



**GODAVARI BIOREFINERIES LTD.,**  
**(SUGAR & CO-GEN DIVISION)**  
**SAMEERWADI – 587 316**



**ENVIRONMENTAL STATEMENT**  
**FOR THE FINANCIAL YEAR ENDING**  
**MARCH – 2021**





GBL/SMR/QA&E/ KSPCB/ 2021 -22/ 64/

To,  
The Member Secretary  
Karnataka State Pollution Control Board  
# 49, Parisara Bhavan,  
4<sup>th</sup> & 5<sup>th</sup> floor, Church Street,  
BANGALURU

Godavari Biorefineries Ltd

Sugar & Co-gen Division  
Date: 16.09.2021

**Through: Regional Environmental Officer, KSPCB Bagalkot**

Sub: Submission of Environmental Statement for the financial year ending March-2021.

Respected Sir,

With reference to above subject, we are herewith submitting the Environmental Statement for the financial year ending 31<sup>st</sup> March, 2021 for our Sugar and Co-generation division in duplicate.

Kindly acknowledge the receipt of the same.

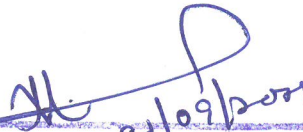
Thanking you

Yours Faithfully  
For Godavari Biorefineries Limited

  
B R Bakshi  
Executive Director

CC:  
GM (Co-gen).



  
ಸೀಮೆಯಾ,  
ಕರ್ನಾಟಕ ರಾಜ್ಯ ಮಾಲಿನ್ಯ ನಿಯಂತ್ರಣ ಮಂಡಳಿ  
ಪ್ರಾದೇಶಿಕ ಕಛೇರಿ, ಬೆಂಗಳೂರು

Works : P O Sameerwadi, Tal Mudhol, Dist Bagalkot, Karnataka State - 587 316. INDIA  
Tel : (91-08350) 260046/ 47/ 48 Fax : (91-08350) 260037 Gram : "SUGAR MILLS" Sameerwadi

Regd. Office : Somaiya Bhavan, 45/47, Mahatma Gandhi Road, Fort, Mumbai - 400 001 INDIA.  
Tel : (91-22) 2204 8272 / 2285 8430 Fax : (91-22) 2204 7297 www.somaiya.com

CIN No U67120MH1956PLC009707 • KST No 5020083-5 w.e.f. 19-09-2002 • TIN No 29100043219 w.e.f. 28-04-09

  
SOMAIYA  
GROUP

**FORM - V**

**ENVIRONMENTAL STATEMENT FOR THE FINANCIAL  
YEAR ENDING THE 31<sup>ST</sup> MARCH - 2021**

**PART - A**

- 1) Name and address of the Occupier of the Industry operation or process : B R Bakshi, Executive Director  
Godavari Biorefineries Ltd;  
SAMEERWADI - 587316  
Dist: Bagalkot
- 2) Production Capacity : 15000 TCD - Sugar Cane
- 3) Date of last statement submitted : 09 September, 2020
- 4) Year of Establishment : 1972

**PART - B**

**i) (a) WATER CONSUMPTION (Cu.M./day)**

Source	During the Previous financial	During the Current financial
	Year 2019-20	Year 2020-21
Process	27.589	39.918
Cooling	10.969	9.966
Domestic	150.000	137.671
<b>TOTAL</b>	<b>188.558</b>	<b>187.555</b>

**(b) Water Consumption per unit of out-put.**

Name of Product	Water consumption per unit of products ( Cu.M./MT of product)	
	During the Previous financial	During the Current financial
	Year 2019-20	Year 2020-21
Sugar - Cooling + Process	0.088	0.108
Domestic	0.427	0.338

**ii) RAW MATERIALS CONSUMPTION:**

Name of Raw Material	Name of Product	Consumption of raw material per unit of out-put (Kgs/Qtl of Sugar produced)	
		During the Previous financial year 2019-20	During the Current financial year 2020-21
1. Sugar cane	Sugar	1191.556	1347.812
2. Bagasse used as fuel		44.098	38.020
3. Lime			
a) Process		0.815	0.703
b) E.T.P. + Spray		0.349	0.301
4. Orthophosphoric Acid		0.074	0.064
5. Sulphur			
a) Process	0.272	0.234	
6. Lubricants (Lts/qtl)			
a) Process	0.035	0.030	

By - Products	Kgs/Qtl of Sugar produced	
	During the Previous financial year 2019-20	During the Current financial year 2020-21
I. Molasses	45.643	58.219
II. Bagasse	338.458	379.720
III. Press - Mud	53.692	58.137

1. It can be seen from the above figures that the use of water for various purposes has been marginally lower due to centralized collecting system and is reclaimed. Further the higher per ton consumption is because of lower yeald and diversion of B-heavy molasse to distillery
2. Excess condensate is collected and cooled in a cooling tower and used as make up water, about 750-800 Cu.Mtr. per day is recycled.there by reducing demand on fresh water.
3. The water quantity is measured by water meters (3 Nos. provided) & one Mag' flow meter is for effluent measurement.

Thus, there is intensive recycling and re-use of hot condensate for process use and cooled condensate for make up, there by reducing demand of fresh water and minimisation of waste water.

**PART-C**  
**POLLUTANTS DISCHARGED TO ENVIRONMENT/UNIT OF OUT PUT.**  
*(Parameters as specified in the consent issued)*

Pollutants	Quantity of pollutants discharged (mass/day)	Concentration of pollutants discharged (kg/day)	Percentage of variation to prescribed standards with reasons
a) Waste water	About 84 Ltrs. Per MT of Cane crushed .	Seprately enclosed	All the parameters are meeting the standards and ETP is in operation.
b) Air	Below 150 mg/Nm <sup>3</sup>	Seprately enclosed	No variation as per Central pollution controll board's standards for bagasse fired boilers.
c) Noise	Below 70 db during day Below 60 db during night	Seprately enclosed	within norms prescribed by CPCB

**Remarks:**

1. The quality of waste water discharged is well within the norms prescribed by the KSPCB
2. The ambient air quality and stack emission level are within the norms of K.S.P.C.B. for all the air pollution sources. The prescribed chimney height and Air pollution control equipments have been provided.
3. The capacity of ETP is 2500 CUM /per day. UASB reactor outlet is further treated in ASP / Extended aeration ETP after clarification, filtered in MB filter. Then disposed off on land for irrigation.

**PART - D**

**HAZARDOUS WASTE**

*(As specified under Hazardous Waste/Management and Handling Rules, 1989)*

Hazardous Waste	Total Quantity (Kgs)	
	During the Previous financial year 2019-20	During the Current financial year 2020-21
a) From Process	NIL	NIL
b) From Pollution control facilities	NIL	NIL
c) D.G.Set Engine oil	Nil	0.14

The oil is collected from DG sets is stored in closed barrels at Hazardous Waste storage Yard and used for cane carrier, belt conveyers lubrication

**PART - E**

**SOLID WASTES**

Parameters	During the previous financial year 2019-20	During the Current financial year 2020-21
	<b>Total quantity in Tonnes</b>	
a) From process (By-products)		
i) Bagasse	433628.885	564264.32
ii) Press - Mud	68789.5	86391.32
iii) Ash	1410.33	1171.39
b) From pollution control facilities	NIL	NIL
c) Quantity recycled or re-utilised within the unit		
i) Bagasse		
- Bagasse for boilers	56497.37	45141.60
- Sold	NIL	NIL
ii) Press-Mud	68789.5	86391.32
iii) Ash - Disposed	1410.33	1171.39
* contains 55-65% moisture		

**PART - F**

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

D.G. set oil is mixed with bagasse and burnt in boilers.

By-products (Solids): Characteristics of Bagasse & Press-Mud.

Sl.No.	Parameter	Bagasse	Press-Mud
1	pH	7.4 - 7.7	6.5 - 7.1
2	Nitrogen %	0.1 - 0.3	1.03 - 1.48
3	Phosphorous %	0.2 - 0.3	2.3 - 3.1
4	Potassium %	0.05 - 0.07	0.52 - 0.88
5	Organic Carbon %	35.0 - 45.0	34.5.0 - 43.0

Bagasse is used as fuel in boilers.

Press-mud is sold to distillery division for making biocompost.

Ash is used for land filling, brick manufacturing and Biocompost.

### PART - G

*Impact of pollution control (abatement) measures taken on conservation of natural resources and consequently on the cost of production.*

The treated effluent is utilised on land for irrigation purpose. The farmers also using treated effluent are benefited due to availability of nutrients in the waste. There is good return to the farmers by the way of recycling nutrients, and supplement their irrigation requirements when no water is available.

There is no significant impact on the cost of production.

### PART - H

*Additional measures/investment proposals for Environmental Protection including abatement of pollution and prevention of pollution.*

We have done the maintenance of ETP plant and overhauling of all equipments and water lines involving a cost of 46.04 lakhs.

We were used new bacterial culture supplied by M/S Fermento Biotech Pvt Ltd. Which gave improved results even under shock load that involved culture cost of 0.45 lakhs.

The sugar factory effluent is treated in the well maintained effluent treatment plant. The sugar factory effluent is taken to holding tank after grit & oil separation units. after U.A.S.B. reactor . Then effluent is treated in two stages aeration treatment plant. ( ASP). The treated effluent is used for irrigation purpose only.

The plantation has been taken up extensively for Green Belt development from beginning and new planting is done every year around the factory and ETP. The cumulative plantation in our complex is about 126 acres and maintainig healthy biodiversity.

**PART - I**

***Any other particulars for improving the quality of Environment.***

***Please refer to the " Environmental Statement in Brief "***  
**ENVIRONMENTAL STATEMENT IN BRIEF**

**Name of the Factory :** Godavari Biorefineries Ltd;  
SAMEERWADI - 587316.  
Tal: Mudhol, Dist: Bagalkot.

**Units of Effluent treatment plant : (Sugar Division)** Screen, grit separator, Oil Skimmer, Oil & Grease traps, V-Notch, Equalisation tank & holding tanks (2 Nos) digester with buffer tank (02 Nos), aeration tanks ( 3Nos) & 102.5 H.P. aeration facility, settling tanks (3Nos), sludge pumps, sludge drying beds 750 M<sup>2</sup>, dual media filter tank, holding tank with pumps pipelines etc...

**Q. 1 *Whether water quantity measurement are made by installing water meter?***

**R** Yes, Water meters are fully installed at all intake points. Water quantity is recorded as per meter readings

**Q.2. *Whether untreated, treated effluent samples from the different unit process are analysed regularly?***

**R** Factory has installed online effluent monitoring system as per CPCB direction. And it is connected to CPCB server  
Untreated and treated effluent samples analysed once in a month by MoEF recognized lab  
Factory has taken stringent steps to reduce effluent at source & to recycle the waste water for imbibition purpose, effluent and spray pond water is used for boiler ash quenching and quantity of effluent during this year came to 1211 Cu Mtr. per day.

**Q. 3. *Whether the soil and ground water samples are tested regularly? Where the effluent is used for irrigation. Similarly, whether upstream and down stream quality of river is tested regularly?***

**R** Soil and well water analysis is done, treated effluent is used for irrigation and river water analysis not applicable.

**Q. 4 *Whether stack monitoring arrangements have been made ? and if so, whether monitoring is done as per consent condition?***

**R** Yes.

**Q. 5. *Whether ambient air quality and sound level measurements are carried out as per the consent conditions ?***

**R** Yes.



**Q.6. Briefly describe the safety precautions undertaken in the industry to prevent accidents including fire accidents ?**

- R. i) Safety belts, Gas masks and ear plugs are provided and safety measures are followed to prevent accident.  
ii) Fire extinguisher like soda ash, dry powder and foam type are installed at the different stations in the factory.  
iii) Fire buckets with sand are provided.  
iv) Fire fighter is always kept ready.

**Q.7 If the expansion / modification is made, whether the consent from pollution control board and Environmental clearance is obtained ? If so, furnish the details.**

R Expansion from 7500 T.C.D. to 15000 TCD is already completed , and consent from KSPC Board is obtained regularly.

**Q.8. What is the capital investment of pollution control measures since the inception of the plant and also mention the details of operational and maintenance costs ?**

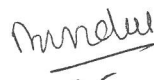
- R i) Capital Cost Rs.365.00 lakhs  
ii) Operational & maintenance cost per anum Rs.46.04 lakhs.

**Q.9. Whether the Environmental Management cell is established in industry ?**

R <u>Yes.</u> Director (Works)	1 No
General Manager (QA & E)	1 No
Sr. Manager (Env)	1 No
Dy. Manager (WTP)	1 No.
Sr.Safety Officer	1 No.
Chemists	3 Nos.
Safety Supervisor	1 No
Laboratory attendents	2 Nos.
Laboratory space	150 Sq.ft.
Approximate expenditure for setting up the laboratory	Rs. 6.5 lakhs.

**GODAVARI BIOREFINERIES LIMITED.**

  
Sr. Manager (Env)

  
GM (QA & E)

  
Executive Director

**APPROXIMATE COST OF EQUIPMENTS AND OTHER LABORATORY  
ACCESSORIES PURCHASED FOR ETP WORKS**

1.	Balance, Electronic, top loading	8000.00
2.	B.O.D. incubator	50000.00
3.	Centrifuge	15000.00
4.	COD reflux unit	5000.00
5.	Conductivity meter	7000.00
6.	Distillation plant	3000.00
7.	Drying oven	15000.00
8.	Kjeldahl's Assembly	8500.00
9.	Magnetic Stirrer	4000.00
10.	Microscope	12000.00
11.	Muffle Furnace	5000.00
12.	pH Meter	8000.00
13.	Silica Crucibles	6000.00
14.	Refrigerator	12000.00
15.	Spectrophotometer	250000.00
16.	Hot Air oven	20000.00
17.	Fume Hood	200000.00

**Others**

a)	Chemicals	20000.00
b)	Glass Wares	25000.00
c)	Contingencies	30000.00

The factory has already appointed the staff as per pattern and the cogen unit has procured high volume sampler for ambient Air quality and stack monitoring kit. Laboratory facilities are available for wastewater testing. Monthly water samples, stack and ambient air samples are analysed by Dr. Subbarao's Environmental Center, Sangli.



# SEC

## Dr. SUBBARAO'S ENVIRONMENT CENTER

"Arundhati", Opp. Sahayognagar, M.S.E.B. Road, Vishrambag, Sangli - 416 415.  
 Phone : Sangli - 0233 - 2301857, (M) 9372109522, 9890992118, 9890454493,  
 E-mail : bssubbarao@yahoo.com / bssharat@yahoo.com / bsnagiyoti@yahoo.com  
 QCI - NABET Accredited ETA Consultant Organization - Certificate No.

NABET / EIA / 1619 / RA 0057 valid upto June 12, 2019,

NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2019

### TEST REPORT STACK EMISSIONS

Report Ref. No.	SEC/Sugar/Stack-1/TZ/11-20
Report Date	09 December 2020
Name of industry	Godavari Biorefineries Ltd., Sameerwadi [Sugar Unit]
Address	Sameerwadi - 587316, (Tq) Mudhol, (Dst) Bagalkot.
Start Date of commencement of Sampling	27 November 2020
Start Time of commencement of Sampling	11:00 am
End Date of commencement of Sampling	27 November 2020
End Time of commencement of Sampling	11:30 am
Retention period of the remnant sample	30 days

### PARTICULARS OF STACK

Stack attached to boiler	37.5 TPH
Stack Diameter	1.98 m
Stack Height	42.59 m
Stack Temperature	133°C
Stack Velocity of Flue Gases	9.5 m/s
Type of Fuel	Bagasse


### POLLUTION PARAMETER RESULTS

Parameter	Units	Results	Limits	Method Used
Particulate Matter (PM)	mg/Nm <sup>3</sup>	109	150	IS 11255m(Part 1): 1985, Reaffirmed 2003
SO <sub>2</sub>	mg/Nm <sup>3</sup>	47	100	IS-11255 (Part 2): 1985 Reaffirmed 2009
NO <sub>x</sub>	mg/Nm <sup>3</sup>	23	50	IS-11255 (Part 7): 2005 Reaffirmed 2012

Note: The test report shall not be reproduced except in full without written approval of the laboratory.

