	NA	NA		255	03/09/2021	Fit	NA .	Fit	NA	
	0947	MR. MANGESH PUJARI	442.72	:48	M	•	NA	NA	1		03/09/2021	Fit	NA	Fit	NA	
	1360	MR. SURESH K KORE		-52	M	70 mm to 8	NA	NA .	Bril.	e 1	03/09/2021	Fit	NA	Fit	NA	
	1408	MR. SUBASH J KAMBLE	1	56	M		NA	NA		3 -	03/09/2021	Fit	NA .	Fit	NA	
	6258	MR. ABHIJEET D PAKALE	9	22	M		NA	NA	5	1	03/09/2021	Fit	NA	Fit	NA	
	7229	MR. ARIHANT K BARGALE	1 11	.25	M		·NA	· NA	-3 7		03/09/2021	Fit	NA	Fit	NA	
	1850	MR. SUNIL B KININGE	1, 14	:55	М	-	NA	NA	500		03/09/2021	Fit	NA	Fit	NA	
- 1 -	0417	MR. RAGHUNATH R'MUDHALE	4 1 1	54	M		NA	NA	7 -0		03/09/2021	Fit	NA:	Fit	NA	
	7218	MR. RUSHIKESH B PATIL	4.1	24	M	•	NA	NA			03/09/2021	Fit	NA .	Fit	NA	
	0370	MR. MARUTI G SHINDE		50	M	* * * * T	· NA	NA .		9	03/09/2021	Fit	NA	Fit	NA NA	
	1741	MR. RÄHUL R SHANDAGE	7. ·	- 40	M	** **	NA.	NA	4		03/09/2021	Fit	. NA	Fit 4	NA	
	0972	MR. VIJAY M GHATGE	#	48	M		NA	NA			03/09/2021	Fit	. NA	Fit	NA)	
	1436	MR. SHARAD A MUDGAL		49	M		NA	NA			03/09/2021	Fit	NA	Fit /	NX	
	0414	MR. SHEKHAR M BHANDARE		49	М		- NA	NA		, ,	03/09/2021	Fit	NA ···	Fit	NA	
-	0861	MR. RAJARAM K DAVARI		54	M		NA	· NA			03/09/2021	Fit	NA .	Fit	NA	
	1817	MR. JAWAHAR B MALI		46	M		NA:	. NA	1	<b>†</b> .:	03/09/2021	Fit	NΔ	GANT X	RIA	
	Page 1	-100				6,							कारखाने	अधिनिर्यम् १९४ कोल्हापूर	<del>८ च्या कलम् १</del> जल्हाकरित	

प्राधिकृत प्रमाणकश्चल्यचिकित्सक 那. ACS 15-AM/2016

# Form No 7 (Prescribed under Rule 18 (7)) HEALTH REGISTER

Certifying Surgeon
DR.ARVIND MANE
MBBS DPH AFIH.(Mumbai)

From: 03/09/2021 To 02/09/2022

Name : JAWAHAR SHETKARI SAHAKARI KARKHANA	LL	D.	•
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mpa	ny Name	: JAWAIIAI SII													-
Sr. No.	Етр. Мо.	Name	Age	Sex	Dept of employement of present work	Date of leaving or transfer to other wor	Reason for leaving Transfer of discharg	Nature of job or occupation	Raw material or bye product handled	Exam. Date	Result of Medical Examination	If suspended from work, state period of suspension with detailed reasons	Certified fit to resume duty on with signature of Certifying Surgeon	If Certificate of unfitness or suspention issued to worker	Signature with gate certifying surgeon.
20	0645	MR. BHAUSAB T MUDALE	.55	M		NA	NA	4.5		03/09/2021	Fit	NA	Fit	NA.	
21	7480	MR. AMOL J JOKARE	30	M		NA	NA		4	03/09/2021	Fit	NA	Fit	ŊA	- 61
22	0353	MR. SHRIDHAR P NALGE	.51	M	-	NA.	- NA	* 0 ·		03/09/2021	Fit	NA	Fit	NA	
23	1962	MR. AJIT B KININGE	-54	М		NA .	NA		1	03/09/2021	Fit	NA	Fit	NA	
24	0720	MR. BALASAHEB HEGADE	56	M		NA	NA	1	3	03/09/2021	Fit.	NA ·	Fit	NA	
25	1116	MR. RAJARAM L BARGAVKAR	55	М		NA.	NA			03/09/2021	Fit	NA ·	Fit	· NA	- U/6
26	2125	MR. RAHUBHAU UATHARE	:60	M		NA	NA.	11	4 9 0	03/09/2021	Fit	NA	Fit	NA	
27	0108	MR, VIJAY J PODJALE	. 58	M		NA .	NA.			03/09/2021	Fit	NA	Fit	NA	
28	989	MR. R G NAIKWADE	-	M		NA	NA			03/09/2021	Fit	NA	Fit	NA	
29	7504	MR. SANTOSH S CHOUGULE		M		- NA	. NA	9	JE3	03/09/2021	Fit	NA	Fit	· NA	, .
30	0010	MR. PUNDLIK N KAMBLE		M	- To	NA	NA	1.3		03/09/2021	Pit	NA NA	Fit	NA	
31	1903	MR. RAMESH P SALOKHE	-39	M		NA NA	NA			03/09/2021	Fit	NA	Fit	NA	
32	7246	MR. SHUBHAM A KALAGATE	2:	M		NA	NA	-		03/09/2021	Fit	NA	Fit	NA	
33	1 1319	MR, NISAR M MULLA	• 53	3 M	10	NA	NA.	4		03/09/2021	Fit	NA	Fit	NA	-:
34	0625	MR. SAGAR R PATIL	-48	3 M	•	NA	NA			03/09/2021	Fit	NA	Fit	NAT	
35	0755	MR. VIJAY R DANGRE	54	-		NA	NA		T. Y.	03/09/2021	Fit	NA	Fit	MA.	1/
	1720	MR. NITIN B SHINTRE		5 M		NA	NA .	• _		03/09/2021	Fit	NA	Fit /	NA	
36	1335	MR. VIJAY V YADAV	-	6 M		NA.	NA:			03/09/2021	Fit	NA	· Et	NA	1
37	10846	MR. ADAM A MULLA		9 M	-	NA	NA.		1.	03/09/2021	Fit	NA	NEW Y	() NA	00/2) 5000
38	0840	TANGALIZATA COMPA	-	-	- A1	fr some	1.4					কাইবা		जिल्हाक	रेता
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Page 2 of 66

मधिकृत प्रमाणकेशल्यचिकित्सव क्र. ACS 15-AM/2016

# Form No.7 (Prescribed under Rule 18 (7)) HEALTH REGISTER

Certifying Surgeon
DR.ARVIND MANE
MBBS DPH AFIH.(Mumbai)

From: 03/09/2021 To 02/09/2022

mpany Name: JAWAHAR SHETKARI SAHAKARI KARKHANA LTD.

DI. 170.	Emp. No.	Name	Age	Sex	Dept of employement of present work	Date of leaving or transfer to other wor	Reason for leaving Transfer of discharg	Nature of job or occupation	Raw material or bye product handled	Exam. Date	Result of Medical Examination	If suspended from work, state period of suspension with detailed reasons	Certified fit to resume duty on with signature of Certifying Surgeon	If Certificate of unfitness or suspention issued to worker	Signature with gate certifying surgeon.
-	1260	MR. SURESH J PARIT	47.	M		NA	NA			03/09/2021	Fit	NA	Fit	NA	-
	1536	MR, SATAPPA M SUTAR	53	М	-	NA NA	NA		4	03/09/2021	Fit	NA	Fit	, NA	
	0946	MR. APPASO U HAWALDAR	-54	M		NA	NA ·			03/09/2021	Fit	NA	Fit	. NA	
	6023	MR. AKASH A BODALE	:30	M		NA	NA	177	÷. "	03/09/2021	Fit	NA	Fit	NA	
	1456	MR. NIVRUTTI N KATKAR	56	M		NA '	· NA			03/09/2021	Fit	NA	Fit	. NA	
	1267	MR. HANMANT B MORE	42	M	- *:5	NA NA	NA	'		03/09/2021	Fit	NA	Fit	NA	
	0435	MR. SURESH A DESAI	-52	M	internal Australia	NA.	NA	P		03/09/2021	Fit	NA.	- Fit	NA	
	380	MR, VILAS N PATIL	57	M		NA	NA .	15.		03/09/2021	Fit	NA	Fit	NA	
2	1403	MR. RAJENDRA A SANNAKE	47	М		NA '	NA			03/09/2021	Fit	NA	Fit	NA	
	289	MR. SUNIL H KHADE	58	М	- 3	NA	NA	- ;		03/09/2021	Fit	. NA	Fit	NA	
T	2092	MR. RAMESH S PATIL	55	М		· NA	NA	8.4		03/09/2021	Fit	NA	Fit	NA	
	1956	MR. SUNIL A KALAGANTE	42	М	-	NA	NA		7	03/09/2021	Fit	NA .	Fit	NA	
- 1	1991	MR. SACHIN A KERGUTTE	37	M		· NA	NA	13	11	03/09/2021	Fit	. NA	Fit	· NA	
1	1318	MR. DADASO D PATIL	47	М		NA	NA ·			03/09/2021	Fit	NA	• Fit	NA	
1	0314	MR. SANDIP N TAVANSHETTI	-53	M	-	NA.	NA	-		03/09/2021	Fit	NA	Fit /	NA /	
	1954	MR. RAHUL U MUDRALE	44	М		NA	NA .			03/09/2021	Fit	NA	Fit	NA/	
	0180	MR. SURESH B GIRAGAVE	51	М		NA	NA		7	03/09/2021	Fit	· · NA	Pit	NA	
1	0660	MR. VILAS B RAUT	52	M	7	NA	· NA			03/09/2021	Fit	. NA	Z/Fit\	NA	)
+	. 0404	MR. KRISHNA SANKAPAL	. 59	М	• •	NA	NA	1 .:		03/09/2021	Fit	NA GROWN	माधिनियम् १९४८ कोल्हा पुर्श	WA च्या कलग १०	(२) प्रमा

Page 3 of 66

प्राधिकृत प्रमाणकश्चल्यचिकित्सक क्र. ACS 15-AM/2016

# rorm No / Prescribed under Rule 18 (7)) HEALTH REGISTER

Certifying Surgeon DR.ARVIND MANE MBBS DPH AFIH.(Mumbai)

From: -03/09/2021 To 02/09/2022

mpany Name : JAWAHAR SHETKARI SAHAKARI KARKHANA LTD.

Sr. No.	Етр. No.	Name	Age	Sex	Dept of employement of present work	Date of leaving or transfer to other wor	Reason for leaving Transfer of discharg	Nature of job or occupation	Raw material or bye product handled	Exam. Date	Result of Medical Examination	If suspended from work, state period of suspension with detailed reasons	Certified fit to resume duty on with signature of Certifying Surgeon	If Certificate of unfitness or suspention issued to worker	Signature with gate ocertifying surgeon.
3	0399	MR. SANJAY D PATIL	52	M		NA	NA	2		03/09/2021	Fit	NA	Fit	NA	
9	<sub>4</sub> 1959	MR. HINDURAO D MANE	50	M	•	NA	NA			03/09/2021	Fit	NA	Fit .	NA	
0	1729	MR. UMESH A CHOUGULE	.46	M		· NA	NA-			03/09/2021	Fit -	NA	Fit	NA	
1	2238	MR. SHRIKANT R DADMODE	44	M	9 9 <b>-</b>	NA ·	NA			03/09/2021	Fit	NA	Fit	NA ·	
2	0885	MR. ASHOK G CHAVAN	50	M		NA .	NA.	7.4		03/09/2021	Fit	NA.	Fit	NA	
3	1701	MR. SHANTINATH B CHOUGALE	54	M		NA	NA .	11		03/09/2021	Fit	NA	Fit	NA	
4	1699	MR. SANJAY KAMBLE	59	М	- · · ·	NA	NA:	100	3	03/09/2021	Fit	NA	Fit	NA	
5	0910	MR. RAJENDRA A SANGAI	50	M		NA	NA.	77		03/09/2021	Fit	NA .	Fit	NA	
5:	1670	MR. PANDURANG J KAMBLE	51	М		· NA	- NA	Segr	1	03/09/2021	Fit	NA	Fit	NA	
7	2085	MR. DONDAPPA KAMATNURE	-46	M		NA	NA		:	03/09/2021	Fit	NA	Fit	NA ·	
3	1912	MR. RAMESH S PATIL	46	M		NA	NA			03/09/2021	Fit	NA	Fit	. NA	-
,	1633	MR. SHIVAJI B MALI	44	M	-	NA.	NA	1.1	1	03/09/2021	Fit	NA	Fit	NA	
)	1217	MR. SAMBHAJI B SADALE	46	M	-	NA	NA ·			03/09/2021	Fit	NA	- Fit	NA	
1	0006 -	MR. RAJENDRA A PARAMAJ	-52	М		NA	· NA	- a a		03/09/2021	Fit	NA ·	Fit	NA	).
2	0369	MR. MANIK S PATIL	50	М	•	NA	NA	1		03/09/2021	Fit	NA	Fit	NA /	
3	1739	MR. VIJAY A PATIL	4.1	M		NA	· NA			03/09/2021	Fit	NA · · ·	Fit /	7 NA /	/
1	7403	MR. SOURABH R CHOUGALE	23	M		NA-	NA			03/09/2021	Fit	NA	Eit	NA	
5	1928	MR. DATTATRAY P YARGTTI	44	М	•	NA·	NA			03/09/2021	Fit	NA	//Fit//	NA	)
5 .	0544	MR. SUBHASH S GOTKHINDE	49	М		NA .	NA <sup>†</sup>	:		03/09/2021	Fit	ŇA	( VIII )	MA	
	Page 4				1000	0.1			7			कारखाने ३	विनियम १९४८ कोल्हापूर्व वि	च्या कलम १०	(2) 指列的

