



ATHANI SUGARS LIMITED

(Formerly known as Athani Farmers Sugar Factory Limited)

Regd. Off. & Factory : Vahnuannanagar, Post : Navalihal-591 234, Tal. : Athani, Dist. : Belgaum,
Karnataka State, Phone : 08339-280100, 01, 02 Fax : 08339-280103
E-mail : info@athanisugars.com

Branch Office : 'Shiv Pavilion', 2nd Floor, Near Ram Mandir, Sangli-Miraj Road,
Sangli - 416 416 Maharashtra State, Phone : 0233-2373885

IN : LM2109KA1999PLOC017805

No. ASL/Env/03/2016-17

Date: 13.04.2016

To,

**The Additional Principal Chief Conservator of Forests (C),
Ministry of Environment and Forest & Climate Change,
4th Floor, E&F Wing, Kendriya Sadan
Koramangala, Bengaluru-560034**

Subject: Submission of Half year compliance report of Environment
Clearance issued for 4500 TCD Sugar plant, 60 KLPD Distillery
and 24 MW Co-gen.

Ref: Your letter no 1: EP/12.1/308/KAR/8077, dated: 3.03.2016.
2: EP/12.1/634/KAR/0106, dated: 8.03.2016.

Respected Sir,

With reference subject and reference to cited above, we are please to
submit 2nd half year compliance report of M/s Athani Sugars Limited
Environmental Clearance issued letter no J-11011/129/2006-IA.II(I),
Dated:29.05.2006 and No. J-11011/189/2009-IA.II(I), Dated: 1.9.2009
for integrated project of sugar 4500 TCD, Distillery 60KLD and 24 MW
Co-gen plant .

This is for your kind information.

Thanking you.

Yours faithfully,
for Athani Sugars Limited,

AUTHORIZED SIGNATORY

Encl. As above.

**2nd HALF YEAR COMPLIANCE REPORT (October
2015-March 2016) TOWARDS ENVIRONMENTAL
CLEARENCE**

Prepared For

**OPERATION OF 4500 TCD SUGAR INDUSTRY &
24 MW CO-GEN PLANT AND 60 KLPD RECTIFIED
SPIRIT/ENA/ETHANOL FOR THE YEAR 2015-16.**

From

**ATHANI SUGARS LIMITED,
VISHNUANNANAGAR, POST-NAVALIHAL,
TAL-ATHANI, DIST.-BELGAUM-591 234.**



Statement of Compliance for 30 KLD Distillery.
MoEF letter no : No.J.11011/129/2006-IA.II.(I), dated : 29.05.2006

1.	Project Type	Industry
2.	Name of the project	30KLPD distillery unit by M/s Athani Sugars Limited, (formely knowns as Athani Farmer Sugar Factory Limited) at Madhabavi Village Talk -Athani, Dist Belgaum in Karnataka
3.	Clearance letter no and date	MOEF letter No.J-11011/129/2006-IA.II.(I), Dated:29.05.2006
4.	Location, District & State / UT	Belgaum, Karnataka
5.	Address for correspondence	Shri. Shrimant Balasaheb Patil, M/s. Athani Sugars Limited, Vishnuannanagar, Post- Navalihal 591 234, Talk Athani, Dist-Belgaum Ph:08339-280100/01, Fax:08339-280103 Email: yogeshpatil@athanisugars.com , padmarajvaradaraya@athanisugars.com . Contact No : 9164830912
6.	Financial Details	
a	Project cost as originally planned and subsequent revised estimates and the years of price reference	13.82 crores.
b	Allocations made for environmental management plans, with item wise and year wise breakup	Rs. 62 Lakhs (Rs. 8 Crores as per condition (viii) of general conditions for recurring and non recurring expenditure to implement conditions stipulated by MoEF)
c	Total expenditure on the Project so far	ASL has spent Rs. 2400 lakh for the completion of entire 30 KLPD project. Out of this, 15.88 crores have been spent for 30 KLPD plant and remaining 8.12 crores have been spent on Environment management plan as per condition (viii).
d	Actual expenditure incurred on the environmental management plans so far	Following capital expenses have been made towards capital equipments to control pollution for 30 KLD distillery: Bio- digester : Rs. 4.8 crores Spent wash Storage tank: Rs1.5 crores Bio compost yard : Rs.1.2 crores Recurring expenses for EMP as enclosed in Annexure - I.
7.	Status of construction:	Plant is completed & commissioned in February, 2008.
a.	Date of commencement	1st February, 2008
b.	Date of completion (actual and/or planned)	The project has been completed
8	Date of site visit :	

a.	The dates on which the project was monitored by the Regional Office on previous occasions, if any	Nil
b.	Date of site visit for this monitoring report	08.01.2015

BRIEF STATUS OF THE PROJECT:-

The ASL has completed and commissioned 30 KLPD distillery/ ethanol plant in February, 2008. The molasses produced out of sugar factory is used as raw material for distillery. The company has adopted continuous fermentation process so that spent wash generation per KL of ethanol will be minimized to 8 liter per liter of final product. As per EC conditions, composting after bio-methanization is adopted for spent wash treatment. Compost yard and spent wash storage tanks are reportedly constructed as per CPCB guidelines.

Presently, 60 KLD distillery, 24 MW cogeneration plant and 4500 TCD sugar plant are operating. MoEF has issued EC for expansion of distillery from 30 KLD to 60 KLD and for 24 MW bagasse based cogeneration vide letter no. J-11011/189/2009-IA.II(I), Dated: 1.9.2009.

There is reportedly abundant quantity of sugarcane is available in the nearby areas and the industry has reportedly also undertaken 16 irrigation projects in the nearby villages. Considering the availability of the sugarcane, the management of the industry proposes to expand the sugar factory from 4500 TCD to 12000 TCD (7500 TCD expansion), co-generation from 24 MW to 54 MW (30 MW expansion) and distillery / ethanol plant from 60 KLPD to 90 KLPD (30 KLPD expansion). For the proposed expansion of the project, the industry has obtained TOR from ministry vide letter no F.No.J-11011/373/2013-IA.II(I) dated 30.04.2014.

A. SPECIFIC CONDITIONS :-

i). The industry shall ensure that the treated effluent and stack emissions from the unit are within the norms stipulated under the EPA rules or SPCB whichever is more stringent. In case of process disturbances/failure of pollution control equipment adopted by the unit, the respective unit shall be shut down and shall not be restarted until the control measures are rectified to achieve the desired efficiency.

The water requirement per day, effluent generation per day and effluent treatment details for various plants is as mentioned below:

Plant	capacity	Water requirement (m3)	Effluent generation volume (m3)	Method of treatment
Sugar plant	4500 TCD	Nil	450	Treated in sugar ETP by surface aeration method. Treated water is used for green belt development.
Cogen plant	24 MW	418 fresh water + 820 from polished condensate from sugar plant = 1238	Boiler blow down 52.4 + cooling tower blow down 220.4 = 272.8	Effluent is neutralized in Neutralization pit and treated water used is for green belt development.
Distillery plant	60 KLD	432 fresh water + 400 condensate from evaporation plant + 238 distillery return condensate = 1070	Spent wash generation = 480	Generated Spent wash is being treated in 2 Nos. of biodigesters'. The biomethanated spent wash (480m ³ /day) is further fed to seven effect falling film evaporators (900 KLD capacity) to concentrate & reduce the qty. of BMSW to 120 m ³ /day. The conc. BMSW is then composted with press mud to achieve zero discharge

There are two process stacks for 130 TPH bagasse base cogeneration boiler and 18 TPH coal and biogas based distillery boiler. Monthly monitoring has been outsourced to a KSPCB empanelled laboratory and reports are submitted to Regional office regularly. 70 M above Ground Level (AGL) provided for 130 TPH bagasse base boiler

and 42 M for 18 TPH distillery boiler and Electrostatic precipitator (ESP) provided for both the stack.

Stack results for the month of Dec 2015 and Jan 2016, Feb 2016 are as follows:

Parameters	Unit	Results						Standard
		130 TPH			18 TPH			
		Dec 2015	Jan 2016	Feb 2016	Dec 2015	Jan 2016	Feb 2016	
Particular Matter	mg/Nm3	101.93	127.11	116.14	134.69	126.59	-	150
Nitrogen dioxide	mg/Nm3	30.7	32.69	37.85	29.54	33.35	-	---
Sulphur dioxide	mg/Nm3	43.2	43.20	41.14	40.8	40.80	-	---
Hydrogen sulphide	mg/Nm3	-	1.21	1.55	-	0.8	-	---

ii).The company shall adopt continuous fermentation technology to ensure that the spent wash shall not exceed 8 kl/kl of alcohol produced. As reflected in the EMP, the spent wash after anaerobic treatment shall be composted with press mud. No effluent shall be discharged outside the factory premises and zero discharge shall be strictly as per the CPCB guidelines. The company shall earmark an area of 16.0 acres for bio composting, storage of finished products etc. The compost yard shall be made impervious as per the CPCB guidelines.

The company has adopted continuous fermentation technology for the distillery. Generated Spent wash is being treated in 2 number of bio-digesters (each of capacity 450 m3/day, volume 12700 m3). The bio-methanated spent wash (BMSW) is mixed with press mud to produce compost. The effluent of Biodigester is further fed to falling film multi effect (7 effects) evaporator (capacity 900 KLD) to concentrate and reduce quantity of BMSW. The effluent from Evaporator is composted with Press mud.

We have constructed compost yard impervious as per the CPCB guidelines. There is no effluent discharged outside the factory premises. We have provided 4 nos. test bore wells around the compost yard. The area being dry and water table is below 150 feet

and due to non availability of ground water, test bore well not monitored. So we are bore water quality analyzed from factory surrounding area.

Water quality report as enclosed below:

The bore samples were collected from inside factory premises near guest house and from bore well which is located outside factory premises.

Analysis Reports for the month of December 2015 and January 2016, Feb 2016 as enclosed below:

Parameters	Unit	Results						Standards	
		Industry Premises			Guest House			DL	PL
		Dec 2015	Jan 2016	Feb 2016	Dec 2015	Jan 2016	Feb 2016		
pH	--	8.4	6.85	8.02	8.44	7.32	7.87	6.5-8.5	
Color	Hazen	<1	<5	<1	<1	<5	<1	5	15
Turbidity	NTU	2.78	0.38	0.85	2.69	0.44	2.3	1	5
TDS	mg/l	226	305	332	329	98	320	500	2000
Total Hardness	mg/l	56	8	48	52	12	60	200	600
Chloride as Cl	mg/l	39.42	9.58	110.4	39.4	39.3	108.5	250	1000
Calcium as Ca	mg/l	14.4	1.6	16.0	14.4	3.2	20.8	75	200
Fluoride as F	mg/l	0.69	0.12	0.79	0.82	0.18	1.41	1	15
Nitrated as Nitrogen	mg/l	7.7	1.55	0.63	4.61	1.93	1.15	45	
Sulphate As SO4	mg/l	34.8	8.1	65.5	37.5	8.34	59.9	200	400
Magnesium as Mg	mg/l	4.86	0.97	1.94	3.88	0.97	1.94	30	100
Iron as Fe	mg/l	0.05	0.18	0.12	0.138	0.07	0.13	0.3	

Total Coliforms	CFU/100ml	Nill	Nill	Nill	1	Nill	Nil	10
Fecal Coloforms	CFU/100ml	nill	Nill	Nill	Nill	Nill	Nill	nill

The photographs of Biodigester, Evaporator plant, construction of compost yard and test bore are enclosed as Annexure II

iii).The company shall install fly ash arrestor and wet scrubber and stack height of 55 m to control the emission from the bagasse fired boiler installed to achieve the particulate emission within the prescribed standards.

The company has installed Electro Static Precipitators (ESP) for both the new boilers to control emission. The old boilers of capacity 35TPH one number and 32 TPH two numbers have been dismantled. The stack height of co-gen boiler (130 TPH) is 70 meter and that of distillery boiler (18 TPH) is 42 meter. Monthly monitoring is outsourced to KSPCB recognized laboratory.

The photographs of the ESP of 130 TPH and 18 TPH boilers are enclosed as Annexure III.

Stack results for the month of December 2015 and Jan 2016, Feb 2016:

Parameters	Unit	Results						Standard
		130 TPH			18 TPH			
		Dec 2015	Jan 2016	Feb 2016	Dec 2015	Jan 2016	Feb 2016	
Particular Matter	mg/Nm3	101.93	127.11	116.14	134.69	126.59	-	150
Nitrogen dioxide	mg/Nm3	30.7	32.69	37.85	29.54	33.35	-	---
Sulphur dioxide	mg/Nm3	43.2	43.20	41.14	40.8	40.80	-	---
Hydrogen sulphide	mg/Nm3	-	1.21	1.55	-	0.8	-	

vi).The spent wash shall be stored in impervious pucca lagoons. The spent wash lagoon shall have proper lining with HDPE and shall be kept in proper condition

to prevent ground water pollution. As per the CPCB recommendation, storage shall not exceed 30 days capacity.

The spent wash is stored in impervious pucca lagoons & these lagoons have proper lining with 250 micron HDPE film. The storage of spent wash is restricted to 30 days.

- Storage tank no.1 (5 days capacity for Raw spent wash storage): 56 m X 12 m X 3 m = 2016 M³ + 1m free board.
- Storage tank no.2 (25 days capacity for Biomethanated spent wash storage): 56 m X 64 m X 3 m = 10752 M³ + 1m free board.

Photographs of the same are enclosed as Annexure –IV

vii).Adequate number of ground water quality monitoring stations by providing Piezometers around the compost plant and the project area shall be set up. Sampling and trend analysis monitoring must be made on monthly a basis and report submitted to SPCB and this Ministry.

Four nos. of test bore wells are provided around compost yard. Sampling & trend analysis monitoring is outsourced to KSPCB recognized laboratory. Monthly monitoring reports are submitted to the KSPCB Regional office regularly. Copies of the monitoring reports are enclosed as Annexure –VIII

viii).The company shall obtain permission from the state Irrigation Department for drawl of ground water.

The company has been granted water drawl permission of 38 mcft (Million Cubic feet) from Krishna River for the industrial use. Two pipelines have been laid for water drawl from the river. Flow meters have been provided to major the quantity of water drawl from river. Rainwater harvesting methods have been adopted to recharge the ground water level.

Permission letter is enclosed as Annexure-V

ix).The operation of distillery shall be restricted to 270 days and that it will not operate during rainy season.

We are ensuring that distillery is not operating more than 270 days per year.

x).As reflected in the EIA/EMP, green belt of adequate width and density in 25% of the plant area shall be provided to mitigate the effects of fugitive emissions all around the plant and compost yard as per the CPCB guideline in consultation with local DEO.

The total area of the industry is 120 acres. Out of this, 40% of the area i.e. 48 acres has been developed as Green belt. We have planted about 10500 nos. of different variety of plants/trees in factory premises in main gate , cane yard, employee colony and road way to factory both side , the green belt such as Neem, Mango, Chikkoo, Coconut, Tamarind etc at cost of 12.6 Lakhs. As per PCB norms we are planted five rose windows around compost yard. Photographs of same enclosed as Annexure-VI.

xi). Company shall adopt rain water harvesting measures to recharge the ground water.

Company is located in dry and rain shadow area. The average rainfall in this location is 450 mm. The rain water over the roof of the various plants is collected and recharged to bore well after giving proper treatments. Also the rain water from the industry premises is collected in tanks and recharged to ground after due treatment. Almost 350 lakhs liter of water would have been gathered during last 3 seasons from roof top of the various building in the industry.

xii).Occupational health surveillance programme shall be undertaken as regular exercise for all the employees. The first aid facilities in the occupational health center shall be strengthened and the medical records of each employee shall be maintained separately.

The industry has total number of 800 employees working in three shifts during season time. The company has purchased its own well equipped ambulance and appointed three permanent drivers to provide 24 hours ambulance service to its all employees. All employees have been provided with canteen facility, entertainment & sports facility and sanitation facility in the premises of the industry. A doctor has been appointed to visit the industry site on daily basis to provide healthcare facility to employees. Also necessary healthcare facilities are being provided with routine health survey tests & through medical camps.

B.GENERAL CONDITIONS.

i).The project authorities must strictly adhere to the stipulations made by the KSPCB and the State Government.

Combined consent for 4500 TCD sugar plant , 60 KLD distillery plant and 24 MW Cogen plant for the season 2015-16 letter no is PCB/148/HPI/2015-16/OB -2112. Dated: 23 Feb 2016.

CFO copies attached as Annexure VII

ii) No further expansion or modifications in the plant shall be carried out without prior approval of Ministry of Environment and Forest.

Ministry has given clearance for Expansion of molasses based distillery (30 to 60 KLPD) and setting up of 24 MW biomass based power plant at Kempwad, Taluk Athani, District Belgaum by M/s Athani Farmers Sugar Factory Ltd. vide MoEF. Lr. No. J-11011/189/2009-IA.II(I), Dated: 1.9.2009.

The co-generation has been completed and commissioned in October, 2012 investing around Rs. 9868 lakh. The expansion of the distillery/ethanol plant is also completed and the expanded plant is commissioned in May, 2014 costing about Rs. 4500 lakh.

iii).Ambient Air Quality Monitoring Stations shall be set up in the downwind direction as well as where maximum ground level concentration of SPM, SO₂, NO_x are anticipated in consultation with the State Pollution Control Board.

Two Ambient Air Quality monitor station are provide. One AAQ station is located near factory main gate and another station is provided near compost yard which is located outside factory. AAQ is being monitored by KSPCB empanelled laboratory on monthly basis and reports are submitted to board regularly. All 12 parameter of ambient air quality results for the month of December 2015 and Jan 2016, Feb 2016 as follow:

Parameters	Units	Results						NAAQ Standards
		Near Main Gate			Near Compost yard			
		Dec 2015	Jan 2016	Feb 2016	Dec 2015	Jan 2016	FEB 2016	
Particulate Matter (PM 10)	µg/m3	76	73	86	84	79	79	100
Particulate Matter (PM 2.5)	µg/m3	39	34	39	44	31	40	60
Sulphur dioxide (SO2)	µg/m3	3.26	5.06	6.39	2.99	3.75	7.01	80
Nitrogen dioxide (NO2)	µg/m3	23.4	10.25	13.15	14.93	13.15	13.82	80
Amonia (NH3)	µg/m3	-	18.99	12.05	-	21.15	12.05	400
Carbon Monoxide (CO)	mg/m3	-	2.25	1.18	-	2.15	1.18	4.0
Ozone (O3)	µg/m3	-	3.62	4.97	-	3.14	4.97	180
Lead (Pb)	µg/m3	-	0.017	0.018	-	0.01	0.018	1.0
Arsenic (As)	ng/m3	-	2.04	0.68	-	1.33	0.68	6.0
Nickel (Ni)	ng/m3	-	8.87	8.23	-	3.33	8.23	20.0
Benzo (a)Pyrene	ng/m3	-	BDL	BDL	-	BDL	BDL	1.0

(BaP)								
Benzene (C ₆ H ₆)	µg/m ³	-	BDL	BDL	-	BDL	BDL	5.0
Poly Aromatic Hydrocarbon	ng/m ³	-	BDL	BDL		BDL	BDL	1.0

iv) Adequate number of influent and effluent quality monitoring stations shall be set up in consultation with the State Pollution Control Board. Regular monitoring should be carried out for relevant parameters.

Four monitoring station provided and monthly monitoring is report all necessary parameter for the influent and effluent. Sample collection points are sugar ETP influent, effluent for sugar plant and raw spent wash & biomethanated spent wash for distillery effluents. The online continuous monitoring system and flow meter is provided for treated Sugar effluent and data to CPCB and KSPCB server is pending.

The monitoring reports and photographs of online monitoring system are attached as Annexure –VIII.

v) The overall noise level in and around the plant area shall be kept well within the standards, (85dBA) by providing noise control measures including acoustic hood, Silencers, enclosure etc. on all sources of noise generation. The ambient noise level should conform to the standards prescribed under EPA Rules, 1989 viz 75 dBA (day time) and 70 dBA (night time).

We have provided noise control measures for all sources of noise generating equipments/machines like D.G. Sets with acoustic enclosures & are confirmed to EPA Rules, 1989 prescribed for Air & Noise Emission standards.

Noise level parameters are being monitored regularly at our location for Day and Night as below:

Sample Location	Parameters dB (A)						Std parameter dB(A)	
	day			Night			Day	Night
	Dec 2015	Jan 2016	Feb 2016	Dec 2015	Jan 2016	Feb 2016		
Near Main Gate	68.04	63.89	62.79	59.75	62.14	61.43	75	70
Near Cane Carrier	68.74	59.61	67.87	62.88	63.31	69.32	75	70
Near Compost yard	67.41	64.26	64.32	60.09	64.08	50.48	75	70
Near Guest house	68.04	72.72	63.28	63.02	62.61	60.96	75	70

vi).The project proponent shall also comply with all the environmental protection measures and safeguards recommended in EIA/EMP project.

Compliance as follows

Sr.No	Items	Compliance
1.	Air Pollution control	ESP is installed to 130TPH boiler and 18 TPH Boiler.
2.	Water Pollution control	<p>Sugar unit: - Generated waste water is treated in Sugar ETP (600m³/day capacity) by Surface aeration followed by Clarification .Treated water used for green belt development.</p> <p>Distillery Waste: The generated waste form distillery is being treated in 2 no of Biodigesters (Capacity of 450m³/day each).The Biomethanated Spent wash further fed to 7 effect falling film evaporator (capacity 900 KL) to concentrate and reduced the quantity of BMSW . The conc. BMSW is composted with press mud to achieve zero discharge.</p>

vii) A separate environmental management cell equipped with full fledged laboratory facilities must be set up to carry out the environmental management and monitoring functions.

Company has established a separate environmental management cell (consisting of one director of company, environment engineer, distillery manager and chief engineer of sugar plant) with well equipped laboratory for carrying out daily analysis of treated and untreated effluents from sugar plant and distillery plant. COD, Total solid, Suspended Solid, pH, oil and grease are analyzed in house laboratory daily and monthly monitoring is done for all necessary parameters by KSPCB approved laboratory. Further, a well qualified Environment officer and ETP in charge are appointed. Environment Management cell structure is enclosed as Annexure-IX.

viii) The project authorities shall provide funds (Rs. 8 Cr as mentioned in the questionnaire no. xix of the EIA/EMP report) for the both recurring and non recurring expenditure to implement the conditions stipulated by the non recurring expenditure to implement the conditions stipulated by the MoEF as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.

The distillery/ethanol plant (30 KLPD) is completed and commissioned in February 2008 costing about Rs. 24 crores. Subsequently, the company has expanded distillery capacity from 30 KLPD to 60 KLPD and installed 24 MW cogeneration plant. Capital expenditure made by the project authorities as on date are listed below:

Bio-digester 2 nos : Rs. 960 Lakh

Spent wash storage tank: Rs. 150 lakh

Bio-composting yard: Rs. 120 lakh

ESP for Co-gen boiler: 250 Lakh

ESP for distillery boiler: 100 Lakh

Spent wash Evaporator: 700 Lakh

Recurring expenses are Rs. 62 Lakhs for monitoring and maintaining green belt.

ix) The implementation of the project vis -a -vis environmental action plans will be monitored by Ministry Regional Office at Bangalore /State Pollution Control Board/Central Pollution Control Board. A six monthly compliance Status report along with the monitored data shall be submitted to the monitoring agencies.

Agreed to comply.

1. Letter no: AFSF/Env/397/2012-13 dated: 20.04.2012.
2. Letter no: AFSF/Env-20/3552/2011-12 dated: 07.03.2012.
3. Letter no: ASL/Env/28/2014-15 dated: 18.09.2014.
4. Letter no: ASL/Env/15/2015-16 dated: 16.07.2015.
5. Letter no: ASL/Env/ 32 /2015-16 dated: 27.01.2016.

x). The project proponent shall inform the public that the project has been accorded environmental clearance by MoEF and copies of the clearance letter are available with SPCB and may also be seen at Website of MoEF at <http://Envfor.nic.in>. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspaper that widely circulated in the region of which one shall be in the vernacular language of locality concerned and copy of the same shall be forwarded to the Regional office.

The project has received Environmental Clearance on 29.05.2006 from MoEF and same has been published in two newspapers (English & Kannada) as per conditions. However, unfortunately we are not able to find the copies of the same as our environment office location has been changed 2-3 times during this period.

xi) The project Authorities shall inform the Regional 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 land development work.

The project is completed and commissioned.

3.0) The Ministry may revoke or suspends the clearance, if implementation of any of the above conditions is not satisfactory.

Accepted.

4.0) The Ministry reserves the right to stipulate additional conditions if found necessary. The company will implement these conditions in a time bound manner.

No additional conditions were stipulated by Ministry.