  
Analyzed By



  
Authorized Signatory  
Technical Manager/ Quality Manager



# SEC

## Dr. SUBBARAO'S ENVIRONMENT CENTER

"Arundhati", Opp. Sahayognagar, M.S.E.B. Road, Vishrambag, Sangli - 416 415.  
 Phone : Sangli - 0233 - 2301857, (M) 9372109522, 9890992118, 9890454493,  
 E-mail : bssubbarao@yahoo.com / bssharat@yahoo.com / bsnagjyoti@yahoo.com  
 QCI - NABET Accredited ETA Consultant Organization - Certificate No.

NABET / EIA / 1619 / RA 0057 valid upto June 12, 2019,

NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2019

### TEST REPORT STACK EMISSIONS

Report Ref. No.	SEC/Sugar/Stack-5/TZ/11-20
Report Date	09 December 2020
Name of industry	Godavari Biorefineries Ltd., Sameerwadi [Sugar Unit]
Address	Sameerwadi - 587316, (Tq) Mudhol, (Dst) Bagalkot.
Start Date of commencement of Sampling	27 November 2020
Start Time of commencement of Sampling	11:00 am
End Date of commencement of Sampling	27 November 2020
End Time of commencement of Sampling	11:30 am
Retention period of the remnant sample	30 days
<b><u>PARTICULARS OF STACK</u></b>	
Stack attached to boiler	37.5 TPH
Stack Diameter	1.98 m
Stack Height	35.86 m
Stack Temperature	126°C
Stack Velocity of Flue Gases	9.1 m/s
Type of Fuel	Bagasse

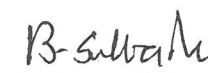
### POLLUTION PARAMETER RESULTS

Parameter	Units	Results	Limits	Method Used
Particulate Matter (PM)	mg/Nm <sup>3</sup>	102	150	IS 11255m(Part 1): 1985, Reaffirmed 2003
SO <sub>2</sub>	mg/Nm <sup>3</sup>	45	100	IS-11255 (Part 2): 1985 Reaffirmed 2009
NO <sub>x</sub>	mg/Nm <sup>3</sup>	21	50	IS-11255 (Part 7): 2005 Reaffirmed 2012

Note: The test report shall not be reproduced except in full without written approval of the laboratory.

  
Analyzed By



  
Authorized Signatory  
Technical Manager/ Quality Manager



# SEC

## Dr. SUBBARAO'S ENVIRONMENT CENTER

"Arundhati", Opp. Sahayognagar, M.S.E.B. Road, Vishrambag, Sangli - 416 415.  
 Phone : Sangli - 0233 - 2301857, (M) 9372109522, 9890992118, 9890454493,  
 E-mail : bssubbarao@yahoo.com / bssharat@yahoo.com / bsnagjyoti@yahoo.com  
 QCI - NABET Accredited ETA Consultant Organization - Certificate No.

NABET / EIA / 1619 / RA 0057 valid upto June 12, 2019,

NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2019

### TEST REPORT STACK EMISSIONS

Report Ref. No.	SEC/Sugar/Stack-1/UT/12-20
Report Date	15 January 2021
Name of industry	Godavari Biorefineries Ltd., Sameerwadi [Sugar Unit]
Address	Sameerwadi - 587316, (Tq) Mudhol, (Dst) Bagalkot.
Start Date of commencement of Sampling	30 December 2020
Start Time of commencement of Sampling	10:00 am
End Date of commencement of Sampling	30 December 2020
End Time of commencement of Sampling	10:30 am
Retention period of the remnant sample	30 days

### PARTICULARS OF STACK

Stack attached to boiler	37.5 TPH
Stack Diameter	1.98 m
Stack Height	42.59 m
Stack Temperature	131°C
Stack Velocity of Flue Gases	9.3 m/s
Type of Fuel	Bagasse

### POLLUTION PARAMETER RESULTS

Parameter	Units	Results	Limits	Method Used
Particulate Matter (PM)	mg/Nm <sup>3</sup>	95	150	IS 11255m(Part 1): 1985, Reaffirmed 2003
SO <sub>2</sub>	mg/Nm <sup>3</sup>	39	100	IS-11255 (Part 2): 1985 Reaffirmed 2009
NO <sub>x</sub>	mg/Nm <sup>3</sup>	20	50	IS-11255 (Part 7): 2005 Reaffirmed 2012

Note: The test report shall not be reproduced except in full without written approval of the laboratory.

  
Analyzed By

  
Authorized Signatory  
Technical Manager/ Quality Manager





# SEC

## Dr. SUBBARAO'S ENVIRONMENT CENTER

"Arundhati", Opp. Sahayognagar, M.S.E.B. Road, Vishrambag, Sangli - 416 415.  
 Phone : Sangli - 0233 - 2301857, (M) 9372109522, 9890992118, 9890454493,  
 E-mail : bssubbarao@yahoo.com / bsssharat@yahoo.com / bsnagjyoti@yahoo.com  
 QCI - NABET Accredited ETA Consultant Organization - Certificate No.

NABET / EIA / 1619 / RA 0057 valid upto June 12, 2019,

NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2019

### TEST REPORT STACK EMISSIONS

Report Ref. No.	SEC/Sugar/Stack-5/UT/12-20
Report Date	15 January 2021
Name of industry	Godavari Biorefineries Ltd., Sameerwadi [Sugar Unit]
Address	Sameerwadi - 587316, (Tq) Mudhol, (Dst) Bagalkot.
Start Date of commencement of Sampling	30 December 2020
Start Time of commencement of Sampling	10:00 am
End Date of commencement of Sampling	30 December 20
End Time of commencement of Sampling	10:30 am
Retention period of the remnant sample	30 days

### PARTICULARS OF STACK

Stack attached to boiler	37.5 TPH
Stack Diameter	1.98 m
Stack Height	35.86 m
Stack Temperature	129°C
Stack Velocity of Flue Gases	9.0 m/s
Type of Fuel	Bagasse

### POLLUTION PARAMETER RESULTS

Parameter	Units	Results	Limits	Method Used
Particulate Matter (PM)	mg/Nm <sup>3</sup>	98	150	IS 11255m(Part 1): 1985, Reaffirmed 2003
SO <sub>2</sub>	mg/Nm <sup>3</sup>	40	100	IS-11255 (Part 2): 1985 Reaffirmed 2009
NO <sub>x</sub>	mg/Nm <sup>3</sup>	20	50	IS-11255 (Part 7): 2005 Reaffirmed 2012

Note: The test report shall not be reproduced except in full without written approval of the laboratory.

  
Analyzed By

  
Authorized Signatory  
Technical Manager/ Quality Manager





# SEC

## Dr. SUBBARAO'S ENVIRONMENT CENTER

"Arundhati", Opp. Sahayognagar, M.S.E.B. Road, Vishrambag, Sangli - 416 415.  
Phone : Sangli - 0233 - 2301857, (M) 9372109522, 9890992118, 9890454493,  
E-mail : bssubbarao@yahoo.com / bssharat@yahoo.com / bsnagjyoti@yahoo.com  
QCI - NABET Accredited ETA Consultant Organization - Certificate No.  
NABET / EIA / 1619 / RA 0057 valid upto June 12, 2019,  
NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2019

### TEST REPORT STACK EMISSIONS

Report Ref. No.	SEC/Sugar/Stack-1/VK/01-21
Report Date	10 February 2021
Name of industry	Godavari Biorefineries Ltd., Sameerwadi [Sugar Unit]
Address	Sameerwadi - 587316, (Tq) Mudhol, (Dst) Bagalkot.
Start Date of commencement of Sampling	25 January 2021
Start Time of commencement of Sampling	09:30 am
End Date of commencement of Sampling	25 January 2021
End Time of commencement of Sampling	10:00 am
Retention period of the remnant sample	30 days
<b>PARTICULARS OF STACK</b>	
Stack attached to boiler	37.5 TPH
Stack Diameter	1.98 m
Stack Height	42.59 m
Stack Temperature	128°C
Stack Velocity of Flue Gases	9.4 m/s
Type of Fuel	Bagasse

### POLLUTION PARAMETER RESULTS

Parameter	Units	Results	Limits	Method Used
Particulate Matter (PM)	mg/Nm <sup>3</sup>	97	150	IS 11255m(Part 1): 1985, Reaffirmed 2003
SO <sub>2</sub>	mg/Nm <sup>3</sup>	40	100	IS-11255 (Part 2): 1985 Reaffirmed 2009
NO <sub>x</sub>	mg/Nm <sup>3</sup>	21	50	IS-11255 (Part 7): 2005 Reaffirmed 2012

Note: The test report shall not be reproduced except in full without written approval of the laboratory.

Analyzed By



B. Sullade  
Authorized Signatory  
Technical Manager/ Quality Manager

QCI - NABET Accredited ETA Consultant Organization Certificate No. NABET/EIA/1922/RA0159 valid upto June 12, 2022.  
QCI - NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2021.

PAN NO. AAMFD6620P ■ ISO 9001:2008, OSHAS 18001:2007 CERTIFIED ■ REGISTRATION NO. PN00000996  
GSTIN : 27AAMFD6620P1ZW ■ TAN : KLDP02394A



# SEC

## Dr. SUBBARAO'S ENVIRONMENT CENTER

"Arundhati", Opp. Sahayognagar, M.S.E.B. Road, Vishrambag, Sangli - 416 415.  
 Phone : Sangli - 0233 - 2301857, (M) 9372109522, 9890992118, 9890454493,  
 E-mail : bssubbarao@yahoo.com / bssharat@yahoo.com / bsnagjyoti@yahoo.com  
 QCI - NABET Accredited ETA Consultant Organization - Certificate No.

NABET / EIA / 1619 / RA 0057 valid upto June 12, 2019,

NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2019

### TEST REPORT STACK EMISSIONS

Report Ref. No.	SEC/Sugar/Stack-5/WB/02-21
Report Date	05 March 2021
Name of industry	Godavari Biorefineries Ltd., Sameerwadi [Sugar Unit]
Address	Sameerwadi – 587316, (Tq) Mudhol, (Dst) Bagalkot.
Start Date of commencement of Sampling	26 February 2021
Start Time of commencement of Sampling	10:30 am
End Date of commencement of Sampling	26 February 2021
End Time of commencement of Sampling	11:00 am
Retention period of the remnant sample	30 days

### PARTICULARS OF STACK

Stack attached to boiler	37.5 TPH
Stack Diameter	1.98 m
Stack Height	35.86 m
Stack Temperature	118°C
Stack Velocity of Flue Gases	8.1 m/s
Type of Fuel	Bagasse

### POLLUTION PARAMETER RESULTS

Parameter	Units	Results	Limits	Method Used
Particulate Matter (PM)	mg/Nm <sup>3</sup>	106	150	IS 11255m(Part 1): 1985, Reaffirmed 2003
SO <sub>2</sub>	mg/Nm <sup>3</sup>	48	100	IS-11255 (Part 2): 1985 Reaffirmed 2009
NOx	mg/Nm <sup>3</sup>	24	50	IS-11255 (Part 7): 2005 Reaffirmed 2012

**Note:** The test report shall not be reproduced except in full without written approval of the laboratory.

Analyzed By

Manager

*B. S. S. De*

Authorized Signatory  
 Technical Manager/ Quality



QCI – NABET Accredited ETA Consultant Organization Certificate No. NABET/EIA/1922/RA0159 valid upto June 12, 2022.  
 QCI – NABL Quality Assurance Laboratory Accreditation Certificate No. TC – 6121 valid upto 09-08-2021.

PAN NO. AAMFD6620P ■ ISO 9001:2008, OSHAS 18001:2007 CERTIFIED ■ REGISTRATION NO. PN00000996  
 GSTIN : 27AAMFD6620P1ZW ■ TAN : KLPD02394A





# SEC


## Dr. SUBBARAO'S ENVIRONMENT CENTER

"Arundhati", Opp. Sahayognagar, M.S.E.B. Road, Vishrambag, Sangli - 416 415.  
 Phone : Sangli - 0233 - 2301857, (M) 9372109522, 9890992118, 9890454493,  
 E-mail : bssubbarao@yahoo.com / bssharat@yahoo.com / bsnagjyoti@yahoo.com  
 QCI - NABET Accredited ETA Consultant Organization - Certificate No.  
 NABET / EIA / 1619 / RA 0057 valid upto June 12, 2019,


NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2019

### AMBIENT AIR QUALITY REPORT

Report Ref. No. : SEC/AA-TZ/11-20					End of Analysis : 07 December 2020			
Name of Industry/Customer: <b>Godavari Biorefineries Ltd. [Sugar Unit]</b>					Report Date : 09 December 2020			
Address: A/p. Sameerwadi – 587316, (Tq) Mudhol, (Dst) Bagalkot.					Lab ID/Sample Ref. No. : TZ			
Date of Collection / Sampling : 27 November 2020					Nature of Sample: Ambient Air			
Date of Receipt : 28 November 2020					Sample Collected By: SEC Lab			
Sr. No.	Sampling Station	Wind Direction	Direction & Distance from stack		PM <sub>10</sub> (µg/m <sup>3</sup> )	PM <sub>2.5</sub> (µg/m <sup>3</sup> )	SO <sub>2</sub> (µg/m <sup>3</sup> )	NO <sub>x</sub> (µg/m <sup>3</sup> )
				Limits	< 100µg/m <sup>3</sup>	< 60µg/m <sup>3</sup>	< 80µg/m <sup>3</sup>	< 80µg/m <sup>3</sup>
				Method of Testing	IS 5182 (Part 23): 2006	SEC/QAL/SOP/AIR/PM2.5/03	IS 5182 (Part 2): 2001	IS 5182 (Part 6): 2006
1.	Near Sugar Main Gate	Easterly	SW, 645 meters		71	32	10.00	12.00

  
 Analyzed By



  
 Authorized Signatory  
 Technical Manager/ Quality Manager



# SEC

## Dr. SUBBARAO'S ENVIRONMENT CENTER

"Arundhati", Opp. Sahayognagar, M.S.E.B. Road, Vishrambag, Sangli - 416 415.  
 Phone : Sangli - 0233 - 2301857, (M) 9372109522, 9890992118, 9890454493,  
 E-mail : bssubbarao@yahoo.com / bssharat@yahoo.com / bsnagjyoti@yahoo.com  
 QCI - NABET Accredited ETA Consultant Organization - Certificate No.  
 NABET / EIA / 1619 / RA 0057 valid upto June 12, 2019,

NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2019

### AMBIENT AIR QUALITY REPORT

Report Ref. No. : SEC/AA-UT/12-20	End of Analysis : 12 January 2021
Name of Industry/Customer: <b>Godavari Biorefineries Ltd. [Sugar Unit]</b>	Report Date : 15 January 2021
Address: A/p. Sameerwadi – 587316, (Tq) Mudhol, (Dst) Bagalkot.	Lab ID/Sample Ref. No. : UT
Date of Collection / Sampling : 30 December 2020	Nature of Sample: Ambient Air
Date of Receipt : 01 January 2021	Sample Collected By: SEC Lab

