

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/E.T.P/8608/2017-18

Dated - 30/11/2017

To,

The Regional Officer (WCZ),
Ministry of Environment and Forest (MoEF),
Ground Floor, East Wing,
New Secretariat Building,
Civil Lines,
Nagpur- 440 001.

Sub: Submission of Half yearly EC compliance report reg...

Ref: Environmental Clearance for 12000 TCD sugar unit
F.No. J-11011/38/2016-IA-II(I), dated 20th December,2016.

Dear Sir,

With reference to above cited subject, we are submitting herewith the half yearly Environmental Clearance compliance report for the period of April 2017 to September 2017 along with required information.

1. Half yearly compliance report with Annexure-
 - a] Monitoring reports
 - b] Environmental Management Cell
2. Copies of Environmental Clearance.
3. Copies of Consent to Operate from MPCB
4. The information of the Data Sheet.

Please find the information furnished in your prescribed proforma is in order and acknowledge the receipt. Any more information if required that shall be submitted promptly on hearing from you.

Thanking you,

Yours faithfully,
For Jawahar SSSK Ltd.,


(M.G. Joshi)

Managing Director.

FL

CC TO –

1. Regional Director,
Central Pollution Control Board,
4th Floor, Sahakar Bhavan,
North T.T Nagar,
Bhopal - 462 003.
2. Member Secretary,
Maharashtra Pollution Control Board,
Kalptarupoint, 2nd and 4th Floor,
Opp.Cine Planet Cinema,
Near Sion Circle, Sion(E)
Mumbai- 400 002.

HALF YEARLY COMPLIANCE REPORT

For the period of April 2017 to September 2017

Environmental Clearance for sugar unit with capacity of 12000 TCD,
Ministry of Environment, Forest and Climate Change, Govt of India
File No. J-11011/38/2016-IA-II (I) Dated 20th December, 2016.

A. Specific Conditions:

Sr. No	Compliance Conditions	Implementation	Remark
i	ESP/Bagfilter shall be provided to the bagasse fired boiler (20,75 TPH and 90 TPH) to control particulate emissions within permissible limit. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines. No wet scrubber shall be used. Existing boiler (55 TPH) will be converted in to 75 TPH boiler.	Complied	1. ESP for 90 & 75 TPH Boiler has been installed. 2. Height of the stack of 90 & 20 TPH boiler is 75 mtr. and 75 TPH Boiler is 72 mtr. which is adequate.
	ESP/Bagfilter shall be provided to the bagasse fired boiler 20 TPH to control particulate emissions within permissible limit.	Not Complied	3. Proposed to replace of wet scrubber of 20 TPH Boiler to ESP.
ii	Pucca approach road to project site should be constructed prior to commencing construction activity of the main distillery to avoid fugitive emissions.	Not applicable	1. We do not have distillery unit. 2. We have pucca approach road network within factory premises.
iii	Total fresh water requirement from Doodhganga River shall not exceed 600 m ³ /day for sugar unit and Co-generation power plant. No ground water shall be used without permission. Effort shall be made to use recycled water from sugar and condensate of MEE for the Co-generation power unit.	Complied	We will not be exceeding the total fresh water requirement of 600 m ³ /day from Doodhganga River. Ground water shall not be used without permission.
iv	Water consumption also to be restricted to 100 liters/ton initially and further to 50 liters /ton cane crushed in a time bound manner as per the CPCB guidelines.	Complied	As per CPCB guidelines, our water consumption is restricted to less than 100 liters/ton.

v	Effluent from sugar unit should be treated in the effluent treatment plant with adequate treatment with standard of 30 mg/l of BOD. Existing ETP shall be upgraded to achieve the standard of BOD 30 mg/l.	Complied	Existing ETP is upgraded to achieve the standard of outlet treated effluent BOD 30 mg/l.
vi	As proposed no effluent from sugar plant should be discharged outside the premises and Zero discharge shall be achieved.	Complied	We are recycling the treated effluent in the sugar unit and balance treated water is utilizing by farmers for agriculture purpose.
vii	Bagasse/coal storage should be done in such a way that it does not get air borne or fly around due to wind.	Complied	--
viii	Boiler ash should be stored separately as per CPCB guidelines so that it should not adversely affect air quality, becoming air borne by wind or water regime during rainy season by flowing along with the storm water. Direct exposure of workers to fly ash & dust should be avoided. Bagasse ash and coal ash should be stored separately.	Complied	--
ix	Occupational health surveillance programme should be under taken as regular exercise for all the employees. The first aid facilities in the occupational health center should be strengthened and the regular medical taste record of each employee should be maintained separately.	Complied	We are Conducting the occupational health surveillance programme is under taken as regular exercise for all the employees.
x	Dedicated parking facility for loading and unloading of material should be provided in the factory premises. Unit should develop and implement good traffic management system for their incoming and out going vehicles to avoid congestion on the public road.	Complied	Dedicated parking facility for loading and unloading of material is provided.
xi	All the issues raised during the public hearing / consultation meetings held on 10 th July, 2015 should be satisfactorily implemented.	Complied	--