प्राधिकृत प्रमाणेकशल्यचिकित्सक 京. ACS 15-AM/2016

# Form No 7 (Prescribed under Rule 18 (7))

# HEALTH REGISTER

From: 03/09/2021 To 02/09/2022

Certifying Surgeon
DR.ARVIND MANE
MBBS DPH AFIH.(Mumbai)

# pany Name: JAWAHAR SHETKARI SAHAKARI KARKHANA LTD.

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Emp. No.	Name	Age	Sex	Dept of employement of present work	Date of leaving or transfer to other wor	Reason for leaving Transfer of discharg	Nature of job or occupation	Raw material or bye product handled	Exam. Date	Result of Medical Examination	If suspended from work, state period of suspension with detailed reasons	Certified fit to resume duty on with signature of Certifying Surgeon	If Certificate of unfitness or suspention issued to worker	Signature with gate certifying surgeon.
1402	MR. SURESH B PAJARE	54	M		NA	NA			03/09/2021	Fit	NA ,	Fit	NA	
1902	MR. SIDDHU S MUDHALE	39	М	-	NA	NA			03/09/2021	Fit	NA	Fit	NA.	
1886	MR. ASHOK G CHOUGALE	45	M	-	NA ·	NA			03/09/2021	Fit	NA	Fit	NA	
6230	MR. BABAN B DESAI	59	M		NA	NA.			03/09/2021	Fit	NA.	Fit	-NA	
1767	MR. JIVENDER V KAMBLE	48	M		· NA	· NA · ·	'		03/09/2021	Fit	NA .	Fit	NA	42
7477	MR. SANTOSH S PUJARI	22	M	-	NA	NA	14		03/09/2021	Fit	NA	Fit	NA	
7028	MR. ABHINANDAN M GIRMAL	29	M		NA	NA -			03/09/2021	Fit	NA	Fit	NA	1
1346	MR. PARGONDA N PATIL	50	M	-	NA ·	NA	19	×	03/09/2021	Fit	NA -	Fit	NA	
7131	MR. SUJIT S RANGOLE	30	M		NA	NA.			03/09/2021	Fit	NA	Fit	NA '	.10
7023	MR, RANJIT R FIRAGANNAVAR	29	M	-10	NA	NA	125.80		03/09/2021	Fit	. NA	Fit	NA	
7137	MR. FIROJ B NAIKWADE	40	M	-	NA NA	NA			03/09/2021	Fit	NA	Fit	NA	8 18
1946	MR. DHANAJI M CHAVAN	49	M		NA	NA		1	03/09/2021	Fit	NA	Fit	NA .	
1778	MR. PRAVIN M GHAT	42	M	- · · · -	NA	NA	1.		03/09/2021	Fit	NA.	Fit	NA	
2040	MR. SWAPNIL B CHOUGALE .	34	M		NA 4	NA	7		03/09/2021	Fit	NA	Fit	NA	
7242	MR: SOURABH J GIBHISE	-25	M		NA	. NA			03/09/2021	Fit	NA	Fit	NA	)
1359	MR. VRUSHABH A AITAVADE	-50	М		NA	NA			03/09/2021	Fit	NA	Fit	/ NA /	,
1612	MR. ANIL K KAMBLE	57	М		NA	NA		1	03/09/2021	Fit	. NA	Fit	NA/	
0416	MR. SHARAD B PATIL	-57	M		. NA	NA			03/09/2021	Fit'	NA/	FA /	JAX.	
1834	MR. DAVAL M SHAIKH	. 50	M		ΝA	'NA			03/09/2021	Fit	NA 1	Fine	TNA	), , ,
										14. 14		h / F	धि च्या कलम् १ जिल्हाकारि	

Page 5 of 66

प्राधिकृत प्रमाणकेशल्यचिकित्सक क्र. ACS 15-AM/2016

From: 03/09/2021 To 02/09/2022

# mpany Name: JAWAHAR SHETKARI SAHAKARI KARKHANA LTD.

	Emp. No.	Name	Age	Sex	Dept of employement of present work	Date of leaving or transfer to other wor	Reason for leaving Transfer of discharg	Nature of job or occupation	Raw material or bye product handled	Exam. Date	Result of Medical Examination	If suspended from work, state period of suspension with detailed reasons	Certified fit to resume duty on with signature of Certifying Surgeon	If Certificate of unfitness or suspention issued to worker	Signature with gate of certifying surgeon.
1	2009.	MR. JAVED A MUJAWAR	38	M		NA.	NA -			03/09/2021	Fit	NA	Fit	NA	C
1	1248	MR. SUBHASH A GOTKHINDE	47	М	- 4	· NA	NA,			03/09/2021	Fit	NA	4 Fit	NA	
1	7027	MR. SACHIN A BRGALE	28	M		NA	NA			03/09/2021	Fit	· NA	Fit	NA	
1	1475	MR. SUNIL A TASHILDAR	53	M	1000	NA	NA			03/09/2021	Fit	NA ·	Fit	NA	- 1
	1717	MR. RAJU P UPADHYE	43	M	. ,: *	NA.	NA.	1,1		03/09/2021	· Fit	NA	Fit	NA	
T	1709	MR. ANIL A PATIL	53	M		NA	NA			03/09/2021	Fit	NA	Fit	NA	
T	0157	MR. BALERAM A MANE	- 57	M		NA	NA .	11.1		03/09/2021	Fit	NA -	Fit	. NA	
1	7351	MR. RUTESH V CHANVIRE	21	М	s - 1 15	NA	NA	.1	. 59	03/09/2021	Fit	NA NA	Fit	NA ·	
1	992	MR. BABURAO A KAMTE	54	M		NA	NA		100	03/09/2021	Fit	NA	Fit	NA	Se T
T	1921	MR. RAVINDRA P KARANJE	52	М		NA	NA .	1.11		03/09/2021	Fit	NA	Fit	NA	
	0802	MR. DATTATRAY G KHEDKAR	51	M	· · · · · ·	NA.	NA	Ta .		03/09/2021	Fit	NA	Fit	NA	
1	2232	MR. RAJARAM V PAWAR	.55	M		NA	NA	1.5		03/09/2021	Fit	NA	Fit	NA	
1	0058	MR. SATAPPA U CHOUGULE	57	M		NA .	NA		23t	03/09/2021	Fit	NA.	Fit	NA	
-	7144	MR. PRAKASH N KAMBLE	-52	M	e e e e e e e e e e e e e e e e e e e	NA	NA	1.5	4 - 1	03/09/2021	Fit	+ NA	Fit	NA	0
T	1240	MR. ARUN K PATIL	46	M		. NA	NA		1. 11	03/09/2021	Fit	NA	Fit	ΛŷΑ .	/
1	7412	MR. AJIT R BANDGR	25	М	7-9	· NA	- NA			.03/09/2021	Fit	NA	Fit	(NA	//
1	2120	MR: SANJEEVAN B VAJAMKAR	58	M	1.5	NA	NA			03/09/2021	Fit	NA NA	Fit	NA /	/
1	7032	MR. SANDIP S CHOPADE	26	М	·	NA	NA	1		03/09/2021	Fit	NA .	Fit /	(NA	
	1374	MR. SARJERAO V CHOUGULE	58	М		NA.	NA		1.1	03/09/2021	Fit	NA ,	SF4/	WAD	1
					4.4	4					4, 4,	कारखान		क्षे च्या क्रलेप जिल्हाकरि	

प्राधिकृत प्रमाणकशेल्यचिकित्सक 亦. ACS 15-AM/2016

DR.ARVIND MANE MBBS DPH AFIH.(Mumbai)

From: 03/09/2021 To 02/09/2022

Emp. No.	Name	Age	Sex	Dept of employement of present work	Date of leaving or transfer to other wor	Reason for leaving Transfer of discharg	Nature of job or occupation	Raw material or bye product handled	Exam. Date	Result of Medical Examination	If suspended from work, state period of suspension with detailed reasons	Certified fit to resume duty on with signature of Certifying Surgeon	If Certificate of unfitness or suspention issued to	Signature with gate of certifying surgeon.
6068	MR. KALPESH K KAPSE	30	M	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	NA	· NA	7,-1		03/09/2021	Fit	NA	Fit	NA	
705	MR. DEEPAK KOTHAWALE	50	M	-	NA	, NA	1		03/09/2021	Fit	NĄ	Fit	NA	1 80
2029	MR. YUVRAJ A GANAKE	32	M		NA	NA	1.50		03/09/2021	·Fit	NA	Fit	NA	
7024	MR. SAGAR H NAIK	30	M		NA	NA	11		03/09/2021	Fit	· NA	Fit	NA .	
2094	MR. NAVNATH A MUDHALE	30	M		NA	NA	- 1. T		03/09/2021	Fit	NA	Fit	NA	- 1
0815	MR. KUBER J SOUNDATTE	55	M	-	NA	NA	· .	-	03/09/2021	Fit	NA	Fit	NA	
637	MR. ASHOK D MANE	54	M		NA-	. NA	, in eq.		03/09/2021	Fit	NA	Fit ·	NA	-
2030	MR. SUNIL M KIRUNGE	-32	M		NA	NA ·	5 - 1 "		03/09/2021	- Fit	NA	Fit	NA	
1100	MR. KALLAPPA R CHOUGULE	53	M	-	NA	NA.	7736		03/09/2021	Fit	NA	Fit	NA	
1976	MR. SHRENIK B KOLHAPURE	45	М		NA	NA.	4; ,		03/09/2021	Fit	. NA	Fit	NA	
7451	MR. HEMANT R PATIL	24	M	0.545	NA	NA	160		03/09/2021	Fit	NA	Fit	NA	
1075	MR. RAOSAHEB V MAJGAVKAR	57	M	-	. NA	NA	1.41		03/09/2021	Fit	NA	Fit	NA	100
2128	MR. VAIBHAV PATIL	30	М	- 1	NA	NA			03/09/2021	Fit	NA .	Fit	NA	
173	MR. BAPU H MANGALEKAR	54	M	- 1	NA	NA ·			03/09/2021	Fit	NA	Fit	NA	
1006	MR. SANJAY M KUDALKAR	50	М		NA	NA			03/09/2021	Fit	ŇA	Fit	XA	1
1599	MR. TANAJI S WALKE	50	M	-	NA	NA:			03/09/2021	Fit	NA	Fit	NA	1/
1447	MR. PRABHAKAR S KUMBHAR	48	M		ΝA	NA	V.		03/09/2021	Fit	NA	Fit	NA .	//
0411	MR. YASHWANT R BOGADE	57	M		NA	NA			03/09/2021	Fit	NA	Fit /	NA (	
0627	MR. SANJAY B KOLI	47	M		· NA	NA NA			03/09/2021	Fit ·	· NA	Fit	NA	1
Page 7	of GG		-				• •				कारवा	न आधानयम १	<del>४६ च्या कलम</del> जिल्हाकरि	

प्राधिकृत प्रमाणकशल्यचिकित्सक  **5. ACS 15-AM/2016** 

From: 03/09/2021 To 02/09/2022

mpany Name: JAWAHAR SHETKARI SAHAKARI KARKHANA LTD.