Sr. No.	Sampling Station	Wind Direction	Direction & Distance from stack	Limits	PM <sub>10</sub> (µg/m <sup>3</sup> )	PM <sub>2.5</sub> (µg/m <sup>3</sup> )	SO <sub>2</sub> (µg/m <sup>3</sup> )	NO <sub>x</sub> (µg/m <sup>3</sup> )
				< 100µg/m <sup>3</sup>	< 60µg/m <sup>3</sup>	<	< 80µg/m <sup>3</sup>	
				Method of Testing	IS 5182 (Part 23): 2006	SEC/QAL/SOP/AIR/PM2.5/03	IS 5182 (Part 2): 2001	IS 5182 (Part 6): 2006
1.	Near Sugar Main Gate	Easterly	SW, 645 meters		70	30	10.00	12.00
2.	Near Mahadev Temple	Easterly	S, 1482 meters		54	21	06.00	08.00

  
 Analyzed By

  
 Authorized Signatory  
 Technical Manager/ Quality Manager





# SEC

## Dr. SUBBARAO'S ENVIRONMENT CENTER

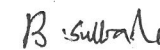
"Arundhati", Opp. Sahayognagar, M.S.E.B. Road, Vishrambag, Sangli - 416 415.  
 Phone : Sangli - 0233 - 2301857, (M) 9372109522, 9890992118, 9890454493,  
 E-mail : bssubbarao@yahoo.com / bssharat@yahoo.com / bsnagjyoti@yahoo.com  
 QCI - NABET Accredited ETA Consultant Organization - Certificate No.  
 NABET / EIA / 1619 / RA 0057 valid upto June 12, 2019,  
 NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2019

### AMBIENT AIR QUALITY REPORT

Report Ref. No. : SEC/AA-VK/01-21				End of Analysis : 08 February 2021				
Name of Industry/Customer: Godavari Biorefineries Ltd. [Sugar Unit]				Report Date : 10 February 2021				
Address: A/p. Sameerwadi – 587316, (Tq) Mudhol, (Dst) Bagalkot.				Lab ID/Sample Ref. No. : AA-VK				
Date of Collection / Sampling : 25 January 2021				Nature of Sample: Ambient Air				
Date of Receipt : 26 January 2021				Sample Collected By: SEC Lab				
Sr. No.	Sampling Station	Wind Direction	Direction & Distance from stack	PM <sub>10</sub> (µg/m <sup>3</sup> )	PM <sub>2.5</sub> (µg/m <sup>3</sup> )	SO <sub>2</sub> (µg/m <sup>3</sup> )	NO <sub>x</sub> (µg/m <sup>3</sup> )	
				Limits	< 100µg/m <sup>3</sup>	< 60µg/m <sup>3</sup>	< 80µg/m <sup>3</sup>	< 80µg/m <sup>3</sup>
				Method of Testing	IS 5182 (Part 23): 2006	SEC/QAL/SOP/AIR/PM2.5/03	IS 5182 (Part 2): 2001	IS 5182 (Part 6): 2006
1.	Near Sugar Main Gate	Easterly	SW, 645 meters	69	30	08.00	10.00	

  
Analyzed By



  
Authorized Signatory  
Technical Manager/ Quality Manager

QCI - NABET Accredited ETA Consultant Organization Certificate No. NABET/EIA/1922/RA0159 valid upto June 12, 2022.  
 QCI - NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2021.



# SEC

## Dr. SUBBARAO'S ENVIRONMENT CENTER

"Arundhati", Opp. Sahayognagar, M.S.E.B. Road, Vishrambag, Sangli - 416 415.  
 Phone : Sangli - 0233 - 2301857, (M) 9372109522, 9890992118, 9890454493,  
 E-mail : bssubbarao@yahoo.com / bssharat@yahoo.com / bsnagjyoti@yahoo.com  
 QCI - NABET Accredited ETA Consultant Organization - Certificate No.

NABET / EIA / 1619 / RA 0057 valid upto June 12, 2019,

NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2019

### AMBIENT AIR QUALITY REPORT

Report Ref. No. : SEC/AA-WB/02-21	End of Analysis : 09 March 2021
Name of Industry/Customer: <b>Godavari Biorefineries Ltd. [Sugar Unit]</b>	Report Date : 15 March 2021
Address: A/p. Sameerwadi - 587316, (Tq) Mudhol, (Dst) Bagalkot.	Lab ID/Sample Ref. No. : AA-WB
Date of Collection / Sampling : 25 February 2021	Nature of Sample: Ambient Air
Date of Receipt : 27 February 2021	Sample Collected By: SEC Lab

Sr. No.	Sampling Station	Wind Direction	Direction & Distance from stack		PM <sub>10</sub> (µg/m <sup>3</sup> )	PM <sub>2.5</sub> (µg/m <sup>3</sup> )	SO <sub>2</sub> (µg/m <sup>3</sup> )	NO <sub>x</sub> (µg/m <sup>3</sup> )
				Limits	< 100µg/m <sup>3</sup>	< 60µg/m <sup>3</sup>	< 80µg/m <sup>3</sup>	< 80µg/m <sup>3</sup>
				Method of Testing	IS 5182 (Part 23): 2006	SEC/QAL/SOP/ AIR/PM2.5/03	IS 5182 (Part 2): 2001	IS 5182 (Part 6): 2006
1.	Near Sugar Main Gate	Easterly	SW, 645 meters		71	30	10.00	12.00

Analyzed By



B. Subbarao

Authorized Signatory  
 Technical Manager/ Quality Manager

QCI - NABET Accredited ETA Consultant Organization Certificate No. NABET/EIA/1922/RA0159 valid upto June 12, 2022.  
 QCI - NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2021.



# SEC

## Dr. SUBBARAO'S ENVIRONMENT CENTER

"Arundhati", Opp. Sahayognagar, M.S.E.B. Road, Vishrambag, Sangli - 416 415.  
 Phone : Sangli - 0233 - 2301857, (M) 9372109522, 9890992118, 9890454493,  
 E-mail : bssubbarao@yahoo.com / bssharat@yahoo.com / bsnagjyoti@yahoo.com

QCI - NABET Accredited ETA Consultant Organization - Certificate No.  
 NABET / EIA / 1619 / RA 0057 valid upto June 12, 2019,

NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2019

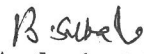
### NOISE LEVEL MEASUREMENT REPORT

Report Ref. No. : SEC/NL-VK/01-21	End of Analysis : 08 February 2021
Name of Industry/Customer: Godavari Biorefineries Ltd. [Sugar Unit]	Report Date : 10 February 2021
Address: A/p. Sameerwadi - 587316, (Tq) Mudhol, (Dst) Bagalkot.	Lab ID/Sample Ref. No. : NL-VK
Date of Collection / Sampling : 25 January 2021	Nature of Sample: Noise Level
Date of Receipt : 26 January 2021	Sample Collected By: SEC Lab

Sr. No.	Location of recording Sound level	Standard Limit dB (A) Leq	Time	dB (A) Leq
1.	Main Gate	75	Day	58.2
		70	Night	49.5
2.	Weigh Bridge	75	Day	65.1
		70	Night	60.4
3.	Cane Cutter	75	Day	68.1
		70	Night	64.8
4.	Mill House	75	Day	70.8
		70	Night	67.3
5.	Boiler House	75	Day	71.7
		70	Night	68.1
6.	Sugar Bagging House	75	Day	69.6
		70	Night	66.5
7.	General Office	75	Day	53.7
		70	Night	42.0
8.	Guest House	55	Day	50.8
		45	Night	41.2

  
 Analyzed By



  
 Authorized Signatory  
 Technical Manager/ Quality Manager

QCI - NABET Accredited ETA Consultant Organization Certificate No. NABET/EIA/1922/RA0159 valid upto June 12, 2022.  
 QCI - NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2021.

PAN NO. AAMFD6620P ■ ISO 9001:2008, OSHAS 18001:2007 CERTIFIED ■ REGISTRATION NO. PN00000996  
 GSTIN : 27AAMFD6620P1ZW ■ TAN : KLPD02394A



# SEC

## Dr. SUBBARAO'S ENVIRONMENT CENTER

"Arundhati", Opp. Sahayognagar, M.S.E.B. Road, Vishrambag, Sangli - 416 415.  
Phone : Sangli - 0233 - 2301857, (M) 9372109522, 9890992118, 9890454493,  
E-mail : bssubbarao@yahoo.com / bssharat@yahoo.com / bsnagjyoti@yahoo.com  
QCI - NABET Accredited ETA Consultant Organization - Certificate No.  
NABET / EIA / 1619 / RA 0057 valid upto June 12, 2019,

NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2019

### TEST REPORT

Report Ref. No. : SEC/W-TZ/11-20	End of Analysis : 07 December 2020
Name of Industry/Customer: <b>Godavari Biorefineries Ltd. [Sugar Unit]</b>	Report Date : 08 December 2020
Address: A/p. Sameerwadi - 587316, (Tq) Mudhol, (Dst) Bagalkot.	Lab ID/Sample Ref. No. : TZ1
Date of Collection / Sampling : 28 November 2020	Nature of Sample: Water
Date of Receipt : 28 November 2020	Sample Collected By: SEC Lab
Date of Analysis: 29 November 2020	Sample Quantity : 1 lit
Name of Sample : <b>Sugar ETP Inlet</b>	

Sr. No.	Test Parameter	Result	Unit	Test Method
1	pH	5.10	-	IS:3025 (P-11) 1983
2	Chemical Oxygen Demand	1508	mg/l	IS:3025 (P-58) 2006
3	B.O.D. ( 3 days at 27°C)	630	mg/l	IS:3025 (P-44) 1993
4	Total Dissolved Solids	2390	mg/l	IS:3025(P-16)1984
5	Total Suspended Solids	192	mg/l	IS:3025 (P-17) 1984
6	Chloride as Cl <sup>-</sup>	349	mg/l	IS:3025 (P-32) 1988
7	Sulphate as SO <sub>4</sub>	210	mg/l	IS:3025 (P-24) 1986
8	Oil & Grease	10	mg/l	IS:3025 (P-39) 1991 (RA 2003)

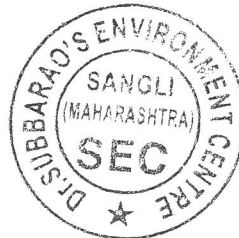
Remarks:

Thanking you,

Analysed By

Note:

1. The result pertains only for the sample tested.
2. The test result shall not be reproduced except in full, without written approval of the laboratory.
3. Sample is not drawn by Dr.Subbarao's Environment Centre, Sangli.
4. Retention period for the remnant shall be 30 days.
5. ND- Not Detected.



B. Sullar  
Authorized Signatory  
Technical Manager/ Quality Manager

\*\*\*END of Test Report \*\*\*



# SEC

## Dr. SUBBARAO'S ENVIRONMENT CENTER

"Arundhati", Opp. Sahayognagar, M.S.E.B. Road, Vishrambag, Sangli - 416 415.  
Phone : Sangli - 0233 - 2301857, (M) 9372109522, 9890992118, 9890454493,  
E-mail : bssubbarao@yahoo.com / bssharat@yahoo.com / bsnagjyoti@yahoo.com

QCI - NABET Accredited ETA Consultant Organization - Certificate No.

NABET / EIA / 1619 / RA 0057 valid upto June 12, 2019,

NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2019

### TEST REPORT

Report Ref. No. : SEC/W-UT/12-20	End of Analysis : 12 January 2021
Name of Industry/Customer: <b>Godavari Biorefineries Ltd. [Sugar Unit]</b>	Report Date : 15 January 2021
Address: A/p. Sameerwadi - 587316, (Tq) Mudhol, (Dst) Bagalkot.	Lab ID/Sample Ref. No. : UT1
Date of Collection / Sampling : 31 December 2020	Nature of Sample: Water
Date of Receipt : 01 January 2021	Sample Collected By: SEC Lab
Date of Analysis: 01 January 2021	Sample Quantity : 1 lit
Name of Sample : <b>Sugar ETP Inlet</b>	

Sr. No.	Test Parameter	Result	Unit	Test Method
1	pH	6.69	-	IS:3025 (P-11) 1983
2	Chemical Oxygen Demand	1594	mg/l	IS:3025 (P-58) 2006
3	B.O.D. ( 3 days at 27°C)	650	mg/l	IS:3025 (P-44) 1993
4	Total Dissolved Solids	2180	mg/l	IS:3025(P-16)1984
5	Total Suspended Solids	172	mg/l	IS:3025 (P-17) 1984
6	Chloride as Cl <sup>-</sup>	330	mg/l	IS:3025 (P-32) 1988
7	Sulphate as SO <sub>4</sub>	226	mg/l	IS:3025 (P-24) 1986
8	Oil & Grease	10	mg/l	IS:3025 (P-39) 1991 (RA 2003)

Remarks:

Thanking you,

  
Analysed By

Note:

1. The result pertains only for the sample tested.
2. The test result shall not be reproduced except in full, without written approval of the laboratory.
3. Sample is not drawn by Dr.Subbarao's Environment Centre, Sangli.
4. Retention period for the remnant shall be 30 days.
5. ND- Not Detected.

  
Authorized Signatory  
Technical Manager/ Quality Manager





# SEC

## Dr. SUBBARAO'S ENVIRONMENT CENTER

"Arundhati", Opp. Sahayognagar, M.S.E.B. Road, Vishrambag, Sangli - 416 415.  
Phone : Sangli - 0233 - 2301857, (M) 9372109522, 9890992118, 9890454493,  
E-mail : bssubbarao@yahoo.com / bssharat@yahoo.com / bsnagjyoti@yahoo.com  
QCI - NABET Accredited ETA Consultant Organization - Certificate No.

NABET / EIA / 1619 / RA 0057 valid upto June 12, 2019,

NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2019

### TEST REPORT

Report Ref. No. : SEC/W-VK/01-21	End of Analysis : 08 February 2021
Name of Industry/Customer: <b>Godavari Biorefineries Ltd. [Sugar Unit]</b>	Report Date : 10 February 2021
Address: A/p. Sameerwadi - 587316, (Tq) Mudhol, (Dst) Bagalkot.	Lab ID/Sample Ref. No. : VK1
Date of Collection / Sampling : 26 January 2021	Nature of Sample: Water
Date of Receipt : 26 January 2021	Sample Collected By: SEC Lab
Date of Analysis: 27 January 2021	Sample Quantity : 1 lit
Name of Sample : <b>Sugar ETP Inlet</b>	

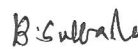
Sr. No.	Test Parameter	Result	Unit	Test Method
1	pH	6.84	-	IS:3025 (P-11) 1983
2	Chemical Oxygen Demand	1830	mg/l	IS:3025 (P-58) 2006
3	B.O.D. ( 3 days at 27°C)	710	mg/l	IS:3025 (P-44) 1993
4	Total Dissolved Solids	2240	mg/l	IS:3025(P-16)1984
5	Total Suspended Solids	180	mg/l	IS:3025 (P-17) 1984
6	Chloride as Cl <sup>-</sup>	292	mg/l	IS:3025 (P-32) 1988
7	Sulphate as SO <sub>4</sub>	208	mg/l	IS:3025 (P-24) 1986
8	Oil & Grease	10	mg/l	IS:3025 (P-39) 1991 (RA 2003)

Remarks:

Thanking you,

  
Analysed By



  
Authorized Signatory  
Technical Manager/ Quality Manager

Note:

1. The result pertains only for the sample tested.
2. The test result shall not be reproduced except in full, without written approval of the laboratory.
3. Sample is not drawn by Dr.Subbarao's Environment Centre, Sangli.
4. Retention period for the remnant shall be 30 days.
5. ND- Not Detected.

\*\*\*END of Test Report \*\*\*

QCI - NABET Accredited ETA Consultant Organization Certificate No. NABET/EIA/1922/RA0159 valid upto June 12, 2022.  
QCI - NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2021.