xii	As proposed, green belt over 33% of plot area shall be developed within plant premises with at list 10 meter wide green belt on all sides along the periphery of the project area, in downward direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.	Complied	We have proposed 61000 nos. of trees on 24.40 hector (33 % of the total area). At present we have planted 33074 nos. of trees. Balance 30306 nos. of trees is planted in the period of 1 st July to 7 th July 2017. The survival rate of plantation is 97 %										
xiii	At least 5% of the total cost of the project should be earmarked towards the Enterprise Social Commitment (ESC) based on local needs and action plan with financial and physical breakup / details should be prepared and submitted to the Ministry's Regional Office at Nagpur. Implementation of such programme should be ensured accordingly in a time bound manner.	Complied	<table border="0"> <tr> <td></td> <td style="text-align: right;">In Lack</td> </tr> <tr> <td>i)Project Cost-</td> <td style="text-align: right;">7450.0</td> </tr> <tr> <td>ii)Expenditure as - on date</td> <td style="text-align: right;">6137.69</td> </tr> <tr> <td>iii)5% of the total - cost of the project enmarked towards ESC</td> <td style="text-align: right;">306.88</td> </tr> <tr> <td>iv) Spent on ESC -</td> <td style="text-align: right;">412.32</td> </tr> </table>		In Lack	i)Project Cost-	7450.0	ii)Expenditure as - on date	6137.69	iii)5% of the total - cost of the project enmarked towards ESC	306.88	iv) Spent on ESC -	412.32
	In Lack												
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ii)Expenditure as - on date	6137.69												
iii)5% of the total - cost of the project enmarked towards ESC	306.88												
iv) Spent on ESC -	412.32												

B. General Conditions:

i	The project authority must strictly adhere to the stipulations made by the Maharashtra Pollution Control Board, State Government and any other statutory authority.	Agreed	--
ii	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.	Agreed	--
iii	The location of ambient air quality monitoring stations shall be decided in consultation with the State Pollution Control Board (SPCB) and it shall be insured that at least one stations is installed in upwind and Downwind directions as well as where maximum GLC are anticipated.	Complied	The AAQM locations are decided as per CPCB's guidelines. The Monitoring reports are enclosed as Annexure - I
iv	The National Ambient Air Quality Emissions Standards issued by the Ministry vide G.S.R No.826 (E) dated 16 th November, 2009 shall be followed.	Agreed	--
v	The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).	Complied	The Noise levels are well within the prescribed standards. The Monitoring reports are enclosed as Annexure - II

vi	The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and use the same water for the process activities of the project to conserve fresh water.	Complied	--
vii	Training shall be imparted to all employees on safety and health aspect of chemicals handling. Pre-employment and routine periodical medical examination for all employees shall be under taken on regular basis. Training to all employees on handling of chemicals shall be imparted.	Complied	Training on safety and health aspect of chemicals and handling of chemicals. Routine periodical medical examination for all employees to carried out on regular basis.
viii	The company shall also comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA / EMP in respect of environmental management, risk mitigation measures and public hearing relating to the project shall be implemented.	Agreed	--
ix	The company shall under take all relevant measures for improving the socio-economic conditions of the surrounding the area. CSR activities shall be under taken by involving local villages and administration.	Complied	--
x	The company shall under take eco-developmental measures including community welfare measures in the project area for the over all improvement of the environment.	Complied	--
xi	A separate Environmental Management Cell equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.	Complied	Environmental Management Cell is enclosed as Annexure -III

xii	The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government along with the implementation scheduled for all the conditions stipulated hearing. The funds so earmarked for environment management / pollution control measures shall not be diverted for any other purpose.	Complied	--
xiii	A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zilla Parishad / Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions / representations, if any, were received while processing the proposal.	Complied	--
xiv	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as e-mail) to the respective Regional Office MoEF & CC, the respective Zonal Office of CPCB and SPCB. A copy of Environmental Clearance and six monthly compliance status reports shall be posted on the web site of the company.	Agreed	--
xv	The environmental statement for each financial year ending 31 st March in Form-V as is mandated shall be submitted to the concern State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be send to the respective	Complied	--

	Regional Offices of MoEF & CC by e-mail.		
xvi	The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB / Committee and many also be seen at Website of the Ministry at http://moef.nic.in . This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.	Complied	--
xvii	The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.	Agreed	We have 31 st March is the financial closure date and the expanded production capacity will be started in upcoming cane crushing season 2017-18.