5.0) The above condition will be enforced, inter alia under the provisions of the Water (Prevention &Control pollution) Act 1974, the Air(Prevention &Control pollution) Act,1981, the Environment (Protection)Act, 1986 and the Public Liability Insurance Act,1991 along with their Amendments and rules.

Noted.

Statement compliance for 30-60 KLD Distillery

MOEF letter No: F.No.J-11011/189/2009-IA-II dated: 1.09.2009.

1.	Project Type	Industry
2.	Name of the project	Expansion of molasses based distillery (30 to 60 KLPD) and setting up of 24 MW biomass based power plant at Kempwad, Taluk Athani, District Belgaum by M/s Athani sugars Limited (formerly known as Athani Farmers Sugar Factory Ltd).
3.	Clearance letter no and date	MoEF. Lr. No. J-11011/189/2009-IA.II(I), Dated: 1.9.2009.
4.	Location, District & State / UT	Belgaum, Karnataka
5.	Address for correspondence	Shri. Shrimant Balasaheb Patil, M/s. Athani Sugars Limited, Vishnuannanagar, Post- Navalihal 591 234, Taluk Athani, Dist-Belgaum Ph:08339-280100/01, Fax:08339-280103 Email: yogeshpatil@athanisugars.com , padmarajvaradaraya@athanisugars.com . Contact no : 9164830912
6.	Financial Details	
a	Project cost as originally planned and subsequent revised estimates and the years of price reference	31.48 crores (30 to 60 Distillery)
b	Allocations made for environmental management plans, with item wise and year wise breakup	Rs. 72 Lakhs
c	Total expenditure on the Project so far	Rs. 45 crores for the completion of entire 30-60 KLPD distillery project. Out of this, 31.48 crores have been spent for 30-60 KLPD plant and remaining 13.52 crores have been spent on Environment management.
d	Actual expenditure incurred on the environmental management plans so far	Following capital expenses were incurred towards equipments to control pollution for distillery 30 to 60 KLP plant: Bio-digester: Rs. 480 Lakh ESP for distillery boiler: 100 Lakh Multi effect Evaporator plant: 700 Lakh Recurring expenses for EMP as enclosed in Annexure - I.
7.	Status of construction:	
a.	Date of commencement	November 2013
b.	Date of completion (actual and/or planned)	May 2014.
8.	Date of site visit :	
a.	The dates on which the project was	24.2.2012

	monitored by the Regional Office on previous occasions, if any	
b.	Date of site visit for this monitoring report	08.01.2015

A. SPECIFIC CONDITIONS :-

i) The company shall adopt continuous fermentation technology. The spent wash generation shall not exceed 480m³/day. the spent wash after bio methanation in bio digester shall be concentrated to 180 m³/day and composted with press mud to achieve zero discharge.

The company has adopted continuous fermentation technology for distillery. Generated Spent wash is being treated in biodigesters (2 nos, capacity of 450m³/day each, volume 12700 m³). The effluent of biodigester is further fed to falling film multi-effect (7 effect, capacity 900 KLD) evaporator to concentrate & reduce the qty. The effluent from the evaporator is composted with press mud and zero discharge is achieved. The Photographs of same enclosed as Annexure II

ii). Land and other requirements for treatment of spent wash with press mud shall be as per the CPCB guidelines. The company shall earmark the area for bio-composting. The compost yard shall be made impervious as per the CPCB guideline.

We have constructed compost yard impervious as per the CPCB guidelines. We have also provided 4 nos. test bore wells around the compost yard. We achieved zero discharge as per the CPCB guidelines. Photographs are enclosed as Annexure -II

iii).The spent wash shall be stored in impervious pucca lagoons. The spent wash lagoon shall have proper lining with HDPE and shall be kept in proper condition to prevent ground water pollution. As per the CPCB recommendation, storage for the concentrated spent wash shall not exceed 30 days.

The spent wash is stored in impervious pucca lagoons & these lagoons have proper lining with 250 micron HDPE film. The storage of spent wash is restricted to 30 days.

- Storage tank no.1 (5 days capacity for Raw spent wash): 56 m X 12 m X 3 m = 2016 M³ + 1m free board.
- Storage tank no.2 (25 days capacity for biomethanated spent wash): 56 m X 64 m X 3 m = 10752 M³+ 1m free board.

Photographs of the same are enclosed in Annexure -IV

iv). Adequate number of ground water quality monitoring station by providing Piezometers around the compost plant and project area shall be set up. Sampling and trend analysis monitoring must be on monthly a basis and report submitted to SPCB and this ministry.

4 nos. of test bore wells are provided around compost yard. Sampling & trend analysis monitoring is outsourced to KSPCB/MoEF recognized laboratory. Monthly monitoring reports are submitted to the board regularly.

The area being dry and water table is below 150 feet and due to non availability of ground water, test bore well not monitored. So we are bore water quality analyzed from factory surrounding area.

Water quality report as enclosed below:

The bore samples were collected from inside factory premises near guest house and from bore well which is located outside factory premises.

Analysis Reports for the month of December 2015 and January 2016, Feb 2016 as enclosed below:

Parameters	Unit	Results						Standards	
		Industry Premises			Guest House			DL	PL
		Dec 2015	Jan 2016	Feb 2016	Dec 2015	Jan 2016	Feb 2016		
pH	--	8.4	6.85	8.02	8.44	7.32	7.87	6.5-8.5	
Color	Hazen	<1	<5	<1	<1	<5	<1	5	15
Turbidity	NTU	2.78	0.38	0.85	2.69	0.44	2.3	1	5
TDS	mg/l	226	305	332	329	98	320	500	2000
Total Hardness	mg/l	56	8	48	52	12	60	200	600
Chloride as Cl	mg/l	39.42	9.58	110.4	39.4	39.3	108.5	250	1000
Calcium as Ca	mg/l	14.4	1.6	16.0	14.4	3.2	20.8	75	200
Fluoride as F	mg/l	0.69	0.12	0.79	0.82	0.18	1.41	1	15
Nitrated as Nitrogen	mg/l	7.7	1.55	0.63	4.61	1.93	1.15	45	
Sulphate As SO ₄	mg/l	34.8	8.1	65.5	37.5	8.34	59.9	200	400

Magnesium as Mg	mg/l	4.86	0.97	1.94	3.88	0.97	1.94	30	100
Iron as Fe	mg/l	0.05	0.18	0.12	0.138	0.07	0.13	0.3	
Total Coliforms	CFU/100ml	Nill	Nill	Nill	1	Nill	Nil	10	
Fecal Coloforms	CFU/100ml	nill	Nill	Nill	Nill	Nill	Nill	nill	

v).The company shall obtain permission from the state Irrigation Department or competent authority to draw the water from Krishna River.

The company has been granted water drawl permission of 38 mcft (Million Cubic feet) from Krishna River for the industrial use. The Permission letter is enclosed as Annexure -V

vi) The particulate emission from the bagasse fired boiler shall be controlled by installation of Electrostatic Precipitator and emission shall be dispersed through stack height as per CPCB Standards.

70 M high, Above Ground Level (AGL) Stack is provided to 130 TPH bagasse based boiler and 42 M stack for 18 TPH distillery boiler and Electrostatic Precipitator provided for the both boilers. Photographs of ESP for 130 TPH and 18 TPH enclosed as Annexure III

Stack results for the month of Dec 2015 and Jan 2016, Feb 2016 are as follows:

Parameters	Unit	Results						Standard
		130 TPH			18 TPH			
		Dec 2015	Jan 2016	Feb 2016	Dec 2015	Jan 2016	Feb 2016	
Particular Matter	mg/Nm3	101.93	127.11	116.14	134.69	126.59	-	150
Nitrogen dioxide	mg/Nm3	30.7	32.69	37.85	29.54	33.35	-	---
Sulphur	mg/Nm3	43.2	43.20	41.14	40.8	40.80	-	---

dioxide								
Hydrogen sulphide	mg/Nm3	-	1.21	1.55	-	0.8	-	---

vii) The company shall install scrubbing system with the fermentation section for CO₂ and HC. H₂S scrubber shall be installed for control of emission from Biodigester.

A pipe line system to collect Co₂ generated from fermentation tank is in place. The company has entered into agreement with Thuer Gas Ltd, Bangalore for installation of carbon dioxide plant for dry ice manufacturing. Agreement copy Enclosed as Annexure-X.

viii) The proponent shall upload the status of compliance of the stipulated EC condition, including monitoring data on their website and shall update the same periodically. It shall Simultaneously be sent to the Regional Office of MoEF, the respective Zonal office of CPCB and SPCB. The criteria pollutant namely SPM, RSPM , SO₂,NOX (Ambient level as well as stack emission) pH , BOD,COD in ground water indicated for project shall be monitored and displayed at the convenient location near the main gate of company in the public domain.

Industry has paid charges for website creation and website is created as www.athanisugars.com. However, website is under designing and soon we will upload compliance reports on it.

ix) Green belt in 33% of the plant area shall be provided to mitigate the effects of fugitive emission all around the plant and compost yard as per the CPCB guideline

Green belt of 45% the plot area (120.6 acres) has been developed to control fugitive emission from the industry. About 10500 plants are planted around industrial premises. (Species such as Neem, Mango, Chikoo, Coconut, Tamarind and Ashok tree) at a cost of Rs. 12.6 Lakhs. As per PCB norms we are planted five rose windows around compost yard. Photographs of same enclosed here as Annexure-VI.

x) Company shall adopt rainwater harvesting measures to recharge the ground water.

Company have adopted the rainwater harvesting measures to recharge ground water. The industry is located in low rain fall area. The average rainfall in this location is reportedly 450 mm. The company has undertaken rain water harvesting measures. The rain water over the roof of the various plants is collected and recharged to bore well after necessary treatment. Total rain water collected in the past season is reportedly around 350 lakh liters.

xi) Occupational health surveillance programme shall be undertaken as regular exercise for all the employees. The first aid facilities in the occupational health center shall be strengthened and the medical records of each employee shall be mentioned separately.

The industry has total number of 800 employees working in three shifts during season time. The company has purchased its own well equipped ambulance and appointed three permanent drivers to provide 24 hours ambulance service to its all employees. All employees have been provided with canteen facility, entertainment & sports facility and sanitation facility in the premises of the industry. A doctor has been appointed to visit the industry site on daily basis to provide healthcare facility to employees. Also necessary healthcare facilities are being provided with routine health survey tests & through medical camps.

xii) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking , mobile toilets , mobile STP, Safe drinking water, medical health care , creache etc,. The housing may be in the form of temporary structures to be removed after the completion of the project.

We are provided temporary infrastructure like house, safe drinking water, medical health care etc for construction labor.

B. GENERAL CONDITION:

i) No further expansion or modification in the plant shall be carried out without prior approval of the MoEF.

The industry proposes to expand the sugar factory from 4500 TCD to 12000 TCD (7500 TCD expansion), co-generation from 24 MW to 54 MW (30 MW expansion) and distillery / ethanol plant form 60 KLPD to 90 KLPD (30 KLPD expansion). For the proposed expansion of the project, the industry has obtained TOR from ministry vide letter no F.No.J-11011/373/2013-IA.II(I) dated 30.04.2014.

ii) Ambient air quality monitoring stations shall be set up in the down wind direction as well as where maximum ground level concentration of SPM, SO₂, NO_x are anticipated in consultation with the SPCB.

Two Ambient Air Quality monitor station are provide. One AAQ station is located near factory main gate and another station is provided near compost yard which is located outside factory. AAQ is being monitored by KSPCB empanelled laboratory on monthly basis and reports are submitted to board regularly. All 12 parameter of ambient air quality results for the month of December 2015 and Jan 2016, Feb 2016 as follow:

Parameters	Units	Results						NAAQ Standards
		Near Main Gate			Near Compost yard			
		Dec 2015	Jan 2016	Feb 2016	Dec 2015	Jan 2016	FEB 2016	
Particulate Matter (PM 10)	µg/m3	76	73	86	84	79	79	100
Particulate Matter (PM 2.5)	µg/m3	39	34	39	44	31	40	60
Sulphur dioxide (SO2)	µg/m3	3.26	5.06	6.39	2.99	3.75	7.01	80
Nitrogen dioxide (NO2)	µg/m3	23.4	10.25	13.15	14.93	13.15	13.82	80
Amonia (NH3)	µg/m3	-	18.99	12.05	-	21.15	12.05	400
Carbon Monoxide (CO)	mg/m3	-	2.25	1.18	-	2.15	1.18	4.0
Ozone (O3)	µg/m3	-	3.62	4.97	-	3.14	4.97	180
Lead (Pb)	µg/m3	-	0.017	0.018	-	0.01	0.018	1.0
Arsenic (As)	ng/m3	-	2.04	0.68	-	1.33	0.68	6.0
Nickel (Ni)	ng/m3	-	8.87	8.23	-	3.33	8.23	20.0
Benzo (a)Pyrene (BaP)	ng/m3	-	BDL	BDL	-	BDL	BDL	1.0
Benzene (C6H6)	µg/m3	-	BDL	BDL	-	BDL	BDL	5.0
Poly Aromatic Hydrocarbon	ng/m3	-	BDL	BDL		BDL	BDL	1.0

iii) Adequate number of influent and effluent quality monitoring stations shall be set up in consultation with the State Pollution Control Board. Regular monitoring should be carried out for relevant parameters.

Four monitoring stations are provided and monthly monitoring is reportedly done for all necessary parameter for the influent and effluent.

Sample collection points are sugar ETP influent, effluent for sugar plant and raw spent wash & biomethanated spent wash for distillery effluents. The online continuous monitoring system is provided for treated Sugar effluent and data to CPCB and KSPCB server is pending.

The monitoring reports and photographs of online monitoring system are attached as Annexure –VIII.

iv) The industry shall ensure that the treated effluent and stack emissions from the units are within the norms stipulated under the EPA rules or SPCB .

Treated effluent and stack emissions parameter are within KSPCB Limits. Monitoring reports enclosed as Annexure- VIII.

v) The overall noise level in and around the plant area shall be well within the standards by providing noise control measures including acoustic hoods, silencers, enclosure etc. on all sources of noise generation. The ambient noise level should conform to the standard prescribed under EPA rules, 1989 Viz 75 dBA (day time) and 70 dBA (night time).

We have provided noise control measures for all sources of noise generating equipments/machines like D.G. Sets with acoustic enclosures & are confirmed to EPA Rules, 1989 prescribed for Air & Noise Emission standards.

Noise level parameters are being monitored regularly at our location for Day and Night as below:

Sample Location	Parameters dB (A)						Std parameter dB(A)	
	day			Night			Day	Night
	Dec 2015	Jan 2016	Feb 2016	Dec 2015	Jan 2016	Feb 2016		
Near Main Gate	68.04	63.89	62.79	59.75	62.14	61.43	75	70
Near Cane Carrier	68.74	59.61	67.87	62.88	63.31	69.32	75	70

Near Compost yard	67.41	64.26	64.32	60.09	64.08	50.48	75	70
Near Guest house	68.04	72.72	63.28	63.02	62.61	60.96	75	70

vi) Ambient Air Quality Monitoring Stations shall be set up in the downwind direction as well as where maximum ground level concentration are anticipated in consultation with the State Pollution Control Board.

Two Ambient Air Quality monitor station are provide. One AAQ station is located near factory main gate and another station is provided near compost yard which is located outside factory. AAQ is being monitored by KSPCB empanelled laboratory on monthly basis and reports are submitted to board regularly. All 12 parameter of ambient air quality results for the month of December 2015 and Jan 2016, Feb 2016 as follow:

Parameters	Units	Results						NAAQ Standards
		Near Main Gate			Near Compost yard			
		Dec 2015	Jan 2016	Feb 2016	Dec 2015	Jan 2016	FEB 2016	
Particulate Matter (PM 10)	µg/m3	76	73	86	84	79	79	100
Particulate Matter (PM 2.5)	µg/m3	39	34	39	44	31	40	60
Sulphur dioxide (SO2)	µg/m3	3.26	5.06	6.39	2.99	3.75	7.01	80
Nitrogen dioxide (NO2)	µg/m3	23.4	10.25	13.15	14.93	13.15	13.82	80
Amonia (NH3)	µg/m3	-	18.99	12.05	-	21.15	12.05	400
Carbon Monoxide (CO)	mg/m3	-	2.25	1.18	-	2.15	1.18	4.0

Ozone (O3)	µg/m3	-	3.62	4.97	-	3.14	4.97	180
Lead (Pb)	µg/m3	-	0.01 7	0.01 8	-	0.01	0.01 8	1.0
Arsenic (As)	ng/m3	-	2.04	0.68	-	1.33	0.68	6.0
Nickel (Ni)	ng/m3	-	8.87	8.23	-	3.33	8.23	20.0
Benzo (a)Pyrene (BaP)	ng/m3	-	BDL	BDL	-	BDL	BDL	1.0
Benzene (C6H6)	µg/m3	-	BDL	BDL	-	BDL	BDL	5.0
Poly Aromatic Hydrocarbon	ng/m3	-	BDL	BDL		BDL	BDL	1.0

vii) The project proponent shall also comply with all the environmental protection measures and safeguards recommend in EIA/EMP report.

Compliance item wise is as follows :-

SL.No	items	compliance
1	Air Pollution control	ESP system is installed to 130 TPH and 18 TPH boiler
2	Water pollution control	The generated spent wash from distillery is being treated in 2 nos of Biodigester (capacity of 450m3/day each). The biomethanted spent wash is further fed to 7 effect falling film multi effect evaporator to concentrarte and reduce qty of BMSW. The concn BMSW is composted with press mud to achieve zero discharge.

viii) A separate environmental management cell equipped with full fledged laboratory facilities must be set up to carry out the environmental management and monitoring functions.

Company has established a separate environmental management cell (consisting of one director of company, environment engineer, distillery manager and chief engineer

of sugar plant) with well equipped laboratory for carrying out daily analysis of treated and untreated effluents. COD, Total solid, Suspended Solid, pH, oil and grease are analyzed in house laboratory daily and monthly monitoring is done for all necessary parameters by KSPCB approved laboratory. Environment Management cell structure is enclosed as Annexure-IX

ix) The project authorities shall provide requisite funds for both recurring and non recurring expenditure to implement the conditions stipulated by the non recurring expenditure to implement the conditions stipulated by the MoEF as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.

The project is completed and commissioned.

The expansion of the 30 to 60 KLPD distillery/ethanol plant is completed and the expanded plant is commissioned in May, 2014 costing about Rs. 4500 lakh. Following capital expenses have been made towards capital equipments to control pollution for 30 KLD to 60 KLD distillery expansion plant,

Bio-digester: Rs. 4.80 crores

ESP for distillery boiler: 1 Crores,

Multi effect Evaporator plant: 7 crores

Recurring expenditure 72 lakhs

x) The implementation of the project vis -a -vis environmental action plans will be monitored by Ministry Regional Office at Bangalore /State Pollution Control Board/Central Pollution Control Board. A six monthly compliance Status report along with the monitored data shall be submitted to the monitoring agencies.

&

xi) The project proponent shall also submit six monthly reports on the status of compliance of the stipulate EC condition including results of monitored data (both on hard copies as well as e-mail) to the respective Regional Office of MoEF, The respective zonal office of CPCB & The SPCB

Six monthly compliance reports are submitted regularly.

1. Letter no: AFSF/Env/397/2012-13 dated: 20.04.2012.
2. Letter no: AFSF/Env-20/3552/2011-12 dated: 07.03.2012.
3. Letter no: ASL/Env/28/2014-15 dated: 18.09.2014.
4. Letter no: ASL/Env/15/2015-16 dated: 16.07.2015.
5. Letter no: ASL/Env/ 32 /2015-16 dated: 27.01.2016.

xii) A copy of clearance letter shall be send by the proponent to concerned Panchayat, Zila parishad/Municipal Corporation, urban local body and local NGO.

if any, from whom suggestion/ representations if any were received while processing the proposal. The clearance letter shall also put on the website of company by proponent.

Complied

xiii) The project proponent shall inform the public that the project has been accorded environmental clearance by MoEF and copies of the clearance letter are available with SPCB and may also be seen at Website of MoEF at <http://Envfor.nic.in>. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspaper that widely circulated in the region of which one shall be in the vernacular language of locality concerned and copy of the same shall be forwarded to the Regional office.

Advertisement was given in Deccan Herald & Samyuktha Karnataka on 11.09.2009.
Copy enclosed as Annexure-XI

xiv) The environmental statement for each financial year ending 31st March in Form V as is mandated to be submitted by the project proponent to the concerned SPCB as prescribed under the Environment (Protection) Rules, 1986. As amended subsequently, shall also put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective regional office of the MOEF by Email.

Noted.

xv) The project Authorities shall inform the Regional 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 land development work.

The date of financial closure of project is 21st January 2014.

First CFO for 60 KLPD was obtained vide letter no. PCB/148/HPI/2014-77 dated: 22 April 2014.

Copy is enclosed here as Annexure -XII

xvi) The Ministry may revoke or suspends the clearance, if implementation of any of the above conditions is not satisfactory.

Accepted.

xvii) The Ministry reserves the right to stipulate additional conditions if found necessary. The company will implement these conditions in a time bound manner.

No additional conditions were so far stipulated.

xviii) Any appeal against this environmental clearance shall lie with the National Environment Appellate Authority, Second floor, Trikot-1, Bhikali Cama Place, New Delhi -110066. If preferred within a period of 30 days as prescribed under section 11 of the National Environment Appellate Authority Act,1997.

No appeal was made.

xix) The above condition will be enforced, inter alia under the provisions of the Water (Prevention &Control pollution) Act 1974, the Air (Prevention &Control pollution) Act, 1981, the Environment (Protection) Act, 1986 hazardous waste (management & handling) rules, 2003 and the Public Liability Insurance Act,1991 along with their Amendments and rules.

Agreed to comply.

ANNEXURE-I

Recurring expenses for EMP

Sr.No	Particulars	Recurring cost per Annum in Lakhs (30 KLPD distillery)	Recurring cost per Annum in Lakhs (30 -60 KLD distillery)
1.	Air Pollution Control	20	25
2.	Water pollution Control	10	15
3.	Composting	25	25
4.	Noise Pollution control Enclosure for DG Set	-	-
5.	Occuational Health	-	-
6.	Environment Monitoring and management	5	5
7.	Green Belt Development	2	2
	Total	62	72

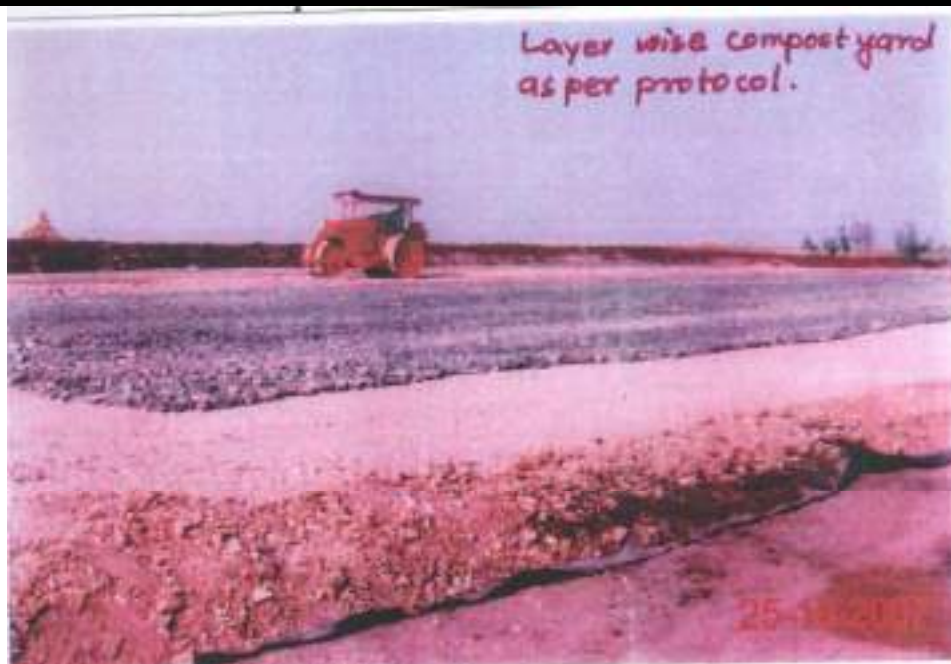
ANNEXURE II



CSTR Biodigestor 02 no (Capacity 450 m³/day each)



Seven effect falling film Evaporator System (capacity 900 KLD)



Layer wise compost yard construction as per protocol



Leachate Gutter and Spent Wash Spraying Chamber



Photos showing the Test bore well provided around compost yard



Photos showings the Test bore well providing around compost

ANNEXURE III



ESP for 130 TPH Co-Gen Boiler



ESP for 18 TPH Boiler

ANNEXURE-IV



Photo of the Lined Lagoon for Storage

ANNEXURE-V

ಕರ್ನಾಟಕ ಸರ್ಕಾರದ ಪಡೆವಳಿಗಳು

ದಿವ್ಯಾನ್ಯತೆ: ಮೆ. ಅಥರ್ ಲೈವ್ ಸರ್ಕಾರದ ಸಾರ್ವಜನಿಕ ಕೋ-ಆಪರೇಷನ್ ಪ್ರಾಂಟಿಂಗ್ ಕೃಷಿ ಪರಿಷತ್ತಿನಿಂದ ನೀಡಲಾಗಿರುವ ಕುರಿತು.