PAN NO. AAMFD6620P ■ ISO 9001:2008, OSHAS 18001:2007 CERTIFIED ■ REGISTRATION NO. PN00000996  
GSTIN : 27AAMFD6620P1ZW ■ TAN : KLPD02394A





# SEC

## Dr. SUBBARAO'S ENVIRONMENT CENTER

"Arundhati", Opp. Sahayognagar, M.S.E.B. Road, Vishrambag, Sangli - 416 415.  
Phone : Sangli - 0233 - 2301857, (M) 9372109522, 9890992118, 9890454493,  
E-mail : bssubbarao@yahoo.com / bssharat@yahoo.com / bsnagjyoti@yahoo.com  
QCI - NABET Accredited ETA Consultant Organization - Certificate No.

NABET / EIA / 1619 / RA 0057 valid upto June 12, 2019,

NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2019

### TEST REPORT

Report Ref. No. : SEC/W-WB/02-21	End of Analysis : 09 March 2021
Name of Industry/Customer: <b>Godavari Biorefineries Ltd. [Sugar Unit]</b>	Report Date : 15 March 2021
Address: A/p. Sameerwadi - 587316, (Tq) Mudhol, (Dst) Bagalkot.	Lab ID/Sample Ref. No. : WB1
Date of Collection / Sampling : 27 February 2021	Nature of Sample: Water
Date of Receipt : 27 February 2021	Sample Collected By: SEC Lab
Date of Analysis: 01 March 2021	Sample Quantity : 1 lit
Name of Sample : <b>Sugar ETP Inlet</b>	


Sr. No.	Test Parameter	Result	Unit	Test Method
1	pH	5.92	-	IS:3025 (P-11) 1983
2	Chemical Oxygen Demand	1965	mg/l	IS:3025 (P-58) 2006
3	B.O.D. ( 3 days at 27°C)	750	mg/l	IS:3025 (P-44) 1993
4	Total Dissolved Solids	2410	mg/l	IS:3025(P-16)1984
5	Total Suspended Solids	190	mg/l	IS:3025 (P-17) 1984
6	Chloride as Cl <sup>-</sup>	317	mg/l	IS:3025 (P-32) 1988
7	Sulphate as SO <sub>4</sub>	210	mg/l	IS:3025 (P-24) 1986
8	Oil & Grease	10	mg/l	IS:3025 (P-39) 1991 (RA 2003)

Remarks:

Thanking you,

  
Analysed By



  
Authorized Signatory  
Technical Manager/ Quality Manager

Note:

1. The result pertains only for the sample tested.
2. The test result shall not be reproduced except in full, without written approval of the laboratory.
3. Sample is not drawn by Dr.Subbarao's Environment Centre, Sangli.
4. Retention period for the remnant shall be 30 days.
5. ND- Not Detected.

\*\*\*END of Test Report \*\*\*

QCI - NABET Accredited ETA Consultant Organization Certificate No. NABET/EIA/1922/RA0159 valid upto June 12, 2022.  
QCI - NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2021.



# SEC

**Dr. SUBBARAO'S ENVIRONMENT CENTER**

"Arundhati", Opp. Sahayognagar, M.S.E.B. Road, Vishrambag, Sangli - 416 415.  
 Phone : Sangli - 0233 - 2301857, (M) 9372109522, 9890992118, 9890454493,  
 E-mail : bssubbarao@yahoo.com / bssharat@yahoo.com / bsnagjyoti@yahoo.com  
 QCI - NABET Accredited ETA Consultant Organization - Certificate No.

NABET / EIA / 1619 / RA 0057 valid upto June 12, 2019,  
 NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2019

## TEST REPORT

Report Ref. No. : SEC/W-TZ/11-20	End of Analysis : 07 December 2020
Name of Industry/Customer: <b>Godavari Biorefineries Ltd. [Sugar Unit]</b>	Report Date : 08 December 2020
Address: A/p. Sameerwadi – 587316, (Tq) Mudhol, (Dst) Bagalkot.	Lab ID/Sample Ref. No. : TZ2
Date of Collection / Sampling : 28 November 2020	Nature of Sample: Water
Date of Receipt : 28 November 2020	Sample Collected By: SEC Lab
Date of Analysis: 29 November 2020	Sample Quantity : 1 lit
Name of Sample : <b>Sugar ETP Outlet</b>	

Sr. No.	Test Parameter	Result	Unit	Standards	Test Method
1	pH	7.72	-	5.5-8.5	IS:3025 (P-11) 1983
2	Chemical Oxygen Demand	121	mg/l	250	IS:3025 (P-58) 2006
3	B.O.D. ( 3 days at 27°C)	45	mg/l	100	IS:3025 (P-44) 1993
4	Total Dissolved Solids	540	mg/l	2100	IS:3025(P-16)1984
5	Total Suspended Solids	51	mg/l	100	IS:3025 (P-17) 1984
6	Chloride as Cl <sup>-</sup>	138	mg/l	600	IS:3025 (P-32) 1988
7	Sulphate as SO <sub>4</sub>	96	mg/l	1000	IS:3025 (P-24) 1986
8	Oil & Grease	ND	mg/l	10	IS:3025 (P-39) 1991 (RA 2003)

Remarks:

Thanking you,  
  
 Analysed By



  
 Authorized Signatory  
 Technical Manager/ Quality Manager

Note:

1. The result pertains only for the sample tested.
2. The test result shall not be reproduced except in full, without written approval of the laboratory.
3. Sample is not drawn by Dr.Subbarao's Environment Centre, Sangli.
4. Retention period for the remnant shall be 30 days.
5. ND- Not Detected.

\*\*\*END of Test Report \*\*\*



# SEC

**Dr. SUBBARAO'S ENVIRONMENT CENTER**

"Arundhati", Opp. Sahayognagar, M.S.E.B. Road, Vishrambag, Sangli - 416 415.  
Phone : Sangli - 0233 - 2301857, (M) 9372109522, 9890992118, 9890454493,  
E-mail : bssubbarao@yahoo.com / bssharat@yahoo.com / bsnagiyoti@yahoo.com

QCI - NABET Accredited ETA Consultant Organization - Certificate No.

NABET / EIA / 1619 / RA 0057 valid upto June 12, 2019,

NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2019

\*\*\*END of Test Report \*\*\*

## TEST REPORT

Report Ref. No. : SEC/W-UT/12-20	End of Analysis : 12 January 2021
Name of Industry/Customer: <b>Godavari Biorefineries Ltd. [Sugar Unit]</b>	Report Date : 15 January 2021
Address: A/p. Sameerwadi - 587316, (Tq) Mudhol, (Dst) Bagalkot.	Lab ID/Sample Ref. No. : UT2
Date of Collection / Sampling : 31 December 2020	Nature of Sample: Water
Date of Receipt : 01 January 2021	Sample Collected By: SEC Lab
Date of Analysis: 01 January 2021	Sample Quantity : 1 lit
Name of Sample : <b>Sugar ETP Outlet</b>	

Sr. No.	Test Parameter	Result	Unit	Standards	Test Method
1	pH	8.05	-	5.5-8.5	IS:3025 (P-11) 1983
2	Chemical Oxygen Demand	125	mg/l	250	IS:3025 (P-58) 2006
3	B.O.D. ( 3 days at 27°C)	45	mg/l	100	IS:3025 (P-44) 1993
4	Total Dissolved Solids	510	mg/l	2100	IS:3025(P-16)1984
5	Total Suspended Solids	47	mg/l	100	IS:3025 (P-17) 1984
6	Chloride as Cl <sup>-</sup>	118	mg/l	600	IS:3025 (P-32) 1988
7	Sulphate as SO <sub>4</sub>	70	mg/l	1000	IS:3025 (P-24) 1986
8	Oil & Grease	ND	mg/l	10	IS:3025 (P-39) 1991 (RA 2003)


Remarks:

Thanking you,

  
Analysed By

Note:

1. The result pertains only for the sample tested.
2. The test result shall not be reproduced except in full, without written approval of the laboratory.
3. Sample is not drawn by Dr.Subbarao's Environment Centre, Sangli.
4. Retention period for the remnant shall be 30 days.
5. ND- Not Detected.

  
Authorized Signatory  
Technical Manager/ Quality Manager



\*\*\*END of Test Report \*\*\*



# SEC

## Dr. SUBBARAO'S ENVIRONMENT CENTER

"Arundhati", Opp. Sahayognagar, M.S.E.B. Road, Vishrambag, Sangli - 416 415.  
Phone : Sangli - 0233 - 2301857, (M) 9372109522, 9890992118, 9890454493,  
E-mail : bssubbarao@yahoo.com / bssharat@yahoo.com / bsnagjyoti@yahoo.com

QCI - NABET Accredited ETA Consultant Organization - Certificate No.

NABET / EIA / 1619 / RA 0057 valid upto June 12, 2019,

NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2019

### TEST REPORT

Report Ref. No. : SEC/W-VK/01-21	End of Analysis : 08 February 2021
Name of Industry/Customer: <b>Godavari Biorefineries Ltd. [Sugar Unit]</b>	Report Date : 10 February 2021
Address: A/p. Sameerwadi - 587316, (Tq) Mudhol, (Dst) Bagalkot.	Lab ID/Sample Ref. No. : VK2
Date of Collection / Sampling : 26 January 2021	Nature of Sample: Water
Date of Receipt : 26 January 2021	Sample Collected By: SEC Lab
Date of Analysis: 27 January 2021	Sample Quantity : 1 lit
Name of Sample : <b>Sugar ETP Outlet</b>	

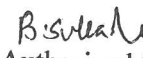
Sr. No.	Test Parameter	Result	Unit	Standards	Test Method
1	pH	7.64	-	5.5-8.5	IS:3025 (P-11) 1983
2	Chemical Oxygen Demand	138	mg/l	250	IS:3025 (P-58) 2006
3	B.O.D. ( 3 days at 27°C)	46	mg/l	100	IS:3025 (P-44) 1993
4	Total Dissolved Solids	520	mg/l	2100	IS:3025(P-16)1984
5	Total Suspended Solids	48	mg/l	100	IS:3025 (P-17) 1984
6	Chloride as Cl <sup>-</sup>	134	mg/l	600	IS:3025 (P-32) 1988
7	Sulphate as SO <sub>4</sub>	98	mg/l	1000	IS:3025 (P-24) 1986
8	Oil & Grease	ND	mg/l	10	IS:3025 (P-39) 1991 (RA 2003)

#### Remarks:

Thanking you,

Analysed By 



  
Authorized Signatory  
Technical Manager/ Quality Manager

#### Note:

1. The result pertains only for the sample tested.
2. The test result shall not be reproduced except in full, without written approval of the laboratory.
3. Sample is not drawn by Dr. Subbarao's Environment Centre, Sangli.
4. Retention period for the remnant shall be 30 days.
5. ND- Not Detected.

\*\*\*END of Test Report \*\*\*

QCI - NABET Accredited ETA Consultant Organization Certificate No. NABET/EIA/1922/RA0159 valid upto June 12, 2022.  
QCI - NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2021.

PAN NO. AAMFD6620P ■ ISO 9001:2008, OSHAS 18001:2007 CERTIFIED ■ REGISTRATION NO. PN00000996  
GSTIN : 27AAMFD6620P1ZW ■ TAN : KLPD02394A



# SEC

## Dr. SUBBARAO'S ENVIRONMENT CENTER

"Arundhati", Opp. Sahayognagar, M.S.E.B. Road, Vishrambag, Sangli - 416 415.  
Phone : Sangli - 0233 - 2301857, (M) 9372109522, 9890992118, 9890454493,  
E-mail : bssubbarao@yahoo.com / bsssharat@yahoo.com / bsnagjyoti@yahoo.com  
QCI - NABET Accredited ETA Consultant Organization - Certificate No.

NABET / EIA / 1619 / RA 0057 valid upto June 12, 2019,

NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2019

### TEST REPORT

Report Ref. No. : SEC/W-WB/02-21	End of Analysis : 09 March 2021
Name of Industry/Customer: <b>Godavari Biorefineries Ltd. [Sugar Unit]</b>	Report Date : 15 March 2021
Address: A/p. Sameerwadi - 587316, (Tq) Mudhol, (Dst) Bagalkot.	Lab ID/Sample Ref. No. : WB2
Date of Collection / Sampling : 27 February 2021	Nature of Sample: Water
Date of Receipt : 27 February 2021	Sample Collected By: SEC Lab
Date of Analysis: 01 March 2021	Sample Quantity : 1 lit
Name of Sample : <b>Sugar ETP Outlet</b>	

Sr. No.	Test Parameter	Result	Unit	Standards	Test Method
1	pH	7.45	-	5.5-8.5	IS:3025 (P-11) 1983
2	Chemical Oxygen Demand	126	mg/l	250	IS:3025 (P-58) 2006
3	B.O.D. ( 3 days at 27°C)	45	mg/l	100	IS:3025 (P-44) 1993
4	Total Dissolved Solids	510	mg/l	2100	IS:3025(P-16)1984
5	Total Suspended Solids	46	mg/l	100	IS:3025 (P-17) 1984
6	Chloride as Cl <sup>-</sup>	121	mg/l	600	IS:3025 (P-32) 1988
7	Sulphate as SO <sub>4</sub>	102	mg/l	1000	IS:3025 (P-24) 1986
8	Oil & Grease	ND	mg/l	10	IS:3025 (P-39) 1991 (RA 2003)

#### Remarks:

Thanking you,

Analysed By



B. Subbarao

Authorized Signatory  
Technical Manager/ Quality Manager

#### Note:

1. The result pertains only for the sample tested.
2. The test result shall not be reproduced except in full, without written approval of the laboratory.
3. Sample is not drawn by Dr. Subbarao's Environment Centre, Sangli.
4. Retention period for the remnant shall be 30 days.
5. ND- Not Detected.

\*\*\*END of Test Report \*\*\*

QCI - NABET Accredited ETA Consultant Organization Certificate No. NABET/EIA/1922/RA0159 valid upto June 12, 2022.  
QCI - NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2021.



# SEC

## Dr. SUBBARAO'S ENVIRONMENT CENTER

"Arundhati", Opp. Sahayognagar, M.S.E.B. Road, Vishrambag, Sangli - 416 415.  
 Phone : Sangli - 0233 - 2301857, (M) 9372109522, 9890992118, 9890454493,  
 E-mail : bssubbarao@yahoo.com / bssharat@yahoo.com / bsnagjyoti@yahoo.com

QCI - NABET Accredited ETA Consultant Organization - Certificate No.