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(No. Q - 1508 / 32 / 2007 - CPW)

(ISO 9001:2008, 14001:2004, OHSAS 18001:2007 & NABL/ISO/IEC 17025 : 2005 Certified Organisation)

Report No:-GCI/V/Lab/EM-SP/17-18/Oct/628

Date: 13.10.2017

ANALYSIS REPORT

Client details		Sample Details	
Name	M/s. Jawahar Shekari Sahakari Sakhar Karkhana Ltd.	Sample Code	GCI/EC/17/AA1
Address	Kallappaanna Awadenagar, Hupari - Yalgud, Tal. Hatkanangale, Dist. Kolhapur.	Location	Project Site
		Date of Sampling	07.10.2017
Sampling Done By	Saitech, Kolhapur	Date of Sample Received	08.10.2017
Analysis Starts On	08.10.2017	Sampling Instrument	RDS, FPS
Analysis Completion On	13.10.2017	Sampling Method	IS 5182 : Part 5 : 1975

AMBIENT AIR ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	National Ambient Air Quality Standards (NAAQS) amended 2009	Reference Method
1	Particulate Matter (PM ₁₀)	µg/m ³	42.7	100	IS 5182 : Part 23 : 2006
2	Particulate Matter (PM _{2.5})	µg/m ³	13.9	60	NAAQS Guidelines
3	Sulphur dioxide (SO ₂)	µg/m ³	6.1	80	IS 5182 : Part 2 : 2001
4	Oxides of Nitrogen (NO _x)	µg/m ³	12.5	80	IS 5182 : Part 6 : 2006
5	Carbon Monoxide CO	mg/m ³	0.6	2.0	IS 5182 : Part 10 : 1999
6	Ozone as O ₃	µg/m ³	BDL	100	NAAQS Guidelines
7	Lead as Pb	µg/m ³	BDL	1.0	NAAQS Guidelines
8	Nickel as Ni	ng/m ³	BDL	20	NAAQS Guidelines
9	Arsenic as As	ng/m ³	BDL	6.0	NAAQS Guidelines
10	Ammonia as NH ₃	µg/m ³	BDL	400	NAAQS Guidelines
11	Benzene, C ₆ H ₆	µg/m ³	BDL	5.0	IS 5182 (Part 11):2006
12	Benzo (a) Pyrene	ng/m ³	BDL	1.0	Gas Chromatography

BDL-Below Detection Limit

Authorized Signatory

- Analysis is subject to the condition In Which the Sample Is received at our Laboratory.
- Reports cannot be used as evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till one month from the date of sampling.

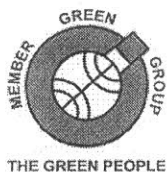
CORP. OFFICE & : Green Empire (Anupushpam), Above Axis Bank, Nr. Yash Complex, Gotri Road, Vadodara - 390 021 (Gujarat), India.
R & D : Tel. : 0265-2371269, Cell : 093285 83835 E-mail : info@greencircleinc.com, Website : www.greencircleinc.com
MUMBAI : 6, Ground Floor, Shakuntala Niwas, M.G. Road, Opp. G.H. School, Borivali (E) Mumbai - 400 066 India.
Cell : 099875 49920 Tel. : 022-28943090/60

: ALSO AT :

NEW DELHI GOA PUNE BENGALURU RUDRAPUR HYDERABAD KOLKATA

: OVERSEAS :

AUSTRALIA OMAN KUWAIT AFRICA VIETNAM UAE



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Report No:-GCI/V/Lab/EM-SP/17-18/Oct/628