	Emp. No.	Name	Age	Sex	Dept of employement of present work	Date of leaving or transfer to other wor	Reason for leaving Transfer of discharg	Nature of job or occupation	Raw material or bye product handled	Exam. Date	Result of Medical Examination	If suspended from work, state period of suspension with detailed reasons	Certified fit to resume duty on with signature of Certifying Surgeon		Signature with gate certifying surgeon.
1	0803	MR. ASLAM B NADAF	56	M		NA	NA	15	1 8	03/09/2021	Fit	NA	Fit	NA	-
$\top$	1780	MR. RAJENDRA R SHINDE	43	M		NA	NA		-	03/09/2021	Fit	NA	Fit	NA	4
	1594	MR. BIRU LATE	50	M		NA -	NA	790		03/09/2021	Fit	NA	Fit	NA.	
	1696	MR. GAJANAN DAKE	42	M	•	NA .	NA	1-5		03/09/2021	Fit	. NA	Fit	NA ·	
1	2222	MR. KIYAVLYA R SHASTRI	25	M		NA ·	· NA	¥ + 1	(# F)	03/09/2021	Fit	NA	- Fit	NA	
	1708	MR, MAHADEV M MAGDUM	42	M		NA.	· NA			03/09/2021	Fit	NA	Fit	NA	1
+	1683	MR. AMOL B HERWADE	43	M		NA .	. NA			03/09/2021	Fit	NA	Fit	NA	
+	1770.	MR. UTTAM R VADD	40	M	• 1	NA-	NA			03/09/2021	Fit	NA	Fit	NA	+ 1
1	2207	MR. NIRANJAN P POWAR	27	M		· NA	NA ·	-		03/09/2021	Fit	NA	Fit	NA	
+	0987	MR. VUAY B HANDE	-50	М		NA.	NA .	4: 1		03/09/2021	Fit	NA	Fit	NA	
+	1007	MR. ANNASO D PARIT	59	M	-	NA ·	NA	¥	-	03/09/2021	Fit	NA	Fit	NA	
+	1984	MR. SHRIRANG R CHOUGULE	33	M	•	NA	NA			03/09/2021	Fit	NA	Fit	NA	
+-	7303	MR. SANTOSH S BHANSE	23	M		NA	NA		1 100	03/09/2021	Fit	NA	Fit	. NA	
+	1754	MR. BHRAT S GHUNKE	41	M		NA	NA	194		03/09/2021	Fit	.NA	Fit	1 NA	17
	0927	MR. MAHADEV B KORAVI	49	M		NA	NA	1		03/09/2021	Fit	NA	Fit	//NA (	
-	6042	MR. SURAJ D PATIL	29	M		NA	NA		1/4 +	03/09/2021	Fit	NA	Fit	/ NA	1
+	871	MR. SHANKR M SUTAR	48	M ·	-	NA	· NA	1		03/09/2021	Fit	NA ·	Fig	NA	
	1111	MR: SHAHAJI B NIMBALKAR	52	2 M		NA	NA.			03/09/2021	Fit	NA	[Fit	CNA	
1	1437	MR. SADIK I MUJAWAR	51	ı M		NA	NA	:	1	03/09/2021	Fit	NA	L, Eit A	15 NAL	/
+			1			14	9.30					ylq.	वाने आधीनयमें कोल्हा	पर्थिट च्या कल पर्रिजल्हाक	म १०। रुस्ति

Page 8 of 66

प्राधिकृतं प्रमाणकशल्यचिकित्सक क्र. ACS 15-AM/2016

# **Annexure**— III Monitoring Reports

Website : www.equinoxenvi.com

■ E-mail: enquiry@equinoxenvi.com, customercare@equinoxenvi.com



DATE: DECEMBER 02, 2020

# **AMBIENT AIR QUALITY MONITORING RESULTS**

Report No.:

EEIPL/REP/2020.21/397

Client:

M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd.,

Site:

A/p.: Hupari, Dist.: Kolhapur.

Plant Condition: Date of Sampling: In Operation. 24.11.2020

# **RESULTS**

SR. NO.	TEST DESCRIPTION	READINGS	NAAQS
01	Test Location	Near Main Gate	
02	Time of Sampling	10:00 A.M.	
03	Ambient Temperature	28.0 °C	
04	Dry Bulb Temperature	28.0 °C	7
05	Wet Bulb Temperature	19.0 °C	
06	Relative Humidity	42.1 %	7
07	Sampling Duration	60 Min.	
08	Particulate Matter (PM <sub>10</sub> )	64.23 µg/cum	100 μg/cum
09	Sulphur Dioxide (SO <sub>2</sub> )	20.45 µg/cum	80 μg/cum
10	Oxides of Nitrogen (NO <sub>x</sub> )	26.71 µg/cum	80 μg/cum

## Note:

- The analysis has been conducted in a MoEFCC; New Delhi approved and NABL accredited laboratory-M/s. Green Envirosafe Engineers & Consultant Pvt. Ltd, Pune- that has also received OHSAS 18001-2007
- NAAQS National Ambient Air Quality Standards, Central Pollution Control Board Notification, No. B - 29016 / 20 / 90 / PCI - I, New Delhi, the 18th November 2009.



■ Website : www.equinoxenvi.com

■ E-mail: enquiry@equinoxenvi.com, customercare@equinoxenvi.com

# DATE: DECEMBER 02, 2020 **AMBIENT AIR QUALITY MONITORING RESULTS**

Report No.:

EEIPL/REP/2020.21/398

Client:

M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd.,

Site:

A/p.: Hupari, Dist.: Kolhapur.

Plant Condition: Date of Sampling: In Operation. 24.11.2020

# **RESULTS**

SR.NO.	TEST DESCRIPTION	READINGS	NAAQS
01	Test Location	Near ETP	
02	Time of Sampling	10:10 A.M.	
03	Ambient Temperature	28.0 °C	
04	Dry Bulb Temperature	28.0 °C	
05	Wet Bulb Temperature	19 0 °C	
06	Relative Humidity	42.1 %	
07	Sampling Duration	60 Min.	
08	Particulate Matter (PM <sub>10</sub> )	59.23 µg/cum	100 μg/cum
09	Sulphur Dioxide (SO <sub>2</sub> )	20.95 µg/cum	80 µg/cum
10	Oxides of Nitrogen (NO <sub>x</sub> )	24.76 µg/cum	80 μg/cum

# Note:

The analysis has been conducted in a MoEFCC; New Delhi approved and NABL accredited laboratory-M/s. Green Envirosafe Engineers & Consultant Pvt. Ltd, Pune- that has also received OHSAS 18001-2007 accreditations.

NAAQS - National Ambient Air Quality Standards, Central Pollution Control Board Notification No.B - 29016 / 20 / 90 / PCI - I, New Delhi, the 18th November 2009.



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# DATE: DECEMBER 02, 2020 **AMBIENT AIR QUALITY MONITORING RESULTS**

Report No.:

EEIPL/REP/2020.21/399

Client:

M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd..

Site:

A/p.: Hupari, Dist.: Kolhapur.

Plant Condition: Date of Sampling:

In Operation. 24.11.2020

# **RESULTS**

SR.NO.	TEST DESCRIPTION	READINGS	NAAQS
01	Test Location	Near Bagass Yard	
02	Time of Sampling	10:20 A.M.	
03	Ambient Temperature	28.0 °C	
04	Dry Bulb Temperature	28.0 °C	
05	Wet Bulb Temperature	19.0 °C	
06	Relative Humidity	42.1 %	
07	Sampling Duration	60 Min.	
08	Particulate Matter (PM <sub>10</sub> )	67.86 µg/cum	100 μg/cum
09	Sulphur Dioxide (SO <sub>2</sub> )	20.43 µg/cum	80 µg/cum
10	Oxides of Nitrogen (NO <sub>x</sub> )	25.50 µg/cum	80 µg/cum

### Note:

- The analysis has been conducted in a MoEFCC; New Delhi approved and NABL accredited laboratory-M/s. Green Envirosate Engineers & Consultant Pvt. Ltd, Pune- that has also received OHSAS 18001-2007 accreditations.
- NAAQS National Ambient Air Quality Standards, Central Pollution Control Board Notification, No.B - 29016 / 20 / 90 / PCI - I, New Delhi, the 18th November 2009.



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**DATE: DECEMBER 02, 2020** 

# **SOURCE EMISSION MONITORING RESULTS**

Report No.:

EEIPL/REP/2020.21/400

Client:

M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd.,

Site:

A/p.: Hupari, Dist.: Kolhapur.

Plant Condition: Date of Sampling: In Operation. 24.11.2020

Time:

10:45 A.M.

# **RESULTS**

SR. NO.	TEST DESCRIPTION	READING		
01	Location	Boiler Stack 1		
02	Material of Stack	RCC		
03	Stack Height from Ground Level	75 M		
04	Type of Stack	Round		
05	Flue Gas Temperature	168°C (441 K)		
06	Differential Pressure	2.30 mm Wg		
07	Velocity	6.05 m/sec		
08	Stack Diameter	4.73 m		
09	Stack Area	17.5627 m <sup>2</sup>		
10	Gas Volume	269807.59 Nm <sup>3</sup> /Hr		

# **FLUE GAS QUALITY**

SR.NO.	PARAMETER	VALUE
01	Suspended Particulate Matter (SPM)	62.83 mg/Nm <sup>3</sup>
02	Sulphur Dioxide (SO <sub>2</sub> )	45.74 mg/Nm <sup>3</sup>
		284.09 Kg /Day

# Note:

- The analysis has been conducted in a MoEFCC; New Delhi approved and NABL accredited laboratory-M/s. Green Envirosafe Engineers & Consultant Pvt. Ltd, Pune- that has also received OHSAS 18001-2007
- Maharashtra Pollution Control Board (MPCB) Limits SPM: 150 mg / Ncum
- Maharashtra Pollution Control Board (MPCB) Limits SO2: As per Consent.



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■ E-mail: enquiry@equinoxenvi.com, customercare@equinoxenvi.com

DATE: DECEMBER 02, 2020

# **SOURCE EMISSION MONITORING RESULTS**

Report No.:

EEIPL/REP/2020.21/401

Client:

M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd.,

Site:

A/p.: Hupari, Dist.: Kolhapur.

Plant Condition: Date of Sampling: In Operation. 24.11.2020

Time:

12:00 P.M.

# **RESULTS**

SR. NO.	TEST DESCRIPTION	READING
01	Location	Boiler Stack 2
02	Material of Stack	RCC
03	Stack Height from Ground Level	72 M
04	Type of Stack	Round
05	Flue Gas Temperature	175 °C (448 K)
06	Differential Pressure	3.00 mm Wg
07	Velocity	6.96 m/sec
08	Stack Diameter	3.00 m
09	Stack Area	7.0650 m <sup>2</sup>
10	Gas Volume	117962.86 Nm³/Hr

# **FLUE GAS QUALITY**

SR.NO.	PARAMETER	VALUE
01	Suspended Particulate Matter (SPM)	58.42 mg/Nm <sup>3</sup>
02	Sulphur Dioxide (SO <sub>2</sub> )	35.65 mg/Nm <sup>3</sup>
		100.93Kg /Day

# Note:

- The analysis has been conducted in a MoEFCC; New Delhi approved and NABL accredited laboratory-M/s. Green Envirosafe Engineers & Consultant Pvt. Ltd, Pune- that has also received OHSAS 18001-2007 accreditations.
- Maharashtra Pollution Control Board (MPCB) Limits SPM: 150 mg / Ncum
- Maharashtra Pollution Control Board (MPCB) Limits SO2: As per Consent.



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# DATE: DECEMBER 02, 2020 **AMBIENT NOISE LEVEL MONITORING RESULTS**

Report No.:

EEIPL/REP/2020.21/402

Client:

M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd.,

Site:

A/p.: Hupari, Dist.: Kolhapur.

Date of Sampling: Time:

24,11,2020. 01:15 P.M.

# **RESULTS**

SR. NO.	LOCATION	READINGS dB(A)	LIMIT dB(A)
01	Near Main Gate	64.2	75
02	Near ETP	66.1	75
03	Near Bagas Section	68.2	75
04	Near Sugar Godown	62.9	75
05	Near Cane Yard	71.6	75

# Note:

- The analysis has been conducted in a MoEFCC; New Delhi approved and NABL accredited laboratory-M/s. Green Envirosafe Engineers & Consultant Pvt. Ltd, Pune- that has also received OHSAS 18001-2007 accreditations.
- Maharashtra Pollution Control Board (MPCB) has prescribed 75 dB (A) as an upper limit of Noise Level during the Day Time & 70 dB (A) during the Night Time



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DATE: DECEMBER 02, 2020

# **WORKZONE NOISE LEVEL MONITORING RESULTS**

Report No.:

EEIPL/REP/2020.21/403

Client:

M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd.,

Site:

A/p.: Hupari, Dist.: Kolhapur.

Date of Sampling:

24.11.2020.

Time:

02:00 P.M.

# **RESULTS**

SR. NO.	LOCATION	READINGS dB(A)	LIMIT dB(A) (Refer Note Below)
01	Centrifugal Section	82.2	90
02	Turbine Section	72.3	90
03	Boiler Section	86.0	90
04	Mill Section	84.1	90
05	Pan Section	97.5	90

# Note:

- The analysis has been conducted in a MoEFCC; New Delhi approved and NABL accredited laboratory-M/s. Green Envirosafe Engineers & Consultant Pvt. Ltd, Pune- that has also received OHSAS 18001-2007 accreditations.
- The Factories' Act, 1948 has prescribed Noise Level threshold limit for 8 hours' exposure as 90 dB (A).

- ENVIRONMENTAL & CIVIL ENGINEERS. CONSULTANTS AND ANALYSTS
- F-11, NAMDEV NEST, 1160-B, 'E' WARD, SYKES EXTENSION. OPP. KAMALA COLLEGE, KOLHAPUR - 416 001 (M.S.) PH.: (0231) 2531231, TELEFAX: (0231) 2526337 MOBILE: (0) 9657865122, (0) 9881121522
- Website : www. equinoxenvi.com
- E-mail: projects@equinoxenvi.com, enquiry@equinoxenvi.com, customercare@equinoxenvi.com











DATE: DECEMBER 02, 2020

# **EFFLUENT SAMPLE ANALYSIS REPORT**

EEIPL/REP/2020.21/404 Report No.:

M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd., Client:

Site: A/p.: Hupari, Dist.: Kolhapur. Location: Effluent Treatment Plant.

ETP in Operation. Plant Condition:

Date of Sampling: 24.11.2020. Analysis Date: 25.11.2020.