NABET / EIA / 1619 / RA 0057 valid upto June 12, 2019,

NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2019

### TEST REPORT

Report Ref. No. : SEC/W-TZ/11-20	End of Analysis : 07 December 2020
Name of Industry/Customer: <b>Godavari Biorefineries Ltd. [Sugar Unit]</b>	Report Date : 08 December 2020
Address: A/p. Sameerwadi – 587316, (Tq) Mudhol, (Dst) Bagalkot.	Lab ID/Sample Ref. No. : TZ3
Date of Collection / Sampling : 28 November 2020	Nature of Sample: Water
Date of Receipt : 28 November 2020	Sample Collected By: SEC Lab
Date of Analysis: 29 November 2020	Sample Quantity : 1 lit
Name of Sample & Location: <b>Borewell Water [Nagappa Satyappa Banaj]</b>	

Sr. No.	Test Parameter	Unit	Result	IS:2296 Standards	Test Method
1	*Color	Hazen	< 5	--	IS:3025 (P-4) 1983
2	*Odor	--	Agreeable	--	IS:3025 (P-5) 1983
3	pH	--	7.17	6.5 – 8.5	IS:3025 (P-11) 1983
4	Turbidity	NTU	0.1	--	IS:3025 (P-10) 1984
5	Total Alkalinity (as CaCO <sub>3</sub> )	mg/l	160	--	IS:3025 (P-23) 1986
6	Chemical Oxygen Demand	mg/l	32	--	IS:3025 (P-58) 2006
7	B.O.D. (3day's at 27°C)	mg/l	< 4	--	IS:3025 (P-44) 1993
8	Total Dissolved Solids	mg/l	610	2100	IS:3025 (P-16) 1984
9	Chlorides (as Cl)	mg/l	124	600	IS:3025 (P-32) 1988
10	Hardness (as CaCO <sub>3</sub> )	mg/l	608	--	IS:3025 (P-21) 1983
11	Calcium (as Ca)	mg/l	141	--	IS:3025 (P-40) 1991
12	Magnesium (as Mg)	mg/l	62	--	IS:3025 (P-46) 1994
13	Sodium (as Na)	mg/l	135.1	--	IS:3025 (P-45) 1993
14	Potassium (as K)	mg/l	5.8	--	IS:3025 (P-45) 1993
15	% Na (Max)	%	32.35	60	By Calculation
16	Sodium Absorption Ratio	---	2.38	26	By Calculation
17	Residual Sodium Carbonate	meq/l	-9.01	2.5	By Calculation
18	Electrical Conductivity	µmhos/cm	1030	2250	IS:3025 (P-14) 1984

Remarks:

Thanking you,

Analysed By



*B. Subbarao*  
 Authorized Signatory  
 Technical Manager/ Quality Manager

Note:

1. The result pertains only for the sample tested.
2. The test result shall not be reproduced except in full, without written approval of the laboratory.
3. Sample is not drawn by Dr. Subbarao's Environment Centre, Sangli.
4. Retention period for the remnant shall be 30 days.
5. ND- Not Detected.
6. \* -- Parameter not under NABL scope

\*\*\*END of Test Report\*\*\*



# SEC

## Dr. SUBBARAO'S ENVIRONMENT CENTER

"Arundhati", Opp. Sahayognagar, M.S.E.B. Road, Vishrambag, Sangli - 416 415.  
 Phone : Sangli - 0233 - 2301857, (M) 9372109522, 9890992118, 9890454493,  
 E-mail : bssubbarao@yahoo.com / bssharat@yahoo.com / bsnagjyoti@yahoo.com  
 QCI - NABET Accredited ETA Consultant Organization - Certificate No.

NABET / EIA / 1619 / RA 0057 valid upto June 12, 2019,


NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2019

### TEST REPORT

Report Ref. No. : SEC/W-UT/12-20	End of Analysis : 12 January 2021
Name of Industry/Customer: <b>Godavari Biorefineries Ltd. [Sugar Unit]</b>	Report Date : 15 January 2021
Address: A/p. Sameerwadi – 587316, (Tq) Mudhol, (Dst) Bagalkot.	Lab ID/Sample Ref. No. : UT3
Date of Collection / Sampling : 31 December 2020	Nature of Sample: Water
Date of Receipt : 01 January 2021	Sample Collected By: SEC Lab
Date of Analysis: 01 January 2021	Sample Quantity : 1 lit
Name of Sample & Location: <b>Borewell Water [Shivling Bassappa Banaj]</b>	

Sr. No.	Test Parameter	Unit	Result	IS:2296 Standards	Test Method
1	*Color	Hazen	< 5	--	IS:3025 (P-4) 1983
2	*Odor	--	Agreeable	--	IS:3025 (P-5) 1983
3	pH	--	7.26	6.5 – 8.5	IS:3025 (P-11) 1983
4	Turbidity	NTU	0.1	--	IS:3025 (P-10) 1984
5	Total Alkalinity (as CaCO <sub>3</sub> )	mg/l	178	--	IS:3025 (P-23) 1986
6	Chemical Oxygen Demand	mg/l	35	--	IS:3025 (P-58) 2006
7	B.O.D. (3day's at 27°C)	mg/l	< 4	--	IS:3025 (P-44) 1993
8	Total Dissolved Solids	mg/l	670	2100	IS:3025 (P-16) 1984
9	Chlorides (as Cl)	mg/l	134	600	IS:3025 (P-32) 1988
10	Hardness (as CaCO <sub>3</sub> )	mg/l	690	--	IS:3025 (P-21) 1983
11	Calcium (as Ca)	mg/l	188	--	IS:3025 (P-40) 1991
12	Magnesium (as Mg)	mg/l	54	--	IS:3025 (P-46) 1994
13	Sodium (as Na)	mg/l	96.6	--	IS:3025 (P-45) 1993
14	Potassium (as K)	mg/l	8.9	--	IS:3025 (P-45) 1993
15	% Na (Max)	%	23.01	60	By Calculation
16	Sodium Absorption Ratio	---	1.59	26	By Calculation
17	Residual Sodium Carbonate	meq/l	-10.34	2.5	By Calculation
18	Electrical Conductivity	µmhos/cm	1240	2250	IS:3025 (P-14) 1984

Remarks:

Thanking you,  
  
 Analysed By

  
 Authorized Signatory  
 Technical Manager/ Quality Manager

Note:

- The result pertains only for the sample tested.
- The test result shall not be reproduced except in full, without written approval of the laboratory.
- Sample is not drawn by Dr.Subbarao's Environment Centre, Sangli.
- Retention period for the remnant shall be 30 days.
- ND- Not Detected.
- \* -- Parameter not under NABL scope





# SEC

**Dr. SUBBARAO'S ENVIRONMENT CENTER**

"Arundhati", Opp. Sahayognagar, M.S.E.B. Road, Vishrambag, Sangli - 416 415.  
Phone : Sangli - 0233 - 2301857, (M) 9372109522, 9890992118, 9890454493,  
E-mail : bssubbarao@yahoo.com / bssharat@yahoo.com / bsnagjyoti@yahoo.com

QCI - NABET Accredited ETA Consultant Organization - Certificate No.  
NABET / EIA / 1619 / RA 0057 valid upto June 12, 2019,

NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2019

## TEST REPORT

Report Ref. No. : SEC/W-VK/01-21	End of Analysis : 08 February 2021
Name of Industry/Customer: <b>Godavari Biorefineries Ltd. [Sugar Unit]</b>	Report Date : 10 February 2021
Address: A/p. Sameerwadi – 587316, (Tq) Mudhol, (Dst) Bagalkot.	Lab ID/Sample Ref. No. : VK3
Date of Collection / Sampling : 26 January 2021	Nature of Sample: Water
Date of Receipt : 26 January 2021	Sample Collected By: SEC Lab
Date of Analysis: 27 January 2021	Sample Quantity : 1 lit
Name of Sample & Location: <b>Borewell Water [Hanmant Ayaappa Naik]</b>	

Sr. No.	Test Parameter	Unit	Result	IS:2296 Standards	Test Method
1	*Color	Hazen	< 5	--	IS:3025 (P-4) 1983
2	*Odor	--	Agreeable	--	IS:3025 (P-5) 1983
3	pH	--	8.18	6.5 – 8.5	IS:3025 (P-11) 1983
4	Turbidity	NTU	0.2	--	IS:3025 (P-10) 1984
5	Total Alkalinity (as CaCO <sub>3</sub> )	mg/l	160	--	IS:3025 (P-23) 1986
6	Chemical Oxygen Demand	mg/l	29	--	IS:3025 (P-58) 2006
7	B.O.D. (3day's at 27°C)	mg/l	< 4	--	IS:3025 (P-44) 1993
8	Total Dissolved Solids	mg/l	470	2100	IS:3025 (P-16) 1984
9	Chlorides (as Cl)	mg/l	112	600	IS:3025 (P-32) 1988
10	Hardness (as CaCO <sub>3</sub> )	mg/l	400	--	IS:3025 (P-21) 1983
11	Calcium (as Ca)	mg/l	132	--	IS:3025 (P-40) 1991
12	Magnesium (as Mg)	mg/l	20	--	IS:3025 (P-46) 1994
13	Sodium (as Na)	mg/l	82.1	--	IS:3025 (P-45) 1993
14	Potassium (as K)	mg/l	4.9	--	IS:3025 (P-45) 1993
15	% Na (Max)	%	29.93	60	By Calculation
16	Sodium Absorption Ratio	---	1.75	26	By Calculation
17	Residual Sodium Carbonate	meq/l	-5.06	2.5	By Calculation
18	Electrical Conductivity	µmhos/cm	681	2250	IS:3025 (P-14) 1984

**Remarks:**

Thanking you,

Analysed By 





Authorized Signatory  
Technical Manager/ Quality Manager

Note:

1. The result pertains only for the sample tested.
2. The test result shall not be reproduced except in full, without written approval of the laboratory.
3. Sample is not drawn by Dr. Subbarao's Environment Centre, Sangli.
4. Retention period for the remnant shall be 30 days.
5. ND- Not Detected.
6. \* -- Parameter not under NABL scope

\*\*\*END of Test Report \*\*\*

QCI - NABET Accredited ETA Consultant Organization Certificate No. NABET/EIA/1922/RA0159 valid upto June 12, 2022.  
QCI - NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2021.

PAN NO. AAMFD6620P ■ ISO 9001:2008, OSHAS 18001:2007 CERTIFIED ■ REGISTRATION NO. PN00000996  
GSTIN : 27AAMFD6620P1ZW ■ TAN : KLPD02394A





# SEC

## Dr. SUBBARAO'S ENVIRONMENT CENTER

"Arundhati", Opp. Sahayognagar, M.S.E.B. Road, Vishrambag, Sangli - 416 415.  
 Phone : Sangli - 0233 - 2301857, (M) 9372109522, 9890992118, 9890454493,  
 E-mail : bssubbarao@yahoo.com / bssharat@yahoo.com / bsnagjyoti@yahoo.com  
 QCI - NABET Accredited ETA Consultant Organization - Certificate No.

NABET / EIA / 1619 / RA 0057 valid upto June 12, 2019,

NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2019

### TEST REPORT

Report Ref. No. : SEC/W-WB/02-21	End of Analysis : 09 March 2021
Name of Industry/Customer: Godavari Biorefineries Ltd. [Sugar Unit]	Report Date : 15 March 2021
Address: A/p. Sameerwadi - 587316, (Tq) Mudhol, (Dst) Bagalkot.	Lab ID/Sample Ref. No. : WB3
Date of Collection / Sampling : 27 February 2021	Nature of Sample: Water
Date of Receipt : 27 February 2021	Sample Collected By: SEC Lab
Date of Analysis: 01 March 2021	Sample Quantity : 1 lit
Name of Sample & Location: Borewell Water [Nagappa Satyappa Banaj]	

Sr. No.	Test Parameter	Unit	Result	IS:2296 Standards	Test Method
1	*Color	Hazen	< 5	--	IS:3025 (P-4) 1983
2	*Odor	--	Agreeable	--	IS:3025 (P-5) 1983
3	pH	--	7.35	6.5 - 8.5	IS:3025 (P-11) 1983
4	Turbidity	NTU	0.1	--	IS:3025 (P-10) 1984
5	Total Alkalinity (as CaCO <sub>3</sub> )	mg/l	170	--	IS:3025 (P-23) 1986
6	Chemical Oxygen Demand	mg/l	29	--	IS:3025 (P-58) 2006
7	B.O.D. (3day's at 27°C)	mg/l	< 4	--	IS:3025 (P-44) 1993
8	Total Dissolved Solids	mg/l	590	2100	IS:3025 (P-16) 1984
9	Chlorides (as Cl)	mg/l	152	600	IS:3025 (P-32) 1988
10	Hardness (as CaCO <sub>3</sub> )	mg/l	503	--	IS:3025 (P-21) 1983
11	Calcium (as Ca)	mg/l	116	--	IS:3025 (P-40) 1991
12	Magnesium (as Mg)	mg/l	52	--	IS:3025 (P-46) 1994
13	Sodium (as Na)	mg/l	112.5	--	IS:3025 (P-45) 1993
14	Potassium (as K)	mg/l	4.1	--	IS:3025 (P-45) 1993
15	% Na (Max)	%	32.47	60	By Calculation
16	Sodium Absorption Ratio	---	2.18	26	By Calculation
17	Residual Sodium Carbonate	meq/l	-6.73	2.5	By Calculation
18	Electrical Conductivity	µmhos/cm	980	2250	IS:3025 (P-14) 1984

#### Remarks:

Thanking you,

Analysed By 





Authorized Signatory  
 Technical Manager/ Quality Manager

#### Note:

- The result pertains only for the sample tested.
- The test result shall not be reproduced except in full, without written approval of the laboratory.
- Sample is not drawn by Dr. Subbarao's Environment Centre, Sangli.
- Retention period for the remnant shall be 30 days.
- ND- Not Detected.
- \* -- Parameter not under NABL scope

\*\*\*END of Test Report \*\*\*

QCI - NABET Accredited ETA Consultant Organization Certificate No. NABET/EIA/1922/RA0159 valid upto June 12, 2022.  
 QCI - NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2021.



# SEC

## Dr. SUBBARAO'S ENVIRONMENT CENTER

"Arundhati", Opp. Sahayognagar, M.S.E.B. Road, Vishrambag, Sangli - 416 415.  
Phone : Sangli - 0233 - 2301857, (M) 9372109522, 9890992118, 9890454493,  
E-mail : bssubbarao@yahoo.com / bssharat@yahoo.com / bsnagjyoti@yahoo.com  
QCI - NABET Accredited ETA Consultant Organization - Certificate No.  
NABET / EIA / 1619 / RA 0057 valid upto June 12, 2019,  
NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2019

### TEST REPORT

Report Ref. No. : SEC/S-TZ/11-20	End of Analysis : 07 December 2020
Name of Industry/Customer: <b>Godavari Biorefineries Ltd. [Sugar Unit]</b>	Report Date : 08 December 2020
Address: A/p. Sameerwadi – 587316, (Tq) Mudhol, (Dst) Bagalkot.	Lab ID/Sample Ref. No. : TZ4
Date of Collection / Sampling : 28 November 2020	Nature of Sample: Soil
Date of Receipt : 28 November 2020	Sample Collected By: SEC Lab
Date of Analysis: 29 November 2020	Sample Quantity : 1 kg
Name of Sample & Location: <b>Soil [Factory Coconut Farm]</b>	

Sr. No.	Test Parameter	Unit	Result	Test Method (Testing Manual of Soil, Ministry of Agriculture, Govt. of India-2011)
1	pH	--	9.25	PP – 77-78
2	Conductivity	mmhos/cm	0.370	PP – 81-82
3	Mineralizable Nitrogen	%	0.0032	PP – 89-91
4	Available Phosphorus	Kg/ha	44	PP – 96-98
5	Available Potassium	Kg/ha	810	PP – 99-100
6	Organic Carbon	%	0.69	PP – 84-85
7	Calcium (as Ca)	%	2.12	PP – 103-104
8	Magnesium (as Mg)	%	0.16	PP – 104-105

#### Remarks:

Thanking you,

Analysed By



*B. Subbarao*  
Authorized Signatory  
Technical Manager/ Quality Manager

#### Note:

1. The result pertains only for the sample tested.
2. The test result shall not be reproduced except in full, without written approval of the laboratory.
3. Sample is not drawn by Dr. Subbarao's Environment Centre, Sangli.
4. Retention period for the remnant shall be 30 days.
5. ND- Not Detected.