Date: 13.10.2017

ANALYSIS REPORT

Client details		Sample Details	
Name	M/s. Jawahar Shekari Sahakari Sakhar Karkhana Ltd.	Sample Code	GCI/EC/17/AA2
Address	Kallappaanna Awadenagar, Hupari -Yalgud, Tal. Hatkanangale, Dist. Kolhapur.	Location	Hupari
		Date of Sampling	07.10.2017
Sampling Done By	Saitech, Kolhapur	Date of Sample Received	08.10.2017
Analysis Starts On	08.10.2017	Sampling Instrument	RDS, FPS
Analysis Completion On	13.10.2017	Sampling Method	IS 5182 : Part 5 : 1975

AMBIENT AIR ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	National Ambient Air Quality Standards (NAAQS) amended 2009	Reference Method
1	Particulate Matter (PM ₁₀)	µg/m ³	37.2	100	IS 5182 : Part 23 : 2006
2	Particulate Matter (PM _{2.5})	µg/m ³	11.6	60	NAAQS Guidelines
3	Sulphur dioxide (SO ₂)	µg/m ³	6.8	80	IS 5182 : Part 2 : 2001
4	Oxides of Nitrogen (NO _x)	µg/m ³	11.4	80	IS 5182 : Part 6 : 2006
5	Carbon Monoxide CO	mg/m ³	0.7	2.0	IS 5182 : Part 10 : 1999
6	Ozone as O ₃	µg/m ³	BDL	100	NAAQS Guidelines
7	Lead as Pb	µg/m ³	BDL	1.0	NAAQS Guidelines
8	Nickel as Ni	ng/m ³	BDL	20	NAAQS Guidelines
9	Arsenic as As	ng/m ³	BDL	6.0	NAAQS Guidelines
10	Ammonia as NH ₃	µg/m ³	BDL	400	NAAQS Guidelines
11	Benzene, C ₆ H ₆	µg/m ³	BDL	5.0	IS 5182 (Part 11):2006
12	Benzo (a) Pyrene	ng/m ³	BDL	1.0	Gas Chromatography

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Report No:-GCI/V/Lab/EM-SP/17-18/Oct/628

Date: 13.10.2017

ANALYSIS REPORT

Client details		Sample Details	
Name	M/s. Jawahar Shekari Sahakari Sakhar Karkhana Ltd.	Sample Code	GCI/EC/17/AA3
Address	Kallappaanna Awadenagar, Hupari -Yalgud, Tal. Hatkanangale, Dist. Kolhapur.	Location	Randivewadi
		Date of Sampling	07.10.2017
Sampling Done By	Saitech, Kolhapur	Date of Sample Received	08.10.2017
Analysis Starts On	08.10.2017	Sampling Instrument	RDS, FPS
Analysis Completion On	13.10.2017	Sampling Method	IS 5182 : Part 5 : 1975

AMBIENT AIR ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	National Ambient Air Quality Standards (NAAQS) amended 2009	Reference Method
1	Particulate Matter (PM ₁₀)	µg/m ³	40.7	100	IS 5182 : Part 23 : 2006
2	Particulate Matter (PM _{2.5})	µg/m ³	13.8	60	NAAQS Guidelines
3	Sulphur dioxide (SO ₂)	µg/m ³	6.1	80	IS 5182 : Part 2 : 2001
4	Oxides of Nitrogen (NO _x)	µg/m ³	10.3	80	IS 5182 : Part 6 : 2006
5	Carbon Monoxide CO	mg/m ³	0.6	2.0	IS 5182 : Part 10 : 1999
6	Ozone as O ₃	µg/m ³	BDL	100	NAAQS Guidelines
7	Lead as Pb	µg/m ³	BDL	1.0	NAAQS Guidelines
8	Nickel as Ni	ng/m ³	BDL	20	NAAQS Guidelines
9	Arsenic as As	ng/m ³	BDL	6.0	NAAQS Guidelines
10	Ammonia as NH ₃	µg/m ³	BDL	400	NAAQS Guidelines
11	Benzene, C ₆ H ₆	µg/m ³	BDL	5.0	IS 5182 (Part 11):2006
12	Benzo (a) Pyrene	ng/m ³	BDL	1.0	Gas Chromatography

BDL-Below Detection Limit

Shital
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Report No:-GCI/V/Lab/EM-SP/17-18/Oct/628

Date: 13.10.2017

ANALYSIS REPORT

Client details		Sample Details	
Name	M/s. Jawahar Shekari Sahakari Sakhar Karkhana Ltd.	Sample Code	GCI/EC/17/AA4
Address	Kallappaanna Awadenagar, Hupari -Yalgud, Tal. Hatkanangale, Dist. Kolhapur.	Location	Mangur
		Date of Sampling	07.10.2017
Sampling Done By	Saitech, Kolhapur	Date of Sample Received	08.10.2017
Analysis Starts On	08.10.2017	Sampling Instrument	RDS, FPS
Analysis Completion On	13.10.2017	Sampling Method	IS 5182 : Part 5 : 1975