ಓದಲಾಗಿದೆ:

1. ಸರ್ಕಾರದ ಪತ್ರ ಸಂಖ್ಯೆ: ನೀಡ 5 ಹಿಆರ್‌ಎಸ್ 2000, ದಿನಾಂಕ: 16-02-2001.
2. ವ್ಯವಸ್ಥಾಪಕ ನಿರ್ದೇಶಕರು, ಕರ್ನಾಟಕ ನೀರಾವರಿ ನಿಗಮ ನಿಯಮಿತ, ಬೆಂಗಳೂರು ಇವರ ಪತ್ರ ಸಂಖ್ಯೆ: ಕೆಎಸ್‌ಎಸ್/94/ಬಿಪಿಎಂ/5239/2001-02/5239, ದಿನಾಂಕ: 07-03-2007
3. ಮುಖ್ಯ ಇಂಜಿನಿಯರ್, ಜಲ ಸಂಪನ್ಮೂಲ ಅಭಿವೃದ್ಧಿ ಸಂಸ್ಥೆ ಇವರ ಪತ್ರ ಸಂಖ್ಯೆ: ಜಪಕೋಮಕುಟಂ-2-ಸಿ-2-ಕ್ಯೂಎಂ-09-10:44, ದಿನಾಂಕ: 15-03-2010.

ಪ್ರಸ್ತಾವನೆ:

ಮೇಲೆ ಓದಲಾದ (1) ರ ಸರ್ಕಾರದ ಪತ್ರದಲ್ಲಿ ಬೆಳಗಾವಿ ಜಿಲ್ಲೆಯ ಅಥರ್ ಕಾಲೋನಿನ 'ಮದಧಾವಿ' ಗ್ರಾಮದ ಪತ್ತೆ ಸ್ಥಳಗಳು ಉದ್ದೇಶಿಸಲಾಗಿರುವ ಮೆ. ಅಥರ್ ಲೈವ್ ಸರ್ಕಾರದ ಕಾರ್ಯದ ಕೃಷಿ ಪರಿಷತ್ತಿನಿಂದ ಹಿರಿಯರಾದ ಹತ್ತಿರ 8 ಎಂ.ಪಿ.ಎಸ್.ಎ. ನೀರನ್ನು ಎತ್ತಿ ಉಪಯೋಗಿಸಿಕೊಳ್ಳುವ 4 ವರ್ಷಗಳ ಅವಧಿ ಅನುಮೋದನೆ ನೀಡಲಾಗಿರುತ್ತದೆ.

ಮೇಲೆ ಓದಲಾದ (2) ರ ಪತ್ರದಲ್ಲಿ ವ್ಯವಸ್ಥಾಪಕ ನಿರ್ದೇಶಕರು, ಕರ್ನಾಟಕ ನೀರಾವರಿ ನಿಗಮ ನೀಡುತ್ತಿರುವ. ಇವರು ಸರ್ಕಾರದ ಪತ್ರದಲ್ಲಿ ಅನುಮತಿ ನೀಡಿರುವಂತೆ. ಮೆ. ಅಥರ್ ಲೈವ್ ಸರ್ಕಾರದ ಕಾರ್ಯದ ಕೃಷಿ ಪರಿಷತ್ತಿನಿಂದ ಬೆಳಗಾವಿ ಜಿಲ್ಲೆ ಇವರಿಗೆ ಕೈಗಾರಿಕಾ ಉಪಯೋಗಕ್ಕಾಗಿ ಬೇಕಾಗಿರುವ 8 ಎಂ.ಪಿ.ಎಸ್.ಎ. ಪ್ರಮಾಣದ ನೀರನ್ನು ಕೃಷಿಪರಿಷತ್ತಿನಿಂದ ಉಪಯೋಗಿಸಲು ಕೆಂಪು ಪದವಿಗಳೊಡನೆ ದಿನಾಂಕ: 24-03-2001 ರಂದು ಒಪ್ಪಂದವನ್ನು ಮಾಡಿಕೊಳ್ಳಲಾಗಿರುತ್ತದೆ. ಇದರ ಒಪ್ಪಂದವು ದಿನಾಂಕ: 23-03-2005ಕ್ಕೆ ಮುಕ್ತಾಯವಾಗಿರುತ್ತದೆಂದು, ಈ ಅವಧಿಯವರೆಗೆ ಸಂಸ್ಥೆಯು ಉಪಯೋಗಿಸಿದ ನೀರಿನ ಪರಿಮಾಣಕ್ಕೆ ಇದನ್ನು ಪಾವತಿಸಿರುತ್ತದೆಂದು ವ್ಯವಸ್ಥಾಪಕ ನಿರ್ದೇಶಕರು, ಕರ್ನಾಟಕ ನೀರಾವರಿ ನಿಗಮ ನಿಯಮಿತ ಇವರು ತಿಳಿಸುತ್ತಿದ್ದು, ದಿನಾಂಕ: 23-03-2005 ರಿಂದ 5 ವರ್ಷಗಳ ಅವಧಿ ಪರಿಪೂರ್ಣವಾಗಿರುವ ಸಮೀಕ್ಷೆಯಂತೆ ಸರ್ಕಾರವನ್ನು ಕೋರಿರುತ್ತಾರೆ.

ಮೆ. ಅಥರ್ ಲೈವ್ ಸರ್ಕಾರದ ಕಾರ್ಯದ ಕೃಷಿ ಪರಿಷತ್ತಿನಿಂದ ಹಿರಿಯರಾದ ಹತ್ತಿರ 8 ಎಂ.ಪಿ.ಎಸ್.ಎ. ಪ್ರಮಾಣದ ನೀರನ್ನು ಕೃಷಿ ಪರಿಷತ್ತಿನಿಂದ ಬೆಳಗಾವಿ ಜಿಲ್ಲೆ ಇವರಿಗೆ ಕೈಗಾರಿಕಾ ಉಪಯೋಗಕ್ಕಾಗಿ ಬೇಕಾಗಿರುವ 8 ಎಂ.ಪಿ.ಎಸ್.ಎ. ಪ್ರಮಾಣದ ನೀರನ್ನು ಕೃಷಿಪರಿಷತ್ತಿನಿಂದ ಉಪಯೋಗಿಸಲು ಕೆಂಪು ಪದವಿಗಳೊಡನೆ ದಿನಾಂಕ: 24-03-2001 ರಂದು ಒಪ್ಪಂದವನ್ನು ಮಾಡಿಕೊಳ್ಳಲಾಗಿರುತ್ತದೆ. ಇದರ ಒಪ್ಪಂದವು ದಿನಾಂಕ: 23-03-2005ಕ್ಕೆ ಮುಕ್ತಾಯವಾಗಿರುತ್ತದೆಂದು, ಈ ಅವಧಿಯವರೆಗೆ ಸಂಸ್ಥೆಯು ಉಪಯೋಗಿಸಿದ ನೀರಿನ ಪರಿಮಾಣಕ್ಕೆ ಇದನ್ನು ಪಾವತಿಸಿರುತ್ತದೆಂದು ವ್ಯವಸ್ಥಾಪಕ ನಿರ್ದೇಶಕರು, ಕರ್ನಾಟಕ ನೀರಾವರಿ ನಿಗಮ ನಿಯಮಿತ ಇವರು ತಿಳಿಸುತ್ತಿದ್ದು, ದಿನಾಂಕ: 23-03-2005 ರಿಂದ 5 ವರ್ಷಗಳ ಅವಧಿ ಪರಿಪೂರ್ಣವಾಗಿರುವ ಸಮೀಕ್ಷೆಯಂತೆ ಸರ್ಕಾರವನ್ನು ಕೋರಿರುತ್ತಾರೆ.

ಮೇಲ್ಕಂಡ ಪ್ರಸ್ತಾವನೆಯನ್ನು ಪರಿಶೀಲಿಸಿ. ಈ ಕೆಳಗಿನಂತೆ ಅನುಮತಿ ನೀಡಿ ಕೊಡಬೇಕಾಗಿದೆ.

..2...

ಸರ್ಕಾರದ ಆದೇಶ ಸಂಖ್ಯೆ: ಜಸಂಇ 7 ಹಿಅಯೋ 2009, ಬೆಂಗಳೂರು, ದಿನಾಂಕ 02.02.2012.

ಮೆ: ಅಲ್ಲಿಗೆ ರೈತರ ಸಕ್ಕರೆ ಸಾಮಾನ್ಯಕ್ಕೆ 8 ಎಂಎಫ್‌ಟಿ ನೀರನ್ನು ಉಪಯೋಗಿಸಲು ನೀಡಲಾಗಿದ್ದ ಪರವಾನಗಿಯ ಅವಧಿಯು ದಿನಾಂಕ 23.03.2005ಕ್ಕೆ ಮುಕ್ತಾಯವಾಗಿದ್ದು, ಈಗ ದಿನಾಂಕ 24.03.2005 ರಿಂದ ದಿನಾಂಕ 01.02.2012 ರವರೆಗೆ ಫೌಜ್‌ನೋಡ್ತರ ಮೂಲಸಂಸ್ಥೆಯನ್ನು ನೀಡಲಾಗಿದೆ. ಮುಂದುವರಿದು, ಸರ್ಕಾರಿ ಸಾಮಾನ್ಯತೆಯ ಹಾಲಿ ಕಾರ್ಯ ನಿರ್ವಹಿಸುತ್ತಿರುವ ಅವಕಾಶದಲ್ಲಿ ಹೆಚ್ಚುವರಾಗಿ ಸ್ಥಾಪಿಸಲು ಉದ್ದೇಶಿಸಿರುವ ಕೋ-ಓನರೇಷನ್ ಪ್ಲಾಂಟ್‌ಗೆ ಬೇಕಾಗಿರುವ 30 ಎಂಎಫ್‌ಟಿ ನೀರನ್ನು ಸೇರಿಸಿಕೊಂಡು ಒಟ್ಟು 28.00 ಎಂಎಫ್‌ಟಿ ನೀರನ್ನು ಕೈಪಿಡಿವಿಷಯದ ಎಸ್ಸಿ ಉಪಯೋಗಿಸಲು ಅನುಬಂಧದಲ್ಲಿನ ಷರತ್ತುಗಳಿಗೊಳಪಟ್ಟು ಮುಂದಿನ ಐದು ವರ್ಷಗಳ ಅವಧಿಗೆ ಅನುಮೋದನೆಯನ್ನು ನೀಡಿದೆ.

ಕರ್ನಾಟಕ ರಾಜ್ಯಪಾಲರ ಆಜ್ಞಾಪನಾಪತ್ರ

ಮತ್ತು ಅದರ ಪರಿಣಾಮ

(ಸಹಿ)
(ಜಿ.ಎ. ರಾಮಣ್ಣ)

ವಿಶೇಷಾಧಿಕಾರಿ (ಪ್ರ.)

ಜಲ ಸಂಪನ್ಮೂಲ ಇಲಾಖೆ (ತಾಂತ್ರಿಕ-4).

ಇವರಿಗೆ:

1. ಮಹಾಲೇಖಪಾಲರು, ಕರ್ನಾಟಕ, ಬೆಂಗಳೂರು - 3 ಪ್ರತಿಗಳು
2. ವ್ಯವಸ್ಥಾಪಕ ನಿರ್ದೇಶಕರು, ಕರ್ನಾಟಕ ನೀರಾವರಿ ನಿಗಮ ನಿಯಮಿತ, ಕೃಷಿ ಬೋರ್ಡ್ ಕಟ್ಟಡ, ಬೆಂಗಳೂರು-560001
3. ಮುಖ್ಯ ಇಂಜಿನಿಯರ್, ಕರ್ನಾಟಕ ನೀರಾವರಿ ನಿಗಮ ನಿರ್ಮಾಣ, ನೀರಾವರಿ (ಉತ್ತರ) ವಿಭಾಗ, ಬೆಂಗಳೂರು
4. ಮುಖ್ಯ ಇಂಜಿನಿಯರ್, ಜಲ ಸಂಪನ್ಮೂಲ ಅಭಿವೃದ್ಧಿ ಸಂಸ್ಥೆ, ಅನಂದಾವಿಡ್ ವ್ಯಕ್ತಿ, ಬೆಂಗಳೂರು
5. ಅಧಿಕಾರಿ ಮಹಾ ನಿರ್ದೇಶಕರು, ವಿಭಾಗೀಯ ಇಂಜಿನಿಯರ್, ಜಲ ಸಂಪನ್ಮೂಲ ಇಲಾಖೆ, ಬಸವ ಭವನ, ಕೈಗಾರಿಕಾ, ಬೆಂಗಳೂರು-560001.
6. ವಿಶೇಷಾಧಿಕಾರಿ ಹಾಗೂ ಪರಿಸರಮಿತ್ರ ಸರ್ಕಾರದ ಉಪ ಕಾರ್ಯದರ್ಶಿಗಳು, ದೋಣೀಪಯೋಗಿ ಇಲಾಖೆ (ಆರ್ಥಿಕ ಕೋಶ), ವಿಧಾನ ಸೌಧ, ಬೆಂಗಳೂರು-1
7. ಮುಖ್ಯ ಜಲ ಸಂಪನ್ಮೂಲ ಸಚಿವರ ಆಪ್ತ ಕಾರ್ಯದರ್ಶಿಗಳು, ವಿಧಾನ ಸೌಧ, ಬೆಂಗಳೂರು-1
8. ಸರ್ಕಾರದ ಉಪ ಕಾರ್ಯದರ್ಶಿಗಳು (ಕೈ.ವಾ.ವ.ನಿ.) / (ಎಂ.ಎಂ.ಎಂ.), ಜಲ ಸಂಪನ್ಮೂಲ ಇಲಾಖೆ
9. ನಿರ್ದೇಶಕರು, ಕರ್ನಾಟಕ ರಾಜ್ಯ ವಿಜ್ಞಾನ ಇಲಾಖೆ, ವಿಜ್ಞಾನ ಸೌಧ, ಬೆಂಗಳೂರು- 10 ಪ್ರತಿಗಳು
10. ಸರ್ಕಾರದ ವಿಜ್ಞಾನ ಕಾರ್ಯದರ್ಶಿಯವರ ಪರಿಶೀಲಿತ ಆಪ್ತ ಕಾರ್ಯದರ್ಶಿ, ಜಲ ಸಂಪನ್ಮೂಲ ಇಲಾಖೆ
11. ಸರ್ಕಾರದ ಕಾರ್ಯದರ್ಶಿಯವರ ಆಪ್ತ ಸಹಾಯಕರು, ಜಲ ಸಂಪನ್ಮೂಲ ಇಲಾಖೆ
12. ಸಂಬಂಧಿಸಿದವರಿಗೆ
13. ಸಾಮಾನ್ಯ ಕಡತ/ಹೆಚ್ಚುವರ ಪ್ರತಿ.

Water lifting permission from River

ANNEXURE-VI



Plantation around compost yard



Plantation around compost yard

ANNEXURE-VII

ಕಾರ್ಯಾಲಯ / Fax : 080-25588321
 e-mail : ho@kspcb.gov.in
 ವೆಬ್‌ಸೈಟ್ / Website : http://kspcb.gov.in



25581383, 25589112
 25588151, 25588270
 25588142, 25588520

ಕರ್ನಾಟಕ ರಾಜ್ಯ ಮಾಲಿನ್ಯ ನಿಯಂತ್ರಣ ಮಂಡಳಿ Karnataka State Pollution Control Board

"ಪರಿಸರಭವನ", 1 ರಿಂದ 5ನೇ ಮಹಡಿಗಳು, ಕಂ.49, ಚರ್ಚ್‌ಸ್ಟ್ರೀಟ್, ಬೆಂಗಳೂರು - 560 001, ಕರ್ನಾಟಕ, ಭಾರತ
 "Parisara Bhavana", 1st to 5th Floor, #49, Church Street, Bengaluru - 560 001, Karnataka, INDIA

//By RPAD//

(This document contains 11 pages including annexure)

Combined Consent order No: PCB/148/HPI/2015-16

/03-2112

Dated:

23 FEB 2016

Consent for discharge of effluents under the Water (Prevention and Control of Pollution) Act, 1974 and Emissions under the Air (Prevention and Control of Pollution) Act, 1981.

- Ref:**
1. Application filed by the industry for consent for operation received at Regional Office, Chikkodi, on 03.09.2015 (Reg. No.98786)
 2. Inspection of the Industry by R.O, Chikkodi on 23.06.2015 & 23.11.2015.
 3. Proceedings of the Consent Committee Meeting held on 23.09.2015.
 4. Industry Letter No: ASI/Env/28/2015-16 dt: 12.11.2015.

The Consent is hereby granted under section 25 of the Water (Prevention and Control of Pollution) Act 1974 and under Section 21 of the Air (Prevention and Control of Pollution) Act 1981 (herein after referred as the Water Act and the Air Act respectively) and the Rules and Orders made there under and subject to the terms and conditions as detailed in the schedule annexed to this order.

This Consent is hereby granted to "The Chairman & Managing Director, M/s. Athani Sugars Limited., Sy. No. 53, 54, 56, 437, 438 & 509, Vishnuanna Nagar village, Navalihal Post, Athani Taluk, Belgaum District- 591 234" authorizing him to operate the industrial plant at above said premises and to make discharge of effluents and emissions from the premises as mentioned above.

This consent is granted to the industry on receipt of ₹ 1,00,000/- under the Water and Air Acts (total Rs.2,00,000/-) based on investment of ₹ 254 crores as per gross block assets details as on 31-03-2014, submitted by the industry.

Discharge of effluents under the Water Act:

Sl. No.	Description	Permitted Quantity of discharge	Stipulated Standards and place of discharge
1	Trade effluent • Sugar plant • Co-generation plant	450 KLD 274 KLD	Shall be used for on land for irrigation after treating in ETP to the standards stipulated in Annexure-I.

SENIOR ENVIRONMENTAL OFFICER

www.kspcb.org

1 AVOID USE OF PLASTICS- BE ECO FRIENDLY

	• Distillery plant	480 KLD	Spent wash after biogasification in the biogasifier shall be concentrated to 180 KLD and composted with press mud to achieve zero discharge. Compost shall conform to the standards prescribed in Annexure-III.
2	Domestic effluent	32 KLD	Septic tanks & Soak pits.

Discharge of air emissions under the Air Act from the following stacks etc.

Sl. No	Description of chimney/ outlet	Limits specified
	130 TPH Boiler (Agro based)	As per Annexure-II
	18 TPH Boiler	
	1200 KVA DG Set	

The consent is valid for the manufacture of:

Sl. No.	Name of the Product	Quantity Consented (Max.)
1	Sugarcane Crushing	4500 TCD
2	Co- generation plant	24MW
3	Distillery plant	60 KLD

**THE CONSENT IS GRANTED FOR THE PERIOD
FROM 01.07.2015 TO 30.06.2016.**

Encl: Schedule, Annexure-I, II & III.

For and on behalf of the
Karnataka State Pollution Control Board

SENIOR ENVIRONMENTAL OFFICER

To,
The Chairman & Managing Director,
M/s. Athani Farmers Sugar Factory Ltd.,
Sy. No. 53, 54, 56, 437, 438 & 509,
Vishnuannanagar village, Navalihal Post,
Athani Taluk, Belgaum District- 591 304.

**SCHEDULE
TERMS AND CONDITIONS**

(to accompany consent No: PCB/148/HPI/2015-16

Dated:)

A. TREATMENT AND DISPOSAL OF EFFLUENTS UNDER THE WATER ACT.

I. TREATMENT AND DISPOSAL OF TRADE EFFLUENT (FROM SUGAR & CO-GEN PLANT):

1. The discharge from the effluent treatment plant of the applicant shall pass through terminal manhole/ manholes where from the Board shall be free to collect samples at any time in accordance with the provisions of the Act or Rules made there under.
2. The daily quantity of effluent discharge shall not exceed the limits and shall not contain the constituents in excess of the tolerance limits laid down as indicated in the table below. The applicant shall monitor the quality of effluents for the parameters stipulated as per the frequency indicated.

Sl. No.	Description of the effluents	Daily quantity of discharge in KLD	Tolerance Limits	Frequency of monitoring
1	2	3	4	5
1	Trade effluent from Sugar & Co-gen plants	450 KLD 274 KLD	Annexure-I	Weekly.
2	Domestic effluent	32	Disposed to Septic tank and soak pit	-

3. The applicant shall ensure that the trade effluent along with condensate is treated in the treatment plant constructed as per the flow sheet submitted by the industry to the standards stipulated in **Annexure-I** and the treated effluent shall be utilized for onroad for gardening/irrigation within the premises.
4. The applicant shall ensure that the operation of effluent treatment plant shall be started at least one month before the starting of cane crushing to achieve desired MLSS so as to meet the prescribed standards from day one of the operation of mill.
5. The applicant shall ensure that the waste water generation from sugar unit is less than or equal to 100 kts/ ton of cane crushed.
6. The applicant shall provide 15 days storage capacity for treated effluent to take care of no demand for irrigation. The storage tank shall be impervious.
7. The applicant shall provide effluent flow meters to record the effluent quantity discharged.
8. The application of treated effluent for agriculture shall be controlled so as to avoid either flooding of land or ground water contamination.

SENIOR ENVIRONMENTAL OFFICER

9. Adequate number of observation bore/ test wells shall be provided in and around the agricultural land where the treated effluent is used to monitor the ground water quality.

II. TREATMENT AND DISPOSAL OF SEWAGE EFFLUENTS

1. The applicant shall treat the domestic effluent in septic tank & soak pit. No overflow from the soak pit is allowed. The septic tank & soak pit shall be designed as per IS 2470 Part-I & Part-II.

III. TREATMENT AND DISPOSAL OF 'DISTILLERY EFFLUENTS'

1. The applicant is permitted to operate the distillery unit for 270 working days.
2. The spent wash generation shall not exceed 480 KLD. The spent wash after bimethanation in the bio-digester shall be concentrated to 180 KLD and composted with press mud to achieve zero discharge. The compost shall conform to the standards as stipulated in Annexure-III.
3. H₂S scrubber shall be installed for control of emission from bio-digester.
4. The total Composting and storage area should be raised or protected by bunds so that the surface run-off during rainy season does not wash off any spent wash and lead to contamination of groundwater and surface drains. The compost yard shall conform to the specifications as stipulated in the CPCB protocol.
5. The spent wash shall be stored in an impervious pucca lagoons. The spent wash lagoons shall have proper lining with HDPE and shall be kept in proper condition to prevent ground water pollution. As per the CPCB recommendations, storage of concentrated spent wash shall not exceed 30 days capacity. The applicant shall synchronize the generation of spent wash and composting activity in such a way that composting is avoided during rainy season.
6. The applicant shall ensure that no spent wash is by-passed to land or stream. The applicant is not permitted to use the spent wash for land application.
7. The applicant shall make proper arrangement for collection of storm water that overflows the compost yard by providing proper impervious gulland canal and impervious leachate tank.
8. In the compost yard there shall not be any material/ press mud/ compost left before the start of rainy season. It shall be kept clean and the storm water during the rainy season shall be collected in the leachate tank. Leachate tank capacity shall be such that it shall hold the rain water from the compost yard completely and this shall be taken to 30 days holding tank and used for composting along with the fresh effluent.

IV. MOLASSES STORAGE

1. (a) The applicant shall store the molasses only in steel tanks covered with proper roofing.
(b) Adequate number of steel tank shall be provided for molasses containment. Containment of molasses in earthen pits is not allowed.

5/1/2016
SENIOR ENVIRONMENTAL OFFICER

2. The applicant shall obtain permission from the Board to dispose-off the spoiled molasses and it shall be disposed off in a manner as laid down by the Board.

V. WATER CESS:

The applicant shall provide water meter at all the intake points as under Section (5) of Water Cess Act and shall file the Water Cess returns regularly and also pay the Cess Assessed with the time stipulated.