Sample Name: Industrial Effluent - Untreated & Treated

# **RESULTS**

SR. NO.	TEST DESCRIPTION	UNTREATED	TREATED	MPCB LIMIT	UNIT
01	рН	2.85	7.67	6.5-8.5	
02	Suspended Solids (SS)	163.74	21.47	100	mg/lit
03	Total Dissolved Solids (TDS)	2258.32	782.30	2100	mg/lit
04	Chemical Oxygen Demand (COD)	2923.95	70.12	250	mg/lit
05	Biochemical Oxygen Demand (BOD)	1290.44	25.01	100	mg/lit
06	Chlorides as Cl <sup>-</sup>	675.42	190.36	600	mg/lit
07	Sulphates as SO <sub>4</sub>	563.51	145.29	1000	mg/lit
08	Oil & Grease	2.11	BDL	10	mg/lit

### Note:

- The analysis has been conducted in a MoEFCC; New Delhi approved and NABL accredited laboratory-M/s. Green Envirosafe Engineers & Consultant Pvt. Ltd, Pune- that has also received OHSAS 18001-2007 accreditations.
- BDL: Below Detectable Limit.

- F-11, NAMDEV NEST, 1160-B, 'E' WARD, SYKES EXTENSION.
   OPP KAMALA COLLEGE, KOLHAPUR 416 001 (M.S.), PH.: (0231) 2531231, TELEFAX: (0231) 2526337, MOBILE: (0) 9657865122
- F-502, FIFTH FLOOR, NANDANVAN TOWER, MUMBAI-PUNE HIGHWAY, PANVEL - 410 206 (M.S.). MOBILE: +91 9822882822
- OFFICE NO. 67, 4th FLOOR, KUNAL PLAZA CHINCHWAD CHOWK. PUNE - 411 019 (M.S.), MOBILE ; +91 9690160622
- Website: www.equinoxenvi.com
- E-mail: enculry@equinoxenvi.com, customercare@equinoxenvi.com











**DATE: DECEMBER 21, 2020** 

# **AMBIENT AIR QUALITY MONITORING RESULTS**

Report No.: EEIPL/REP/2020.21/592

Client: M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd.,

Site: A/p.: Hupari, Dist.: Kolhapur.

Plant Condition : In Operation.
Date of Sampling: 12.12.2020

### **RESULTS**

SR. NO.	TEST DESCRIPTION	READINGS	NAAQS
01	Test Location	Near Main Gate	
02	Time of Sampling	09:40 A.M.	
03	Ambient Temperature	27.0 °C	
04	Dry Bulb Temperature	27.0 °C	
05	Wet Bulb Temperature	17.0 °C	
06	Relative Humidity	35.5 %	
07	Sampling Duration	60 Min.	
08	Particulate Matter (PM <sub>10</sub> )	63.86 µg/cum	100 μg/cum
09	Sulphur Dioxide (SO <sub>2</sub> )	19.45 μg/cum	80 μg/cum
10	Oxides of Nitrogen (NO <sub>x</sub> )	24.90 μg/cum	80 μg/cum

#### Note:

- The analysis has been conducted in a <u>MoEFCC; New Delhi</u> approved and <u>NABL</u> accredited laboratory-M/s. Green Envirosafe Engineers & Consultant Pvt. Ltd, Pune- that has also received <u>OHSAS 18001–2007</u> accreditations.
- NAAQS National Ambient Air Quality Standards, Central Pollution Control Board Notification, No. B 29016 / 20 / 90 / PCI –
  I, New Delhi, the 18th November 2009.

- F-11, NAMDEV NEST, 1160-B, 'E' WARD, SYKES EXTENSION.
   OPP KAMALA COLLEGE, KOLHAPUR 416 001 (M.S.), PH.: (0231) 2531231, TELEFAX: (0231) 2526337, MOBILE: (0) 9657865122
- F.502, FIFTH FLOOR, NANDANVAN TOWER, MUMBAI-PUNE HIGHWAY, PANVEL - 410 206 (M.S.), MOBILE: +91 9822882822
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- Website: www.equinoxenvi.com
- E-mail: enculry@equinoxenvi.com, customercare@equinoxenvi.com











DATE: DECEMBER 21, 2020

# **AMBIENT AIR QUALITY MONITORING RESULTS**

Report No.: EEIPL/REP/2020.21/593

Client: M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd.,

Site: A/p.: Hupari, Dist.: Kolhapur.

Plant Condition : In Operation.
Date of Sampling: 12.12.2020

### **RESULTS**

SR.NO.	TEST DESCRIPTION	READINGS	NAAQS
01	Test Location	Near ETP	
02	Time of Sampling	09:50 A.M.	
03	Ambient Temperature	27.0 °C	
04	Dry Bulb Temperature	27.0 °C	
05	Wet Bulb Temperature	17.0 °C	
06	Relative Humidity	35.5 %	
07	Sampling Duration	60 Min.	
80	Particulate Matter (PM <sub>10</sub> )	61.86 µg/cum	100 μg/cum
09	Sulphur Dioxide (SO <sub>2</sub> )	22.75 µg/cum	80 μg/cum
10	Oxides of Nitrogen (NO <sub>x</sub> )	26.02 µg/cum	80 μg/cum

### Note:

- The analysis has been conducted in a <u>MoEFCC; New Delhi</u> approved and <u>NABL</u> accredited laboratory-M/s. Green Envirosafe Engineers & Consultant Pvt. Ltd, Pune- that has also received <u>OHSAS 18001–2007</u> accreditations.
- NAAQS National Ambient Air Quality Standards, Central Pollution Control Board Notification, No.B 29016 / 20 / 90 / PCI I, New Delhi, the 18th November 2009.

- F-11, NAMDEV NEST, 1160-B, 'E' WARD, SYKES EXTENSION.
   OPP KAMALA COLLEGE, KOLHAPUR 416 001 (M.S.), PH.: (0231) 2531231, TELEFAX: (0231) 2526337, MOBILE: (0) 9657865122
- F.502, FIFTH FLOOR, NANDANVAN TOWER, MUMBAI-PUNE HIGHWAY, PANVEL - 410 206 (M.S.), MOBILE: +91 9822882822
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- Website | www.equinoxenvi.com
- E-mail: enculry@equinoxenvi.com, customercare@equinoxenvi.com











**DATE: DECEMBER 21, 2020** 

# **AMBIENT AIR QUALITY MONITORING RESULTS**

Report No.: EEIPL/REP/2020.21/594

Client: M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd.,

Site: A/p.: Hupari, Dist.: Kolhapur.

Plant Condition : In Operation.
Date of Sampling: 12.12.2020

### **RESULTS**

SR.NO.	TEST DESCRIPTION	READINGS	NAAQS
01	Test Location	Near Bagass Yard	
02	Time of Sampling	10:00 A.M.	
03	Ambient Temperature	27.0 °C	
04	Dry Bulb Temperature	27.0 °C	
05	Wet Bulb Temperature	17.0 °C	
06	Relative Humidity	35.5 %	
07	Sampling Duration	60 Min.	
08	Particulate Matter (PM <sub>10</sub> )	69.23 µg/cum	100 μg/cum
09	Sulphur Dioxide (SO <sub>2</sub> )	24.85 μg/cum	80 μg/cum
10	Oxides of Nitrogen (NO <sub>x</sub> )	26.90 µg/cum	80 µg/cum

### Note:

- The analysis has been conducted in a <u>MoEFCC; New Delhi</u> approved and <u>NABL</u> accredited laboratory-M/s. Green Envirosafe Engineers & Consultant Pvt. Ltd, Pune- that has also received <u>OHSAS 18001–2007</u> accreditations.
- NAAQS National Ambient Air Quality Standards, Central Pollution Control Board Notification, No.B 29016 / 20 / 90 / PCI I, New Delhi, the 18th November 2009.

- F-11, NAMDEV NEST, 1160-B, 'E' WARD, SYKES EXTENSION.
   OPP KAMALA COLLEGE, KOLHAPUR 416 001 (M.S.), PH.: (0231) 2531231, TELEFAX: (0231) 2526337, MOBILE: (0) 9657865122
- F.502, FIFTH FLOOR, NANDANVAN TOWER, MUMBAI-PUNE HIGHWAY, PANVEL - 410 206 (M.S.), MOBILE: +91 9822882822
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- E-mail: enculry@equinoxenvi.com, customercare@equinoxenvi.com











**DATE: DECEMBER 21, 2020** 

# **SOURCE EMISSION MONITORING RESULTS**

Report No.: EEIPL/REP/2020.21/595

Client: M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd.,

Site: A/p.: Hupari, Dist.: Kolhapur.

Plant Condition: In Operation.
Date of Sampling: 12.12.2020
Time: 10:30 A.M.

### **RESULTS**

SR. NO.	TEST DESCRIPTION	READING
01	Location	Boiler Stack 1
02	Material of Stack	RCC
03	Stack Height from Ground Level	75 M
04	Type of Stack	Round
05	Flue Gas Temperature	171°C (444 K)
06	Differential Pressure	1.50 mm Wg
07	Velocity	4.90 m/sec
08	Stack Diameter	4.73 m
09	Stack Area	17.5627 m <sup>2</sup>
10	Gas Volume	208284.81 Nm <sup>3</sup> /Hr

### **FLUE GAS QUALITY**

SR.NO.	PARAMETER	VALUE
01	Suspended Particulate Matter (SPM)	59.23 mg/Nm <sup>3</sup>
02	Sulphur Dioxide (SO <sub>2</sub> )	39.15 mg/Nm <sup>3</sup>
		195.70 Kg /Day

### Note:

- The analysis has been conducted in a <u>MoEFCC; New Delhi</u> approved and <u>NABL</u> accredited laboratory-M/s. Green Envirosafe Engineers & Consultant Pvt. Ltd, Pune- that has also received <u>OHSAS 18001–2007</u> accreditations.
- Maharashtra Pollution Control Board (MPCB) Limits SPM: 150 mg / Ncum
- Maharashtra Pollution Control Board (MPCB) Limits SO<sub>2</sub>: As per Consent.

54.

- F-11, NAMDEV NEST, 1160-B, 'E' WARD, SYKES EXTENSION.
   OPP KAMALA COLLEGE, KOLHAPUR 416 001 (M.S.), PH.: (0231) 2531231, TELEFAX: (0231) 2526337, MOBILE: (0) 9657865122
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DATE: DECEMBER 21, 2020

# **SOURCE EMISSION MONITORING RESULTS**

Report No.: EEIPL/REP/2020.21/596

Client: M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd.,

Site: A/p.: Hupari, Dist.: Kolhapur.

Plant Condition: In Operation.
Date of Sampling: 12.12.2020
Time: 12:10 P.M.

### **RESULTS**

SR. NO.	TEST DESCRIPTION	READING
01	Location	Boiler Stack 2
02	Material of Stack	RCC
03	Stack Height from Ground Level	72 M
04	Type of Stack	Round
05	Flue Gas Temperature	178 °C (451 K)
06	Differential Pressure	1.90 mm Wg
07	Velocity	4.60 m/sec
80	Stack Diameter	3.00 m
09	Stack Area	7.0650 m <sup>2</sup>
10	Gas Volume	93564.74 Nm <sup>3</sup> /Hr

### **FLUE GAS QUALITY**

SR.NO.	PARAMETER	VALUE
01	Suspended Particulate Matter (SPM)	55.63 mg/Nm <sup>3</sup>
02	Sulphur Dioxide (SO <sub>2</sub> )	32.01 mg/Nm <sup>3</sup>
		71.88 Kg /Day

### Note:

- The analysis has been conducted in a <u>MoEFCC; New Delhi</u> approved and <u>NABL</u> accredited laboratory-M/s. Green Envirosafe Engineers & Consultant Pvt. Ltd, Pune- that has also received <u>OHSAS 18001–2007</u> accreditations.
- Maharashtra Pollution Control Board (MPCB) Limits SPM: 150 mg / Ncum
- Maharashtra Pollution Control Board (MPCB) Limits SO<sub>2</sub>: As per Consent.

- F-11, NAMDEV NEST, 1160-B, 'E' WARD, SYKES EXTENSION.
   OPP KAMALA COLLEGE, KOLHAPUR 416 001 (M.S.), PH.: (0231) 2531231, TELEFAX: (0231) 2526337, MOBILE: (0) 9657865122
- F.502, FIFTH FLOOR, NANDANVAN TOWER, MUMBAI-PUNE HIGHWAY, PANVEL - 410 206 (M.S.), MOBILE: +91 9822882822
- OFFICE NO. 67, 4th FLOOR, KUNAL PLAZA, CHINCHWAD CHOWK, PUNE - 411 019 (M.S.), MOBILE: +91 9890160622
- Website: www.equinoxenvi.com
- E-mail: enculry@equinoxenvi.com, customercare@equinoxenvi.com











DATE: DECEMBER 21, 2020

# **AMBIENT NOISE LEVEL MONITORING RESULTS**

Report No.: EEIPL/REP/2020.21/597

Client: M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd.,

Site: A/p.: Hupari, Dist.: Kolhapur.

Date of Sampling: 12.12.2020. Time: 01:30 P.M.