AMBIENT AIR ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	National Ambient Air Quality Standards (NAAQS) amended 2009	Reference Method
1	Particulate Matter (PM ₁₀)	µg/m ³	36.4	100	IS 5182 : Part 23 : 2006
2	Particulate Matter (PM _{2.5})	µg/m ³	14.3	60	NAAQS Guidelines
3	Sulphur dioxide (SO ₂)	µg/m ³	6.6	80	IS 5182 : Part 2 : 2001
4	Oxides of Nitrogen (NO _x)	µg/m ³	11.3	80	IS 5182 : Part 6 : 2006
5	Carbon Monoxide CO	mg/m ³	0.5	2.0	IS 5182 : Part 10 : 1999
6	Ozone as O ₃	µg/m ³	BDL	100	NAAQS Guidelines
7	Lead as Pb	µg/m ³	BDL	1.0	NAAQS Guidelines
8	Nickel as Ni	ng/m ³	BDL	20	NAAQS Guidelines
9	Arsenic as As	ng/m ³	BDL	6.0	NAAQS Guidelines
10	Ammonia as NH ₃	µg/m ³	BDL	400	NAAQS Guidelines
11	Benzene, C ₆ H ₆	µg/m ³	BDL	5.0	IS 5182 (Part 11):2006
12	Benzo (a) Pyrene	ng/m ³	BDL	1.0	Gas Chromatography

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Date: 13.10.2017

ANALYSIS REPORT

Client details		Sample Details	
Name	M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd.	Sample Code	GCI/EC/17/AA5
Address	Kallappaanna Awadenagar, Hupari -Yalgud, Tal. Hatkanangale, Dist. Kolhapur.	Location	Mankapur
		Date of Sampling	07.10.2017
Sampling Done By	Saitech, Kolhapur	Date of Sample Received	08.10.2017
Analysis Starts On	08.10.2017	Sampling Instrument	RDS, FPS
Analysis Completion On	13.10.2017	Sampling Method	IS 5182 : Part 5 : 1975

AMBIENT AIR ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	National Ambient Air Quality Standards (NAAQS) amended 2009	Reference Method
1	Particulate Matter (PM ₁₀)	µg/m ³	39.3	100	IS 5182 : Part 23 : 2006
2	Particulate Matter (PM _{2.5})	µg/m ³	15.6	60	NAAQS Guidelines
3	Sulphur dioxide (SO ₂)	µg/m ³	6.6	80	IS 5182 : Part 2 : 2001
4	Oxides of Nitrogen (NO _x)	µg/m ³	13.2	80	IS 5182 : Part 6 : 2006
5	Carbon Monoxide CO	mg/m ³	0.7	2.0	IS 5182 : Part 10 : 1999
6	Ozone as O ₃	µg/m ³	BDL	100	NAAQS Guidelines
7	Lead as Pb	µg/m ³	BDL	1.0	NAAQS Guidelines
8	Nickel as Ni	ng/m ³	BDL	20	NAAQS Guidelines
9	Arsenic as As	ng/m ³	BDL	6.0	NAAQS Guidelines
10	Ammonia as NH ₃	µg/m ³	BDL	400	NAAQS Guidelines
11	Benzene, C ₆ H ₆	µg/m ³	BDL	5.0	IS 5182 (Part 11):2006
12	Benzo (a) Pyrene	ng/m ³	BDL	1.0	Gas Chromatography

BDL-Below Detection Limit

Sital

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Report No:-GCI/V/Lab/EM-SP/17-18/Oct/628

Date: 13.10.2017

ANALYSIS REPORT

Client details		Sample Details	
Name	M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd.	Sample Code	GCI/EC/17/AA6
Address	Kallappaanna Awadenagar, Hupari -Yalgud, Tal. Hatkanangale, Dist. Kolhapur.	Location	Sangaon Kasaba
		Date of Sampling	07.10.2017
Sampling Done By	Saitech, Kolhapur	Date of Sample Received	08.10.2017
Analysis Starts On	08.10.2017	Sampling Instrument	RDS, FPS
Analysis Completion On	13.10.2017	Sampling Method	IS 5182 : Part 5 : 1975