VI. SELF MONITORING AND REPORTING:

1. The applicant shall at his own cost get the treated trade effluent samples collected from the place specified and analyze the same once in a month for the parameters indicated in **Annexure-I** and report submitted once in a month along with the quantity of water used, waste water generated, treated, and discharged, product manufactured, etc., in a compiled statement to the concerned Regional Office
2. The spent wash stored in the lagoons shall be analysed in Board/MoEF empanelled laboratory every 15 days for pH, EC, FDS, Na, K, Ca, Mg, Cl, SO₄, PO₄, BOD and TKN.
3. Ground water samples shall be monitored two times in a year, in April-May and October-November periods. Samples shall be collected from first water bearing strata from hand pump. Sampling points shall be uniformly spread in the command area at the rate of one station per 50 hectares as per the procedure specified in the protocol of CPCB. Sampling and trend analysis must be made on monthly basis and report shall be submitted to the Regional Officer of the Board.
4. At least five soil and water quality stations shall be located in areas where spent wash irrigation is not practiced.
5. In case of deterioration in ground water quality distillery shall provide alternate drinking water supply.
6. All stations shall be monitored regularly and continuously even in the years when the field are under rest. The location of the monitoring stations shall not be changed.
7. The applicant shall be responsible for reclamation of soil and ground water.
8. The applicant shall at his own cost get the trade effluent samples specified in condition I(1) & II (1) and analyse the same **every month** for the parameters indicated in condition No I(2)& II(2) and shall submit in duplicate the report to the Regional Officer.
9. Monthly extract of daily product manufactured as well as effluent discharged-sewage/trade shall be submitted to the Regional Officer regularly every month.
10. The applicant shall monitor the quality of bio-methanated effluent for parameters TSS, BOD, COD, TVA and Alkalinity once in a week and a compiled report shall be submitted to the Regional Office once in quarter.

SENIOR ENVIRONMENTAL OFFICER

VII. DISCHARGE OF EMISSIONS UNDER THE AIR ACT:

1. The discharge of emissions from the premises of the applicant shall pass through the stacks/ chimneys mentioned in **Annexure-II** to the consent, where from the Board shall be free to collect the samples at any time in accordance with the provisions of the Act and Rules made there under. The stacks/ chimneys heights shall be as per **Annexure-II**.
2. The applicant shall operate the air pollution control equipment as specified in the **Annexure-II**, continuously so as to ensure that the emission does not exceed the limits specified. The operation of the control equipment shall be synchronized with the operation of the emission source.
3. The applicant shall maintain port hole, access platforms for carrying out stack sampling with electrical outlet points for sampling the emissions from port holes in all the stacks, as per the guidelines.
4. The applicant shall treat and dispose any liquid effluents produced in the course of control of air pollution by scrubbing, conditioning etc., of flue gases in accordance with the provisions of the Water (Prevention and Control of Pollution) Act, 1974. The details of such discharges shall be quantified and monitored immediately after commissioning and details of collection, treatment and disposal shall be furnished to the Board.

VIII. SELF MONITORING AND REPORTING BY THE INDUSTRY

1. The applicant shall at his own cost get the samples of emissions collected and get them analyzed once a month for the parameters indicated from the sampling port holes provided.
2. The applicant shall carryout the ambient air quality monitoring and submits the report to the Regional Office of the Board. The AAQM stations shall be carried out in all the established stations as per the requirement under the National Ambient Air Quality Monitoring Standards stipulated in Environmental (Protection) Rules, 1986. Monitoring shall include the parameters, $PM_{2.5}$, PM_{10} sulphur-di-oxide, Nitrogen Oxide. The industry shall furnish statistical analysis for annual average of pollutants at all the locations as per Ambient Air Quality standards Notification once in a year.
3. The applicant shall regularly monitor the ground water of the wells situated in agricultural where treated trade effluent is used for irrigation for water quality parameters and submit report.
4. (a) The applicant shall maintain the on line continuous stack emission monitoring system for measurement of emissions parameter like PM and monitoring data shall be connected & up loaded to KSPCB and CPCB's servers.
(b) The applicant monitor the treated effluent through on line continuous effluent quality monitoring system at the out let of sugar plant ETP for the measurement of parameters flow, pH, COD, BOD, TSS and monitoring data shall be connected & up loaded to KSPCB and CPCB's servers.

SENIOR ENVIRONMENTAL OFFICER

(c) Once in a month by 5th, the max, min & Avg values and also the number of time, the exigencies recorded shall be submitted to R.O

5. The applicant shall;

a) Submit the monitoring results as under;

i) Data monitored as per prescribed schedule shall be submitted to the Regional Office every month.

ii) A compiled data of all monitoring conducted as per schedule during the consent period shall be submitted in hard copy along with Consent application.

IX. ENVIRONMENTAL STATEMENT

The applicant shall submit the Environmental Statement every year for the period ending 31st March in Form V as per Rule 14 of Environment (Protection) Rule, 1986 on or before 30th September.

X. HAZARDOUS WASTE (MANAGEMENT, HANDLING AND TRANSBOUNDARY MOVEMENT) RULES 2008

The applicant shall comply with the Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2008.

XI. SOLID WASTE MANAGEMENT

The solid waste collected in the factory premises as sweepings, wastage from packaging, empty containers, residue, sludge including those from air pollution control equipments shall be disposed off scientifically to the satisfaction of the Board, so as not to cause fugitive emissions, dust problems or water pollution problems through leaching etc., of any kind.

Sl. No.	Type of wastes	Quantity (MT/D)	Mode of disposal
1	Bagasse	1305 MT	Shall be used as fuel to boilers
2	Boiler Ash	22 MT	Shall be used for Bio-composting and excess if any sold to brick manufactures and farmers
3	Fly Ash		
4	Press mud	180 MT	Shall be used for Biocomposting
5	ETP Sludge	0.02 T	
6	Yeast Sludge	2.25 T	

XII. NOISE POLLUTION CONTROL:

1. The applicant shall comply with the ambient noise standards as stipulated under the EP Rule, 1986.
2. The applicant shall provide acoustic measures to the DG Sets as per Sl. No. 94 in Schedule-I of EP Rules.

SENIOR ENVIRONMENTAL OFFICER


XIII. GENERAL

1. The Board reserves the right to review, impose additional conditions, revoke, change or alter terms and conditions of this consent.
2. This consent for discharging sewage and/ or trade effluents from the factory shall not be taken or construed as the Board's permission to continue to discharge the sewage and/ or trade effluents from the factory into the place (as mentioned in this consent Order) which pollutes the water there-in endangering the life and property of the persons using the said water before, during or after the periods indicated in the Terms and Conditions of this Consent Order.
3. The applicant shall not change or alter either the quality or quantity or rate of emission or install/ replace or alter the air pollution control equipment, change in raw material or manufacturing process resulting in change in quality and/ or quantity of emissions without the prior permission of the Board.
4. The industry shall not change or alter (a) raw materials or manufacturing process, (b) change the products or product mix (c) the quality, quantity or rate of discharge/ emissions and (d) install/replace/alter the water or air pollution control equipments without the prior approval of the Board.
5. The applicant shall promptly comply with all orders and instructions issued from time to time by the Board or any other officers of the Board duly authorized in this behalf.
6. The applicant shall forthwith keep the Board informed of any accidental discharge of emissions/ effluents into the atmosphere in excess of the standards laid down by the Board. The applicant shall also take corrective steps to mitigate the impact.
7. The applicant shall not store any raw materials on naked ground. The applicant shall construct impervious dyke walls/tank form for storage tanks constructed above ground level.
8. The applicant shall display flow diagram of the pollution control system at the site.
9. The applicant shall appoint a qualified environmental engineer/ scientist for environment management in the factory and also establish an environmental cell.
10. Applicant shall maintain the Environmental Management System in conformity with ISO 14001:2004 standards.
11. The applicant shall comply with the guidelines under Corporate Responsibilities for Environment Protection (CREP)-2003 issued by Ministry of Environmental Forests and CPCB.
12. The applicant shall maintain register recording the ambient air quality, stack monitoring and analysis report of treated effluents. The register shall be open for inspection by the Board Officers at all time.

SENIOR ENVIRONMENTAL OFFICER

13. An inspection book shall be opened and made available to the Board Officers during their visit to the factory.
14. The applicant shall provide alternate power supply sufficient to operate all pollution control equipments utilized by the applicant to maintain compliance with the terms and conditions of this consent.
15. The entire premises shall be always kept clean. The effluent holding area, inspection chambers, outlets, flow measuring points should be made easily approachable.
16. The applicant shall display the consent granted in a prominent place for period of the inspecting Officers of the Board.
17. The applicant is heirs, legal representatives or assigns shall have no claims what so ever to the continuation or renewal of this consent after expiry of the period of consent.
18. The industry shall transport and store the raw materials in a manner so as not to cause any damage to environment, life and property. The applicant shall be solely responsible for any damages to environment.
19. The applicant shall plant and maintain adequate number of trees in and around the industry to arrest the dust emissions escaping into the surrounding area and improve the environment and aesthetic appearance of the industry and the surrounding.
20. A well designed rainwater harvesting shall be put in place. Central Groundwater Authority/ Board shall be consulted for finalization of appropriate rainwater harvesting technology within a period of three months and details shall be furnished. Status of implementation shall be submitted to the Regional Office of the Board.
21. The applicant shall make an application for consent at least 120 days before expiry of this consent.
22. Industry shall comply with all the consent conditions and furnish report within 30 days to the Regional Office.

For and on behalf of the
Karnataka State Pollution Control Board


SENIOR ENVIRONMENTAL OFFICER

ANNEXURE - I


STANDARDS FOR DISCHARGE OF TREATED TRADE EFFLUENT ON LAND FOR GARDENING/IRRIGATION

Sl. No.	Parameters	Tolerance limits.
1.	Colour and Odour.	See Note.
2.	Suspended Solids mg/l., Max.	100
3.	pH value.	6 to 8.5
4.	Oil and Grease mg/l., Max.	10
5.	Bio-chemical Oxygen Demand, mg/l. (3 days at 27°C) max.	30

Note: All efforts should be made to remove colour and unpleasant odour as far as practicable.

ANNEXURE - II COMPOST QUALITY

Sl. No.	Parameter	Standards
1	Moisture content	< 35%
2	Organic carbon	20 - 25%
3	Phosphorous	1.5 - 2.0%
4	Nitrogen	1.5 - 2.0%
5	Potassium	2.0 - 3.5%
6	C : N Ratio	< 17


SENIOR ENVIRONMENTAL OFFICER

ANNEXURE – III

Chimney	Chimney Attached to	Minimum Chimney Height to be Provided above ground level (AGL)/ roof level (ARL) in m	Rate of emission Nm ³ /Hr.	Constituents to be controlled in the emission.	Tolerance limits Mg/Nm ³	Air Pollution Control equipment to be installed, in addition to Chimney height as per Col (3)
1	2	3	4	5	6	7
1	170 TPH Refinery (Agris based)	60 M AGL	-	PM	150	ESP
2	18 TPH Boiler	42 M AGL	-	PM	150	ESP
3	1250 KVA DG Set	30 M AGL	-	-	-	Acoustic measures

Note: The Noise level shall not exceed 75 dB(A) leq. During day time (6 AM to 9 PM) and 70 dB (A) leq. during night time (9 PM to 6 AM).

SENIOR ENVIRONMENTAL OFFICER

Copy of combined CFO for year 2015-16 for 4500 TCD sugar, 60KLD distillery and 24 Mw Co-gen

Test Report

ANALYSIS REPORT OF AMBIENT AIR QUALITY

1. Name of the Station : Near Main Gate
2. Name of the Project : M/s Athani Sugars Pvt. Ltd.
Vishnuannanagar, Post: Navalihah- 591234,
Tq: Athani, Dist: Belagavi, Karnataka
3. Sample Collected by : M/s. Environmental Health and Safety Research &
Development Centre Unit II, Belagavi - 590015.
4. Date of Collection : 26.12.2015
5. Particulars of Sample Collected : Ambient Air collected through
Fine Particulate Sampler - APM 550
Respirable Dust Sampler - 460NI.
6. Date of Sample Receipt : 29.12.2015
7. Sample Number : EHSRDCU2/ASPL/A/15/12/1267
8. Report to be Sent : 06.12.2015
9. Page No : 1 of 16

Sl.No	Parameters	Unit	Results	NAAQ Standards	Protocol
1.	Period of sampling/Time	hrs	9,00am-5:00pm	NO	
2.	Particulate Matter (PM ₁₀)	µg/m ³	76	100	IS: 5182 (P-23)-2006
3.	Particulate Matter (PM _{2.5})	µg/m ³	39	60	USEPA 40 CFR (P-53)
4.	Sulphur dioxide (SO ₂)	µg/m ³	3.26	80	IS: 5182 (P2)-2001
5.	Nitrogen dioxide (NO ₂)	µg/m ³	23.4	80	IS: 5182 (P6)-2006

INFERENCE As per NAAQ Standards,
Report Status - The measured values for the above parameters are
within the standards.

End of Report

[Signature]
Authorized Signatory

NOTE: The report is subject to the terms & conditions mentioned overleaf

Test Report

ANALYSIS REPORT OF AMBIENT AIR QUALITY

1. Name of the Station : Near Compost Yard
2. Name of the Project : M/s Athani Sugars Pvt. Ltd.
Vishnuannarasagar, Post: Navalihal- 591234,
Tq. Athani, Dist: Belagavi, Karnataka
3. Sample Collected by : M/s. Environmental Health and Safety Research &
Development Centre Unit II, Belagavi - 590015.
4. Date of Collection : 26.12.2015
5. Particulars of Sample Collected : Ambient Air collected through
Fine Particulate Sampler - APM 550
Respirable Dust Sampler - 460NL
6. Date of Sample Receipt : 29.12.2015
7. Sample Number : EHSRDCU2/ASPL/A/15/12/1268
8. Report to be Sent : 06.12.2015
9. Page No : 2 of 16

SL.No	Parameters	Unit	Results	NAAQ Standards	Protocol
1.	Period of sampling/Time	hrs	9.15am-5.15pm	75	
2.	Particulate Matter (PM ₁₀)	µg/ m ³	84	100	IS: 5182 (P-23)-2006
3.	Particulate Matter (PM _{2.5})	µg/ m ³	44	60	USEPA 40 CFR (P 57)
4.	Sulphur dioxide (SO ₂)	µg/ m ³	2.99	80	IS: 5182 (P2)-2001
5.	Nitrogen dioxide (NO ₂)	µg/ m ³	14.93	80	IS: 5182 (P6)-2006

INFERENCE As per NAAQ Standards,
Report Status: - The measured values for the above parameters are within
the standards.

***End of Report**

[Signature]
Authorized Signatory

NOTE: The report is subject to the terms & conditions mentioned overleaf

Test Report

ANALYSIS REPORT FOR STACK SOURCE EMISSION

1. Stack ID : Boiler 130 TPH
2. Name of the Industry : M/s Athani Sugars Pvt. Ltd.
Vishnuamannagar, Post: Navalihal- 591234,
Tq: Athani, Dist: Belagavi, Karnataka
3. Sample Collected by : M/s. Environmental Health and Safety Research &
Development Centre Unit II, Belagavi - 590015
4. Date of Collection : 26.12.2015
5. Particulars of Sample Collected : Emissions from stack collected through
Stack Sampler VSS1
6. Date of Sample Receipt : 29.12.2015
7. Sample Number : EHSR/DCU2/ASPL/S/15/12/1269
8. Report to be Sent : 06.12.2015
9. Page No : 3 of 16

GENERAL DETAILS

Date of Monitoring	26.12.2015
Ambient Temperature (°C)	30
Stack Temperature (°C)	163
Velocity (m/s)	7.86
Diameter (m)	3
Cross Sectional Area in meter square (m ²)	7.065
Quantity of flue gas discharged into atmosphere (Nm ³ /h)	139004.81
Dust Emission Rate	14.169

RESULTS

Parameters	Protocol	Unit	Result	Standard
Particulate Matter	IS: 11255, (P1)	mg/Nm ³	101.93	150
Nitrogen dioxide	IS: 11255, (P7)	mg/Nm ³	30.7	--
Sulphur dioxide	IS: 11255, (P2)	mg/Nm ³	43.2	--

INFERENCE	As per KSPCB Standards, Report Status: - The measured values for the above parameters are within the standards and there are no standards available for NO ₂ & SO ₂
-----------	---

End of Report

B. Srinivasulu
Authorized Signatory

NOTE: The report is subject to the terms & conditions mentioned overleaf

Test Report

ANALYSIS REPORT FOR STACK SOURCE EMISSION

1. Stack ID : DG 1250 KVA
2. Name of the Industry : M/s Athani Sugars Pvt. Ltd.
Vishnuamannagar, Post: Navalihah- 591234,
Tq: Athani, Dist: Belagavi, Karnataka
3. Sample Collected by : M/s. Environmental Health and Safety Research &
Development Centre Unit II, Belagavi - 590015
4. Date of Collection : 26.12.2015
5. Particulars of Sample Collected : Emissions from stack collected through
Stack Sampler VSSJ
6. Date of Sample Receipt : 29.12.2015
7. Sample Number : EHSRDCU2/ASPL/S/15/12/1270
8. Report to be Sent : 06.12.2015
9. Page No : 4 of 16

GENERAL DETAILS

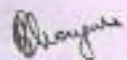
Date of Monitoring	26.12.2015
Ambient Temperature (°C)	30
Stack Temperature (°C)	183
Velocity (m/s)	9.57
Diameter (m)	0.4
Cross Sectional Area in meter square (m ²)	0.126
Quantity of flue gas discharged into atmosphere (Nm ³ /h)	2873.89
Dust Emission Rate	0.282

RESULTS

Parameters	Protocol	Unit	Result	Standard
Particulate Matter	IS: 11255, (P1)	mg/Nm ³	98.04	150
Nitrogen dioxide	IS: 11255, (P7)	mg/Nm ³	27.53	--
Sulphur dioxide	IS: 11255, (P2)	mg/Nm ³	41.14	--

INFERENCE	As per KSPCB Standards, Report Status - The measured values for the above parameters are within the standards. There are no standards available for NO ₂ & SO ₂ .
-----------	--

End of Report


Authorized Signatory

NOTE: The report is subject to the terms & conditions mentioned overleaf

Test Report

ANALYSIS REPORT FOR STACK SOURCE EMISSION

- | | | |
|------------------------------------|---|--|
| 1. Stack ID | : | Boiler 18 TPH |
| 2. Name of the Industry | : | M/s Athani Sugars Pvt. Ltd.
Vishnuannanagar, Post: Navalihal-591234,
Tq: Athani, Dist: Belagavi, Karnataka |
| 3. Sample Collected by | : | M/s. Environmental Health and Safety Research &
Development Centre Unit II, Belagavi - 590015 |
| 4. Date of Collection | : | 25.12.2015 |
| 5. Particulars of Sample Collected | : | Emissions from stack collected through
Stack Sampler VSS1 |
| 6. Date of Sample Receipt | : | 29.12.2015 |
| 7. Sample Number | : | EHSRDCU2/ASPL/S/15/12/1271 |
| 8. Report to be Sent | : | 06.12.2015 |
| 9. Page No | : | 5 of 16 |

GENERAL DETAILS

Date of Monitoring	26.12.2015
Ambient Temperature (°C)	30
Stack Temperature (°C)	136
Velocity (m/s)	7.95
Diameter (m)	1.6
Cross Sectional Area in meter square (m²)	2.01
Quantity of flue gas discharged into atmosphere (Nm³/h)	42583.35

RESULTS

Parameters	Protocol	Unit	Result	Standard
Particulate Matter	IS: 11255, (P1)	mg/Nm³	134.69	150
Nitrogen dioxide	IS: 11255, (P2)	mg/Nm³	29.54	--
Sulphur dioxide	IS: 11255, (P2)	mg/Nm³	40.8	--

INFERENCE	As per KSPCB Standards, Report Status: - The measured values for the above parameters are within the standards. There are no standards available for NO ₂ & SO ₂ .
-----------	---

End of Report


Authorized Signatory

NOTE: The report is subject to the terms & conditions mentioned overleaf

Test Report

AMBIENT NOISE LEVEL MONITORING REPORT

1. Name of the Project : M/s Athani Sugars Pvt. Ltd.
Vishnuannagar, Post: Navalathur- 591224,
Tq: Athani, Dist: Belagavi, Karnataka
2. Sample Collected by : M/s. Environmental Health and Safety Research &
Development Centre Unit II, Belagavi - 590015.
3. Date of Collection : 26.12.2015
4. Particulars of Sample Collected : Ambient Noise Level collected through
Sound Level Meter EQ-8852
5. Date of Sample Receipt : 29.12.2015
6. Sample Number : EHSRDCU2/ASPL/TN/15/12/1272, 1273, 1274 &
1275
7. Report to be Sent : 06.12.2015
8. Method Adopted : Instrument Method
9. Page No : 6 of 16

Code No.	Sample Location	Time Frequency	Parameters			Std.
			Max.	Min.	L_{eq} dB(A)	
1272	Near Main Gate	11.32 AM - 11.49 AM	76.5	40	66.04	75.0 dB(A) - Day
1273	Near Cane Corner	11.50 AM - 12.05 PM	71.6	35.9	68.74	
1274	Near Guest House	12.10 PM - 12.25 PM	81.7	53	67.41	
1275	Near Compost Yard	12.35 PM - 11.50 AM	76.5	60	68.04	

- Note :
- Day Time is reckoned between 6 A.M and 10 P.M
- Night Time is reckoned between 10 P.M and 6 A.M
- L_{eq} It is energy mean of the noise level over a specified period.
- $L_{eq}(A)$ denotes the time weighted average of the level of sound in decibels on scale A which is referable to human hearing.
- A "decibel" is a unit in which noise is measured.
- "A", in dB (A) L_{eq} denotes the frequency weighting in the measurement of noise and corresponds to frequency response characteristics of the human ear.

INFERENCE:	As per CPCB Standards, Report Status - The measured values for the above parameters are within the standards.
------------	--

End of Report


Authorized Signatory

NOTE: The report is subject to the terms & conditions mentioned overleaf

Test Report

ANALYSIS REPORT OF EFFLUENT QUALITY

- | | |
|------------------------------------|---|
| 1. Name of the Location | : ETP Un-Treated Water |
| 2. Name of the Project | : M/s Athani Sugars Pvt. Ltd.
Vishnuannagar, Post: Navalihal- 591234,
Tq: Athani, Dist: Belagavi, Karnataka |
| 3. Sample Collected by | : M/s. Environmental Health and Safety Research &
Development Centre Unit-II, Belgaum- 590015. |
| 4. Date of Collection | : 26.12.2015 |
| 5. Particulars of Sample Collected | : ETP Un-Treated water, Grab Sampling |
| 6. Date of Sample Receipt | : 29.12.2015 |
| 7. Sample Number | : EHSRDCU2/ASPL/WW/15/12/1226 |
| 8. Analysis started on | : 29.12.2015 |
| 9. Analysis Completed on | : 06.12.2015 |
| 10. Report to be Sent | : 06.12.2015 |
| 11. Page No. | : 7 of 16 |
| 12. Protocol | : ALPHA.22 nd Edition |

Sl.No	Parameters	Test Method	Unit	Result
1.	pH	4500H+ B	--	5.97
2.	Colour	2120 B	Hazen	<5.0
3.	Oil & Grease	5520 B	mg/L	BDL
4.	BOD	5210 B	mg/L	1200
5.	Chloride	4500-Cl B	mg/L	74.8
6.	Sulphate	4500-SC ₁₂	mg/L	129.6
7.	Total Dissolved Solids	2540 C	mg/L	1004
8.	Total Suspended Solids	2540 D	mg/L	28

End of Report

(Signature)
Authorized Signatory

NOTE: The report is subject to the terms & conditions mentioned overleaf

Test Report

ANALYSIS REPORT OF EFFLUENT QUALITY

1. Name of the Location : ETP Treated Water
2. Name of the Project : M/s Athani Sugars Pvt. Ltd.
Vishnuannarasagar, Post: Navalihal- 591234,
Tq: Athani, Dist: Belagavi, Karnataka
3. Sample Collected by : M/s. Environmental Health and Safety Research &
Development Centre Unit-II, Belgaum- 590015
4. Date of Collection : 26.12.2015
5. Particulars of Sample Collected : ETP Treated Water, Grab Sampling
6. Date of Sample Receipt : 29.12.2015
7. Sample Number : EHSRDCU2/ASPL/WW/15/12/1277
8. Analysis started on : 29.12.2015
9. Analysis Completed on : 06.01.2016
10. Report to be Sent : 06.01.2016
11. Page No. : 8 of 16
12. Protocol : AIFS-1A, 22nd Edition

Sl.No	Parameters	Test Method	Unit	Result	KSPCB Limits
1.	pH	45001+ B	--	7.14	5.5-9.0
2.	Colour	2120 B	Hazen	<5.0	-
3.	Oil & Grease	5520 B	mg/L	BDL	10
4.	BOD	5210 B	mg/L	50	100
5.	Chloride	4500-Cl B	mg/L	50.6	600
6.	Sulphate	4500-SO ₄ ²⁻	mg/L	212	1000
7.	Total Dissolved Solids	2540 C	mg/L	1154	2100
8.	Total Suspended Solids	2540 D	mg/L	120	200

BOD - Biological Oxygen Demand.

INFERENCE As per CPCB Standards,
Report Status: - The measured values for the above parameters are within
the standards.