\*\*\*END of Test Report \*\*\*



# SEC

## Dr. SUBBARAO'S ENVIRONMENT CENTER

"Arundhati", Opp. Sahayognagar, M.S.E.B. Road, Vishrambag, Sangli - 416 415.  
Phone : Sangli - 0233 - 2301857, (M) 9372109522, 9890992118, 9890454493,  
E-mail : bssubbarao@yahoo.com / bssharat@yahoo.com / bsnagjyoti@yahoo.com

QCI - NABET Accredited ETA Consultant Organization - Certificate No.  
NABET / EIA / 1619 / RA 0057 valid upto June 12, 2019,

NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2019

\*\*\*END of Test Report \*\*\*

### TEST REPORT

Report Ref. No. : SEC/S-UT/12-20	End of Analysis : 12 January 2021
Name of Industry/Customer: <b>Godavari Biorefineries Ltd. [Sugar Unit]</b>	Report Date : 15 January 2021
Address: A/p. Sameerwadi - 587316, (Tq) Mudhol, (Dst) Bagalkot.	Lab ID/Sample Ref. No. : UT4
Date of Collection / Sampling : 31 December 2020	Nature of Sample: Soil
Date of Receipt : 01 January 2021	Sample Collected By: SEC Lab
Date of Analysis: 01 January 2021	Sample Quantity : 1 kg
Name of Sample & Location: <b>Soil [Factory Coconut Farm]</b>	

Sr. No.	Test Parameter	Unit	Result	Test Method (Testing Manual of Soil, Ministry of Agriculture, Govt. of India-2011)
1	pH	--	9.21	PP - 77-78
2	Conductivity	mmhos/cm	0.390	PP - 81-82
3	Mineralizable Nitrogen	%	0.0035	PP - 89-91
4	Available Phosphorus	Kg/ha	47	PP - 96-98
5	Available Potassium	Kg/ha	870	PP - 99-100
6	Organic Carbon	%	0.63	PP - 84-85
7	Calcium (as Ca)	%	2.37	PP - 103-104
8	Magnesium (as Mg)	%	0.21	PP - 104-105

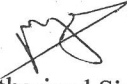
Remarks:

Thanking you,

  
Analysed By

Note:

1. The result pertains only for the sample tested.
2. The test result shall not be reproduced except in full, without written approval of the laboratory.
3. Sample is not drawn by Dr.Subbarao's Environment Centre, Sangli.
4. Retention period for the remnant shall be 30 days.
5. ND- Not Detected.

  
Authorized Signatory  
Technical Manager/ Quality Manager



\*\*\*END of Test Report \*\*\*



# SEC

## Dr. SUBBARAO'S ENVIRONMENT CENTER

"Arundhati", Opp. Sahayognagar, M.S.E.B. Road, Vishrambag, Sangli - 416 415.  
Phone : Sangli - 0233 - 2301857, (M) 9372109522, 9890992118, 9890454493,  
E-mail : bssubbarao@yahoo.com / bssharat@yahoo.com / bsnagjyoti@yahoo.com  
QCI - NABET Accredited ETA Consultant Organization - Certificate No.

NABET / EIA / 1619 / RA 0057 valid upto June 12, 2019,

NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2019


### TEST REPORT

Report Ref. No. : SEC/S-VK/01-21	End of Analysis : 08 February 2021
Name of Industry/Customer: <b>Godavari Biorefineries Ltd. [Sugar Unit]</b>	Report Date : 10 February 2021
Address: A/p. Sameerwadi - 587316, (Tq) Mudhol, (Dst) Bagalkot.	Lab ID/Sample Ref. No. : VK4
Date of Collection / Sampling : 26 January 2021	Nature of Sample: Soil
Date of Receipt : 26 January 2021	Sample Collected By: SEC Lab
Date of Analysis: 27 January 2021	Sample Quantity : 1 kg
Name of Sample & Location: <b>Soil [Factory Coconut Farm]</b>	


Sr. No.	Test Parameter	Unit	Result	Test Method (Testing Manual of Soil, Ministry of Agriculture, Govt. of India-2011)
1	pH	--	9.16	PP - 77-78
2	Conductivity	mmhos/cm	0.410	PP - 81-82
3	Mineralizable Nitrogen	%	0.0038	PP - 89-91
4	Available Phosphorus	Kg/ha	45	PP - 96-98
5	Available Potassium	Kg/ha	790	PP - 99-100
6	Organic Carbon	%	0.65	PP - 84-85
7	Calcium (as Ca)	%	2.31	PP - 103-104
8	Magnesium (as Mg)	%	0.24	PP - 104-105

#### Remarks:

Thanking you,

  
Analysed By



  
Authorized Signatory  
Technical Manager/ Quality Manager

#### Note:

1. The result pertains only for the sample tested.
2. The test result shall not be reproduced except in full, without written approval of the laboratory.
3. Sample is not drawn by Dr. Subbarao's Environment Centre, Sangli.
4. Retention period for the remnant shall be 30 days.
5. ND- Not Detected.

\*\*\*END of Test Report \*\*\*

QCI - NABET Accredited ETA Consultant Organization Certificate No. NABET/EIA/1922/RA0159 valid upto June 12, 2022.  
QCI - NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2021.

PAN NO. AAMFD6620P ■ ISO 9001:2008, OSHAS 18001:2007 CERTIFIED ■ REGISTRATION NO. PN00000996  
GSTIN : 27AAMFD6620P1ZW ■ TAN : KLPD02394A



# SEC

## Dr. SUBBARAO'S ENVIRONMENT CENTER

"Arundhati", Opp. Sahayognagar, M.S.E.B. Road, Vishrambag, Sangli - 416 415.  
Phone : Sangli - 0233 - 2301857, (M) 9372109522, 9890992118, 9890454493,  
E-mail : bssubbarao@yahoo.com / bssharat@yahoo.com / bsnagjyoti@yahoo.com  
QCI - NABET Accredited ETA Consultant Organization - Certificate No.

NABET / EIA / 1619 / RA 0057 valid upto June 12, 2019,

NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2019

### TEST REPORT

Report Ref. No. : SEC/S-WB/02-21	End of Analysis : 09 March 2021
Name of Industry/Customer: <b>Godavari Biorefineries Ltd. [Sugar Unit]</b>	Report Date : 15 March 2021
Address: A/p. Sameerwadi - 587316, (Tq) Mudhol, (Dst) Bagalkot.	Lab ID/Sample Ref. No. : WB4
Date of Collection / Sampling : 27 February 2021	Nature of Sample: Soil
Date of Receipt : 27 February 2021	Sample Collected By: SEC Lab
Date of Analysis: 01 March 2021	Sample Quantity : 1 kg
Name of Sample & Location: <b>Soil [Factory Coconut Farm]</b>	

Sr. No.	Test Parameter	Unit	Result	Test Method (Testing Manual of Soil, Ministry of Agriculture, Govt. of India-2011)
1	pH	--	9.12	PP - 77-78
2	Conductivity	mmhos/cm	0.370	PP - 81-82
3	Mineralizable Nitrogen	%	0.0043	PP - 89-91
4	Available Phosphorus	Kg/ha	47	PP - 96-98
5	Available Potassium	Kg/ha	810	PP - 99-100
6	Organic Carbon	%	0.64	PP - 84-85
7	Calcium (as Ca)	%	2.26	PP - 103-104
8	Magnesium (as Mg)	%	0.21	PP - 104-105

#### Remarks:

Thanking you,

Analysed By

#### Note:

1. The result pertains only for the sample tested.
2. The test result shall not be reproduced except in full, without written approval of the laboratory.
3. Sample is not drawn by Dr. Subbarao's Environment Centre, Sangli.
4. Retention period for the remnant shall be 30 days.
5. ND- Not Detected.



*B. Subbarao*  
Authorized Signatory  
Technical Manager/ Quality Manager

\*\*\*END of Test Report \*\*\*

QCI - NABET Accredited ETA Consultant Organization Certificate No. NABET/EIA/1922/RA0159 valid upto June 12, 2022.  
QCI - NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2021.

## GODAVARI BIOREFINERIES LIMITED

## SAMEERWADI

## ONLINE REPORT FOR THE MONTH NOVEMBER-2020

Date (DD-MM-YY)	ETP-BOD-(r)	ETP-pH-(pH)	ETP-Flow-(m3/h)	ETP-COD-(mg/l)	ETP-TSS-(mg/l)
12-11-20	31.99	8.59	23.41	93.7	22.55
13-11-20	15.12	8.4	24.12	44.28	22.01
14-11-20	12.48	7.57	24.74	36.56	20.98
15-11-20	12.85	7.6	31.3	37.66	31.4
16-11-20	14.99	7.63	37.71	43.87	47.04
17-11-20	10.24	7.62	40.58	29.98	37.68
18-11-20	23	7.58	36.2	67.34	20.11
19-11-20	63.26	7.58	34.3	185.25	37.66
20-11-20	39.93	7.57	17.53	116.93	47.34
21-11-20	12.02	7.52	7.4	35.2	26.59
22-11-20	6.15	7.59	33.57	18.04	40.82
23-11-20	29.15	7.61	35.51	77.98	46.07
24-11-20	56.32	7.63	33.58	144.94	26.67
25-11-20	46.75	7.65	14.59	120.32	23.82
26-11-20	38.73	7.69	32.42	99.68	27.23
27-11-20	32.05	7.68	36.63	82.48	26.54
28-11-20	33.15	7.78	34.09	85.32	14.38
29-11-20	39.89	7.8	34.78	102.67	14.58
30-11-20	40.44	7.77	35.75	104.08	20.67
Avg	29.4	7.73	29.91	80.33	29.17
Max	63.26	8.59	40.58	185.25	47.34
Min	6.15	7.52	7.4	18.04	14.38



## GODAVARI BIOREFINERIES LIMITED

## SAMEERWADI

## ONLINE REPORT FOR THE MONTH DECEMBER-2020

Date (DD-MM-YY)	ETP-BOD-(mg/l)	ETP-pH-(pH)	ETP-Flow-(m <sup>3</sup> /h)	ETP-COD-(mg/l)	ETP-TSS-(mg/l)
01-12-20	39.93	7.69	32.12	102.77	20.6
02-12-20	51.55	7.69	36.42	132.67	17.34
03-12-20	35.21	7.7	32.14	90.62	17.87
04-12-20	28.81	7.69	35.88	74.15	27.53
05-12-20	40.07	7.69	40.08	103.12	31.65
06-12-20	34.57	7.69	36.09	88.96	51.85
07-12-20	24.4	7.68	38.28	62.79	21.48
08-12-20	23.04	7.66	43.63	61.29	21.45
09-12-20	22.7	7.63	46.34	84.54	31.12
10-12-20	21.29	7.61	42.8	79.28	31.55
11-12-20	20.69	7.61	47.23	77.04	17.45
12-12-20	20.87	7.63	47.43	77.73	14.15
13-12-20	20.6	7.65	48.81	76.71	18.22
14-12-20	21.08	7.64	49.5	78.52	19.15
15-12-20	32.04	7.63	51.63	119.3	14.78
16-12-20	37.65	7.63	48.77	140.22	13.77
17-12-20	27.33	7.61	47.9	101.8	14.48
18-12-20	42.88	7.59	51.29	159.71	14.54
19-12-20	27.15	7.58	54.83	101.12	14.16
20-12-20	16.17	7.58	44.83	60.25	10.91
21-12-20	20.36	7.6	39.75	75.77	12.79
22-12-20	23	7.6	59.2	87.98	15.06
23-12-20	27.49	7.58	54.69	108.45	15.07
24-12-20	30.62	7.56	41.6	120.79	14.23
25-12-20	31.14	7.55	50.54	122.85	16.93
26-12-20	35.75	7.53	53.3	140.99	18.97
27-12-20	39.74	7.49	57.53	156.75	12.28
28-12-20	43.38	7.44	63.71	171.03	7.31
29-12-20	44.02	7.45	63.11	173.63	8.7
30-12-20	38.46	7.45	58.06	151.69	6.88
31-12-20	39.6	7.44	54.7	156.22	5.67
Avg	31.02	7.6	47.49	107.7	18
Max	51.55	7.7	63.71	173.63	51.85
Min	16.17	7.44	32.12	60.25	5.67

*T. Lakshmin*  
 (M. N. Gansur)  
 Sr. Manager (Env)

GODAVARI BIOREFINERIES LIMITED					
SAMEERWADI					
ONLINE REPORT FOR THE MONTH JANUARY-2021					
Date (DD-MM-YY)	ETP-BOD-(mg/l)	ETP-pH-(pH)	ETP-Flow-(m3/h)	ETP-COD-(mg/l)	ETP-TSS-(mg/l)
01-01-21	41.29	7.44	48.06	162.85	8.45
02-01-21	41.77	7.45	47.89	164.74	18.88
03-01-21	32.52	7.45	44.45	128.38	13.62
04-01-21	34.88	7.39	53.68	137.58	5.47
05-01-21	34.81	7.52	50.42	137.31	10.34
06-01-21	32.98	7.79	54.92	130.08	15.28
07-01-21	35.81	7.79	60.56	141.25	11.62
08-01-21	37.61	7.78	58.1	148.36	10.17
09-01-21	41.24	7.82	52.58	162.68	13.95
10-01-21	40.29	7.83	55.9	158.91	17.55
11-01-21	39.67	7.86	41.54	156.48	15.01
12-01-21	33.69	7.86	30.58	132.97	11.87
13-01-21	23.02	7.88	33.64	117.63	12.38
14-01-21	28.62	7.89	36.96	169.15	12.83
15-01-21	33.07	7.91	42.66	159.15	14.14
16-01-21	36.14	7.92	58.01	173.91	13.77
17-01-21	27.43	7.93	68.03	132	14.94
18-01-21	33.13	7.81	67.12	159.46	16.82
19-01-21	45.29	7.77	59.23	146.57	20.93
20-01-21	54.86	7.79	64.75	140.57	20.51
21-01-21	69.66	7.82	61.29	178.44	18.05
22-01-21	68.57	7.86	59.46	175.71	25.71
23-01-21	55.75	7.87	60.07	142.86	27.79
24-01-21	54.35	7.89	64.24	139.28	28.22
25-01-21	47.13	7.89	66.03	120.77	36.62
26-01-21	40.37	7.88	67.17	103.44	30.91
27-01-21	37.75	7.91	65.08	96.73	33.23
28-01-21	38.7	7.94	62.43	99.18	30.72
29-01-21	39.72	7.93	60.29	101.78	17.45
30-01-21	38.75	7.94	61.11	99.29	23.53
31-01-21	43.24	7.93	62.71	110.81	44.02
Avg	40.71	7.8	55.45	139.62	19.19
Max	69.66	7.94	68.03	178.44	44.02
Min	23.02	7.39	30.58	96.73	5.47