AMBIENT AIR ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	National Ambient Air Quality Standards (NAAQS) amended 2009	Reference Method
1	Particulate Matter (PM ₁₀)	µg/m ³	43.1	100	IS 5182 : Part 23 : 2006
2	Particulate Matter (PM _{2.5})	µg/m ³	15.7	60	NAAQS Guidelines
3	Sulphur dioxide (SO ₂)	µg/m ³	8.4	80	IS 5182 : Part 2 : 2001
4	Oxides of Nitrogen (NO _x)	µg/m ³	14.9	80	IS 5182 : Part 6 : 2006
5	Carbon Monoxide CO	mg/m ³	0.9	2.0	IS 5182 : Part 10 : 1999
6	Ozone as O ₃	µg/m ³	BDL	100	NAAQS Guidelines
7	Lead as Pb	µg/m ³	BDL	1.0	NAAQS Guidelines
8	Nickel as Ni	ng/m ³	BDL	20	NAAQS Guidelines
9	Arsenic as As	ng/m ³	BDL	6.0	NAAQS Guidelines
10	Ammonia as NH ₃	µg/m ³	BDL	400	NAAQS Guidelines
11	Benzene, C ₆ H ₆	µg/m ³	BDL	5.0	IS 5182 (Part 11):2006
12	Benzo (a) Pyrene	ng/m ³	BDL	1.0	Gas Chromatography

BDL-Below Detection Limit

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Date: 13.10.2017

ANALYSIS REPORT

Client Details		Sample Details	
Name	M/s. Jawahar Shekari Sahakari Sakhar Karkhana Ltd.	Sample Code	GCI/EC/17/ N1 to N6
Address	Kallappaanna Awadenagar, Hupari -Yalgud, Tal. Hatkanangale, Dist. Kolhapur.	Location	As per table
		Quantity	NA
		Date of Measurement	07.10.2017
		Sampling Instrument	Sound Level Meter (HTC/SL-1352)
Measurement Done By	Saitech, Kolhapur	Sampling Method	HTC/SL-1352 Inst. Manual

NOISE MONITORING RESULTS

Name of Station	Noise Levels (dBA)		Ambient Noise Standard (dBA)	
	Day	Night	Day	Night
Project site	64.2	45.8	75	70
Hupari	60.7	43.2	55	45
Randivewadi	55.8	41.6	55	45
Mangur	56.2	43.7	55	45
Mankapur	57.1	44.3	55	45
Sangaon Kasaba	56.7	42.5	55	45

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Date: 13.10.2017

ANALYSIS REPORT

Client Details		Sample Details	
Name	M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd.	Sample Code	GCI/EC/17/GW
Address	Kallappaanna Awadenagar, Hupari -Yalgud, Tal. Hatkanangale, Dist. Kolhapur.	Location	As per table
		Quantity	2000 ml
Sampling Done By	SAITECH, Kolhapur	Date of Sampling	07.10.2017
Analysis Starts on	08.10.2017	Sampling Method	APHA 1060
Analysis Completion On	13.10.2017	Sample Received Date	08.10.2017

GROUND WATER ANALYSIS RESULTS

Sr. No	Parameters	Ground Water							Standards
		Unit	Project Site	Mangure	Barwad	Dhonedwadi	Ingali		
1.	Color	Unit	Colorless	Colorless	Colorless	Colorless	Colorless	Colorless	Colorless
2.	Odor		Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable
3.	Turbidity	NTU	Nil	Nil	Nil	Nil	Nil	Nil	5.0 NTU
4.	Conductivity	ms/cm	598	230	227	210	249	-----	-----
5.	pH		7.53	7.15	7.23	7.51	7.62		6.5 to 8.5
6.	Total Dissolved Solids	mg/l	441	422	428	418	431		500 Max
7.	Total Suspended solids	mg/l	Nil	Nil	Nil	Nil	Nil		--
8.	Total Hardness	mg/l	214	212	231	237	221		300 Max
9.	Calcium as Ca	mg/l	52.6	53.27	63.83	42.38	47.92		75.0 Max
10.	Magnesium as Mg	mg/l	14.5	11.4	15.9	12.3	13.7		30.0 Max
11.	Chlorides as Cl	mg/l	38.3	32.7	30.8	20.2	37.6		250 Max
12.	Nitrate as NO3	mg/l	1.4	2.10	2.19	2.64	2.45		45.0 Max
13.	Sulphate as SO4	mg/l	8.3	3.50	4.25	4.21	3.20		200 Max
14.	Total Alkalinity	mg/l	271.3	261.6	272.3	245.9	255.7		200 Max
15.	Iron as Fe	mg/l	0.09	0.07	0.08	0.06	0.07		0.3 Max
16.	Fluoride as F	mg/l	Nil	Nil	Nil	Nil	Nil		1.0 Max
17.	Arsenic as As	mg/l	Nil	Nil	Nil	Nil	Nil		0.01 Max
18.	COD	mg/l	Nil	Nil	Nil	Nil	Nil		--
19.	BOD @ 27°C for 3 days	mg/l	Nil	Nil	Nil	Nil	Nil		--
20.	Total Coliforms	Nos/	Absent	Absent	Absen	Absen	Absen		Absent
21.	E-Coli	Nos/	Absent	Absent	Absen	Absen	Absen		Absent