### **RESULTS**

SR. NO.	LOCATION	READINGS dB(A)	LIMIT dB(A)
01	Near Main Gate	63.5	75
02	Near ETP	65.4	75
03	Near Bagas Section	65.9	75
04	Near Sugar Godown	63.1	75
05	Near Cane Yard	72.0	75

### Note:

- The analysis has been conducted in a <u>MoEFCC; New Delhi</u> approved and <u>NABL</u> accredited laboratory-M/s. Green Envirosafe Engineers & Consultant Pvt. Ltd, Pune- that has also received <u>OHSAS 18001–2007</u> accreditations.
- Maharashtra Pollution Control Board (MPCB) has prescribed 75 dB (A) as an upper limit of Noise Level during the Day Time & 70 dB (A) during the Night Time

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- F-11, NAMDEV NEST, 1160-B, 'E' WARD, SYKES EXTENSION.
   OPP KAMALA COLLEGE, KOLHAPUR 416 001 (M.S.), PH.: (0231) 2531231, TELEFAX: (0231) 2526337, MOBILE: (0) 9657865122
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DATE: DECEMBER 21, 2020

# **WORKZONE NOISE LEVEL MONITORING RESULTS**

Report No.: EEIPL/REP/2020.21/598

Client: M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd.,

Site: A/p.: Hupari, Dist.: Kolhapur.

Date of Sampling: 12.12.2020. Time: 02:30 P.M.

### **RESULTS**

SR. NO.	LOCATION	READINGS dB(A)	LIMIT dB(A) (Refer Note Below)
01	Centrifugal Section	83.4	90
02	Turbine Section	75.1	90
03	Boiler Section	84.8	90
04	Mill Section	86.3	90
05	Pan Section	87.0	90

### Note:

- The analysis has been conducted in a <u>MoEFCC; New Delhi</u> approved and <u>NABL</u> accredited laboratory-M/s. Green Envirosafe Engineers & Consultant Pvt. Ltd, Pune- that has also received <u>OHSAS 18001–2007</u> accreditations.
- The Factories' Act, 1948 has prescribed Noise Level threshold limit for 8 hours' exposure as 90 dB (A).

- F-11, NAMDEV NEST, 1160-B, 'E' WARD, SYKES EXTENSION.
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**DATE: DECEMBER 21, 2020** 

# **EFFLUENT SAMPLE ANALYSIS REPORT**

Report No.: EEIPL/REP/2020.21/599

Client: M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd.,

Site: A/p.: Hupari, Dist.: Kolhapur. Location: Effluent Treatment Plant.

Plant Condition: ETP in Operation.

Date of Sampling: 12.12.2020. Analysis Date: 14.12.2020.

Sample Name: Industrial Effluent – Untreated & Treated

### **RESULTS**

SR. NO.	TEST DESCRIPTION	UNTREATED	TREATED	MPCB LIMIT	UNIT
01	рН	3.01	7.75	6.5-8.5	
02	Suspended Solids (SS)	156.85	19.02	100	mg/lit
03	Total Dissolved Solids (TDS)	2856.32	695.83	2100	mg/lit
04	Chemical Oxygen Demand (COD)	3169.80	65.27	250	mg/lit
05	Biochemical Oxygen Demand (BOD)	1210.49	23.85	100	mg/lit
06	Chlorides as Cl <sup>-</sup>	765.92	180.30	600	mg/lit
07	Sulphates as SO <sub>4</sub> -	650.37	136.92	1000	mg/lit
80	Oil & Grease	2.36	BDL	10	mg/lit

### Note:

- The analysis has been conducted in a <u>MoEFCC; New Delhi</u> approved and <u>NABL</u> accredited laboratory-M/s. Green Envirosafe Engineers & Consultant Pvt. Ltd, Pune- that has also received <u>OHSAS 18001–2007</u> accreditations.
- BDL: Below Detectable Limit.

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- F-11, NAMDEV NEST, 1160-B, 'E' WARD, SYKES EXTENSION.
   OPP KAMALA COLLEGE, KOLHAPUR 416 001 (M.S.), PH.: (0231) 2531231, TELEFAX: (0231) 2526337, MOBILE: (0) 9657865122
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**DATE: JANUARY 21, 2021** 

# **AMBIENT AIR QUALITY MONITORING RESULTS**

Report No.: EEIPL/REP/2020.21/691

Client: M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd.,

Site: A/p.: Hupari, Dist.: Kolhapur.

Plant Condition : In Operation.
Date of Sampling: 14.01.2021

### **RESULTS**

SR. NO.	TEST DESCRIPTION	READINGS	NAAQS
01	Test Location	Near Main Gate	
02	Time of Sampling	10:30 A.M.	
03	Ambient Temperature	28.0 °C	
04	Dry Bulb Temperature	28.0 °C	
05	Wet Bulb Temperature	18.0 °C	
06	Relative Humidity	36.8 %	
07	Sampling Duration	60 Min.	
80	Particulate Matter (PM <sub>10</sub> )	59.23 μg/cum	100 μg/cum
09	Sulphur Dioxide (SO <sub>2</sub> )	18.02 μg/cum	80 μg/cum
10	Oxides of Nitrogen (NO <sub>x</sub> )	21.44 µg/cum	80 μg/cum

### Note:

- The analysis has been conducted in a <u>MoEFCC; New Delhi</u> approved and <u>NABL</u> accredited laboratory-M/s. Green Envirosafe Engineers & Consultant Pvt. Ltd, Pune- that has also received <u>OHSAS 18001–2007</u> accreditations.
- NAAQS National Ambient Air Quality Standards, Central Pollution Control Board Notification, No. B 29016 / 20 / 90 / PCI I, New Delhi, the 18th November 2009.

**Dr. Sandip Mangalekar** (Dy. Head Monitoring)

**DATE: JANUARY 21, 2021** 

- F-11, NAMDEV NEST, 1160-B, 'E' WARD, SYKES EXTENSION.
   OPP KAMALA COLLEGE, KOLHAPUR 416 001 (M.S.), PH.: (0231) 2531231, TELEFAX: (0231) 2526337, MOBILE: (0) 9657865122
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# **AMBIENT AIR QUALITY MONITORING RESULTS**

Report No.: EEIPL/REP/2020.21/692

Client: M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd.,

Site: A/p.: Hupari, Dist.: Kolhapur.

Plant Condition: In Operation. Date of Sampling: 14.01.2021

### **RESULTS**

SR.NO.	TEST DESCRIPTION	READINGS	NAAQS
01	Test Location	Near ETP	
02	Time of Sampling	10:40 A.M.	
03	Ambient Temperature	28.0 °C	
04	Dry Bulb Temperature	28.0 °C	
05	Wet Bulb Temperature	18.0 °C	
06	Relative Humidity	36.8 %	
07	Sampling Duration	60 Min.	
80	Particulate Matter (PM <sub>10</sub> )	59.86 μg/cum	100 μg/cum
09	Sulphur Dioxide (SO <sub>2</sub> )	20.14 μg/cum	80 μg/cum
10	Oxides of Nitrogen (NO <sub>x</sub> )	24.67 μg/cum	80 μg/cum

### Note:

- The analysis has been conducted in a <u>MoEFCC; New Delhi</u> approved and <u>NABL</u> accredited laboratory-M/s. Green Envirosafe Engineers & Consultant Pvt. Ltd, Pune- that has also received <u>OHSAS 18001–2007</u> accreditations.
- NAAQS National Ambient Air Quality Standards, Central Pollution Control Board Notification, No.B 29016 / 20 / 90 / PCI I, New Delhi, the 18th November 2009.

- F-11, NAMDEV NEST, 1160-B, 'E' WARD, SYKES EXTENSION.
   OPP KAMALA COLLEGE, KOLHAPUR 416 001 (M.S.), PH.: (0231) 2531231, TELEFAX: (0231) 2526337, MOBILE: (0) 9657865122
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**DATE: JANUARY 21, 2021** 

# **AMBIENT AIR QUALITY MONITORING RESULTS**

Report No.: EEIPL/REP/2020.21/693

Client: M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd.,

Site: A/p.: Hupari, Dist.: Kolhapur.

Plant Condition: In Operation. Date of Sampling: 14.01.2021

### **RESULTS**

SR.NO.	TEST DESCRIPTION	READINGS	NAAQS
01	Test Location	Near Bagass Yard	
02	Time of Sampling	10:55 A.M.	
03	Ambient Temperature	29.0 °C	
04	Dry Bulb Temperature	29.0 °C	
05	Wet Bulb Temperature	18.0 °C	
06	Relative Humidity	33.1 %	
07	Sampling Duration	60 Min.	
08	Particulate Matter (PM <sub>10</sub> )	64.86 µg/cum	100 μg/cum
09	Sulphur Dioxide (SO <sub>2</sub> )	21.47 µg/cum	80 μg/cum
10	Oxides of Nitrogen (NO <sub>x</sub> )	24.20 µg/cum	80 µg/cum

### Note:

- The analysis has been conducted in a <u>MoEFCC; New Delhi</u> approved and <u>NABL</u> accredited laboratory-M/s. Green Envirosafe Engineers & Consultant Pvt. Ltd, Pune- that has also received <u>OHSAS 18001–2007</u> accreditations.
- NAAQS National Ambient Air Quality Standards, Central Pollution Control Board Notification, No.B 29016 / 20 / 90 / PCI I, New Delhi, the 18th November 2009.

- F-11, NAMDEV NEST, 1160-B, 'E' WARD, SYKES EXTENSION.
   OPP KAMALA COLLEGE, KOLHAPUR 416 001 (M.S.), PH.: (0231) 2531231, TELEFAX: (0231) 2526337, MOBILE: (0) 9657865122
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**DATE: JANUARY 21, 2021** 

# **SOURCE EMISSION MONITORING RESULTS**

Report No.: EEIPL/REP/2020.21/694

Client: M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd.,

Site: A/p.: Hupari, Dist.: Kolhapur.

Plant Condition: In Operation.
Date of Sampling: 14.01.2021
Time: 11:15 A.M.

### **RESULTS**

SR. NO.	TEST DESCRIPTION	READING
01	Location	Boiler Stack 1
02	Material of Stack	RCC
03	Stack Height from Ground Level	75 M
04	Type of Stack	Round
05	Flue Gas Temperature	167°C (440 K)
06	Differential Pressure	1.30 mm Wg
07	Velocity	4.54 m/sec
80	Stack Diameter	4.73 m
09	Stack Area	17.5627 m <sup>2</sup>
10	Gas Volume	194781.98 Nm³/Hr

### **FLUE GAS QUALITY**

SR.NO.	PARAMETER	VALUE
01	Suspended Particulate Matter (SPM)	56.83 mg/Nm <sup>3</sup>
02	Sulphur Dioxide (SO <sub>2</sub> )	32.10 mg/Nm <sup>3</sup>
		150.06 Kg /Day

### Note:

- The analysis has been conducted in a <u>MoEFCC; New Delhi</u> approved and <u>NABL</u> accredited laboratory-M/s. Green Envirosafe Engineers & Consultant Pvt. Ltd, Pune- that has also received <u>OHSAS 18001–2007</u> accreditations.
- Maharashtra Pollution Control Board (MPCB) Limits SPM: 150 mg / Ncum
- Maharashtra Pollution Control Board (MPCB) Limits SO<sub>2</sub>: As per Consent.

- F-11, NAMDEV NEST, 1160-B, 'E' WARD, SYKES EXTENSION.
   OPP KAMALA COLLEGE, KOLHAPUR 416 001 (M.S.), PH.: (0231) 2531231, TELEFAX: (0231) 2526337, MOBILE: (0) 9657865122
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**DATE: JANUARY 21, 2021** 

# **SOURCE EMISSION MONITORING RESULTS**

Report No.: EEIPL/REP/2020.21/695

Client: M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd.,

Site: A/p.: Hupari, Dist.: Kolhapur.

Plant Condition: In Operation.
Date of Sampling: 14.01.2021
Time: 12:30 P.M.

### **RESULTS**

SR. NO.	TEST DESCRIPTION	READING
01	Location	Boiler Stack 2
02	Material of Stack	RCC
03	Stack Height from Ground Level	72 M
04	Type of Stack	Round
05	Flue Gas Temperature	172 °C (445 K)
06	Differential Pressure	1.50 mm Wg
07	Velocity	4.91 m/sec
08	Stack Diameter	3.00 m
09	Stack Area	7.0650 m <sup>2</sup>
10	Gas Volume	83693.03 Nm <sup>3</sup> /Hr

### **FLUE GAS QUALITY**

SR.NO.	PARAMETER	VALUE
01	Suspended Particulate Matter (SPM)	52.66 mg/Nm <sup>3</sup>
02	Sulphur Dioxide (SO <sub>2</sub> )	28.05 mg/Nm <sup>3</sup>
		56.34 Kg /Day

### Note:

- The analysis has been conducted in a <u>MoEFCC; New Delhi</u> approved and <u>NABL</u> accredited laboratory-M/s. Green Envirosafe Engineers & Consultant Pvt. Ltd, Pune- that has also received <u>OHSAS 18001–2007</u> accreditations.
- Maharashtra Pollution Control Board (MPCB) Limits SPM: 150 mg / Ncum
- Maharashtra Pollution Control Board (MPCB) Limits SO<sub>2</sub>: As per Consent.

- F-11, NAMDEV NEST, 1160-B, 'E' WARD, SYKES EXTENSION.
   OPP KAMALA COLLEGE, KOLHAPUR 416 001 (M.S.), PH.: (0231) 2531231, TELEFAX: (0231) 2526337, MOBILE: (0) 9657865122
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**DATE: JANUARY 21, 2021** 

# **AMBIENT NOISE LEVEL MONITORING RESULTS**

Report No.: EEIPL/REP/2020.21/696

Client: M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd.,

Site: A/p.: Hupari, Dist.: Kolhapur.