End of Report


Authorized Signatory

NOTE: The report is subject to the terms & conditions mentioned overleaf

Test Report

ANALYSIS REPORT OF EFFLUENT QUALITY

1. Name of the Location : Raw Spent Wash
2. Name of the Project : M/s Athani Sugars Pvt. Ltd.
Vishnuannanagar, Post: Navalihal- 597234,
Tq: Athani, Dist: Belagavi, Karnataka
3. Sample Collected by : M/s. Environmental Health and Safety Research &
Development Centre Unit-II, Belgaum- 590015.
4. Date of Collection : 26.12.2015
5. Particulars of Sample Collected : Raw Spent Wash, Grab Sampling
6. Date of Sample Receipt : 29.12.2015
7. Sample Number : EHSRDCU2/ASPL/WW/15/12/1278
8. Analysis started on : 29.12.2015
9. Analysis Completed on : 06.01.2016
10. Report to be Sent : 06.01.2016
11. Page No. : 9 of 16
12. Protocol : APHA, 22nd Edition

Sl.No	Parameters	Test Method	Unit	Result
1	pH	4500H- B	--	8.10
2	Alkalinity	2320 B	mg/L	6000
3	Oil & Grease	5520 B	mg/L	810
4	BOD	5210 B	mg/L	15000
5	COD	5220B	mg/L	55200
6	Chloride	4500-Cl B	mg/L	3202.9
7	Sulphate	4500-SC ₁₂	mg/L	5897
8	Total Suspended Solids	2540 D	mg/L	2372
9	Potassium as K	3500-K	mg/L	14400
10	Total Kjeldhal Nitrogen	4500 NH ₃ -B&C	mg/L	28.84
11	Total Solids	2540H	mg/L	59933

End of Report

[Signature]

Authorized Signatory

NOTE: The report is subject to the terms & conditions mentioned overleaf


Test Report

ANALYSIS REPORT OF EFFLUENT QUALITY

- | | |
|------------------------------------|--|
| 1. Name of the Location | 1. Bio-Methanated Spent Wash |
| 2. Name of the Project | 1. M/s Athani Sugars Pvt. Ltd.
Vishnuamannagar, Post Navalihali- 591234,
Tq: Athani, Dist: Belagavi, Karnataka |
| 3. Sample Collected by | 1. M/s. Environmental Health and Safety Research &
Development Centre Unit-II, Belgaum- 590015 |
| 4. Date of Collection | 1. 26.12.2015 |
| 5. Particulars of Sample Collected | 1. Bio-Methanated Spent Wash, Grab Sampling |
| 6. Date of Sample Receipt | 1. 29.12.2015 |
| 7. Sample Number | 1. EHSROCU2/ASPL/WW/15/12/1279 |
| 8. Analysis started on | 1. 29.12.2015 |
| 9. Analysis Completed on | 1. 06.01.2016 |
| 10. Report to be Sent | 1. 06.01.2016 |
| 11. Page No. | 1. 10 of 16 |
| 12. Protocol | 1. APHA, 22 nd Edition |

Sl.No	Parameters	Test Method	Unit	Result
1	pH	4500-17 B	--	7.5
2	Alkalinity	2320 B	mg/L	14800
3	Oil & Grease	5520 B	mg/L	812L
4	BOD	5210 B	mg/L	8000
5	COD	5220B	mg/L	27600
6	Chloride	4500-Cl B	mg/L	9165
7	Sulphate	4500-SO ₄ ²⁻	mg/L	5845
8	Total Suspended Solids	2540 D	mg/L	272
9	Potassium as K	3500-K	mg/L	33000
10	Total Kjeldhal Nitrogen	4500-NH ₃ -B&C	mg/L	156.24
11	Total Solids	2540B	mg/L	25756

End of Report


Authorized Signatory

NOTE: The report is subject to the terms & conditions mentioned overleaf

Test Report

ANALYSIS REPORT OF EFFLUENT QUALITY

1. Name of the Location : Multi-Effective Evaporation Outlet Water
2. Name of the Project : M/s Athari Sugars Pvt. Ltd.
Vishnuannagar, Post: Navalihal- 591234,
Tq: Athani, Dist: Belagavi, Karnataka
3. Sample Collected by : M/s. Environmental Health and Safety Research &
Development Centre Unit-II, Belgaum- 590015.
4. Date of Collection : 26.12.2015
5. Particulars of Sample Collected : Multi-Effective Evaporation Outlet, Grab Sampling
6. Date of Sample Receipt : 29.12.2015
7. Sample Number : EHSROCU2/ASPL/VW/15/12/1280
8. Analysis started on : 29.12.2015
9. Analysis Completed on : 06.01.2016
10. Report to be Sent : 06.01.2016
11. Page No. : 11 of 16
12. Protocol : APHA, 22nd Edition

Sl.No	Parameters	Test Method	Units	Results
1	pH	45001P-II	--	9.06
2	Alkalinity	2320-B	mg/L	56000
3	Oil & Grease	5520-B	mg/L	BDL
4	BOD	5210-B	mg/L	11000
5	COD	5220B	mg/L	33200
6	Chloride	4500-CL-II	mg/L	14979
7	Sulphate	4500-SO ₄ ²⁻	mg/L	12281
8	Total Suspended Solids	2540-F	mg/L	n/a
9	Potassium as K	3500-K	mg/L	98400
10	Total Kjeldhal Nitrogen	4500-NH ₃ -B&C	mg/L	21.92
11	Total Solids	2540B	mg/L	25642

End of Report


Authorized Signatory

NOTE: The report is subject to the terms & conditions mentioned overleaf

Test Report

ANALYSIS REPORT OF FRESH WATER QUALITY

- | | |
|------------------------------------|---|
| 1. Name of the Location | : Bore Well Water (Industrial Premises) |
| 2. Name of the Project | : M/s Athani Sugars Pvt. Ltd.
Vishnuannarasagar, Post: Navalthal- 591234,
Tq: Athani, Dist: Belagavi, Karnataka |
| 3. Sample Collected by | : M/s. Environmental Health and Safety Research &
Development Centre Unit-II, Belgaum- 590015 |
| 4. Date of Collection | : 26.12.2015 |
| 5. Particulars of Sample Collected | : Bore Well Water. Grab Sampling |
| 6. Date of Sample Receipt | : 29.12.2015 |
| 7. Sample Number | : EHSRDCU2/ASPL/W/15/12/1281 |
| 8. Analysis started on | : 29.12.2015 |
| 9. Analysis Completed on | : 06.01.2016 |
| 10. Report to be Sent | : 06.01.2016 |
| 11. Page No. | : 12 of 16 |
| 12. Protocol | : APHA, 22 nd Edition |

Sl.No	Parameters	Protocol	Unit	Result	Std. IS 10500:2012 (Second Revision)	
					DL	PL
1	pH	4500H+ B	-	8.4	6.5-8.5	
2	Colour	2120 B	Hazen	<5.0	5	15
3	Odour	-	-	Un-Objectionable	Un-Objectionable	
4	Turbidity	2130 B	NTU	2.78	1	5
5	Total Dissolved Solids	2540 C	mg/l	226	500	2000
6	Total Hardness	2390 C	mg/l	56	200	600
7	Calcium	3500 Ca	mg/l	14.4	75	200
8	Magnesium	3500 Mg B	mg/l	4.86	30	100
9	Chloride as Cl	4500 Cl B	mg/l	39.02	250	1000
10	Sulphate as SO ₄	4500 SO ₄ B	mg/L	30.8	200	400
11	Fluoride as F	4500 F D	mg/l	0.69	1	1.5
12	Iron as Fe	3500 Fe B	mg/l	0.05	0.3	
13	Nitrate as NO ₃	4500 NO ₃ B	mg/l	7.7	45	
14	Total Coliform	9222 B	CFU/100	Nil	10	
15	Faecal Coliform	9222 D	CFU/100	Nil	Nil	

INFERENCE As per IS 10500:2012(Second Revision),
Report Status: - The measured values for the above parameters are within
the standards.

End of Report

(Signature)
Authorized Signatory

NOTE: The report is subject to the terms & conditions mentioned overleaf

Test Report

ANALYSIS REPORT OF FRESH WATER QUALITY

- | | |
|------------------------------------|--|
| 1. Name of the Location | : Bore Well Water (Guest House) |
| 2. Name of the Project | : M/s Athari Sugars Pvt. Ltd.
Vishruvananagar, Post: Navalihali- 591234,
Tq: Athari, Dist: Belagavi, Karnataka |
| 3. Sample Collected by | : M/s. Environmental Health and Safety Research &
Development Centre Unit-II, Belgaum- 590015 |
| 4. Date of Collection | : 28.12.2015 |
| 5. Particulars of Sample Collected | : Bore Well Water, Grab Sampling. |
| 6. Date of Sample Receipt | : 29.12.2015 |
| 7. Sample Number | : EHSRDCU2/ASPI/W/15/12/1282 |
| 8. Analysis started on | : 29.12.2015 |
| 9. Analysis Completed on | : 06.01.2016 |
| 10. Page No. | : 13 of 16 |
| 11. Report to be Sent | : 06.01.2016 |
| 12. Protocol | : APHA, 22 nd Edition |

SLNo	Parameters	Protocol	Unit	Result	Std. IS 10500:2012 (Second Revision)	
					DL	PL
1.	pH	4500H+ B	-	8.44	6.5-8.5	
2.	Colour	2120 B	Hazen	<5.0	5	15
3.	Odour	-	-	Un- Objectionable	Un- Objectionable	
4.	Turbidity	2130 B	NTU	2.69	1	5
5.	Total Dissolved Solids	2540 C	mg/l.	329	500	2000
6.	Total Hardness	2540 C	mg/l.	52	200	600
7.	Calcium	3500-Ca	mg/l.	14.4	75	200
8.	Magnesium	3500-Mg B	mg/l.	3.88	30	100
9.	Chloride as Cl	4500-Cl B	mg/L	39.4	250	1000
10.	Sulphate as SO ₄	4500-SO ₄ C	mg/l.	37.5	200	400
11.	Fluoride as F	4500F D	mg/l.	0.82	1	1.5
12.	Iron as Fe	3500-Fe B	mg/l.	0.138	0.3	
13.	Nitrate as NO ₃	4500-NO ₃ E	mg/L	4.61	45	
14.	Total Coliform	9222 B	CFU/100	1	10	
15.	Faecal Coliform	9222 D	CFU/100	Nil	Nil	

INFERENCE As per IS 10500:2012(Second Revision),
Report Status- The measured values for the above parameters are within
the Standards.

End of Report

[Signature]
Authorized Signatory

NOTE: The report is subject to the terms & conditions mentioned overleaf

Test Report

ANALYSIS REPORT OF FRESH WATER QUALITY

1. Name of the Location : Well Water (Vittal Sernbadli)
2. Name of the Project : M/s Athani Sugars Pvt.Ltd.
Vishnuannanagar, Post: Navalihal-591234,
Tq: Athani, Dist: Belagavi, Karnataka
3. Sample Collected by : M/s. Environmental Health and Safety Research &
Development Centre Unit-II, Belgaum- 590015
4. Date of Collection : 26.12.2015
5. Particulars of Sample Collected : Open Well Water, Grab Sampling
6. Date of Sample Receipt : 29.12.2015
7. Sample Number : EHSRO/CU2/ASPI/W/15/12/1283
8. Analysis started on : 29.12.2015
9. Analysis Completed on : 06.01.2016
10. Report to be Sent : 06.01.2016
11. Page No. : 14 of 16
12. Protocol : API 1A, 22nd Edition

Sl No.	Parameters	Protocol	Unit	Result	Std. IS 10500:2012 (Second Revision)	
					DL	PL
1	pH	45001+ B	-	7.26	6.5-8.5	
2	Colour	2120 B	Hazen	<5.0	5	15
3	Odour	-	-	Un-	Un- Objectionable	
4	Turbidity	2130 B	NTU	1.26	1	5
5	Total Dissolved Solids	2540 C	mg/l	885	500	2000
6	Total Hardness	2340 C	mg/l	220	200	600
7	Calcium	3500-Ca	mg/l	80	75	200
8	Magnesium	3500-Mg B	mg/l	4.86	30	100
9	Chloride as Cl	4500-Cl B	mg/l	886.9	250	1000
10	Sulphate as SO ₄	4500-SO ₄ ²⁻	mg/l	209.5	200	400
11	Fluoride as F	4500F D	mg/l	0.92	1	1.5
12	Iron as Fe	3500-Fe B	mg/l	0.17	0.3	
13	Nitrate as NO ₃	4500-NO ₃	mg/l	21.9	45	
14	Total Coliform	9222 B	CFU/100ml	2	10	
15	Faecal Coliform	9222 D	CFU/100ml	Nil	Nil	

INFERENCE

As per IS 10500:2012(Second Revision),
Report Status:- The measured values for the above parameters are
within the standards.

End of Report

Signature
Authorized Signatory

NOTE: The report is subject to the terms & conditions mentioned overleaf

Test Report

ANALYSIS REPORT OF FRESHWATER QUALITY

- | | |
|------------------------------------|--|
| 1. Name of the Location | : Well Water (Kareppa Musudge) |
| 2. Name of the Project | : M/s. Athani Sugars Pvt. Ltd.
Vishnuannanagar, Post: Navalihai- 591234,
Tq. Athani, Dist. Belagavi, Karnataka |
| 3. Sample Collected by | : M/s. Environmental Health and Safety Research &
Development Centre Unit-II, Belgaum- 590015 |
| 4. Date of Collection | : 26.12.2015 |
| 5. Particulars of Sample Collected | : Bore Well Water, Grab Sampling. |
| 6. Date of Sample Receipt | : 29.12.2015 |
| 7. Sample Number | : EHSRDCU2/ASPL/W/15/12/1284 |
| 8. Analysis started on | : 29.12.2015 |
| 9. Analysis Completed on | : 06.01.2016 |
| 10. Report to be Sent | : 06.01.2016 |
| 11. Page No. | : 15 of 16 |
| 12. Protocol | : APHA, 22 nd Edition |

Sl.No	Parameters	Protocol	Unit	Result	Std. IS 10500:2012 (Second Revision)	
					DL	PL
1	pH	4500H ⁺ B	--	7.12	6.5-8.5	
2	Colour	2120 B	Hazen	<5.0	5	15
3	Odour	-	-	Un-Objectionable	Un-Objectionable	
4	Turbidity	2130 B	NTU	1.09	1	5
5	Total Dissolved Solids	2540 C	mg/l	1228	500	2000
6	Total Hardness	2340 C	mg/l	532	200	600
7	Calcium	3500-Ca	mg/L	179.2	75	200
8	Magnesium	3500-Mg B	mg/L	20.4	30	100
9	Chloride as Cl	4500-Cl B	mg/l	153.7	250	1000
10	Sulphate as SO ₄	4500-SO ₄ B	mg/l	160.7	200	1000
11	Fluoride as F	4500F D	mg/L	0.22	1	1.5
12	Iron as Fe	3500-Fe B	mg/L	0.22	0.3	
13	Nitrate as NO ₃	4500-NO ₃ E	mg/L	0.91	45	
14	Total Coliform	9222 B	CFU/100	2	10	
15	Faecal Coliform	9222 D	CFU/100	Nil	Nil	

INFERENCE As per IS 10500:2012(Second Revision),
Report Status:- The measured values for the above parameters are within
the Standards.

End of Report

[Signature]
Authorized Signatory

NOTE: The report is subject to the terms & conditions mentioned overleaf

Test Report

ANALYSIS REPORT OF AMBIENT AIR QUALITY

1. Name of the Station : Near Main Gate
2. Name of the Project : M/s Athani Sugars Pvt. Ltd.
Vishruvannagar, Post: Navalhal- 591234,
Tal: Athani, Dist: Belagavi, Karnataka
3. Sample Collected by : M/s. Environmental Health and Safety Research &
Development Centre Unit II, Belagavi - 590015
4. Date of Collection : 26.01.2016
5. Particulars of Sample Collected : Ambient Air collected through
Fine Particulate Sampler - APM 350
Respirable Dust Sampler - 460N1
6. Date of Sample Receipt : 28.01.2016
7. Sample Number : IHSRDCU2/ASPI/A/16/01/1429
8. Report to be Sent : 13.02.2016
9. Page No : 1 of 17

Sl.No	Parameters	Unit	Results	NAAQ Standards	Protocol
1.	Period of sampling/Time	Hrs	24 8.30am-8.30am	N5	-
2.	Particulate Matter (PM ₁₀)	µg/m ³	73	100	IS: 5182 (P-23)-2006
3.	Particulate Matter (PM _{2.5})	µg/m ³	34	60	USEPA 40 CFR (P-53)
4.	Sulphur dioxide (SO ₂)	µg/m ³	5.16	80	IS: 5182 (P2)-2001
5.	Nitrogen dioxide (NO ₂)	µg/m ³	10.25	80	IS: 5182 (P6)-2006
6.	Ammonia (NH ₃)	µg/m ³	18.99	400.0 (24 hr Average)	Air Sampling and Analysis Book, method-01
7.	Carbon Monoxide (CO)	mg/m ³	2.25	4.0 (1 hr Average)	IS 5182 (Part 10) : 1999
8.	Chlorine (Cl ₂)	µg/m ³	3.62	180 (1 hr Average)	Instrument method
9.	Lead (Pb)	µg/m ³	0.017	1.0 (24 hr Average)	Lab-SCM No. IHSRDC/SCM/ICP- OES/001 based on - CPCB Guidelines for the Measurement of Ambient Air Pollutants Volume-I 2011
10.	Arsenic (As)	ng/m ³	2.01	6.0 (Annual Average)	
11.	Nickel (Ni)	ng/m ³	8.87	20.0 (Annual Average)	
12.	Benzene (a) pyrene (BaP)	ng/m ³	BDL	1.0 (Annual Average)	IS:5182 (P-12)-2001
13.	Benzene (C ₆ H ₆)	µg/m ³	BDL	5.0 (Annual Average)	IS: 5182 (P-11)-2006
14.	Poly Aromatic Hydrocarbon	ng/m ³	BDL	1.0 (Annual Average)	IS:5182 (P-12)-2001

Note: N5 - Not Specified; BDL - Below Detectable Limit

INFERENCE

As per NAAQ Standards,
Report Status: - The measured values for the above parameters are within the standards.

End of Report


Authorized Signatory

NOTE: This report is subject to the terms & conditions mentioned elsewhere

ANALYSIS REPORT OF AMBIENT AIR QUALITY

1. Name of the Station : Near Compost Yard
2. Name of the Project : M/s Athani Sugars Pvt. Ltd.
Vishnuamannagar, Post: Navalihali- 591234,
Tq: Athani, Dist: Belagavi, Karnataka
3. Sample Collected by : M/s. Environmental Health and Safety Research
Development Centre Unit II, Belagavi - 590015.
4. Date of Collection : 26.01.2016
5. Particulars of Sample Collected : Ambient Air collected through
Fine Particulate Sampler - ATM 550
Respirable Dust Sampler - 460NL
6. Date of Sample Receipt : 28.01.2016
7. Sample Number : EHSRDCU2/ASPL/A/16/01/1430
8. Report to be Sent : 13.02.2016
9. Page No : 2 of 17

Sl.No	Parameters	Unit	Results	NAAQ Standards	Protocol
1.	Period of sampling/Time	Hrs	24 8.30am-8.30am	NS	-
2.	Particulate Matter (PM ₁₀)	ug/m ³	79	100	IS: 5182 (P 23)-2006
3.	Particulate Matter (PM _{2.5})	ug/m ³	31	60	USEPA 40 CFR (P 53)
4.	Sulphur dioxide (SO ₂)	ug/m ³	3.75	80	IS: 5182 (P 2)-2003
5.	Nitrogen dioxide (NO ₂)	ug/m ³	13.15	80	IS: 5182 (P 6)-2006
6.	Ammonia (NH ₃)	ug/m ³	21.15	400.0 (24 hr Average)	Air Sampling and Analysis Book, method 403
7.	Carbon Monoxide (CO)	mg/m ³	2.15	4.0 (1 hr Average)	IS 5182 (Part 10) : 1999
8.	Ozone (O ₃)	ug/m ³	3.14	180 (1 hr Average)	Instrument method
9.	Lead (Pb)	ug/m ³	0.03	1.0 (24 hr Average)	Lab-SOP No. EHSRDC/SOP/ICU-OES/001 based on - CPCB Guidelines for the Measurement of Ambient Air Pollutants Volume-I, 2011
10.	Arsenic (As)	ug/m ³	1.33	6.0 (Annual Average)	
11.	Nickel (Ni)	ug/m ³	3.33	20.0 (Annual Average)	
12.	Benz(a) pyrene (BaP)	ng/m ³	BDL	1.0 (Annual Average)	IS:5182 (P 12)-2004
13.	Benzene (C ₆ H ₆)	ug/m ³	BDL	5.0 (Annual Average)	IS: 5182 (P 11)-2006
14.	Poly Aromatic Hydrocarbons	ng/m ³	BDL	1.0 (Annual Average)	IS:5182 (P 12)-2004

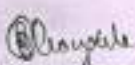
Note: NS - Not Specified; BDL - Below Detectable Limit

INFERENCE

As per NAAQ Standards,

Report Status: - The measured values for the above parameters are within the standards.

End of Report


Authorized Signatory

NOTE: The report is subject to the terms & conditions mentioned overleaf

Test Report

ANALYSIS REPORT FOR STACK SOURCE EMISSION

- | | |
|------------------------------------|--|
| 1. Stack ID | 1. Boiler 130 TPH |
| 2. Name of the Industry | 2. M/s. Athani Sugarcane Pvt. Ltd.
Vishnuannagar, Post: Navalihal- 591234,
Tq: Athani, Dist: Belagavi, Karnataka |
| 3. Sample Collected by | 3. M/s. Environmental Health and Safety Research &
Development Centre Unit II, Belagavi - 590015 |
| 4. Date of Collection | 4. 26.01.2016 |
| 5. Particulars of Sample Collected | 5. Emissions from stack collected through
Stack Sampler VSS1 |
| 6. Date of Sample Receipt | 6. 28.01.2016 |
| 7. Sample Number | 7. EHSRDCU2/ASPT/5/16/01/1431 |
| 8. Report to be Sent | 8. 13.02.2016 |
| 9. Page No | 9. 3 of 17 |

GENERAL DETAILS

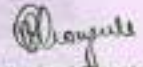
Date of Monitoring	26.01.2016
Ambient Temperature (°C)	30
Stack Temperature (°C)	161
Velocity (m/s)	7.89
Diameter (m)	3
Cross Sectional Area in meter square (m²)	7.065
Quantity of flue gas discharged into atmosphere (Nm³/h)	140044.75
Dust Emission Rate	17.801

RESULTS

Parameters	Protocol	Unit	Result	Standard
Particulate Matter	IS: 11255, (P1)	mg/Nm³	127.11	150
Nitrogen dioxide	IS: 11255, (P7)	mg/Nm³	32.69	--
Sulphur dioxide	IS: 11255, (P2)	mg/Nm³	43.20	--
Hydrogen Sulphide	IS: 11255, (P4)	mg/Nm³	1.21	--

INFERENCE: As per KSPCB Standards,
Report Status: - The measured values for the above parameters are within the standards and there are no standards available for NO_x, SO_x & H₂S

End of Report


Authorized Signatory

NOTE: The report is subject to the terms & conditions mentioned on cover

Test Report

ANALYSIS REPORT FOR STACK SOURCE EMISSION

1. Stack ID : DG#1250 KVA
2. Name of the Industry : M/s Athani Sugars Pvt. Ltd.
Vishnuannanagar, Post: Navalihal- 591234,
Tq: Athani, Dist: Belagavi, Karnataka
3. Sample Collected by : M/s. Environmental Health and Safety Research &
Development Centre Unit II, Belagavi - 590015
4. Date of Collection : 26.01.2016
5. Particulars of Sample Collected : Emissions from stack collected through
Stack Sampler VSS1
6. Date of Sample Receipt : 28.01.2016
7. Sample Number : EHSRDCU2/ASPL/S/16/01/1432
8. Report to be Sent : 13.02.2016
9. Page No : 4 of 17

GENERAL DETAILS

Date of Monitoring	26.01.2016
Ambient Temperature (°C)	30
Stack Temperature (°C)	178
Velocity (m/s)	9.49
Diameter (m)	0.4
Cross Sectional Area in meter square (m ²)	0.126
Quantity of flue gas discharged into atmosphere (Nm ³ /h)	2881.83
Dust Emission Rate	0.252

RESULTS

Parameters	Protocol	Unit	Result	Standard
Particulate Matter	IS: 11255, (P1)	mg/Nm ³	67.45	130
Nitrogen dioxide	IS: 11255, (P7)	mg/Nm ³	26.85	—
Sulphur dioxide	IS: 11255, (P2)	mg/Nm ³	46.63	—
Hydrogen Sulphide*	IS: 11255, (P4)	mg/Nm ³	1.35	—