BDL =Below Detectable Limit

DL =Detectable Limit

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Report No:-GCI/V/Lab/EM-SP/17-18/Oct/628

Date: 13.10.2017

ANALYSIS REPORT

Client Details		Sample Details	
Name	M/s. Jawahar Shefkari Sahakari Sakhar Karkhana Ltd.	Sample Code	GCI/EC/17/SW
Address	Kallappaanna Awadenagar, Hupari -Yalgud, Tal. Hatkanangale, Dist. Kolhapur.	Location	As per table
		Quantity	2000 ml
Sampling Done By	SAITECH, Kolhapur	Date of Sampling	07.10.2017
Analysis Starts on	08.10.2017	Sampling Method	APHA 1060
Analysis Completion On	13.10.2017	Sample Received Date	08.10.2017

SURFACE WATER ANALYSIS RESULTS

Sr. No	Parameter	Unit	Limits as per IS:2296-C	Dudhganga River	Rendal Lake
1	pH	-	-	7.5	7.8
2	Electrical Conductivity	µmhos/cm	NS	327.8	889.5
3	Chlorides (Cl)	Mg/l	600	63.5	92.3
4	Total Hardness	mg/l	NS	95.6	128.5
5	Total Alkalinity	mg/l	NS	120.3	377.5
6	Total Dissolved Solids	mg/l	1500	257.8	537.4
7	Sulphate (SO ₄)	mg/l	400	39.2	75.6
8	Iron (Fe ⁺)	mg/l	50	0.3	0.4
9	Fluoride (F)	mg/l	1.5	0.4	0.3
10	Calcium (Ca ⁺)	mg/l	NS	30.7	36.2
11	Magnesium (Mg ⁺)	mg/l	NS	8.8	11.3
12	Nitrates (NO ₃ ⁻)	mg/l	50	6.5	6.1
13	Total suspended solids	mg/l	NS	70.4	74.8
14	B O D	mg/l	3	1.0	1.3
15	Dissolved Oxygen	mg/l	4 (min)	3.8	3.9
16	Copper (Cu)	mg/l	1.5	BDL	BDL
17	Manganese (Mn)	mg/l	NS	BDL	BDL
18	Mercury (Hg)	mg/l	NS	BDL	BDL
19	Selenium (Se)	mg/l	0.05	BDL	BDL
20	Cyanide (CN)	mg/l	NS	BDL	BDL
21	Chromium (Cr ⁶⁺)	mg/l	NS	BDL	BDL
22	Lead (Pb)	mg/l	NS	BDL	BDL
23	Zinc (Zn)	mg/l	NS	BDL	BDL
24	Aluminum (Al)	mg/l	NS	BDL	BDL
25	Cadmium (Cd)	mg/l	NS	BDL	BDL
26	Arsenic (As)	mg/l	0.2	BDL	BDL

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Date: 13.10.2017

ANALYSIS REPORT

Client Details		Sample Details	
Name	M/s. Jawahar Shekari Sahakari Sakhar Karkhana Ltd.	Sample Code	GCI/EC/17/S
Address	Kallappaanna Awadenagar, Hupari - Yalgud, Tal. Hatkanangale, Dist. Kolhapur.	Location	As per table
		Quantity	2.0 Kg
Sampling Done By	SAITECH, Kolhapur	Date of Sampling	07.10.2017
Analysis Starts on	08.10.2017	Sampling Method	APHA 1060
Analysis Completion On	13.10.2017	Sample Received Date	08.10.2017