Date of Sampling: 14.01.2021. Time: 01:40 P.M.

### **RESULTS**

SR. NO.	LOCATION	READINGS dB(A)	LIMIT dB(A)
01	Near Main Gate	62.0	75
02	Near ETP	63.9	75
03	Near Bagas Section	64.1	75
04	Near Sugar Godown	61.8	75
05	Near Cane Yard	70.5	75

### Note:

- The analysis has been conducted in a <u>MoEFCC; New Delhi</u> approved and <u>NABL</u> accredited laboratory-M/s. Green Envirosafe Engineers & Consultant Pvt. Ltd, Pune- that has also received <u>OHSAS 18001–2007</u> accreditations.
- Maharashtra Pollution Control Board (MPCB) has prescribed 75 dB (A) as an upper limit of Noise Level during the Day Time & 70 dB (A) during the Night Time.

- F-11, NAMDEV NEST, 1160-B, 'E' WARD, SYKES EXTENSION.
   OPP KAMALA COLLEGE, KOLHAPUR 416 001 (M.S.), PH.: (0231) 2531231, TELEFAX: (0231) 2526337, MOBILE: (0) 9657865122
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**DATE: JANUARY 21, 2021** 

# **WORKZONE NOISE LEVEL MONITORING RESULTS**

Report No.: EEIPL/REP/2020.21/697

Client: M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd.,

Site: A/p.: Hupari, Dist.: Kolhapur.

Date of Sampling: 14.01.2021. Time: 02:20 P.M.

### **RESULTS**

SR. NO.	LOCATION	READINGS dB(A)	LIMIT dB(A) (Refer Note Below)
01	Centrifugal Section	82.5	90
02	Turbine Section	73.0	90
03	Boiler Section	81.6	90
04	Mill Section	84.5	90
05	Pan Section	85.9	90

### Note:

- The analysis has been conducted in a <u>MoEFCC; New Delhi</u> approved and <u>NABL</u> accredited laboratory-M/s. Green Envirosafe Engineers & Consultant Pvt. Ltd, Pune- that has also received <u>OHSAS 18001–2007</u> accreditations.
- The Factories' Act, 1948 has prescribed Noise Level threshold limit for 8 hours' exposure as 90 dB (A).

- F-11, NAMDEV NEST, 1160-B, 'E' WARD, SYKES EXTENSION.
   OPP KAMALA COLLEGE, KOLHAPUR 416 001 (M.S.), PH.: (0231) 2531231, TELEFAX: (0231) 2526337, MOBILE: (0) 9657865122
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**DATE: JANUARY 21, 2021** 

# **EFFLUENT SAMPLE ANALYSIS REPORT**

Report No.: EEIPL/REP/2020.21/698

Client: M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd.,

Site: A/p.: Hupari, Dist.: Kolhapur. Location: Effluent Treatment Plant.

Plant Condition: ETP in Operation.

Date of Sampling: 14.01.2021. Analysis Date: 15.01.2021.

Sample Name: Industrial Effluent – Untreated & Treated

### **RESULTS**

SR. NO.	TEST DESCRIPTION	UNTREATED	TREATED	MPCB LIMIT	UNIT
01	рН	3.25	7.61	6.5-8.5	
02	Suspended Solids (SS)	174.62	17.44	100	mg/lit
03	Total Dissolved Solids (TDS)	3065.93	650.23	2100	mg/lit
04	Chemical Oxygen Demand (COD)	3218.05	68.82	250	mg/lit
05	Biochemical Oxygen Demand (BOD)	1334.67	25.06	100	mg/lit
06	Chlorides as Cl <sup>-</sup>	746.30	169.83	600	mg/lit
07	Sulphates as SO <sub>4</sub> -	523.42	123.27	1000	mg/lit
80	Oil & Grease	2.00	BDL	10	mg/lit

### Note:

- The analysis has been conducted in a <u>MoEFCC; New Delhi</u> approved and <u>NABL</u> accredited laboratory-M/s. Green Envirosafe Engineers & Consultant Pvt. Ltd, Pune- that has also received <u>OHSAS 18001–2007</u> accreditations.
- BDL: Below Detectable Limit.

- F-11, NAMDEV NEST, 1160-B, 'E' WARD, SYKES EXTENSION,
   OPP. KAMALA COLLEGE, KOLHAPUR 416 001 (M.S.), PH.: (0231) 2531231,
   TELEFAX: (0231) 2526337, MOBILE: (0) 9657865122
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**DATE: FEBRUARY 16, 2021** 

# AMBIENT AIR QUALITY MONITORING RESULTS

Report No.: EEIPL/REP/2020.21/787

Client : M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd.,

Site : A/p.: Hupari, Dist.: Kolhapur.

Plant Condition : In Operation.
Date of Sampling: 10.02.2021

### **RESULTS**

SR. NO.	TEST DESCRIPTION	READINGS	NAAQS
01	Test Location	Near Main Gate	
02	Time of Sampling	02:30 P.M.	
03	Ambient Temperature	33.0 °C	
04	Dry Bulb Temperature	33.0 °C	
05	Wet Bulb Temperature	20.0 °C	
06	Relative Humidity	29.1 %	
07	Sampling Duration	60 Min.	
80	Particulate Matter (PM <sub>10</sub> )	66.86 µg/cum	100 μg/cum
09	Sulphur Dioxide (SO <sub>2</sub> )	21.42 µg/cum	80 µg/cum
10	Oxides of Nitrogen (NO <sub>x</sub> )	27.01 μg/cum	80 μg/cum

### Note:

- The analysis has been conducted in a <u>MoEFCC; New Delhi</u> approved and <u>NABL</u> accredited laboratory-M/s. Green Envirosafe Engineers & Consultant Pvt. Ltd, Pune- that has also received <u>OHSAS 18001–2007</u> accreditations.
- NAAQS National Ambient Air Quality Standards, Central Pollution Control Board Notification, No. B 29016 / 20 / 90 / PCI I, New Delhi, the 18th November 2009.

- F-11, NAMDEV NEST, 1160-B, 'E' WARD, SYKES EXTENSION,
   OPP. KAMALA COLLEGE, KOLHAPUR 416 001 (M.S.), PH.: (0231) 2531231,
   TELEFAX: (0231) 2526337, MOBILE: (0) 9657865122
- F-502, FIFTH FLOOR, NANDANVAN TOWER, MUMBAI-PUNE HIGHWAY, PANVEL - 410 206 (M.S.), MOBILE: +91 9822682822
- OFFICE NO. 67, 4th FLOOR, KUNAL PLAZA, CHINCHWAD CHOWK, PUNE - 411 019 (M.S.), MOBILE: +91 9890160622
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DATE: FEBRUARY 16, 2021

## AMBIENT AIR QUALITY MONITORING RESULTS

Report No.: EEIPL/REP/2020.21/788

Client : M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd.,

Site: A/p.: Hupari, Dist.: Kolhapur.

Plant Condition : In Operation.
Date of Sampling: 10.02.2021

### **RESULTS**

SR.NO.	TEST DESCRIPTION	READINGS	NAAQS
01	Test Location	Near ETP	
02	Time of Sampling	02:40 P.M.	
03	Ambient Temperature	33.0 °C	
04	Dry Bulb Temperature	33.0 °C	
05	Wet Bulb Temperature	20.0 °C	
06	Relative Humidity	29.1 %	
07	Sampling Duration	60 Min.	
80	Particulate Matter (PM <sub>10</sub> )	63.33 µg/cum	100 μg/cum
09	Sulphur Dioxide (SO <sub>2</sub> )	20.47 μg/cum	80 µg/cum
10	Oxides of Nitrogen (NO <sub>x</sub> )	23.62 µg/cum	80 µg/cum

### Note:

- The analysis has been conducted in a <u>MoEFCC; New Delhi</u> approved and <u>NABL</u> accredited laboratory-M/s. Green Envirosafe Engineers & Consultant Pvt. Ltd, Pune- that has also received <u>OHSAS 18001–2007</u> accreditations.
- NAAQS National Ambient Air Quality Standards, Central Pollution Control Board Notification, No.B 29016 / 20 / 90 / PCI I, New Delhi, the 18th November 2009.

- F-11, NAMDEV NEST, 1160-B, 'E' WARD, SYKES EXTENSION,
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   TELEFAX: (0231) 2526337, MOBILE: (0) 9657865122
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# DATE: FEBRUARY 16, 2021 AMBIENT AIR QUALITY MONITORING RESULTS

Report No.: EEIPL/REP/2020.21/789

Client: M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd.,

Site: A/p.: Hupari, Dist.: Kolhapur.

Plant Condition : In Operation.
Date of Sampling: 10.02.2021

### **RESULTS**

SR.NO.	TEST DESCRIPTION	READINGS	NAAQS
01	Test Location	Near Bagass Yard	
02	Time of Sampling	02:55 P.M.	
03	Ambient Temperature	33.0 °C	
04	Dry Bulb Temperature	33.0 °C	
05	Wet Bulb Temperature	21.0 °C	
06	Relative Humidity	33.4 %	
07	Sampling Duration	60 Min.	
80	Particulate Matter (PM <sub>10</sub> )	70.36 µg/cum	100 μg/cum
09	Sulphur Dioxide (SO <sub>2</sub> )	21.85 µg/cum	80 μg/cum
10	Oxides of Nitrogen (NO <sub>x</sub> )	23.40 µg/cum	80 µg/cum

### Note:

- The analysis has been conducted in a <u>MoEFCC; New Delhi</u> approved and <u>NABL</u> accredited laboratory-M/s. Green Envirosafe Engineers & Consultant Pvt. Ltd, Pune- that has also received <u>OHSAS 18001–2007</u> accreditations.
- NAAQS National Ambient Air Quality Standards, Central Pollution Control Board Notification, No.B 29016 / 20 / 90 / PCI I, New Delhi, the 18th November 2009.

- F-11, NAMDEV NEST, 1160-B, 'E' WARD, SYKES EXTENSION,
   OPP. KAMALA COLLEGE, KOLHAPUR 416 001 (M.S.), PH.: (0231) 2531231,
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# DATE: FEBRUARY 16, 2021

# **SOURCE EMISSION MONITORING RESULTS**

Report No.: EEIPL/REP/2020.21/790

Client: M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd.,

Site: A/p.: Hupari, Dist.: Kolhapur.

Plant Condition: In Operation.
Date of Sampling: 10.02.2021
Time: 03:30 P.M.

### **RESULTS**

SR. NO.	TEST DESCRIPTION	READING
01	Location	Boiler Stack 1
02	Material of Stack	RCC
03	Stack Height from Ground Level	75 M
04	Type of Stack	Round
05	Flue Gas Temperature	180°C (453 K)
06	Differential Pressure	1.10 mm Wg
07	Velocity	4.24 m/sec
08	Stack Diameter	4.73 m
09	Stack Area	17.5627 m <sup>2</sup>
10	Gas Volume	176583.73 Nm <sup>3</sup> /Hr

### **FLUE GAS QUALITY**

SR.NO.	PARAMETER	VALUE
01	Suspended Particulate Matter (SPM)	56.86 mg/Nm <sup>3</sup>
02	Sulphur Dioxide (SO <sub>2</sub> )	36.92 mg/Nm <sup>3</sup>
		156.47 Kg /Day

### Note:

- The analysis has been conducted in a <u>MoEFCC</u>; <u>New Delhi</u> approved and <u>NABL</u> accredited laboratory-M/s. Green Envirosafe Engineers & Consultant Pvt. Ltd, Pune- that has also received <u>OHSAS 18001–2007</u> accreditations.
- Maharashtra Pollution Control Board (MPCB) Limits SPM: 150 mg / Ncum
- Maharashtra Pollution Control Board (MPCB) Limits SO₂: As per Consent.

- F-11, NAMDEV NEST, 1160-B, 'E' WARD, SYKES EXTENSION,
   OPP. KAMALA COLLEGE, KOLHAPUR 416 001 (M.S.), PH.: (0231) 2531231,
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**DATE: FEBRUARY 16, 2021** 

# **SOURCE EMISSION MONITORING RESULTS**

Report No.: EEIPL/REP/2020.21/791

Client: M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd.,

Site: A/p.: Hupari, Dist.: Kolhapur.

Plant Condition: In Operation.
Date of Sampling: 10.02.2021
Time: 04:50 P.M.

### **RESULTS**

SR. NO.	TEST DESCRIPTION	READING
01	Location	Boiler Stack 2
02	Material of Stack	RCC
03	Stack Height from Ground Level	72 M
04	Type of Stack	Round
05	Flue Gas Temperature	182 °C (455 K)
06	Differential Pressure	1.50 mm Wg
07	Velocity	4.96 m/sec
08	Stack Diameter	3.00 m
09	Stack Area	7.0650 m <sup>2</sup>
10	Gas Volume	82768.22 Nm <sup>3</sup> /Hr

### **FLUE GAS QUALITY**

SR.NO.	PARAMETER	VALUE
01	Suspended Particulate Matter (SPM)	49.85 mg/Nm <sup>3</sup>
02	Sulphur Dioxide (SO <sub>2</sub> )	28.01 mg/Nm <sup>3</sup>
		55.64 Kg /Day

### Note:

- The analysis has been conducted in a <u>MoEFCC; New Delhi</u> approved and <u>NABL</u> accredited laboratory-M/s. Green Envirosafe Engineers & Consultant Pvt. Ltd, Pune- that has also received <u>OHSAS 18001–2007</u> accreditations.
- Maharashtra Pollution Control Board (MPCB) Limits SPM: 150 mg / Ncum
- Maharashtra Pollution Control Board (MPCB) Limits SO<sub>2</sub>: As per Consent.