INFERENCE	As per KSPCB Standards, Report Status - The measured values for the above parameters are within the standards and there are no standards available for NO _x , SO _x & H ₂ S
-----------	--

End of Report

Blayale
Authorized Signatory

NOTE: The report is subject to the terms & conditions mentioned overleaf

Test Report

ANALYSIS REPORT FOR STACK SOURCE EMISSION

- | | |
|------------------------------------|--|
| 1. Stack ID | 1. Boiler 18 TPH |
| 2. Name of the Industry | 2. M/s Athani Sugars Pvt. Ltd.
Viahannanagar, Post: Navalihal- 591234.
Tq: Athani, Dist: Belagavi, Karnataka |
| 3. Sample Collected by | 3. M/s. Environmental Health and Safety Research &
Development Centre Unit II, Belagavi - 590015 |
| 4. Date of Collection | 4. 26.01.2016 |
| 5. Particulars of Sample Collected | 5. Emissions from stack collected through
Stack Sampler VSS1 |
| 6. Date of Sample Receipt | 6. 28.01.2016 |
| 7. Sample Number | 7. 11-15RDCU2/ASP1/S/16/01/1433 |
| 8. Report to be Sent | 8. 13.02.2016 |
| 9. Page No | 9. 5 of 17 |

GENERAL DETAILS

Date of Monitoring	26.01.2016
Ambient Temperature (°C)	30
Stack Temperature (°C)	131
Velocity (m/s)	7.06
Diameter (m)	1.6
Cross Sectional Area in meter square (m ²)	2.010
Quantity of flue gas discharged into atmosphere (Nm ³ /m)	38322.65
Dust Emission Rate	4.851

RESULTS

Parameters	Protocol	Unit	Result	Standard
Particulate Matter	IS: 11255, (P1)	mg/Nm ³	126.59	150
Nitrogen dioxide	IS: 11255, (P7)	mg/Nm ³	33.35	--
Sulphur dioxide	IS: 11255, (P2)	mg/Nm ³	40.80	--
Hydrogen Sulphide	IS: 11255, (P4)	mg/Nm ³	0.8	--

INFERENCE	As per KSPCB Standards, Report Status: - The measured values for the above parameters are within the standards and there are no standards available for NO _x , SO _x & H ₂ S
-----------	---

End of Report


Authorized Signatory

NOTE: The report is subject to the terms & conditions mentioned overleaf

Test Report

AMBIENT NOISE LEVEL MONITORING REPORT

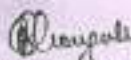
1. Name of the Project : M/s Athani Sugars Pvt. Ltd.
Vishnuannanagar, Post Navalihahli- 591234,
Tq: Athani, Dist: Belagavi, Karnataka
2. Sample Collected by : M/s. Environmental Health and Safety Research &
Development Centre Unit II, Belagavi - 590015.
3. Date of Collection : 26.01.2016
4. Particulars of Sample Collected : Ambient Noise Level collected through
Sound Level Meter EQ-8852
5. Date of Sample Receipt : 28.01.2016
6. Sample Number : EHSRDCU2/ASPL/N/16/01/1434, 1435, 1436, &
1437
7. Report to be Sent : 13.02.2016
8. Method Adopted : Instrument Method
9. Page No : 6 of 17

Code No	Sample Location	Time Frequency	Parameters			Std.
			Max.	Min.	L_{eq} dB(A)	
1434	Near Main Gate (IP)	2.30PM-2.45PM	76.2	51.1	63.89	75.0 dB(A) - Day
1435	Near Cane Carrier (IP)	2.47AM-3.02PM	73.3	50.9	59.61	
1436	Near Guest House (IP)	3.05PM-3.20PM	77.5	51.7	64.26	
1437	Near Compost Yard(IP)	3.23PM-3.38PM	77.5	63.2	72.72	

- Note:
- Day Time is reckoned between 6 A.M and 10 P.M.
- Night Time is reckoned between 10 P.M and 6 A.M.
- L_{eq} is energy mean of the noise level over a specified period.
- "dB (A) L_{eq} denotes the time weighted average of the level of sound in decibels on scale A which is suitable to human hearing.
- A "decibel" is a unit in which noise is measured.
- "A" in dB (A) L_{eq} denotes the frequency weighting as the measurement of noise and corresponds to frequency response characteristics of the human ear.

INFERENCE As per CPCB Standards,
Report Status - The measured values for the above parameters are within the standards.

End of Report


Authorized Signatory

NOTE: The report is subject to the terms & conditions mentioned overleaf

Test Report

AMBIENT NOISE LEVEL MONITORING REPORT

1. Name of the Project : M/s Athani Sugars Pvt. Ltd.
Vishnuannagar, Post: Navalihal- 591234,
Tq: Athani, Dist: Belagavi, Karnataka
2. Sample Collected by : M/s. Environmental Health and Safety Research &
Development Centre Unit II, Belagavi - 590015.
3. Date of Collection : 26.01.2016
4. Particulars of Sample Collected : Ambient Noise Level collected through
Sound Level Meter-EQ-8002
5. Date of Sample Receipt : 28.01.2016
6. Sample Number : EH5RDCU2/ASPL/N/16/01/1438, 1439, 1440 &
1441
7. Report to be Sent : 13.02.2016
8. Method Adopted : Instrument Method
9. Page No : 7 of 17

Code No	Sample Location	Time Frequency	Parameters			Std.
			Max.	Min.	L_{eq} dB(A)	
1438	Near Main Gate (IP)	10.16PM-10.31PM	69.8	41.4	62.14	70.0 dB(A)
1439	Near Gate Corner (IP)	10.35PM-10.50PM	78.1	51.1	63.31	Night
1440	Near Guest House (IP)	10.55PM-11.10PM	75.4	49.6	64.08	
1441	Near Compost Yard(IP)	11.15PM-11.30PM	69.8	41.7	62.61	

- Note:
- Day Time is reckoned between 6 A.M and 10 P.M
- Night Time is reckoned between 10 P.M and 6 A.M
- L_{eq} It is energy mean of the noise level over a specified period.
- "dB (A)" L_{eq} denotes the time weighted average of the level of sound in decibels on a dB(A) which is reliable to human hearing.
- "A" decibel" is a unit in which noise is measured.
- "A", in dB (A) L_{eq} denotes the frequency weighting in the measurement of noise and corresponds to frequency response characteristics of the human ear.

INFERENCE As per CPCB Standards,
Report Status: The measured values for the above parameters are within the standards.

End of Report

[Signature]
Authorized Signatory

NOTE: The report is subject to the terms & conditions mentioned overleaf

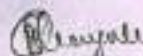
Test Report

ANALYSIS REPORT OF EFFLUENT QUALITY

1. Name of the Location : ETP Untreated Water
2. Name of the Project : M/s Athani Sugars Pvt. Ltd.
Vishnuamannagar, Post Navalihali-591234,
Tq: Athani, Dist: Belagavi, Karnataka
3. Sample Collected by : M/s. Environmental Health and Safety Research &
Development Centre Unit-II, Belgaum- 590015
4. Date of Collection : 26.01.2016
5. Particulars of Sample Collected : ETP Untreated water, Grab Sampling
6. Date of Sample Receipt : 28.01.2016
7. Sample Number : EHSRDCU2/ASPT./WW/16/01/1442
8. Analysis started on : 28.01.2016
9. Analysis Completed on : 08.02.2016
10. Report to be Sent : 13.02.2016
11. Page No. : 8 of 17
12. Protocol : APHA, 22nd Edition

Sl.No	Parameters	Test Method	Unit	Result
1.	pH	4500H ⁺ B	--	5.68
2.	Colour	2120 B	Hazen	<5.0
3.	Oil & Grease	5520 B	mg/L	NDL
4.	BOD	5210 B	mg/L	90
5.	Chloride	4500-Cl B	mg/L	655.11
6.	Sulphate	4500-SC ₁₀	mg/L	204.7
7.	Total Dissolved Solids	2540 C	mg/L	2699
8.	Total Suspended Solids	2540 D	mg/L	230

End of Report


Authorized Signatory

NOTE: The report is subject to the terms & conditions mentioned overleaf

Test Report

ANALYSIS REPORT OF EFFLUENT QUALITY

1. Name of the Location : ETP Treated Water
2. Name of the Project : M/s. Athani Sugars Pvt. Ltd.
Vishnuannanagar, Post: Navalihali- 591234,
Tq: Athani, Dist: Belagavi, Karnataka
3. Sample Collected by : M/s. Environmental Health and Safety Research &
Development Centre Unit-II, Belgaum- 590015
4. Date of Collection : 26.01.2016
5. Particulars of Sample Collected : ETP Treated Water, Grab Sampling
6. Date of Sample Receipt : 28.01.2016
7. Sample Number : EHSRDCU2/ASPL/WW/16/01/1443
8. Analysis started on : 28.01.2016
9. Analysis Completed on : 08.02.2016
10. Report to be Sent : 13.02.2016
11. Page No. : 9 of 17
12. Protocol : APHA, 22nd Edition

Sl.No	Parameters	Test Method	Unit	Result	KSPCB Limits
1.	pH	4500 H ⁺ B	-	7.13	5.5-9.0
2.	Colour	2120 B	Hazen	<5 U	-
3.	Oil & Grease	5520 B	mg/L	013	10
4.	BOD	5210 B	mg/L	50	100
5.	Chloride	4500 Cl ⁻ B	mg/L	171.14	600
6.	Sulphate	4500 SO ₄ ²⁻ B	mg/L	166.49	1000
7.	Total Dissolved Solids	2540 C	mg/L	1296	2100
8.	Total Suspended Solids	2540 D	mg/L	130	200

BOD - Biological Oxygen Demand,

INFERENCE As per CPCB Standards,
Report Status - The measured values for the above parameters are within the standards.

End of Report

R. Bhat
Authorized Signatory

NOTE: The report is subject to the terms & conditions mentioned overleaf

Test Report

ANALYSIS REPORT OF EFFLUENT QUALITY

- | | |
|------------------------------------|---|
| 1. Name of the Location | : Raw Spent Wash |
| 2. Name of the Project | : M/s Athani Sugars Pvt. Ltd.
Vishnuannanagar, Post: Navalihal- 591234,
Tq: Athani, Dist: Belagavi, Karnataka |
| 3. Sample Collected by | : M/s. Environmental Health and Safety Research &
Development Centre Unit-II, Belgaum- 590015. |
| 4. Date of Collection | : 26.01.2016 |
| 5. Particulars of Sample Collected | : Raw Spent Wash, Grab Sampling |
| 6. Date of Sample Receipt | : 28.01.2016 |
| 7. Sample Number | : EHSRDCU2/ASPL/WW/16/01/1444 |
| 8. Analysis started on | : 28.01.2016 |
| 9. Analysis Completed on | : 08.02.2016 |
| 10. Report to be Sent | : 13.02.2016 |
| 11. Page No. | : 10 of 17 |
| 12. Protocol | : APHA 22nd Edition |

Sl.No	Parameters	Test Method	Unit	Result
1	pH	4500-P B	--	4.10
2	Alkalinity	2320 B	mg/L	6000
3	Oil & Grease	5520 B	mg/L	BOD
4	BOD	5210 D	mg/L	4300
5	COD	5220 B	mg/L	16800
6	Chloride	4500-Cl B	mg/L	17570
7	Sulphate	4500-SO ₄ ²⁻	mg/L	10797.5
8	Total Suspended Solids	2540 D	mg/L	11050
9	Potassium as K	3500-K	mg/L	10500
10	Total Kjeldhal Nitrogen	4500-NH ₃ -N & C	mg/L	403.2
11	Total Solids	2540 B	mg/L	146162

End of Report

R. Mangale
Authorized Signatory

NOTE: The report is subject to the terms & conditions mentioned overleaf

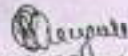
Test Report

ANALYSIS REPORT OF EFFLUENT QUALITY

1. Name of the Location : Bin-Methanated Spent Wash
2. Name of the Project : M/s Athani Sugars Pvt. Ltd.
Vishnuannanagar, Post: Navabihal- 591234,
Tq. Athani, Dist. Belagavi, Karnataka
3. Sample Collected by : M/s. Environmental Health and Safety Research &
Development Centre Unit-II, Belgaum- 590015
4. Date of Collection : 26.01.2016
5. Particulars of Sample Collected : Bio-Methanated Spent Wash - Grab Sampling
6. Date of Sample Receipt : 28.01.2016
7. Sample Number : EHSRDCU2/ASPI/WW/16/01/1445
8. Analysis started on : 28.01.2016
9. Analysis Completed on : 08.02.2016
10. Report to be Sent : 13.02.2016
11. Page No. : 11 of 17
12. Protocol : APHA, 22nd Edition

Sl.No	Parameters	Test Method	Unit	Result
1	pH	4500H+ B	-	7.54
2	Alkalinity	2520 B	mg/L	20000
3	Oil & Grease	9520 B	mg/L	8121
4	BOD	5210 B	mg/L	4000
5	COD	5200 B	mg/L	6600
6	Chloride	4500-Cl B	mg/L	16845.8
7	Sulphate	4500-SO ₄ ²⁻	mg/L	6960.11
8	Total Suspended Solids	2540 D	mg/L	35400
9	Potassium as K	7500-K	mg/L	11600
10	Total Kjeldhal Nitrogen	4500 N1b-B&C	mg/L	1993.6
11	Total Solids	2540B	mg/L	83163

End of Report


Authorized Signatory

NOTE: This report is subject to the terms & conditions mentioned overleaf

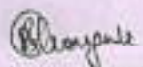
Test Report

ANALYSIS REPORT OF EFFLUENT QUALITY

1. Name of the Location : Multi-Effective Evaporation Outlet Water
2. Name of the Project : M/s Athani Sugars Pvt. Ltd.
Vishnuvaranagar, Post Navalihal- 591234,
Tq: Athani, Dist: Belagavi, Karnataka
3. Sample Collected by : M/s. Environmental Health and Safety Research &
Development Centre Unit-II, Belgaum- 590015.
4. Date of Collection : 26.01.2016
5. Particulars of Sample Collected : Multi-Effective Evaporation Outlet, Grab Sampling
6. Date of Sample Receipt : 28.01.2016
7. Sample Number : EHSROCU2/ASPL/NW/16/01/1446
8. Analysis started on : 28.01.2016
9. Analysis Completed on : 08.02.2016
10. Report to be Sent : 13.02.2016
11. Page No. : 12 of 17
12. Protocol : APH1A, 22nd Edition

SLNo	Parameters	Test Method	Unit	Result
1	pH	4500H ⁺ B	--	8.28
2	Alkalinity	2320 B	mg/L	24000
3	Ca & Magn	5520 B	mg/L	500
4	BOD	5210 B	mg/L	13000
5	COD	5220 B	mg/L	44800
6	Chloride	4500 Cl B	mg/L	22161.1
7	Sulphate	4500 SO ₄ ²⁻	mg/L	9147.06
8	Total Suspended Solids	2540 D	mg/L	46100
9	Potassium as K	7500-K	mg/L	16600
10	Total Kjeldahl Nitrogen	4500 N11-8&C	mg/L	1559.6
11	Total Solids	2510 B	mg/L	96550

End of Report


Authorized Signatory

NOTE: The report is subject to the terms & conditions mentioned overleaf

Test Report

ANALYSIS REPORT OF FRESH WATER QUALITY

1. Name of the Location : Bore Well Water (Industrial Premises)
2. Name of the Project : M/s Athani Sugars Pvt. Ltd.
Vishnuannanagar, Post: Navalihal- 591234,
Tq: Athani, Dist: Belagavi, Karnataka
3. Sample Collected by : M/s. Environmental Health and Safety Research &
Development Centre Unit-II, Bilgaum- 590015
4. Date of Collection : 26.01.2016
5. Particulars of Sample Collected : Bore Well Water, Grab Sampling
6. Date of Sample Receipt : 28.01.2016
7. Sample Number : EHSRDCU2/ASPL/W/16/01/1447
8. Analysis started on : 28.01.2016
9. Analysis Completed on : 08.02.2016
10. Report to be Sent : 13.02.2016
11. Page No. : 13 of 17
12. Protocol : APHA, 22nd Edition

Sl.No	Parameters	Protocol	Unit	Result	Std. IS 10500:2012 (Second Revision)	
					DL	PL
1	pH	4500H+ B	-	6.85	6.5-8.5	
2	Colour	2120 B	Hazen	<5.0	5	15
3	Odour	-	-	Un-Objectionable	Un-Objectionable	
4	Turbidity	2130 B	NTU	0.36	1	5
5	Total Dissolved Solids	2540 C	mg/L	305	500	2000
6	Total Hardness	2340 C	mg/L	8	300	600
7	Calcium	3500-Ca	mg/L	1.6	75	200
8	Magnesium	3500-Mg B	mg/L	0.97	30	100
9	Chloride as Cl	4500-Cl B	mg/L	90.58	250	1000
10	Sulphate as SO ₄	4500-SO ₄ ²	mg/L	8.1	200	400
11	Fluoride as F⁻	4500F D	mg/L	0.12	1	1.5
12	Iron as Fe	3500-Fe B	mg/L	0.18	0.3	
13	Nitrate as NO ₃	4500-NO ₃	mg/L	1.55	45	
14	Total Coliform	9222 B	CFU/10	Nil	10	
15	Focal Coliform	9222 D	CFU/10	Nil	Nil	

INFERENCE

As per IS 10500:2012(Second Revision).
Report Status:- The measured values for the above parameters are within the standards.

End of Report

[Signature]
Authorized Signatory

NOTE: The report is subject to the terms & conditions mentioned overleaf

Test Report

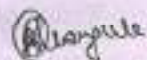
ANALYSIS REPORT OF FRESH WATER QUALITY

- | | |
|------------------------------------|---|
| 1. Name of the Location | : Bore Well Water (Guest House) |
| 2. Name of the Project | : M/s. Athara Bagare Pvt. Ltd.,
Vishnuannagar, Post: Navalihal- 591234,
Tq. Athari, Dist. Belagavi, Karnataka |
| 3. Sample Collected by | : M/s. Environmental Health and Safety Research &
Development Centre Unit-II, Belgaum- 590015 |
| 4. Date of Collection | : 26.01.2016 |
| 5. Particulars of Sample Collected | : Bore Well Water, Grab Sampling. |
| 6. Date of Sample Receipt | : 28.01.2016 |
| 7. Sample Number | : EHSRDCU2/ASPL/W/16/01/1448 |
| 8. Analysis started on | : 28.01.2016 |
| 9. Analysis Completed on | : 08.02.2016 |
| 10. Page No. | : 14 of 17 |
| 11. Report to be Sent | : 13.02.2016 |
| 12. Protocol | : APHA, 22nd Edition |

Sl.No	Parameters	Protocol	Unit	Result	Std. IS 10500:2012 (Second Revision)	
					DL	PL
1	pH	4500H+ B	-	7.32	6.5-8.5	
2	Colour	2120 B	Hazen	<5.0	5	15
3	Odour	-	-	Un-Objectionable	Un-Objectionable	
4	Turbidity	2130 B	NTU	0.44	1	5
5	Total Dissolved Solids	2540 C	mg/l	98	500	2000
6	Total Hardness	2340 C	mg/l	12	200	600
7	Calcium	3500-Ca	mg/l	3.2	75	200
8	Magnesium	3500-Mg B	mg/l	0.97	30	100
9	Chloride as Cl ⁻	4500-Cl B	mg/l	39.3	250	1000
10	Sulphate as SO ₄ ²⁻	4500-SO ₄ B	mg/l	8.34	200	400
11	Fluoride as F ⁻	4500F D	mg/l	0.18	1	1.5
12	Iron as Fe	3500-Fe B	mg/l	0.07	0.3	
13	Nitrate as NO ₃ ⁻	4500-NO ₃ F	mg/l	1.00	45	
14	Total Coliform	9222 B	CFU/100	Nil	10	
15	Faecal Coliform	9222 D	CFU/100	Nil	Nil	

INTERPRENCE: As per IS 10500:2012(Second Revision),
Report Status - The measured values for the above parameters are within the Standards

End of Report


Authorized Signatory

NOTE: The report is subject to the terms & conditions mentioned overleaf

Test Report

ANALYSIS REPORT OF FRESH WATER QUALITY

- | | |
|------------------------------------|---|
| 1. Name of the Location | : Well Water (Vital Sembali) |
| 2. Name of the Project | : M/s Athani Sugars Pvt. Ltd.
Vishnuvaranagar, Post: Navalihal- 591234,
Tq: Athani, Dist: Belagavi, Karnataka |
| 3. Sample Collected by | : M/s. Environmental Health and Safety Research &
Development Centre Unit-II, Belgaum- 590015 |
| 4. Date of Collection | : 26.01.2016 |
| 5. Particulars of Sample Collected | : Open Well Water, Grab Sampling |
| 6. Date of Sample Receipt | : 28.01.2016 |
| 7. Sample Number | : EHSROCU2/ASP/W/16/01/1449 |
| 8. Analysis started on | : 28.01.2016 |
| 9. Analysis Completed on | : 08.02.2016 |
| 10. Report to be Sent | : 13.02.2016 |
| 11. Page No. | : 15 of 17 |
| 12. Protocol | : APHA, 22 nd Edition |

Sl.No	Parameters	Protocol	Unit	Result	Std. IS 10500:2012 (Second Revision)	
					DL	PL
1.	pH	4500H+ B	-	6.92	6.5-8.5	
2.	Colour	2120 B	Hazen	<5	5	15
3.	Odour	-	-	Un- Objectionable	Un- Objectionable	
4.	Turbidity	2130 B	NFU	2.26	1	5
5.	Total Dissolved	2540 C	mg/l.	1996	500	2000
6.	Total Hardness	2340 C	mg/l.	208	200	600
7.	Calcium	3500-Ca	mg/l.	52.8	75	200
8.	Magnesium	3510 Mg B	mg/l.	18.46	30	100
9.	Chloride as Cl	4500-Cl B	mg/l.	329.4	250	1000
10.	Sulphate as SO ₄	4500-SO ₄ B	mg/l.	184.8	300	400
11.	Fluoride as F	4500F D	mg/l.	0.55	1	1.5
12.	Iron as Fe	3500-Fe B	mg/l.	0.1	0.3	
13.	Nitrate as NO ₃	4500-NO ₃ E	mg/l.	23.9	45	
14.	Total Coliform	9222 B	CFU/100ml	2	10	
15.	Faecal Coliform	9222 D	CFU/100ml	Nil	Nil	

REFERENCE: As per IS 10500:2012(Second Revision).
Report Status: + The measured values for the above parameters are within the standards.

End of Report

Blasque
Authorized Signatory

NOTE: The report is subject to the terms & conditions mentioned overleaf

Test Report

ANALYSIS REPORT OF FRESH WATER QUALITY

1. Name of the Location : Well Water (Kareppa Musudge)
2. Name of the Project : M/s Athani Sugars Pvt. Ltd.
Vishnuannanagar, Post: Navahihali- 591234,
Tq: Athani, Dist: Belagavi, Karnataka
3. Sample Collected by : M/s. Environmental Health and Safety Research &
Development Centre Unit-II, Belgaum- 590015
4. Date of Collection : 28.01.2016
5. Particulars of Sample Collected : Bore Well Water, Grab Sampling.
6. Date of Sample Receipt : 28.01.2016
7. Sample Number : EHSRDCU2/ASPL/W/16/01/1450
8. Analysis started on : 28.01.2016
9. Analysis Completed on : 08.02.2016
10. Report to be Sent : 13.02.2016
11. Page No. : 16 of 17
12. Protocol : APHA, 22nd Edition

Sl.No	Parameters	Protocol	Unit	Result	Std. IS 10500:2012 (Second Revision)	
					DL	PL
1	pH	4500H ⁺ B	-	7.30	6.5-8.5	
2	Colour	2120 B	Hazen	<5.0	5	15
3	Odour	-	-	Un-Objectionable	Un-Objectionable	
4	Turbidity	2130 B	NTU	2.8	1	5
5	Total Dissolved Solids	2540 C	mg/L	1978	500	2000
6	Total Hardness	2540 C	mg/L	180	200	600
7	Calcium	3500-Ca	mg/L	60.8	75	200
8	Magnesium	3500-Mg B	mg/L	6.8	30	100
9	Chloride as Cl	4500-Cl B	mg/L	525.6	250	1000
10	Sulphate as SO ₄	4500-SO ₄ B	mg/L	197.4	200	400
11	Fluoride as F	4500F D	mg/L	0.57	1	1.5
12	Iron as Fe	3500-Fe B	mg/L	0.28	0.3	
13	Nitrate as NO ₃	4500-NO ₃ E	mg/L	9.09	45	
14	Total Coliform	9222 B	CFU/100ml	Nil	10	
15	Faecal Coliform	9222 D	CFU/100ml	Nil	Nil	

INFERENCE: As per IS 10500:2012(Second Revision).
Report Status - The measured values for the above parameters are within the Standards.