SOIL ANALYSIS RESULTS

Sr. No.	Parameters	Project Site	Mangure	Barwad	Dhonerwadi	Ingali	Unit
1.	pH	6.5	6.7	6.5	6.9	6.6	-
2.	Conductivity	4.47	4.38	4.78	4.67	4.73	Ms/sec
3.	Chlorine(Cl)	ND	ND	ND	ND	ND	Mg/ltr
4.	Sulphate(SO ₄)	113	106	115	118	123	Mg/ltr
5.	Nitrogen(N)	28.4	26.5	30.7	32.5	34.1	Mg/ltr
6.	Phosphorous(P)	41.3	45.8	36.2	47.5	35.9	Mg/ltr
7.	Potassium(K)	65.3	69.5	61.6	67.3	64.8	Mg/ltr
8.	Sodium (Na)	182	188	190	186	174	Mg/ltr
9.	Iron(Fe)	2.4	2.1	2.3	2.0	2.2	Mg/ltr
10.	Calcium(Ca)	43.8	46.2	45.0	42.5	47.9	Mg/ltr
11.	Magnesium(Mg)	51.7	52.7	58.3	56.7	55.8	Mg/ltr
12.	Oil & Greece	ND	ND	ND	ND	ND	Mg/ltr

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Report No:-GCI/V/Lab/EM-SP/17-18/Oct/628

Date: 13.11.2017

ANALYSIS REPORT

Client Details		Sample Details	
Name	M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd.	Sample Code	GCI/EC/17/JSSSKL/ST1
Address	Kallappana Awadenagar, Hupari Yalgud, Tal-Hatkanangale, Dist-Kolhapur.	Stack attached to	As In Table
		Location	Boiler I
		Sampling Instrument	Stack Monitoring Kit
Sampling Done By	SAITECH, Kolhapur	Date of Sampling	09.11.2017
Analysis Starts on	10.11.2017	Sampling Method	Isokinetic Sampling, IS:11255,PART-1,2,3
Analysis Completion On	13.11.2017	Sample Received Date	10.11.2017

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Description	Unit	Results	MPCB Limits	Reference Method
			Boiler I		
1.	Material of Stack	-	Concrete		
2.	Type of Stack	-	Round		
3.	Stack Height	mtr.	72		
4.	Stack Dimensions	mtr.	3.0		
5.	Differential Pressure	mmWG	2.7		
6.	Stack Area	m ²	7.06		
7.	Temperature of Flue Gas	°K	383		
8.	Velocity of Flue Gas	m/s	6.1		
9.	Volumetric Flow of Flue Gas	Nm ³ /hr	122940.7		
10.	Total Particulate matter (TPM)	mg/Nm ³	40.3	<150	IS 11255: Part 1
11.	Sulfur Dioxide (SO ₂)	mg/Nm ³	0.7	---	IS 11255: Part 2
12.	Oxide of Nitrogen (NO _x)	mg/Nm ³	3.4	---	IS 11255: Part 7

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Report No:-GCI/V/Lab/EM-SP/17-18/Oct/628

Date: 13.11.2017

ANALYSIS REPORT

Client Details		Sample Details	
Name	M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd.	Sample Code	GCI/EC/17/ JSSSKL /ST2
Address	Kallappana Awadenagar, Hupari Yalgud, Tal- Hatkanangale, Dist-Kolhapur.	Stack attached to	As In Table
		Location	Boiler II & III
		Sampling Instrument	Stack Monitoring Kit
Sampling Done By	SAITECH, Kolhapur	Date of Sampling	09.11.2017
Analysis Starts on	10.11.2017	Sampling Method	Isokinetic Sampling, IS:11255,PART-1,2,3
Analysis Completion On	13.11.2017	Sample Received Date	10.11.2017

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Description	Unit	Results	MPCB Limits	Reference Method
			Boiler II & III		
1.	Material of Stack	-	Concrete		
2.	Type of Stack	-	Round		
3.	Stack Height	mtr.	75		
4.	Stack Dimensions	mtr.	4.0		
5.	Differential Pressure	mmWG	2.4		
6.	Stack Area	m ²	12.5		
7.	Temperature of Flue Gas	°K	379		
8.	Velocity of Flue Gas	m/s	5.7		
9.	Volumetric Flow of Flue Gas	Nm ³ /hr	207146.0		
10.	Total Particulate matter (TPM)	mg/Nm ³	76.8	<150	IS 11255: Part 1
11.	Sulfur Dioxide (SO ₂)	mg/Nm ³	0.7	---	IS 11255: Part 2
12.	Oxide of Nitrogen (NO _x)	mg/Nm ³	3.2	---	IS 11255: Part 7

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Environmental Management Cell