- F-11, NAMDEV NEST, 1160-B, 'E' WARD, SYKES EXTENSION,
   OPP. KAMALA COLLEGE, KOLHAPUR 416 001 (M.S.), PH.: (0231) 2531231,
   TELEFAX: (0231) 2526337, MOBILE: (0) 9657865122
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# DATE: FEBRUARY 16, 2021 AMBIENT NOISE LEVEL MONITORING RESULTS

Report No.: EEIPL/REP/2020.21/792

Client : M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd.,

Site : A/p.: Hupari, Dist.: Kolhapur.

Date of Sampling: 10.02.2021. Time: 06:00 P.M.

### **RESULTS**

SR. NO.	LOCATION	READINGS dB(A)	LIMIT dB(A)
01	Near Main Gate	62.3	75
02	Near ETP	61.2	75
03	Near Bagas Section	65.4	75
04	Near Sugar Godown	61.3	75
05	Near Cane Yard	73.5	75

### Note:

- The analysis has been conducted in a <u>MoEFCC; New Delhi</u> approved and <u>NABL</u> accredited laboratory-M/s. Green Envirosafe Engineers & Consultant Pvt. Ltd, Pune- that has also received <u>OHSAS 18001–2007</u> accreditations.
- Maharashtra Pollution Control Board (MPCB) has prescribed 75 dB (A) as an upper limit of Noise Level during the Day Time & 70 dB (A) during the Night Time

- F-11, NAMDEV NEST, 1160-B, 'E' WARD, SYKES EXTENSION,
   OPP. KAMALA COLLEGE, KOLHAPUR 416 001 (M.S.), PH.: (0231) 2531231,
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# **WORKZONE NOISE LEVEL MONITORING RESULTS**

Report No.: EEIPL/REP/2020.21/793

Client : M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd.,

Site: A/p.: Hupari, Dist.: Kolhapur.

Date of Sampling: 10.02.2021. Time: 06:30 P.M.

### **RESULTS**

SR. NO.	LOCATION	READINGS dB(A)	LIMIT dB(A) (Refer Note Below)
01	Centrifugal Section	83.2	90
02	Turbine Section	84.8	90
03	Boiler Section	85.8	90
04	Mill Section	81.4	90
05	Pan Section	83.2	90

### Note:

- The analysis has been conducted in a <u>MoEFCC; New Delhi</u> approved and <u>NABL</u> accredited laboratory-M/s. Green Envirosafe Engineers & Consultant Pvt. Ltd, Pune- that has also received <u>OHSAS 18001–2007</u> accreditations.
- The Factories' Act, 1948 has prescribed Noise Level threshold limit for 8 hours' exposure as 90 dB (A).

- F-11, NAMDEV NEST, 1160-B, 'E' WARD, SYKES EXTENSION,
   OPP. KAMALA COLLEGE, KOLHAPUR 416 001 (M.S.), PH.: (0231) 2531231,
   TELEFAX: (0231) 2526337, MOBILE: (0) 9657865122
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# **EFFLUENT SAMPLE ANALYSIS REPORT**

Report No.: EEIPL/REP/2020.21/794

Client: M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd.,

Site: A/p.: Hupari, Dist.: Kolhapur. Location: Effluent Treatment Plant.

Plant Condition: ETP in Operation.

Date of Sampling: 10.02.2021. Analysis Date: 11.02.2021

Sample Name: Industrial Effluent – Untreated & Treated

### **RESULTS**

SR. NO.	TEST DESCRIPTION	UNTREATED	TREATED	MPCB LIMIT	UNIT
01	pH	3.49	7.52	6.5-8.5	
02	Suspended Solids (SS)	174.96	18.30	100	mg/lit
03	Total Dissolved Solids (TDS)	3069.53	700.12	2100	mg/lit
04	Chemical Oxygen Demand (COD)	3596.71	62.55	250	mg/lit
05	Biochemical Oxygen Demand (BOD)	1495.85	24.39	100	mg/lit
06	Chlorides as Cl <sup>-</sup>	800.90	214.67	600	mg/lit
07	Sulphates as SO <sub>4</sub> <sup>-</sup>	569.32	157.42	1000	mg/lit
08	Oil & Grease	6.00	BDL	10	mg/lit

### Note:

- The analysis has been conducted in a <u>MoEFCC; New Delhi</u> approved and <u>NABL</u> accredited laboratory-M/s. Green Envirosafe Engineers & Consultant Pvt. Ltd, Pune- that has also received <u>OHSAS 18001–2007</u> accreditations.
- BDL: Below Detectable Limit.

- F-11, NAMDEV NEST, 1160-B, 'E' WARD, SYKES EXTENSION,
   OPP. KAMALA COLLEGE, KOLHAPUR 416 001 (M.S.), PH.: (0231) 2531231,
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# **SOIL SAMPLE ANALYSIS REPORT**

Report No.: EEIPL/REP/2020.21/799

Client: M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd.,

Site: A/p.: Hupari, Dist.: Kolhapur.

Plant Condition:
Sampling Date:
Analysis Date:
Sample Name:
In Operation.
10.02.2021.
11.02.2021
Soil Sample

### **RESULTS**

SR. NO.	TEST DESCRIPTION	RESULTS	UNIT
01	Nitrogen (N)	Kg/ha	156.23
02	Available Phosphorous (P)	Kg/ha	89.11
03	Available Potassium	Kg/ha	124.75
04	Organic Carbon	%	1.20
05	Organic Matter	%	2.06
06	Water Soluble Chloride (CI)	mg/kg	178.45
07	Water Soluble Sulphate (SO <sub>4</sub> )	mg/kg	159.67
08	Sodium Absorption Ratio		0.051

### Note:

 The analysis has been conducted in a <u>MoEFCC; New Delhi</u> approved and <u>NABL</u> accredited laboratory-M/s. Green Envirosafe Engineers & Consultant Pvt. Ltd, Pune- that has also received <u>OHSAS 18001–2007</u> accreditations.

 F-11, NAMDEV NEST, 1160-B, 'E' WARD, SYKES EXTENSION, OPP. KAMALA COLLEGE, KOLHAPUR - 416 001 (M.S.), PH.: (0231) 2531231, TELEFAX: (0231) 2526337, MOBILE: (0) 9657865122

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DATE: MARCH 15, 2021

# AMBIENT AIR QUALITY MONITORING RESULTS

Report No .:

EEIPL/REP/2020.21/898

Client:

M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd.,

Site:

A/p.: Hupari, Dist.: Kolhapur.

Plant Condition: Date of Sampling: In Operation. 10.03.2021

### RESULTS

SR. NO.	TEST DESCRIPTION	READINGS	NAAQS
01	Test Location	Near Main Gate	
02	Time of Sampling	09:30 A.M.	
03	Ambient Temperature	29.0 °C	
04	Dry Bulb Temperature	29.0 °C	7
05	Wet Bulb Temperature	18.0 °C	
06	Relative Humidity	33.1 %	7
07	Sampling Duration	60 Min.	
08	Particulate Matter (PM <sub>10</sub> )	64.23 µg/cum	100 µg/cum
09	Sulphur Dioxide (SO <sub>2</sub> )	19.05 µg/cum	80 µg/cum
10	Oxides of Nitrogen (NO <sub>x</sub> )	26.88 µg/cum	80 µg/cum

### Note:

The analysis has been conducted in a MoEFCC; New Delhi approved and NABL accredited laboratory-M/s. Green Envirosafe Engineers & Consultant Pvt. Ltd, Pune- that has also received OHSAS 18001-2007 accreditations.

NAAQS - National Ambient Air Quality Standards, Central Pollution Control Board Notification, No. B - 29016 / 20 / 90 / PCI -I, New Delhi, the 18th November 2009.

- ENVIRONMENTAL; CIVIL & CHEMICAL ENGINEERS. CONSULTANTS AND ANALYSTS
- F-11, NAMDEV NEST, 1160-B, 'E' WARD, SYKES EXTENSION, OPP, KAMALA COLLEGE, KOLHAPUR - 416 001 (M.S.), PH.: (0231) 2531231, TELEFAX: (0231) 2526337, MOBILE: (0) 9657865122
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DATE: MARCH 15, 2021

# AMBIENT AIR QUALITY MONITORING RESULTS

Report No .:

EEIPL/REP/2020.21/899

Client:

M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd.,

Site:

A/p.: Hupari, Dist.: Kolhapur.

Plant Condition: Date of Sampling: In Operation. 10.03.2021

### RESULTS

SR.NO.	TEST DESCRIPTION	READINGS	NAAQS
01	Test Location	Near ETP	
02	Time of Sampling	09:40 A.M.	
03	Ambient Temperature	29.0 °C	
04	Dry Bulb Temperature	29.0 °C	
05	Wet Bulb Temperature	18.0 °C	
06	Relative Humidity	33.1 %	.3
07	Sampling Duration	60 Min.	
08	Particulate Matter (PM <sub>10</sub> )	62.86 µg/cum	100 µg/cum
09	Sulphur Dioxide (SO <sub>2</sub> )	18.30 µg/cum	80 µg/cum
10	Oxides of Nitrogen (NO <sub>x</sub> )	21.97 µg/cum	80 µg/cum

### Note:

- The analysis has been conducted in a MoEFCC; New Delhi approved and NABL accredited laboratory-M/s. Green Envirosafe Engineers & Consultant Pvt. Ltd, Pune- that has also received OHSAS 18001-2007 accreditations.
- NAAQS National Ambient Air Quality Standards, Central Pollution Control Board Notification, No.B 29016 / 20 / 90 / PCI I, New Delhi, the 18th November 2009.

. F-11, NAMDEV NEST, 1160-B, 'E' WARD, SYKES EXTENSION, OPP, KAMALA COLLEGE, KOLHAPUR - 416 001 (M.S.), PH.: (0231) 2531231, TELEFAX: (0231) 2526337, MOBILE: (0) 9657865122

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**DATE: MARCH 15, 2021** 

# AMBIENT AIR QUALITY MONITORING RESULTS

Report No .:

EEIPL/REP/2020.21/900

Client:

M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd.,

Site:

A/p.: Hupari, Dist.: Kolhapur.

Plant Condition:

In Operation.

Date of Sampling: 10.03.2021

### RESULTS

SR.NO.	TEST DESCRIPTION	READINGS	NAAQS
01	Test Location	Near Bagass Yard	
02	Time of Sampling	09:50 A.M.	
03	Ambient Temperature	30.0 °C	
04	Dry Bulb Temperature	30.0 °C	
05	Wet Bulb Temperature	18.0 °C	
06	Relative Humidity	29.7 %	
07	Sampling Duration	60 Min.	
08	Particulate Matter (PM <sub>10</sub> )	67.36 µg/cum	100 µg/cum
09	Sulphur Dioxide (SO <sub>2</sub> )	17.65 µg/cum	80 µg/cum
10	Oxides of Nitrogen (NO <sub>x</sub> )	22.89 µg/cum	80 µg/cum

### Note:

The analysis has been conducted in a MoEFCC; New Delhi approved and NABL accredited laboratory-M/s. Green Envirosafe Engineers & Consultant Pvt. Ltd, Pune- that has also received OHSAS 18001-2007 accreditations.

NAAQS - National Ambient Air Quality Standards, Central Pollution Control Board Notification, No.B - 29016 / 20 / 90 / PCI - I, New Delhi, the 18th November 2009.

F-11, NAMDEV NEST, 1160-B, 'E' WARD, SYKES EXTENSION, OPP. KAMALA COLLEGE, KOLHAPUR - 416 001 (M.S.), PH.: (0231) 2531231, TELEFAX: (0231) 2526337, MOBILE: (0) 9657865122

■ F-502, FIFTH FLOOR, NANDANVAN TOWER, MUMBAI-PUNE HIGHWAY. PANVEL - 410 206 (M.S.), MOBILE: +91 9822682822

 OFFICE NO. 67, 4th FLOOR, KUNAL PLAZA, CHINCHWAD CHOWK, PUNE - 411 019 (M.S.), MOBILE: +91 9890160622

Website: www. equinoxenvi.com

E-mail: enquiry@equinoxenvi.com, customercare@equinoxenvi.com











Equinox Environments (India) Pvt. Ltd. ISO 9001: 2015 & QCI - NABET Accredited Organization

**DATE: MARCH 15, 2021** 

# SOURCE EMISSION MONITORING RESULTS

Report No.:

EEIPL/REP/2020.21/901

Client:

M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd.,

Site:

A/p.: Hupari, Dist.: Kolhapur.

Plant Condition: Date of Sampling: In Operation. 10.03.2021

Time:

10:20 A.M.