End of Report


Authorized Signatory

NOTE: The report is subject to the terms & conditions mentioned overleaf

Test Report

ANALYSIS REPORT OF AMBIENT AIR QUALITY

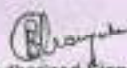
1. Name of the Station : Near Main Gate
2. Name of the Project : M/s Athari Sugars Pvt. Ltd.
Vishnuanagar, Post: Navalihad- 591234,
Tq: Athari, Dist: Belagavi, Karnataka
3. Sample Collected by : M/s. Environmental Health and Safety Research &
Development Centre Unit II, Belagavi - 590015.
4. Date of Collection : 24.02.2016
5. Particulars of Sample Collected : Ambient Air collected through
Fine Particulate Sampler - APM 550
Respirable Dust Sampler - 460NI.
6. Date of Sample Receipt : 25.02.2016
7. Sample Number : EHSRDCU2/ASPL/A/16/02/1635
8. Report to be Sent : 03.03.2016
9. Page No : 1 of 16

Sl.No	Parameters	Unit	Results	NAAQ Standards	Protocol
1.	Period of sampling/Time	Hrs	8.30am-8.30am	24	
2.	Particulate Matter (PM ₁₀)	µg/m ³	86	100	IS: 5182 (P 23)-2006
3.	Particulate Matter (PM _{2.5})	µg/m ³	39	60	USEPA 40 CFR (P 55)
4.	Sulphur dioxide (SO ₂)	µg/m ³	6.36	80	IS: 5182 (P 23)-2006
5.	Nitrogen dioxide (NO ₂)	µg/m ³	13.12	80	IS: 5182 (P 23)-2006
6.	Ammonia (NH ₃)	µg/m ³	12.05	400.0 (24 hr Average)	CPCB Guidelines Volume-2 NAAQ MS/37/2012-13
7.	Carbon Monoxide (CO)	mg/m ³	1.18	4.0 (1 hr Average)	IS 5182 (Part 10) : 1999
8.	Ozone (O ₃)	µg/m ³	4.97	180 (1 hr Average)	Instrument method Lab SOP No.
9.	Lead (Pb)	µg/m ³	0.018	1.0 (24 hr Average)	EHSRDC/SOP/ICP-OES/001 based on -
10.	Arsenic (As)	ng/m ³	0.68	6.0 (Annual Average)	CPCB Guidelines for the Measurement of Ambient Air Pollutants Volume-4, 2011
11.	Nickel (Ni)	ng/m ³	8.23	20.0 (Annual Average)	IS-5182 (P 12)-2004
12.	Poly Aromatic Hydrocarbons	ng/m ³	BDL	1.0 (Annual Average)	IS-5182 (P 11)-2004
13.	Benzene (C ₆ H ₆)	ng/m ³	BDL	5.0 (Annual Average)	IS-5182 (P 12)-2004
14.	Benzo (a) pyrene (BaP)	ng/m ³	BDL	1.0 (Annual Average)	

Note: NS - Not Specified; BDL - Below Detectable Limit

INFERENCE As per NAAQ Standards,
Report Status: - The measured values for the above parameters are within the standards.

End of Report


Authorized Signatory

NOTE: The report is subject to the terms & conditions mentioned overleaf

ANALYSIS REPORT OF AMBIENT AIR QUALITY


1. Name of the Station : Near Compost Yard
2. Name of the Project : M/s Athani Sugars Pvt. Ltd.
Vishnuannanagar, Post: Navalihali- 591234,
Tq: Athani, Dist: Belagavi, Karnataka
3. Sample Collected by : M/s. Environmental Health and Safety Research &
Development Centre Unit II, Belagavi - 590015.
4. Date of Collection : 24.02.2016
5. Particulars of Sample Collected : Ambient Air collected through
Fine Particulate Sampler - APM 550
Respirable Dust Sampler - 460NI
6. Date of Sample Receipt : 25.02.2016
7. Sample Number : EHSRDCU2/ASPI/A/16/02/1636
8. Report to be Sent : 03.03.2016
9. Page No : 2 of 16

Sl.No	Parameters	Unit	Results	NAAQ Standards	Protocol
1.	Period of sampling/Time	Hrs	8 8.30am-8.30am	24	-
2.	Particulate Matter (PM ₁₀)	ug/m ³	79	100	IS: 5182 (P 23)-2006
3.	Particulate Matter (PM _{2.5})	ug/m ³	40	60	USEPA 40 CFR (P 53)
4.	Sulphur dioxide (SO ₂)	ug/m ³	7.01	80	IS: 5182 (P2)-2001
5.	Nitrogen dioxide (NO ₂)	ug/m ³	13.82	80	IS: 5182 (P6)-2006
6.	Ammonia (NH ₃)	ug/m ³	14.06	400.0 (24 hr Average)	CPCB Guidelines Volume-2 NAAQ MS/37/2012-13
7.	Carbon Monoxide (CO)	mg/m ³	1.32	4.0 (1 hr Average)	IS 5182 (Part 10): 1999
8.	Ozone (O ₃)	ug/m ³	5.19	180 (1 hr Average)	Instrument method
9.	Lead (Pb)	ug/m ³	0.033	1.0 (24 hr Average)	Lab SOP No EHSRDC/SC0/ICP-015/001
10.	Arsenic (As)	ng/m ³	1.43	6.0 (Annual Average)	based on - CPCB Guidelines for the Measurement of Ambient Air Pollutants Volume-1, 2011
11.	Nickel (Ni)	ng/m ³	7.13	20.0 (Annual Average)	
12.	Poly Aromatic Hydrocarbons	ng/m ³	BDL	1.0 (Annual Average)	IS-5182 (P 12)-2004
13.	Benzene (C ₆ H ₆)	ug/m ³	BDL	5.0 (Annual Average)	IS: 5182 (P 11)-2006
14.	Benzo (a) Pyrene (BaP)	ng/m ³	BDL	1.0 (Annual Average)	IS-5182 (P 12)-2004

Note: NS - Not Specified; BDL - Below Detectable Limit

INFERENCE As per NAAQ Standards,
Report Status - The measured values for the above parameters are within the standards.

***End of Report**


Authorized Signatory

NOTE: The report is subject to the terms & conditions mentioned overleaf

Test Report

ANALYSIS REPORT FOR STACK SOURCE EMISSION

1. Stack ID : Boiler 130 TPII
2. Name of the Industry : M/s Athani Sugars Pvt. Ltd.
Yeshwanthnagar, Post: Navahital - 591234,
Tq: Athani, Dist: Belagavi, Karnataka
3. Sample Collected by : M/s. Environmental Health and Safety Research &
Development Centre Unit II, Belagavi - 590015
4. Date of Collection : 24.02.2016
5. Particulars of Sample Collected : Emissions from stack collected through
Stack Sampler VSS1
6. Date of Sample Receipt : 25.02.2016
7. Sample Number : EHSRDCU2/ASP1/S/16/02/1637
8. Report to be Sent : 03.03.2016
9. Page No : 3 of 16

GENERAL DETAILS

Date of Monitoring	24.02.2016
Ambient Temperature (°C)	30
Stack Temperature (°C)	169
Velocity (m/s)	6.74
Diameter (m)	3
Cross Sectional Area in meter square (m²)	7.065
Quantity of flue gas discharged into atmosphere (Nm³/hr)	117583.75
Dust Emission Rate	13.656

RESULTS

Parameters	Protocol	Unit	Result	Standard
Particulate Matter	IS: 11255, (P1)	mg/Nm³	116.14	150
Nitrogen dioxide	IS: 11255, (P7)	mg/Nm³	37.85	—
Sulphur dioxide	IS: 11255, (P2)	mg/Nm³	41.14	—
Hydrogen Sulphide	IS: 11255,	mg/Nm³	1.55	—

INFERENCE

As per KSPCB Standards,
Report Status: - The measured values for the above parameters are within the standards and there are no standards available for NO_x, SO₂ & H₂S.

End of Report


Authorized Signatory

NOTE: The report is subject to the terms & conditions mentioned on reverse

Test Report

ANALYSIS REPORT FOR STACK SOURCE EMISSION

1. Stack ID : DG#1250 KVA
2. Name of the Industry : M/s Athani Sugars Pvt. Ltd.
Vishnuvarmanagar, Post: Nayathal- 591234,
Tq. Athani, Dist. Belagavi, Karnataka
3. Sample Collected by : M/s. Environmental Health and Safety Research &
Development Centre Unit II, Belagavi - 590015
4. Date of Collection : 24.02.2016
5. Particulars of Sample Collected : Emissions from stack collected through
Stack Sampler VSS1
6. Date of Sample Receipt : 25.02.2016
7. Sample Number : EHSRDCU2/ASPI/S/16/02/1638
8. Report to be Sent : 03.03.2016
9. Page No : 4 of 16

GENERAL DETAILS

Date of Monitoring	24.02.2016
Ambient Temperature (°C)	30
Stack Temperature (°C)	154
Velocity (m/s)	7.20
Diameter (m)	0.36
Cross Sectional Area in meter square (m ²)	0.102
Quantity of flue gas discharged into atmosphere (Nm ³ /h)	1870.19
Dust Emission Rate	0.276

RESULTS

Parameters	Protocol	Unit	Result	Standard
Particulate Matter	IS: 11255, (P1)	mg/Nm ³	147.53	150
Nitrogen dioxide	IS: 11255, (P7)	mg/Nm ³	34.6	--
Sulphur dioxide	IS: 11255, (P2)	mg/Nm ³	54.4	--
Hydrogen Sulphide	IS: 11255,	mg/Nm ³	1.48	--

INFERENCE

As per KSPCH Standards,

Report Status: - The measured values for the above parameters are within the standards and there are no standards available for NO_x, SO_x & H₂S

End of Report


Authorized Signatory

NOTE: The report is subject to the terms & conditions mentioned overleaf

Test Report

AMBIENT NOISE LEVEL MONITORING REPORT


1. Name of the Project : M/s Athani Sugars Pvt. Ltd.
Vishnuannanagar, Post: Navalihal-591234,
Tq: Athani, Dist: Belagavi, Karnataka
2. Sample Collected by : M/s. Environmental Health and Safety Research &
Development Centre Unit II, Belagavi - 590015
3. Date of Collection : 24.02.2016
4. Particulars of Sample : Ambient Noise Level collected through
Collected Sound Level Meter EQ-8832
5. Date of Sample Receipt : 25.02.2016
6. Sample Number : EHSRDCU2/ASPL/N/16/02/1639,1640,1641,&
1642
7. Report to be Sent : 03.03.2016
8. Method Adopted : Instrument Method
9. Page No : 5 of 16

Code No	Sample Location	Time Frequency	Parameters			Std.
			Max.	Min.	L_{eq} dB(A)	
1639	Near Main Gate	10.45PM-11.00PM	76.5	51.7	61.43	70.0 dB(A) - Night
1640	Near Cone Carrier	11.03PM-11.18PM	76.1	63.2	69.32	
1641	Near Guest House	11.21PM-11.36PM	66.2	41.4	50.48	
1642	Near Compost Yard	11.40PM-11.55PM	74.1	51.1	60.96	

- Note :
- Day Time is reckoned between 6 A.M and 10 P.M
- Night Time is reckoned between 10 P.M and 6 A.M
- L_{eq} : It is energy mean of the noise level over a specified period.
- "dB (A) L_{eq} " denotes the time weighted average of the level of sound in decibels on scale A which is reliable to human hearing.
- A "decibel" is a unit in which noise is measured.
- "A", in dB (A) L_{eq} , denotes the frequency weighting in the measurement of noise and corresponds to frequency response characteristics of the human ear.

INFERENCE	As per CPCB Standards, Report Status: - The measured values for the above parameters are within the standards.
-----------	---

End of Report


Authorized Signatory

NOTE: The report is subject to the terms & conditions mentioned overleaf

Test Report

AMBIENT NOISE LEVEL MONITORING REPORT

1. Name of the Project : M/s Athani Sugars Pvt. Ltd.
Vishnuannanagar, Post: Navalihal- 591234,
Tq: Athani, Dist: Belagavi, Karnataka
2. Sample Collected by : M/s. Environmental Health and Safety Research &
Development Centre Unit II, Belagavi - 590015.
3. Date of Collection : 24.02.2016
4. Particulars of Sample Collected : Ambient Noise Level collected through
Sound Level Meter EQ-8852
5. Date of Sample Receipt : 25.02.2016
6. Sample Number : EHSROCU2/ASPL/N/16/02/1643,1644,1645 &
1646
7. Report to be Sent : 03.03.2016
8. Method Adopted : Instrument Method
9. Page No : 6 of 16

Code No	Sample Location	Time Frequency	Parameters			Std.
			Max.	Min.	L_{eq} dB(A)	
1643	Near Main Gate	10.00AM-10.15AM	71.2	51.1	62.79	75.0 dB(A) - Day
1644	Near Cane Carrier	10.20AM-10.35AM	71.2	47.3	62.87	
1645	Near Guest House	10.40AM-10.55AM	79.9	43.9	64.32	
1646	Near Compost Yard	11.00AM-11.15AM	73.6	46.9	63.28	

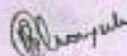
- Note :
- Day Time is reckoned between 6 A.M and 10 P.M
- Night Time is reckoned between 10 P.M and 6 A.M
- L_{eq} It is energy mean of the noise level over a specified period.
- "dB (A) L_{eq} " denotes the time weighted average of the level of sound in decibels on scale A which is relative to human hearing.
- A "decibel" is a unit in which noise is measured.
- "A", in dB (A) L_{eq} denotes the frequency weighting in the measurement of noise and corresponds to frequency response characteristics of the human ear.

INFERENCE

As per CPCB Standards,

Report Status: - The measured values for the above parameters are within the standards.

End of Report


Authorized Signatory

NOTE: The report is subject to the terms & conditions mentioned overleaf

Test Report

ANALYSIS REPORT OF EFFLUENT QUALITY

1. Name of the Location : ETP Un-Treated Water
2. Name of the Project : M/s Athani Sugars Pvt. Ltd.
Vishnuannanagar, Post: Navalihal- 591234,
Tq: Athani, Dist: Belagavi, Karnataka
3. Sample Collected by : M/s. Environmental Health and Safety Research &
Development Centre Unit-II, Belgaum- 590015.
4. Date of Collection : 24.02.2016
5. Particulars of Sample Collected : ETP Un-Treated water, Grab Sampling
6. Date of Sample Receipt : 25.02.2016
7. Sample Number : EHSRDCU2/ASPI./WW/16/02/1647
8. Analysis started on : 25.02.2016
9. Analysis Completed on : 03.03.2016
10. Report to be Sent : 03.03.2016
11. Page No. : 7 of 16
12. Protocol : APHA, 22nd Edition

Sl.No	Parameters	Test Method	Unit	Result
1.	pH	4500H ⁺ B	--	7.82
2.	Colour	2120 B	Hazen	<5.0
3.	Oil & Grease	5520 B	mg/L	ND
4.	BOD	5210 H	mg/L	16000
5.	Chloride	4500-Cl B	mg/L	46794
6.	Sulphate	4500-SCl ²	mg/L	172.811
7.	Total Dissolved Solids	2540 C	mg/L	8432
8.	Total Suspended Solids	2540 D	mg/L	1000

End of Report

[Signature]

Authorized Signatory

NOTE: The report is subject to the terms & conditions mentioned overleaf

Test Report

ANALYSIS REPORT OF EFFLUENT QUALITY

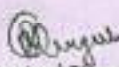
- | | |
|------------------------------------|--|
| 1. Name of the Location | : ETP Treated Water |
| 2. Name of the Project | : M/s Athani Sugars Pvt. Ltd.
Vishnuvarmanagar, Post: Navalihal- 591234,
Tq: Athani, Dist: Belagavi, Karnataka |
| 3. Sample Collected by | : M/s. Environmental Health and Safety Research &
Development Centre Unit-II, Belgaum- 590015 |
| 4. Date of Collection | : 24.02.2016 |
| 5. Particulars of Sample Collected | : ETP Treated Water, Grab Sampling |
| 6. Date of Sample Receipt | : 25.02.2016 |
| 7. Sample Number | : EHSRDCU2/ASPL/WW/16/02/1648 |
| 8. Analysis started on | : 25.02.2016 |
| 9. Analysis Completed on | : 03.03.2016 |
| 10. Report to be Sent | : 03.03.2016 |
| 11. Page No. | : 8 of 16 |
| 12. Protocol | : APHA, 22nd Edition |

SL.No	Parameters	Test Method	Unit	Result	KSPCB Limits
1.	pH	4500 H ⁺ B	--	7.79	6.0-8.5
2.	Colour	2120 B	Platinum	<5.0	-
3.	Oil & Grease	5070 B	mg/l	NDL	10
4.	BOD	5210 B	mg/l	80	100
5.	Chloride	4500 Cl B	mg/l	463.26	600
6.	Sulphate	4500 SO ₄ ²⁻	mg/l	147.5	1000
7.	Total Dissolved Solids	2540 C	mg/l	1432	2100
8.	Total Suspended Solids	2540 D	mg/l	70	100

BOD - Biological Oxygen Demand.

INFERENCE As per CPCB Standards,
Report Status: - The measured values for the above parameters are within the standards.

End of Report


Authorized Signatory

NOTE: The report is subject to the terms & conditions mentioned overleaf

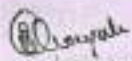
Test Report

ANALYSIS REPORT OF EFFLUENT QUALITY

1. Name of the Location : Raw Spent Wash
2. Name of the Project : M/s Athani Sugars Pvt. Ltd.
Vishnuannagar, Post: Navalihal- 591234,
Tq: Athani, Dist: Belagavi, Karnataka
3. Sample Collected by : M/s. Environmental Health and Safety Research &
Development Centre Unit-II, Belgaum- 590015.
4. Date of Collection : 24.02.2016
5. Particulars of Sample Collected : Raw Spent Wash, Grab Sampling
6. Date of Sample Receipt : 25.02.2016
7. Sample Number : EHSRDCU2/ASPI./WW/16/02/1649
8. Analysis started on : 25.02.2016
9. Analysis Completed on : 03.03.2016
10. Report to be Sent : 03.03.2016
11. Page No. : 09 of 16
12. Protocol : APHA, 22nd Edition

Sl.No	Parameters	Test Method	Unit	Result
1	pH	4500H B	--	4.28
2	Alkalinity	2320 B	mg/l	1200
3	Oil & Grease	5520 B	mg/l	813
4	BOD	5210 B	mg/l	4300
5	COD	5220 B	mg/l	8400
6	Chloride	4500-Cl B	mg/l	16843.84
7	Sulphate	4500-SC ²⁻	mg/l	2578.6
8	Total Suspended Solids	2540 D	mg/l	2500
9	Potassium as K	3500-K	mg/l	16800
10	Total Kjeldhal Nitrogen	4500 N16-5&C	mg/l	371
11	Total Solids	2540 B	mg/l	142646

End of Report


Authorized Signatory

NOTE: The report is subject to the terms & conditions mentioned overleaf

Test Report

ANALYSIS REPORT OF EFFLUENT QUALITY

1. Name of the Location : Bio-Methanated Spent Wash
2. Name of the Project : M/s Athani Sugars Pvt. Ltd.
Vishnuannanagar, Post: Navalihal- 591234,
Tq: Athani, Dist: Belagavi, Karnataka
3. Sample Collected by : M/s. Environmental Health and Safety Research &
Development Centre Unit-II, Belgaum- 590015
4. Date of Collection : 24.02.2016
5. Particulars of Sample Collected : Bio-Methanated Spent Wash ; Grab Sampling
6. Date of Sample Receipt : 25.02.2016
7. Sample Number : EHSRDCU2/ASPL/WW/16/02/1650
8. Analysis started on : 25.02.2016
9. Analysis Completed on : 03.03.2016
10. Report to be Sent : 03.03.2016
11. Page No. : 10 of 16
12. Protocol : APHA, 22nd Edition

Sl.No	Parameters	Test Method	Unit	Result
1	pH	45001-P H	--	7.58
2	Alkalinity	2520 B	mg/L	36000
3	Oil & Grease	5520 B	mg/L	n.d.
4	BOD	5210 B	mg/L	20000
5	COD	5220B	mg/L	50000
6	Chloride	4500-Cl B	mg/L	18715
7	Sulphate	4500-SC ₂	mg/L	3307.2±5
8	Total Suspended Solids	2540 D	mg/L	5300
9	Potassium as K	3500-K	mg/L	16400
10	Total Kjeldhal Nitrogen	4500-NH ₃ -B&C	mg/L	2163
11	Total Solids	2540B	mg/L	157172

End of Report


Authorized Signatory

NOTE: The report is subject to the terms & conditions mentioned overleaf

Test Report

ANALYSIS REPORT OF EFFLUENT QUALITY

1. Name of the Location : Multi-Effective Evaporation Outlet Water
2. Name of the Project : M/s Athani Sugars Pvt. Ltd.
Vishnuannagar, Post: Navalihal- 591234,
Tq: Athani, Dist: Belagavi, Karnataka
3. Sample Collected by : M/s. Environmental Health and Safety Research &
Development Centre Unit-II, Belgaum- 590015.
4. Date of Collection : 24.02.2016
5. Particulars of Sample Collected : Multi-Effective Evaporation Outlet, Grab Sampling
6. Date of Sample Receipt : 25.02.2016
7. Sample Number : EHSRDCU2/ASPL/WW/16/02/1651
8. Analysis started on : 25.02.2016
9. Analysis Completed on : 03.03.2016
10. Report to be Sent : 03.03.2016
11. Page No. : 11 of 16
12. Protocol : APHA, 22nd Edition

SLNo	Parameters	Test Method	Unit	Result
1	pH	4500H ⁺ B	-	7.87
2	Alkalinity	2320 B	mg/L	32000
3	Oil & Grease	5520 B	mg/L	BDL
4	BOD	5210 B	mg/L	36000
5	COD	5220B	mg/L	160000
6	Chloride	4500-Cl B	mg/L	31819.92
7	Sulphate	4500-SO ₄ ²⁻	mg/L	12430
8	Total Suspended Solids	2540 D	mg/L	10500
9	Potassium as K	3500-K	mg/L	25000
10	Total Kjeldhal Nitrogen	4500 NH ₃ -N&C	mg/L	1106
11	Total Solids	2540B	mg/L	193873

End of Report

[Signature]
Authorized Signatory

NOTE: The report is subject to the terms & conditions mentioned overleaf

Test Report

ANALYSIS REPORT OF FRESH WATER QUALITY

1. Name of the Location : Bore Well Water (Industrial Premises)
2. Name of the Project : M/s Athani Sugars Pvt. Ltd.
Vishnuannagar, Post: Navalihal- 591234,
Tq: Athani, Dist: Belagavi, Karnataka
3. Sample Collected by : M/s. Environmental Health and Safety Research &
Development Centre Unit-II, Belgaum- 590015
4. Date of Collection : 24.02.2016
5. Particulars of Sample Collected : Bore Well Water, Grab Sampling
6. Date of Sample Receipt : 25.02.2016
7. Sample Number : EHSR/DCU2/ASPL/W/16/02/1652
8. Analysis started on : 25.02.2016
9. Analysis Completed on : 03.03.2016
10. Report to be Sent : 03.03.2016
11. Page No. : 12 of 16
12. Protocol : APHA, 22nd Edition

SLNo	Parameters	Protocol	Unit	Result	Std. IS 10500:2012 (Second Revision)	
					DL	PL
1	pH	4500H ⁺ B	-	8.02	6.5-8.5	
2	Colour	2120 B	Hazen	<1.0	5	15
3	Odour	-	-	Un-Objectionable	Un-Objectionable	
4	Turbidity	2130 B	NTU	0.85	1	5
5	Total Dissolved Solids	2540 C	mg/L	332	500	2000
6	Total Hardness	2310 C	mg/L	48	200	600
7	Calcium	3500-Ca	mg/L	16	75	200
8	Magnesium	3500-Mg B	mg/L	1.94	30	100
9	Chloride as Cl	4500-Cl B	mg/L	110.8	250	1000
10	Sulphate as SO ₄	4500-SO ₄ ²⁻	mg/L	65.5	200	400
11	Fluoride as F	4500F D	mg/L	0.79	1	1.5
12	Iron as Fe	3500-Fe B	mg/L	0.12	0.3	
13	Nitrate as NO ₃	4500-NO ₃ E	mg/L	0.63	45	
14	Total Coliform	IS 15185:2002	CFU/100	Absent	Absent	
15	Faecal Coliform	IS 15185:2002	CFU/100	Absent	Absent	

INFERENCE As per IS 10500:2012(Second Revision),
Report Status - The measured values for the above parameters are within the standards

End of Report


Authorized Signatory

NOTE: The report is subject to the terms & conditions mentioned overleaf

Test Report

ANALYSIS REPORT OF FRESH WATER QUALITY

- | | |
|------------------------------------|---|
| 1. Name of the Location | : Bore Well Water (Guest House) |
| 2. Name of the Project | : M/s Athani Sugars Pvt. Ltd.
Vishnuannanagar, Post: Navalihal- 591234,
Tq: Athani, Dist: Belagavi, Karnataka |
| 3. Sample Collected by | : M/s. Environmental Health and Safety Research &
Development Centre Unit-II, Belgaum- 590015 |
| 4. Date of Collection | : 24.02.2016 |
| 5. Particulars of Sample Collected | : Bore Well Water, Grab Sampling |
| 6. Date of Sample Receipt | : 25.02.2016 |
| 7. Sample Number | : EHSRDCU2/ASPL/W/16/02/1653 |
| 8. Analysis started on | : 25.02.2016 |
| 9. Analysis Completed on | : 03.03.2016 |
| 10. Page No. | : 13 of 16 |
| 11. Report to be Sent | : 03.03.2016 |
| 12. Protocol | : APHA, 22 nd Edition |

Sl.No	Parameters	Protocol	Unit	Result	Std. IS 10500:2012 (Second Revision)	
					DL	PL
1	pH	4500H+ B	-	7.87	6.5-8.5	
2	Colour	2120 B	Hazen	<1.0	5	15
3	Odour	-	-	Un- Objectionable	Un- Objectionable	
4	Turbidity	2130 B	NTU	2.3	1	5
5	Total Dissolved Solids	2540 C	mg/L	320	500	2000
6	Total Hardness	2340 C	mg/L	60	200	600
7	Calcium	3500-Ca	mg/L	20.8	75	200
8	Magnesium	3500-Mg B	mg/L	1.94	30	100
9	Chloride as Cl	4500-Cl B	mg/L	108.5	250	1000
10	Sulphate as SO ₄	4500-SO ₄ ²	mg/L	59.9	200	400
11	Fluoride as F	4500F D	mg/L	1.41	1	1.5
12	Iron as Fe	3500-Fe B	mg/L	0.13	0.3	
13	Nitrate as NO ₃	4500-NO ₃ E	mg/L	1.15	45	
14	Total Coliform	IS 15185:2002	CFU/100ml	Absent	Absent	
15	Faecal Coliform	IS 15185:2002	CFU/100ml	Absent	Absent	

INFERENCE As per IS 10500:2012(Second Revision),
Report Status:- The measured values for the above parameters are within the Standards.