*T. Lakshmin*  
(M. N. Jambir)  
Sr. Manager  
03/02/2021



## GODAVARI BIOREFINERIES LIMITED

## SAMEERWADI

## ONLINE REPORT FOR THE MONTH FEBRUARY-2021

Date (DD-MM-YY)	ETP-BOD-(mg/l)	ETP-pH-(pH)	ETP-Flow-(m3/h)	ETP-COD-(mg/l)	ETP-TSS-(mg/l)
01-02-21	39.1	7.95	61.45	100.18	88.56
02-02-21	38.33	7.96	62.54	98.22	154.99
03-02-21	37.6	7.96	58.36	96.35	25.45
04-02-21	40.45	8	43.86	103.65	27.85
05-02-21	36.91	7.98	54.41	94.59	23.45
06-02-21	42.91	7.96	56.06	109.96	22.51
07-02-21	61.53	7.99	36.44	157.66	27.56
08-02-21	53.74	7.97	24.92	137.7	32.63
09-02-21	28.18	7.95	27.88	72.21	37.54
10-02-21	29.9	7.95	27.19	76.62	43.66
11-02-21	34.68	7.93	28.45	129.21	42.22
12-02-21	37	7.94	31.16	181.32	42.88
13-02-21	39.76	7.96	34.16	194.83	48.06
14-02-21	17.29	7.92	34.27	84.74	46.91
15-02-21	19.2	7.93	29.37	94.06	47.52
16-02-21	26.7	7.92	28.25	130.83	46.96
17-02-21	22.31	7.93	23.88	109.3	53.49
18-02-21	25.23	7.91	31.24	123.64	47.95
19-02-21	23.7	7.95	35.77	116.12	65.57
20-02-21	19.37	7.95	33.14	94.89	54.74
21-02-21	20.76	7.94	31.98	101.7	41.34
22-02-21	21.81	7.77	22.89	106.86	34.24
23-02-21	18.63	7.58	21.65	91.3	37.86
24-02-21	16.23	7.63	30.33	79.52	50.67
25-02-21	13.92	7.68	31.28	68.22	44
26-02-21	12.44	7.73	32.77	60.97	21.25
27-02-21	12.15	7.73	35.25	59.56	15.31
28-02-21	10.7	7.79	34.94	52.49	16.77
Avg	28.59	7.89	35.85	104.52	44.36
Max	61.53	8	62.54	194.83	154.99
Min	10.7	7.58	21.65	52.49	15.31

*T. S. Srinivasan*  
 (M. N. Jambun)  
 Sr. Manager

# GODAVARI BIOREFINERIES LIMITED

Sameerwadi-587316, Dist. Bagalkot

Report of analysis of treated effluent showing performance of the treatment plant for the month of November 2020

Sample Collected On : 12.11.2020  
Sample Tested On : 12.11.2020  
By the Laboratories : Godavari Biorefineries Ltd

Sr No	Polluting Parameters as mentioned in the conditions imported under the consent granted under section 25/26 of the water (prevention & control of the pollution) Act 1974	Maximum Permissible Limits or range allowed As per consent conditions	Concentration of the range of parameters as per report	On which date there was break down or failure of the plant	On which date under performance was noticed
1	2	3	4	5	6
1	Colour & odour	See note	48		
2	Suspended solids - mg/lit	Max 100	8.39		
3	pH value	Max 6 to 8.5	42		
4	BOD(5 days at 20 deg C) mg/lit	Max 100	Nil		
5	Oil & grease Mg/lit	Max 10	152		
6	Chlorides (as Cl) mg/lit	Max 350	78		
7	Sulphates (as SO4) Mg/lit	Max 1000	-		
8	Pesticides	Absent	2060		
9	Dissolved Solids	Max 2100			

Note: All efforts should be made to remove colour and unpleasant odour as per practica

Sr. Manager (Environment)

General Manager (QA & E)

Signature :  
Date :

Address :

Signature of Consumer :  
02.12.2020  
Godavari Biorefineries Ltd,  
Sameerwadi-587316  
Dt. Bagalkot

# GODAVARI BIOREFINERIES LIMITED

Sameerwadi-587316, Dist. Bagalkot

Report of analysis of treated effluent showing performance of the treatment plant for the month of December 2020

Sample Collected On : 22.12.2020  
Sample Tested On : 22.12.2020  
By the Laboratories : Godavari Biorefineries Ltd

Sr No	Polluting Parameters as mentioned in the conditions imported under the consent granted under section 25/26 of the water (prevention & control of the pollution) Act 1974	Maximum Permissible Limits or range allowed As per consent conditions	Concentration of the range of parameters as per report	On which date there was break down or failure of the plant	On which date performance was noticed
1	2	3	4	5	6
1	Colour & odour	See note	56		
2	Suspended solids – mg/lit	Max 100	56		
3	pH value	Max 6 to 8.5	8.28		
4	BOD(5 days at 20 deg C) mg/lit	Max 100	42		
5	Oil & grease Mg/lit	Max 10	Nil		
6	Chlorides (as Cl) mg/lit	Max 350	164		
7	Sulphates (as SO4) Mg/lit	Max 1000	62		
8	Pesticides	Absent	-		
9	Dissolved Solids	Max 2100	2090		

Note: All efforts should be made to remove colour and unpleasant odour as per practica

Sr. Manager (Environment)

General Manager (QA & E)

Signature :  
Date :

Address :

Signature of Consumer :  
02.01.2021  
Godavari Biorefineries Ltd,  
Sameerwadi-587316  
Dt. Bagalkot

# GODAVARI BIOREFINERIES LIMITED

Sameerwadi-587316, Dist. Bagalkot

Report of analysis of treated effluent showing performance of the treatment plant for the month of January 2021

Sample Collected On : 19.01.2021  
Sample Tested On : 19.01.2021  
By the Laboratories : Godavari Biorefineries Ltd

Sr No	Polluting Parameters as mentioned in the conditions imported under the consent granted under section 25/26 of the water (prevention & control of the pollution) Act 1974	Maximum Permissible Limits or range allowed As per consent conditions	Concentration of the range of parameters as per report	On which date there was break down or failure of the plant	On which date under performance was noticed
1	2	3	4	5	6
1	Colour & odour	See note	4	5	6
2	Suspended solids – mg/lit	Max 100	36		
3	pH value	Max 6 to 8.5	7.83		
4	BOD(5 days at 20 deg C) mg/lit	Max 100	48		
5	Oil & grease Mg/lit	Max 10	Nil		
6	Chlorides (as Cl) mg/lit	Max 350	152		
7	Sulphates (as SO4) Mg/lit	Max 1000	56		
8	Pesticides	Absent	-		
9	Dissolved Solids	Max 2100	1980		

Note: All efforts should be made to remove colour and unpleasant odour as per practica

Sr. Manager (Environment)

General Manager (QA & E)

Signature :  
Date :

:

:

:

Signature of Consumer :  
03.02.2021  
Godavari Biorefineries Ltd,  
Sameerwadi-587316  
Dt. Bagalkot

# GODAVARI BIOREFINERIES LIMITED

Sameerwadi-587316, Dist. Bagalkot

Report of analysis of treated effluent showing performance of the treatment plant for the month of February 2021

Sample Collected On : 20.02.2021  
Sample Tested On : 20.02.2021  
By the Laboratories : Godavari Biorefineries Ltd

Sr No	Polluting Parameters as mentioned in the conditions imported under the consent granted under section 25/26 of the water (prevention & control of the pollution) Act 1974	Maximum Permissible Limits or range allowed As per consent conditions	Concentration of the range of parameters as per report	On which date there was break down or failure of the plant	On which date under performance was noticed
1	Colour & odour	See note	4	5	6
2	Suspended solids – mg/lit	Max 100	47		
3	pH value	Max 6 to 8.5	7.98		
4	BOD(5 days at 20 deg C) mg/lit	Max 100	45		
5	Oil & grease Mg/lit	Max 10	Nil		
6	Chlorides (as Cl) mg/lit	Max 350	118		
7	Sulphates (as SO4) Mg/lit	Max 1000	70		
8	Pesticides	Absent	-		
9	Dissolved Solids	Max 2100	2080		

Note: All efforts should be made to remove colour and unpleasant odour as per practica

Sr. Manager (Environment)

General Manager (QA & E)

Signature :  
Date :

Address :

Signature of Consumer :  
02.03.2021  
Godavari Biorefineries Ltd,  
Sameerwadi-587316  
Dt. Bagalkot

**FORM - V**

**ENVIRONMENTAL STATEMENT FOR THE FINANCIAL  
YEAR ENDING THE 31 ST MARCH - 2021**

**PART - A**

- 1) Name and address of the Occupier of the Industry operation or process : B R Bakshi, Executive Director  
Godavari Biorefineries Ltd;  
SAMEERWADI - 587316  
Dist: Bagalkot
- 2) Production Capacity : 45.56 MW - Power
- 3) Date of last statement submitted : 09 September, 2020
- 4) Year of Establishment : 09.04.2002 / 07.01.2011

1) (a) Water Consumption (Cu.M./day)

Source	During the Previous financial	During the Current financial
	Year 2019-20	Year 2020-21
Process	454.02	483.18
Cooling	788.210	579.190
Domestic	2.460	2.260
<b>TOTAL</b>	<b>1244.690</b>	<b>1064.630</b>

b) Water Consumption per unit of out-put:

Name of Product	Water consumption per unit of product output ( Cu.M./MWh)	
	During the Previous financial	During the Current financial
	year 2019 - 20	year 2020 - 21
Power Cooling + Process	3.04	2.54
Domestic	0.006	0.005

**2) Raw Materials Consumption:**

Name of Raw Material	Name of Product	Consumption of raw material per unit of out-put (Kgs/MWh of Power produced)	
		During the previous financial year 2019-20	During the Current financial year 2020-21
1. Bagasse used as fuel	POWER	2739.42	2779.25
2.TSP		0.0032	0.0028
3.Hydrazine Hydrate		0.0056	0.0041
4.PH Booster		0.0048	0.0045
5.Hydrochloric acid		1.1580	1.3428
6.Caustic Lye		0.6109	0.7222
7.Non ferric Alum		0.0730	0.0165
8.Lubricants (Lts/MWh)		0.0140	0.0218

**PART-C**

Pollutants discharged to environment/unit of out-put.  
(Parameters as specified in the consent issued)

Pollutants	Quantity of pollutants discharged (mass/day)	Concentration of pollutants in discharges (mass/volume)	Percentage of variation from prescribed standards with reasons
a) Waste Water	Below 3.5 Ltrs. per unit generated	Separately enclosed	All the parameters are meeting the standards and ETP is in operation. within norms prescribed by CPCB
b) Air	-- do --	-- do --	
c) Noise	-- do --	-- do --	

**Remarks:**

- The quality of waste water discharged is well within the norms prescribed by t by the K. S. P. C. B. The analysis reports are enclosed for the month of January 2021 & February 2021.
- The ambient air quality level and stack emission level are within the norms of K.S.P.C.B.The prescribed chimney height and air pollution control equipments have been provided.  
The analysis reports are enclosed for the month of January 2021 & February 2021.

**PART - D**

**Hazardous Wastes**

(As specified under Hazardous Waste/Management and Handling Rules, 1989)

Hazardous Waste	Total Quantity (Kgs)	
	During the previous financial year 2019-20	During the Current financial year 2020-21
a) From Process	NIL	NIL
b) From Pollution control facilities	NIL	NIL
c) D.G.Set Engine oil	NIL	NIL

**PART - E**

**SOLID WASTES**

Particulars	Total quantity in Tonnes	
	During the previous financial year 2019-20	During the Current financial year 2020-21
a) From Process		
i) Ash	4087.93	4236.7849
b) From pollution control facilities		
c) (1) Quantity recycled or re-utilised within the unit	Yes	Yes
(2) Sold	NIL	NIL
(3) Disposed	4087.93	4236.7849

**PART - F**

Please specify the characteristics (in terms of quantum) of hazardous as well as solid wastes and indicate disposal practice for both these categories of waste.  
No Hazardous Waste is Generated. Ash is used for land filling.

**PART - G**

Impact of pollution control (abatement) measures taken on conservation of natural resources and consequently on the cost of production.  
The treated effluent is used for energy plantations  
There is no significant impact on the cost of production.

**PART - H**

Additional measures/investment proposal for Environmental Protection including abatement of pollution and prevention of pollution.  
Maintenance of the ETP is carried out at the Cost of Rs.4.0 Lakh  
The Cogen effluent is treated in the well maintained Effluent treatment plant.  
The effluent from Sludge Sump is pumped to the ETP Clarifier. For any Suspended solids, Polyelectrolyte & alum dosing is being done at Clarifier.  
The treated effluent is used for irrigation & green belt development purpose.

The plantation has been taken up extensively for Green Belt development from beginning and new planting is done every year around the factory and ETP.  
ESP'S Operation & Maintenance will be carried at the Cost of 60 Lakhs  
Cost incurred for Environmental monitoring and Management is 2.2 lakh.  
Cost incurred for Solid waste disposal 5.0 Lakh.



## PART I

Any other particulars for improving the quality of Environment.  
Please refer to the " Environmental Statement in Brief "

### ENVIRONMENTAL STATEMENT IN BRIEF

Name of the Factory : Godavari Biorefineries Ltd ( Cogen)  
SAMEERWADI - 587316.  
Tal: Mudhol, Dist: Bagalkot.

Units of Effluent treatment plant : Aeration tank, Clarifier, Treated water tank, Sludge Sump,  
Sludge Sump, Transfer pump, Sludge Drying Beds

Q. 1. Whether water quantity measurement are made by installing water meter?

R. Yes, Water meters are installed. Water quantity is estimated as per  
water meter readings.

Q.2. Whether treated effluent samples are analysed regularly?

R. Yes, Treated effluent samples are analysed on daily basis.

Q.3. Whether upstream and down stream quality of river is tested regularly?

R. River water analysis is regularly carried out.

Q.4. Whether stack monitoring arrangements have been made ? And if so, whether  
Monitoring is done as per consent conditions ?

R. Yes.

Q.5. Whether ambient air quality and sound level measurements are carried out  
as per the consent conditions ?

R. Yes.

**Q.6. Briefly describe the safety precautions undertaken in the industry to prevent accidents including fire accidents ?**

- R. i) Safety belts, Gas masks are kept in tool room.
- ii) Fire extinguisher like soda ash, dry powder and foam type are installed at the power house.
- iii) Fire buckets with sand are provided.
- iv) Fire fighter is always kept ready.
- v) Safety showers are reconditioned and provided at hazards chemical handling area.

**Q.7. If the expansion/Modification is made, whether the consent from pollution control board and Environmental clearance is obtained ? If so, furnish the details.**

R. Consent from KSPCB is regularly obtained

**Q.8. What is the capital investment of pollution control measures since the inception of the plant and also mention the details of operational and maintenance costs ?**

R. Capital Cost	Rs.555.00 lakhs
Operational & maintenance cost per annum.	Rs.60.0 lakhs

**Q.9. Whether the Environmental Management cell is established in industry ?**

R. The Environment Management cell is already exists in Sugar unit. So cogen is also under same Environment Management Cell.

  
General manager (Co-gen)

  
Executive Director

**APPROXIMATE COST OF EQUIPMENTS AND OTHER LABORATORY  
ACCESSORIES PURCHASED**

<b>1. Electronic Balance</b>	<b>50000.00</b>
<b>2. Stack monitoring kit</b>	<b>50000.00</b>
<b>3. High volume Sampler</b>	<b>60000.00</b>
<b>4. Conductivity meter</b>	<b>36000.00</b>
<b>5. Drying oven</b>	<b>28000.00</b>
<b>6. Magnetic Stirrer</b>	<b>4000.00</b>
<b>7. Muffle Furnace</b>	<b>35000.00</b>
<b>8. pH Meter</b>	<b>36000.00</b>
<b>9. Silica Crucibles</b>	<b>6000.00</b>
<b>10. Spectrophotometer</b>	<b>450000.00</b>
<b>11. COD Reflux condenser</b>	<b>15000.00</b>
<b>12. Noise Meter</b>	<b>25000.00</b>
<b>13. IR moisture meter</b>	<b>25000.00</b>
<b>Others</b>	
<b>a) Chemicals</b>	<b>125000.00</b>
<b>b) Glass Wares</b>	<b>25000.00</b>
<b>c) Contingencies</b>	<b>30000.00</b>

**Laboratory facilities are available for waste water testing. Monthly water samples, stack and ambient air samples are analysed by Self & additionally by DR Subbaro's .  
Environment Center Sangli.**



# SEC

## Dr. SUBBARAO'S ENVIRONMENT CENTER

"Arundhati", Opp. Sahayognagar, M.S.E.B. Road, Vishrambag, Sangli - 416 415.  
 Phone : Sangli - 0233 - 2301857, (M) 9372109522, 9890992118, 9890454493,  
 E-mail : bssubbarao@yahoo.com / bsssharat@yahoo.com / bsnagjyoti@yahoo.com  
 QCI - NABET Accredited ETA Consultant Organization - Certificate No.