### RESULTS

	the state of the s	
SR. NO.	TEST DESCRIPTION	READING
01	Location	Boiler Stack 1
02	Material of Stack	RCC
03	Stack Height from Ground Level	75 M
04	Type of Stack	Round
05	Flue Gas Temperature	170°C (433 K)
06	Differential Pressure	1.00 mm Wg
07	Velocity	4.00 m/sec
08	Stack Diameter	4.73 m
09	Stack Area	17.5627 m <sup>2</sup>
10	Gas Volume	170255.67 Nm <sup>3</sup> /Hr

### **FLUE GAS QUALITY**

SR.NO.	PARAMETER	VALUE
01	Suspended Particulate Matter (SPM)	52.83 mg/Nm <sup>3</sup>
. 02	Sulphur Dioxide (SO <sub>2</sub> )	30.71 mg/Nm <sup>3</sup>
. 02		125.49 Kg /Day

### Note:

- The analysis has been conducted in a MoEFCC; New Delhi approved and NABL accredited laboratory-M/s. Green Envirosafe Engineers & Consultant Pvt. Ltd, Pune- that has also received OHSAS 18001-2007
- Maharashtra Pollution Control Board (MPCB) Limits SPM: 150 mg / Ncum
- Maharashtra Pollution Control Board (MPCB) Limits SO2: As per Consent.

 F-11, NAMDEV NEST, 1160-B, 'E' WARD, SYKES EXTENSION. OPP, KAMALA COLLEGE, KOLHAPUR - 416 001 (M.S.), Ph.: (0231) 2531231. TELEFAX: (0231) 2526337, MOBILE: (0) 9657865122

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DATE: MARCH 15, 2021

# SOURCE EMISSION MONITORING RESULTS

Report No .:

EEIPL/REP/2020.21/902

Client:

M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd.,

Site:

A/p.: Hupari, Dist.: Kolhapur.

Plant Condition:

In Operation. 10.03.2021

Date of Sampling: Time:

11:45 A.M.

### **RESULTS**

SR. NO.	TEST DESCRIPTION	READING
01	Location	Boiler Stack 2
. 02	Material of Stack	RCC
03	Stack Height from Ground Level	72 M
04	Type of Stack	Round
05	Flue Gas Temperature	175 °C (448 K)
06	Differential Pressure	1.00 mm Wg
07	Velocity	4.02 m/sec
08	Stack Diameter	3.00 m
09	Stack Area	7.0650 m <sup>2</sup>
10	Gas Volume	68105.89 Nm <sup>3</sup> /Hr

### **FLUE GAS QUALITY**

SR.NO.	PARAMETER	VALUE
01	Suspended Particulate Matter (SPM)	34.83 mg/Nm <sup>3</sup>
02	Sulphur Dioxide (SO <sub>2</sub> )	22.47 mg/Nm <sup>3</sup>
		36.73 Kg /Day

### Note:

- The analysis has been conducted in a MoEFCC; New Delhi approved and NABL accredited laboratory-M/s. Green Envirosafe Engineers & Consultant Pvt. Ltd, Pune- that has also received OHSAS 18001-2007 accreditations.
- Maharashtra Pollution Control Board (MPCB) Limits SPM: 150 mg / Ncum
- Maharashtra Pollution Control Board (MPCB) Limits SO2: As per Consent.

 F-11, NAMDEV NEST, 1160-B, 'E' WARD, SYKES EXTENSION, OPP. KAMALA COLLEGE, KOLHAPUR - 416 001 (M.S.), PH.: (0231) 2531231. TELEFAX: (0231) 2526337, MOBILE: (0) 9657865122

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**DATE: MARCH 15, 2021** 

# AMBIENT NOISE LEVEL MONITORING RESULTS

Report No .:

EEIPL/REP/2020.21/903

Client:

M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd.,

Site:

A/p.: Hupari, Dist.: Kolhapur.

Date of Sampling:

10.03.2021.

Time:

01:00 P.M.

### RESULTS

SR. NO.	LOCATION	READINGS dB(A)	LIMIT dB(A)
01	Near Main Gate	65.1	75
02	Near ETP	61.2	. 75
03	Near Bagas Section	64.8	. 75
04	Near Sugar Godown	62.8	75
05	Near Cane Yard	71.2	75

### Note:

- The analysis has been conducted in a MoEFCC; New Delhi approved and NABL accredited laboratory-M/s. Green Envirosafe Engineers & Consultant Pvt. Ltd, Pune- that has also received OHSAS 18001-2007 accreditations.
- Maharashtra Pollution Control Board (MPCB) has prescribed 75 dB (A) as an upper limit of Noise Level during the Day Time & 70 dB (A) during the Night Time

■ F-11, NAMDEV NEST, 1160-B, 'E' WARD, SYKES EXTENSION, OPP. KAMALA COLLEGE, KOLHAPUR - 416 001 (M.S.), Ph.: (0231) 2531231. TELEFAX: (0231) 2526337, MOBILE: (0) 9657865122

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 OFFICE NO. 67, 4th FLOOR, KUNAL PLAZA, CHINCHWAD CHOWK. PUNE - 411 019 (M.S.), MOBILE: +91 9890160622

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**DATE: MARCH 15, 2021** 

# **WORKZONE NOISE LEVEL MONITORING RESULTS**

Report No .:

EEIPL/REP/2020.21/904

Client:

M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd.,

Site:

A/p.: Hupari, Dist.: Kolhapur.

Date of Sampling:

10.03.2021.

Time:

01:30 P.M.

## RESULTS

SR. NO.	LOCATION	READINGS dB(A)	LIMIT dB(A) (Refer Note Below)
01	Centrifugal Section	81.3	90
02	Turbine Section	84.1	90-
03	Boiler Section	82.7	90
04	Mill Section	86.4	90
05	Pan Section	82.9	90

### Note:

The analysis has been conducted in a MoEFCC; New Delhi approved and NABL accredited laboratory-M/s. Green Envirosafe Engineers & Consultant Pvt. Ltd, Pune- that has also received OHSAS 18001-2007 accreditations.

The Factories' Act, 1948 has prescribed Noise Level threshold limit for 8 hours' exposure as 90 dB (A).

F-11, NAMDEV NEST, 1160-B, 'E' WARD, SYKES EXTENSION, OPP. KAMALA COLLEGE, KOLHAPUR - 416 001 (M.S.), PH.: (0231) 2531231 TELEFAX: (0231) 2526337, MOBILE: (0) 9657865122

F-502, FIFTH FLOOR, NANDANVAN TOWER, MUMBAI-PUNE HIGHWAY, PANVEL - 410 206 (M.S.), MOBILE: +91 9822682822

 OFFICE NO. 67, 4th FLOOR, KUNAL PLAZA, CHINCHWAD CHOWK. PUNE - 411 019 (M.S.), MOBILE: +91 9890160622

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**DATE: MARCH 15, 2021** 

# **EFFLUENT SAMPLE ANALYSIS REPORT**

Report No .:

EEIPL/REP/2020.21/905

Client:

M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd.,

Site:

A/p.: Hupari, Dist.: Kolhapur.

Location:

Effluent Treatment Plant. ETP in Operation.

Plant Condition:

10.03.2021.

Date of Sampling:

11.03.2021

Analysis Date: Sample Name:

Industrial Effluent – Untreated & Treated

## RESULTS

SR. NO.	TEST DESCRIPTION	UNTREATED	TREATED	MPCB LIMIT	UNIT
01	pH	3.55	7.68	6.5-8.5	
02	Suspended Solids (SS)	152.34	17.50	100	mg/lit
03	Total Dissolved Solids (TDS)	2895.61	623.04	2100	mg/lit
04	Chemical Oxygen Demand (COD)	2846.10	65.98	250	mg/lit
05	Biochemical Oxygen Demand (BOD)	1023.92	23.44	100	mg/lit
06	Chlorides as Cl	523.61	165.01	600	mg/lit
07	Sulphates as SO <sub>4</sub>	230.14	110.57	1000	mg/lit
08	Oil & Grease	7.00	BDL	10	mg/lit

### Note:

The analysis has been conducted in a MoEFCC; New Delhi approved and NABL accredited laboratory-M/s. Green Envirosafe Engineers & Consultant Pvt. Ltd, Pune- that has also received OHSAS 18001-2007 accreditations.

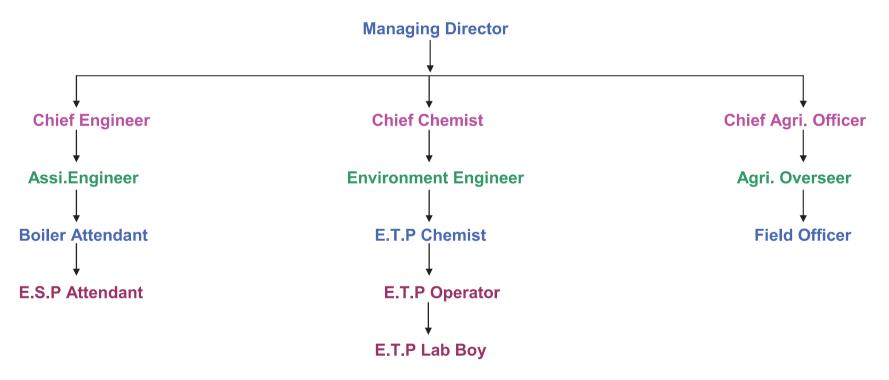
BDL: Below Detectable Limit.

# Annexure –IV Environment Management Cell

# Jawahar Shetkari Sahakari Sakhar Karkhana Ltd., Hupari

Shri Kallappanna Awadenagar, Hupari-Yalgud 416 203, Tal. Hatkanangale, Dist. Kolhapur (Maharashtra)

# **Environmental Management Cell**



# Annexure – V Green Belt Details

# GREENBELT DEVELOPMENT AT JAWAHAR SHETAKARI S.S.K. LTD. (JSSSKL), AT: HUPARI, TAL.: HATKANANGALE, DIST.: KOLHAPUR, MAHARASHTRA













# AREAWISE TREE PLANTATION INFORMATION-

Sr.N o.	Suevey No.	Place	Area (Acre)
1	1258	Harvesting workers staying yard	22.36
2	315/8,9	Colony area	5.00
3	315/11	Caneyard west side area	3.30
4	315/9,10	Office backside Mango & Rose plantation area	3.0
5	315/10	Stage side area	2.11
6	315/9,925/ 9	Main Road both sides area	1.13
7	315/14	Near Ash Yard	0.13
8	315/14	Hamaal shed (Eucalyptus tree plantation)	4.26
9	315/14	Hamaal shed (Forest trees)	4.16
10	315/11	Karkhana Main Gate area	0.03
11	315/14	Switch Yard/Bullock cart yard area	0.22
12	315/11	Behind Godown No.13 area	2.10
13	315/7	Petrol pump area	0.05
14	315/8	Bamboo in Compost yard	2.25
15	315/7,8,9	Bene plot	13.30
16	925/9	Flower Bed	0.11
17	315/9	Guest house, Board Room area	0.12
18	925/9	Karanj,chikoo,Mango plantation Area	2.02
19	925/9	Near Mhasoba Temple Area	6.00
20	925/9,315/9		1.31
21	925/9	Canal Side Coconut, Ashok Tree plantation	1.08
22	925/9,315/9	Karkhana outside Gate Cross Bed area	0.08
23	925/9	Rajrajeshwari Temple Area	1.10
24	925/9	Caneyard to Rajrajeshwari Temple Roadside plantation	0.22
25	925/9	Tractor Yard area	2.36
		Total	83.20

Chief Agri. Officer

# JAWAHAR SHETKARI SAHAKARI SAKHAR KARKHANA LTD., HUPARI

Shri. Kallappanna Awadenagar, Hupari -Yalgud, Tal-Hatkanangale, Dist- Kolhapur. (Maharastra)

Date- 18/10/2021

## Karkhana Site Tree Plantation Details:-

Sr.No	Particulars	Nos of Plant
Α	Fruit Plant	
1.	Coconut	613
2.	Mango	350
3.	Chikku	156
	Total	1119
В	Forest Tree	
1.	Rain Tree	2700
2.	Cassia	1752
3.	Chinch	78
4.	Kadaumb	17
5.	Jacaranda	35
6.	Behda	10
7.	Saptaparni	27
8.	Brassia	17
9.	Saga	14
10.	Suru	2000
11.	Nimb & Others	2798
12.	Tubobia	20
13.	Kardia	35
14.	Gorham Chinch	558
15.	Silver Oak	390
16.	Mohagani	6
17.	Wad	70
18.	Pimpal	125
19.	Nile Mohar	03
20.	Bahawa	140
21.	Gulmohar	409
22.	Kanchan	133
23.	Nilgiri	3430
24.	Umber	10
25.	Phanas	15
26.	Bel	20
27.	Australian babeb	300
28.	Gul bhendi	507
29.	Karanj	1239
30.	Jambhul	100
31.	Pletoforum	250
32.	Bambu	28015
33.	Katesawar	170
	Total	45393

Sr.No	Particulars	Nos of Plant
С	Decorative Tree	
1.	Bottal Palm	90
2.	Ashoka	703
3.	Morepankhi	108
4.	Ficus	167
5.	Boganwel	1440
6.	Exora	72
7.	Chapha	53
8.	Areka Palm	4605
	Total	7238
D	Flower Tree	
1.	Rose	655
2.	Other Flower Tree	5300
3.	Pots Tree	564
4.	Kaneri	1670
5.	Shankasur	340
	Total	8529

tal Summa	ry of tree plantation-	
Α	Fruit Tree	1119
В	Forest Tree	45393
С	Decorative Tree	7238
D	Flower Tree	8529
	Total Tree Plantation	62279