End of Report


Authorized Signatory

NOTE: This report is subject to the terms & conditions mentioned overleaf

Test Report

ANALYSIS REPORT OF FRESH WATER QUALITY

1. Name of the Location : Well Water (Vittal Sembadi)
2. Name of the Project : M/s Athani Sugars Pvt. Ltd.
Vishnuannanagar, Post: Navalihal- 591234,
Tq: Athani, Dist: Belagavi, Karnataka
3. Sample Collected by : M/s. Environmental Health and Safety Research &
Development Centre Unit-II, Belgaum- 590015
4. Date of Collection : 24.02.2016
5. Particulars of Sample Collected : Open Well Water, Grab Sampling
6. Date of Sample Receipt : 25.02.2016
7. Sample Number : EHSRDCU2/ASPL/W/16/02/1654
8. Analysis started on : 25.02.2016
9. Analysis Completed on : 03.03.2016
10. Report to be Sent : 03.03.2016
11. Page No. : 14 of 16
12. Protocol : AP31A, 22nd Edition

SL.No	Parameters	Protocol	Unit	Result	Std. IS 10500:2012 (Second Revision)	
					DL	PL
1	pH	4300H B	-	7.31	6.5-8.5	
2	Colour	2120 B	Hazen	<1.0	5	15
3	Odour	-	-	Un-Objectionable	Un-Objectionable	
4	Turbidity	2130 B	NTU	0.19	1	5
5	Total Dissolved Solids	2540 C	mg/L	1490	500	2000
6	Total Hardness	2340 C	mg/L	564	200	600
7	Calcium	3500-Ca	mg/L	145.6	75	200
8	Magnesium	3500-Mg B	mg/L	48.6	30	100
9	Chloride as Cl	4500-Cl B	mg/L	217.1	250	1000
10	Sulphate as SO ₄	4500-SO ₄ B	mg/L	161	200	400
11	Fluoride as F	4300F D	mg/L	0.65	1	1.5
12	Iron as Fe	3500-Fe B	mg/L	0.03	0.3	
13	Nitrate as NO ₃	4500-NO ₃ E	mg/L	8.45	45	
14	Total Coliform	IS 15185:2002	CFU/100ml	Absent	Absent	
15	Faecal Coliform	IS 15185:2002	CFU/100ml	Absent	Absent	

INFERENCE As per IS 10500:2012(Second Revision),
Report Status - The measured values for the above parameters are within the standards.

End of Report

(Signature)
Authorized Signatory

NOTE: The report is subject to the terms & conditions mentioned overleaf

Test Report

ANALYSIS REPORT OF FRESH WATER QUALITY

1. Name of the Location : Well Water (Kareppa Musudee)
2. Name of the Project : M/s Athani Sugars Pvt. Ltd.
Vishnuvarmanagar, Post: Navalihal- 591234,
Tq: Athani, Dist: Belagavi, Karnataka
3. Sample Collected by : M/s. Environmental Health and Safety Research &
Development Centre Unit-II, Belgaum- 590015
4. Date of Collection : 24.02.2016
5. Particulars of Sample Collected : Bore Well Water, Grab Sampling,
6. Date of Sample Receipt : 25.02.2016
7. Sample Number : EHSRDCU2/ASPL/W/16/02/1655
8. Analysis started on : 25.02.2016
9. Analysis Completed on : 03.03.2016
10. Report to be Sent : 03.03.2016
11. Page No. : 15 of 16
12. Protocol : 1. APHA, 22nd Edition

Sl.No	Parameters	Protocol	Unit	Result	Std. IS 10800:2012 (Second Revision)	
					DL	PL
1	pH	45001+ B	-	7.27	6.5-8.5	
2	Colour	2120 B	Hazen	<1.0	5	15
3	Odour	-	-	Un-Objectionable	Un-Objectionable	
4	Turbidity	2130 B	NTU	0.3	1	5
5	Total Dissolved Solids	2540 C	mg/L	1318	500	2000
6	Total Hardness	2340 C	mg/L	556	200	400
7	Calcium	3500-Ca	mg/L	144	75	200
8	Magnesium	3500-Mg B	mg/L	47.6	30	100
9	Chloride as Cl	4700-Cl B	mg/L	220.8	250	1000
10	Sulphate as SO ₄	4500-SO ₄ ²⁻	mg/L	148.4	200	400
11	Fluoride as F	4500-F D	mg/L	0.43	1	1.5
12	Iron as Fe	3500-Fe B	mg/L	0.03	0.3	
13	Nitrate as NO ₃	4500-NO ₃ E	mg/L	7.52	45	
14	Total Coliform	IS 15185:2002	CFU/100ml	Absent	Absent	
15	Faecal Coliform	IS 15185:2002	CFU/100ml	Absent	Absent	

INFERENCE As per IS 10800:2012(Second Revision),
Report Status: The measured values for the above parameters are within the
Standards.

End of Report

[Signature]
Authorized Signatory

NOTE: The report is subject to the terms & conditions mentioned overleaf

ANNEXURE -VIII

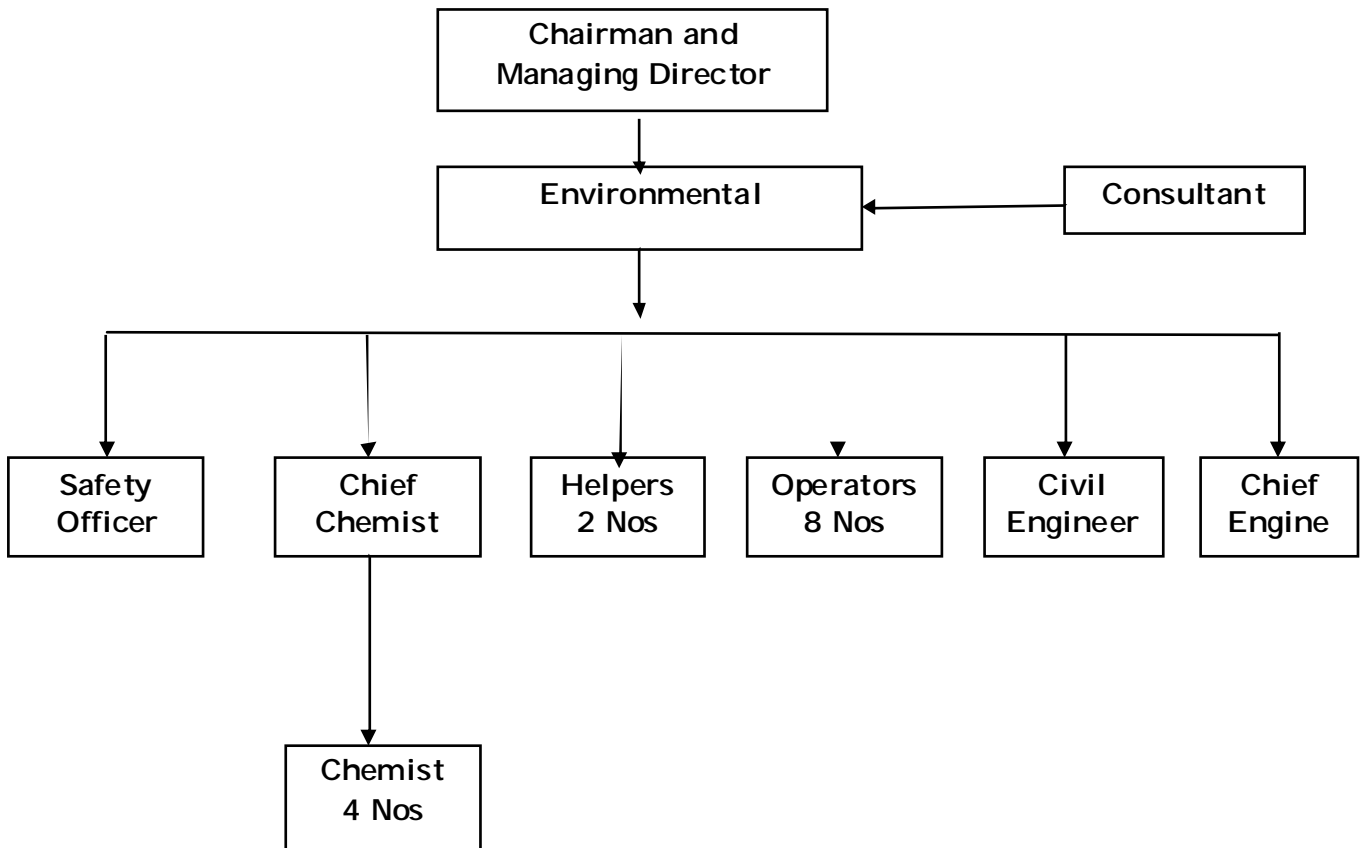


Online monitoring system for treated Effluent in Sugar ETP




Flow meter installed for treated Effluent for Sugar ETP.


ANNEXURE- IX

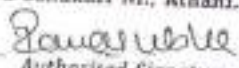


Environmental Management Cell Pattern and Reporting

ANNEXURE- X

 सत्यमेव जयते		INDIA NON JUDICIAL Government of Karnataka e-Stamp
Certificate No.	:	IN-KA007000700000007M
Certificate Issued Date	:	09-Jan-2014 10:25 AM
Account Reference	:	NONACC (FI) kakatodw/ ATHANI2/ KA-BL
Unique Doc. Reference	:	SLBIN-KAKAKSPCL0805682532700048M
Purchased by	:	ATHANI SUGARS LTD VISHNU ANNA NAGAR
Description of Document	:	Article 12 Bond
Description	:	AGREEMENT
Consideration Price (Rs.)	:	0 (Zero)
First Party	:	ATHANI SUGARS LTD VISHNU ANNA NAGAR
Second Party	:	THEUR GASES PVT LTD BANGALORE
Stamp Duty Paid By	:	ATHANI SUGARS LTD VISHNU ANNA NAGAR
Stamp Duty Amount(Rs.)	:	100 (One hundred only)



ISSUED BY :
Shri Venkateshwar Urban Credit
Soudard Sahakari Ni., Athani.

Authorised Signature.

.....Please write or type below this line.....

UNDERTAKING

We, Athani Sugars Limited, Vishnuanna Nagar, Post: Navvithal, wish to inform that, in our Distillery during Fermentation Process Raw/Impure Carbon Dioxide Gas is evolved. Now, we have decided to collect the same Raw Carbon Dioxide after removal of residual alcohol, and it is to be supplied to private party on contract basis for further process.

We have decided to sell the Raw/Impure Carbon Dioxide Gas to M/s. Theur Gases Pvt Ltd, Bangalore on contract basis. They will process the Raw/Impure Carbon Dioxide

Cont...2

History Sheet

1. For the purpose of this history sheet, the user should be notified of the user's name and the user's name should be notified of the user's name and the user's name should be notified of the user's name.

2. The user should be notified of the user's name and the user's name should be notified of the user's name and the user's name should be notified of the user's name.

//2//

Gas, purify, compress and liquefy into final product of pure liquid Carbon dioxide. For the above mentioned process, they will install required Plant and Machinery in our sugar factory premises.


During the purification process the Raw/Impure Carbon Dioxide Gas is scrubbed using Hydrogen Peroxide solution. The used solution which is colourless will be the Effluent generated by their plant. This Effluent will be around 2 to 5 M3 per day. This is negligible quantity and we will allow them to discharge this into our sugar factory ETP. We have NO OBJECTION to the above firm in discharging their Effluent (Industrial and Domestic) in our existing ETP system.

Hence, we are giving this undertaking that, we will obtain the pollution consent from the Karnataka Pollution Control Board to establish and run the Carbon Dioxide Plant which will be installed in our premises as per the Agreement dated 09/01/2014. We are also giving Their Gases Pvt Ltd, consent to establish and run their Carbon Dioxide Plant.

Date: 24.02.2014

Place: Vishnuanna Nagar, Athani.

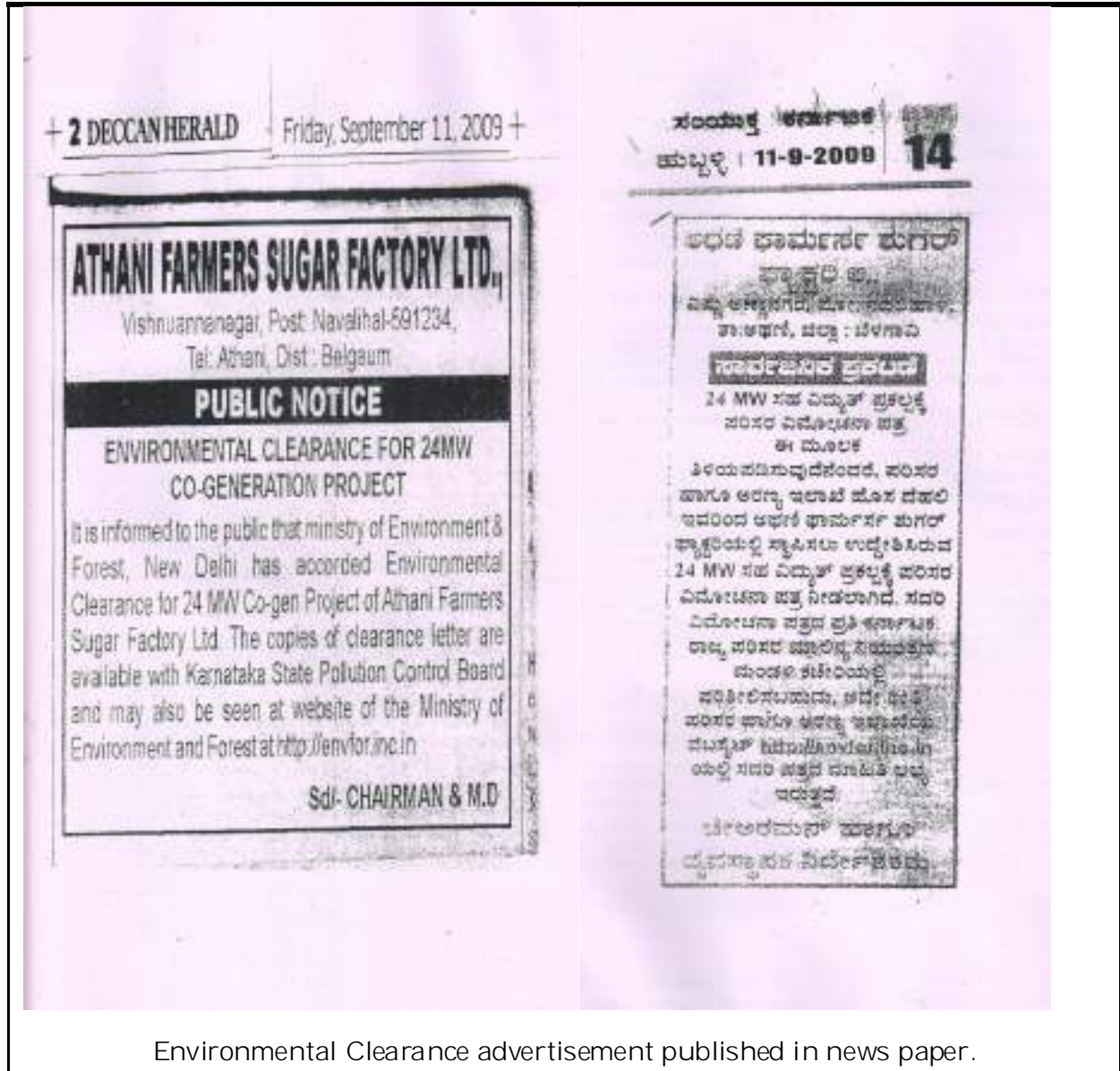
For Athani Sugars Limited


AUTHORISED SIGNATORY



Copy of undertaken Their gas ltd and ASL

ANNEXURE-XI




Environmental Clearance advertisement published in news paper.

ANNEXURE- XII

CFO for 30 KLPD to 60 KLPD

ಫ್ಯಾಕ್ಸ್ / Fax : 080-25586321
ಇಮೇಲ್ / E-mail : ho@kspcb.gov.in
ವೆಬ್‌ಸೈಟ್ / Website : http://kspcb.gov.in



☎ 25581383, 25589112
25588151, 25588270
25588142, 25586520

ಕರ್ನಾಟಕ ರಾಜ್ಯ ಮಾಲಿನ್ಯ ನಿಯಂತ್ರಣ ಮಂಡಳಿ
Karnataka State Pollution Control Board

"ಪರಿಸರಭವನ", 1 ರಿಂದ 5ನೇ ಮಹಡಿಗಳು, ಸಂ.49, ಚರ್ಚ್‌ಸ್ಟ್ರೀಟ್, ಬೆಂಗಳೂರು - 560 001, ಕರ್ನಾಟಕ, ಭಾರತ
"Parisara Bhavana", 1st to 5th Floor, # 49, Church Street, Bengaluru - 560 001, Karnataka, INDIA

/BY RPAD/

No.: PCB/148/HPI/2010/731

Dated: 22 APR 2014

ADDENDUM to Consent order No: KSPCB/148/HPI/2010/731 dated 02.08.2013.

Sub: Consent for Operation under the Water (Prevention and Control of Pollution) Act 1974 and Emission under the Air (Prevention and Control of Pollution) Act 1981 for expansion of Rectified Spirit from 30 to 60 KLD by M/s. Athani Farmers Sugar Factory Ltd, Vishnuannanagar Village, Navalihal Post, Athani Taluk, Belgaum District -reg.

Ref: 1) E C issued from MOEF vide letter no J-11011/189/2009-LA-II(I), Dated: 01.09.2009
2) Combined Consent order No: PCB/148/HPI/2010/731 dated 02.08.2013
3) CFE-expansion order No. PCB/148/HPI/2013/1100 Dated: 26.10.2013.
4) Industry's CPO application for expanded capacity dated 08.01.2014 received at R O, Chikkodi on 03-02-2014. (Reg- 64825)
5) Inspection of the industry by the regional Officer, Chikkodi, Dated: 22.01.2014.
6) Proceedings of Consent Committee Meeting held on 15.03.2014.

The Board has accorded Consent under Section 25 of Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of the Air (Prevention & Control of Pollution) Act, 1981 vide ref. (2) to M/s. Athani Farmers Sugar Factory Ltd, Vishnuannanagar Village, Navalihal Post, Athani Taluk, Belgaum District considering the following manufacturing activities:

Sl. No.	Products & By-products	Maximum Capacity
1	Rectified Spirit	30 KLPD

The Board has issued Consent for Expansion for Rectified Spirit plant from 30 KLD to 60 KLD vide ref (3). Now, the industry has submitted CPO application for expansion of Rectified Spirit production from 30 KLD to 60 KLD vide ref (4).

Regional officer, Chikkodi has forwarded the applications vide ref (5). The subject was discussed in the Consent Committee Meeting held on 15.03.2014 vide ref (6) and the committee has recommended to issue CFO for expanded capacity.

Hence the following addendum is issued to the consent issued vide ref (2) cited above.

M/s Athani Sugars Ltd., CFO, Addendum, 2014

"ಪ್ಲಾಸ್ಟಿಕ್ ಬಳಕೆ ಕಡಿಗೊಳಿಸಿ, ಪರಿಸರ ಸ್ನೇಹಿ ಸಿದ್ಧಿಗೊಳಿಸಿ"

1.

AVOID USE OF PLASTICS- BE 'ECO' FRIENDLY

ADDENDUM

1. In addition to the activities permitted in the consent order issued vide order cited under ref (2), the industry is permitted to operate for 60 KLD Rectified Spirit plant.
2. The existing trade effluent generation from Distillery (Spent Wash) is 326 KLD. This spent wash shall be Compost in the compost yard and compost shall conform to the standards stipulate in annexure-1.
3. After expansion of Distillery plant from 30 KLD to 60 KLD, the total quantity of spent wash generation is 480 KLD. This shall be composted in the existing compost yard and compost quality shall conform to the standards stipulate in annexure-1.
4. The discharge of emission from the premises of the applicant shall pass through the Air pollution control equipment and discharge through stacks/chimney mentioned in the annexure-II where from the Board shall be free to collect the sample at any time in accordance with the provisions of Acts & rule made there under.
5. The amended consent order shall come into force from the date of issue.

All other conditions stipulated in the consent under the Water Act and the Air Act issued vide reference (2) above shall be complied with and remains unaltered.

FOR AND ON BEHALF OF THE
KARNATAKA STATE POLLUTION CONTROL BOARD

sd/-
CHIEF ENVIRONMENTAL OFFICER

To,
The Managing Director,
M/s. Athani Farmers Sugars Factory,
Sy No. 53, 54, 56, 437, 438 & 509,
Vishnuannanagar Village, Navalihal Post,
Athani Taluk, Belgaum Dist-59304.

- | | |
|--------------------------|------------------------------------|
| 1. Size: L/M/S : | Large |
| 2. Category: R/O/G : | Red |
| 3. Consent Fee Paid : | Rs. 30,000 under each acts |
| 4. Capital Investments : | Rs. 20 Crores (For expansion only) |

Copy to:

1. The Environmental Officer, KSPCB, Regional Office, Chikkodi, for information and to inspect the industry during your next visit to the area.
2. Master Register.
- ✓ Case file.

sd/-
CHIEF ENVIRONMENTAL OFFICER

ANNEXURE-I

Standards For Discharge of Treated Trade Effluent On Land For Gardening/Irrigation

Sl.No.	Parameters	Tolerance Limits
1	Colour and Odour	See Note
2	Suspended Solids mg/l.Max	100
3	pH value-	6 to 8.5
4	Oil and Grease mg/l.Max	10
5	BOD, mg/l, (3 days at 27°C) Max	100

Note: All efforts should be made to remove colour and unpleasant odour as far as practicable.


ANNEXURE-II

Chimney No.	Chimney attached to	Min. chimney ht. to be provided AGL	Rate of emission NM ³ /Hr	Constituents to be controlled in the emission	Tolerance limits mg/NM ³	Air pollution control equipment to be installed, in addition to chimney height as per CoL(3)
1	2	3	4	5	6	7
1	18 TPH Boiler	42m AGL	-	PM	150	ESP
2	1250 KVA D.G.Set	30 m AGL	-	SO ₂	-	Acoustics


CHIEF ENVIRONMENTAL OFFICER

ANNEXURE III
COMPOST QUALITY

Sl. No	Parameter	Standards
1	Moisture Content	< 35%
2	Organic Carbon	20-25%
3	Phosphorous	1.5-2.0%
4	Nitrogen	1.5-2.0%
5	Potassium	2.0-3.5%
6	C:N Ratio	< 17

CHIEF ENVIRONMENTAL OFFICER 

First CFO obtain for 60 KLD Distillery