NABET / EIA / 1619 / RA 0057 valid upto June 12, 2019,

NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2019

### TEST REPORT STACK EMISSIONS

Report Ref. No.	SEC/Cogen/Stack-1/VJ/01-21
Report Date	10 February 2021
Name of industry	Godavari Biorefineries Ltd., Sameerwadi [Co-gen Unit]
Address	Sameerwadi – 587316, (Tq) Mudhol, (Dst) Bagalkot.
Start Date of commencement of Sampling	25 January 2021
Start Time of commencement of Sampling	03:00 pm
End Date of commencement of Sampling	25 January 2021
End Time of commencement of Sampling	03:30 pm
Retention period of the remnant sample	30 days

### PARTICULARS OF STACK

Stack attached to boiler	130 TPH
Stack Diameter	3.00 m
Stack Height	70 m
Stack Temperature	112°C
Stack Velocity of Flue Gases	10.1 m/s
Type of Fuel	Bagasse

### POLLUTION PARAMETER RESULTS

Parameter	Units	Results	Limits	Method Used
Particulate Matter (PM)	mg/Nm <sup>3</sup>	107	150	IS 11255m(Part 1): 1985, Reaffirmed 2003
SO <sub>2</sub>	mg/Nm <sup>3</sup>	52	100	IS-11255 (Part 2): 1985 Reaffirmed 2009
NO <sub>x</sub>	mg/Nm <sup>3</sup>	25	50	IS-11255 (Part 7): 2005 Reaffirmed 2012

**Note:** The test report shall not be reproduced except in full without written approval of the laboratory.

Analyzed By



Authorized Signatory  
Technical Manager/ Quality Manager

QCI - NABET Accredited ETA Consultant Organization Certificate No. NABET/EIA/1922/RA0159 valid upto June 12, 2022.  
 QCI - NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2021.

PAN NO. AAMFD6620P ■ ISO 9001:2008, OSHAS 18001:2007 CERTIFIED ■ REGISTRATION NO. PN00000996  
 GSTIN : 27AAMFD6620P1ZW ■ TAN : KLDP02394A



# SEC

## Dr. SUBBARAO'S ENVIRONMENT CENTER

"Arundhati", Opp. Sahayognagar, M.S.E.B. Road, Vishrambag, Sangli - 416 415.  
 Phone : Sangli - 0233 - 2301857, (M) 9372109522, 9890992118, 9890454493,  
 E-mail : bssubbarao@yahoo.com / bssharat@yahoo.com / bsnagjyoti@yahoo.com  
 QCI - NABET Accredited ETA Consultant Organization - Certificate No.  
 NABET / EIA / 1619 / RA 0057 valid upto June 12, 2019,

NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2019

### TEST REPORT STACK EMISSIONS

Report Ref. No.	SEC/Cogen/Stack-2/VJ/01-21
Report Date	10 February 2021
Name of industry	Godavari Biorefineries Ltd., Sameerwadi [Co-gen Unit]
Address	Sameerwadi - 587316, (Tq) Mudhol, (Dst) Bagalkot.
Start Date of commencement of Sampling	25 January 2021
Start Time of commencement of Sampling	04:00 pm
End Date of commencement of Sampling	25 January 2021
End Time of commencement of Sampling	04:30 pm
Retention period of the remnant sample	30 days
<b>PARTICULARS OF STACK</b>	
Stack attached to boiler	120 TPH
Stack Diameter	3.00 m
Stack Height	70 m
Stack Temperature	121°C
Stack Velocity of Flue Gases	10.0 m/s
Type of Fuel	Bagasse

### POLLUTION PARAMETER RESULTS

Parameter	Units	Results	Limits	Method Used
Particulate Matter (PM)	mg/Nm <sup>3</sup>	98	150	IS 11255m(Part 1): 1985, Reaffirmed 2003
SO <sub>2</sub>	mg/Nm <sup>3</sup>	45	100	IS-11255 (Part 2): 1985 Reaffirmed 2009
NO <sub>x</sub>	mg/Nm <sup>3</sup>	22	50	IS-11255 (Part 7): 2005 Reaffirmed 2012

**Note:** The test report shall not be reproduced except in full without written approval of the laboratory.

  
Analyzed By



  
Authorized Signatory  
Technical Manager/ Quality Manager

QCI - NABET Accredited ETA Consultant Organization Certificate No. NABET/EIA/1922/RA0159 valid upto June 12, 2022.  
 QCI - NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2021.



# SEC

## Dr. SUBBARAO'S ENVIRONMENT CENTER

"Arundhati", Opp. Sahayognagar, M.S.E.B. Road, Vishrambag, Sangli - 416 415.  
Phone : Sangli - 0233 - 2301857, (M) 9372109522, 9890992118, 9890454493,  
E-mail : bssubbarao@yahoo.com / bssharaat@yahoo.com / bsnagjyoti@yahoo.com  
QCI - NABET Accredited ETA Consultant Organization - Certificate No.  
NABET / EIA / 1619 / RA 0057 valid upto June 12, 2019,

NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2019

### AMBIENT AIR QUALITY REPORT

Report Ref. No. : SEC/AA-VJ/01-21				End of Analysis : 08 February 2021				
Name of Industry/Customer: <b>Godavari Biorefineries Ltd. [Co-gen Unit]</b>				Report Date : 10 February 2021				
Address: A/p. Sameerwadi - 587316, (Tq) Mudhol, (Dst) Bagalkot.				Lab ID/Sample Ref. No. : VJ-AA				
Date of Collection / Sampling : 25 January 2021				Nature of Sample: Ambient Air				
Date of Receipt : 26 January 2021				Sample Collected By: SEC Lab				
Sr. No.	Sampling Station	Wind Direction	Direction & Distance from stack	Limits	PM <sub>10</sub> (µg/m <sup>3</sup> )	PM <sub>2.5</sub> (µg/m <sup>3</sup> )	SO <sub>2</sub> (µg/m <sup>3</sup> )	NO <sub>x</sub> (µg/m <sup>3</sup> )
				Method of Testing	< 100µg/m <sup>3</sup>	< 60µg/m <sup>3</sup>	< 80µg/m <sup>3</sup>	< 80µg/m <sup>3</sup>
				IS 5182 (Part 23): 2006	IS 5182 (Part 2): 2001	IS 5182 (Part 6): 2006		
1.	Near Switch Yard	Easterly	E, 145 meters		70	28	10.00	12.00

Analyzed By



Authorized Signatory  
Technical Manager/ Quality Manager

QCI - NABET Accredited ETA Consultant Organization Certificate No. NABET/EIA/1922/RA0159 valid upto June 12, 2022.  
QCI - NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2021.

PAN NO. AAMFD6620P ■ ISO 9001:2008, OSHAS 18001:2007 CERTIFIED ■ REGISTRATION NO. PN00000996  
GSTIN : 27AAMFD6620P1ZW ■ TAN : KLPD02394A



# SEC

## Dr. SUBBARAO'S ENVIRONMENT CENTER

"Arundhati", Opp. Sahayognagar, M.S.E.B. Road, Vishrambag, Sangli - 416 415.  
Phone : Sangli - 0233 - 2301857, (M) 9372109522, 9890992118, 9890454493,  
E-mail : bssubbarao@yahoo.com / bssharat@yahoo.com / bsnagjyoti@yahoo.com  
QCI - NABET Accredited ETA Consultant Organization - Certificate No.

NABET / EIA / 1619 / RA 0057 valid upto June 12, 2019,

NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2019

### TEST REPORT

Report Ref. No. : SEC/W-VJ/01-21	End of Analysis : 08 February 2021
Name of Industry/Customer: <b>Godavari Biorefineries Ltd. [Co-gen Unit]</b>	Report Date : 10 February 2021
Address: A/p. Sameerwadi - 587316, (Tq) Mudhol, (Dst) Bagalkot.	Lab ID/Sample Ref. No. : VJ1
Date of Collection / Sampling : 26 January 2021	Nature of Sample: Water
Date of Receipt : 26 January 2021	Sample Collected By: SEC Lab
Date of Analysis: 27 January 2020	Sample Quantity : 1 lit
Name of Sample : <b>Co-gen ETP Outlet</b>	

Sr. No.	Test Parameter	Result	Unit	Test Method
1	pH	7.74	-	IS:3025 (P-11) 1983
2	Chemical Oxygen Demand	139	mg/l	IS:3025 (P-58) 2006
3	B.O.D. ( 3 days at 27°C)	52	mg/l	IS:3025 (P-44) 1993
4	Total Dissolved Solids	540	mg/l	IS:3025(P-16)1984
5	Total Suspended Solids	56	mg/l	IS:3025 (P-17) 1984
6	Chloride as Cl <sup>-</sup>	154	mg/l	IS:3025 (P-32) 1988
7	Sulphate as SO <sub>4</sub>	135	mg/l	IS:3025 (P-24) 1986
8	Oil & Grease	ND	mg/l	IS:3025 (P-39) 1991 (RA 2003)

#### Remarks:

Thanking you,

  
Analysed By



Authorized Signatory  
Technical Manager/ Quality Manager

#### Note:

1. The result pertains only for the sample tested.
2. The test result shall not be reproduced except in full, without written approval of the laboratory.
3. Sample is not drawn by Dr. Subbarao's Environment Centre, Sangli.
4. Retention period for the remnant shall be 30 days.
5. ND- Not Detected.

\*\*\*END of Test Report \*\*\*

QCI - NABET Accredited ETA Consultant Organization Certificate No. NABET/EIA/1922/RA0159 valid upto June 12, 2022.  
QCI - NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2021.



# SEC

## Dr. SUBBARAO'S ENVIRONMENT CENTER

"Arundhati", Opp. Sahayognagar, M.S.E.B. Road, Vishrambag, Sangli - 416 415.  
 Phone : Sangli - 0233 - 2301857, (M) 9372109522, 9890992118, 9890454493,  
 E-mail : bssubbarao@yahoo.com / bssharat@yahoo.com / bsnagiyoti@yahoo.com  
 QCI - NABET Accredited ETA Consultant Organization - Certificate No.

NABET / EIA / 1619 / RA 0057 valid upto June 12, 2019,

NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2019

### TEST REPORT STACK EMISSIONS

Report Ref. No.	SEC/Cogen/Stack-1/WA/02-21
Report Date	05 March 2021
Name of industry	Godavari Biorefineries Ltd., Sameerwadi [Co-gen Unit]
Address	Sameerwadi - 587316, (Tq) Mudhol, (Dst) Bagalkot.
Start Date of commencement of Sampling	27 February 2021
Start Time of commencement of Sampling	04:20 pm
End Date of commencement of Sampling	27 February 2021
End Time of commencement of Sampling	04:50 pm
Retention period of the remnant sample	30 days

### PARTICULARS OF STACK

Stack attached to boiler	130 TPH
Stack Diameter	3.00 m
Stack Height	70 m
Stack Temperature	112°C
Stack Velocity of Flue Gases	9.8 m/s
Type of Fuel	Bagasse

### POLLUTION PARAMETER RESULTS

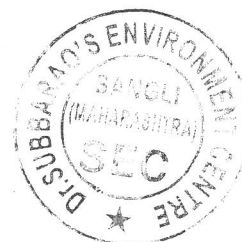
Parameter	Units	Results	Limits	Method Used
Particulate Matter (PM)	mg/Nm <sup>3</sup>	108	150	IS 11255m(Part 1): 1985, Reaffirmed 2003
SO <sub>2</sub>	mg/Nm <sup>3</sup>	56	100	IS-11255 (Part 2): 1985 Reaffirmed 2009
NO <sub>x</sub>	mg/Nm <sup>3</sup>	24	50	IS-11255 (Part 7): 2005 Reaffirmed 2012

**Note:** The test report shall not be reproduced except in full without written approval of the laboratory.

Analyzed By

Manager

Authorized Signatory  
Technical Manager/ Quality



QCI - NABET Accredited ETA Consultant Organization Certificate No. NABET/EIA/1922/RA0159 valid upto June 12, 2022.  
 QCI - NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2021.

PAN NO. AAMFD6620P ■ ISO 9001:2008, OSHAS 18001:2007 CERTIFIED ■ REGISTRATION NO. PN00000996  
 GSTIN : 27AAMFD6620P1ZW ■ TAN : KLPD02394A





# SEC

## Dr. SUBBARAO'S ENVIRONMENT CENTER

"Arundhati", Opp. Sahayognagar, M.S.E.B. Road, Vishrambag, Sangli - 416 415.  
 Phone : Sangli - 0233 - 2301857, (M) 9372109522, 9890992118, 9890454493,  
 E-mail : bssubbarao@yahoo.com / bssharat@yahoo.com / bsnagjyoti@yahoo.com  
 QCI - NABET Accredited ETA Consultant Organization - Certificate No.

NABET / EIA / 1619 / RA 0057 valid upto June 12, 2019,

NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2019

### TEST REPORT STACK EMISSIONS

Report Ref. No.	SEC/Cogen/Stack-2/WA/02-21
Report Date	05 March 2021
Name of industry	Godavari Biorefineries Ltd., Sameerwadi [Co-gen Unit]
Address	Sameerwadi - 587316, (Tq) Mudhol, (Dst) Bagalkot.
Start Date of commencement of Sampling	28 February 2021
Start Time of commencement of Sampling	02:05 pm
End Date of commencement of Sampling	28 February 2021
End Time of commencement of Sampling	02:35 pm
Retention period of the remnant sample	30 days
<b>PARTICULARS OF STACK</b>	
Stack attached to boiler	120 TPH
Stack Diameter	3.00 m
Stack Height	70 m
Stack Temperature	118°C
Stack Velocity of Flue Gases	10.1m/s
Type of Fuel	Bagasse

### POLLUTION PARAMETER RESULTS

Parameter	Units	Results	Limits	Method Used
Particulate Matter (PM)	mg/Nm <sup>3</sup>	106	150	IS 11255m(Part 1): 1985, Reaffirmed 2003
SO <sub>2</sub>	mg/Nm <sup>3</sup>	52	100	IS-11255 (Part 2): 1985 Reaffirmed 2009
NO <sub>x</sub>	mg/Nm <sup>3</sup>	22	50	IS-11255 (Part 7): 2005 Reaffirmed 2012

**Note:** The test report shall not be reproduced except in full without written approval of the laboratory.

Analyzed By

Manager

*B. Subbarao*  
 Authorized Signatory  
 Technical Manager/ Quality



QCI - NABET Accredited ETA Consultant Organization Certificate No. NABET/EIA/1922/RA0159 valid upto June 12, 2022.  
 QCI - NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2021.

PAN NO. AAMFD6620P ■ ISO 9001:2008, OSHAS 18001:2007 CERTIFIED ■ REGISTRATION NO. PN00000996  
 GSTIN : 27AAMFD6620P1ZW ■ TAN : KLPD02394A



# SEC

## Dr. SUBBARAO'S ENVIRONMENT CENTER

"Arundhati", Opp. Sahayognagar, M.S.E.B. Road, Vishrambag, Sangli - 416 415.  
 Phone : Sangli - 0233 - 2301857, (M) 9372109522, 9890992118, 9890454493,  
 E-mail : bssubbarao@yahoo.com / bssharat@yahoo.com / bsnagjyoti@yahoo.com  
 QCI - NABET Accredited ETA Consultant Organization - Certificate No.

NABET / EIA / 1619 / RA 0057 valid upto June 12, 2019,

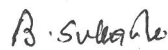
NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2019

### AMBIENT AIR QUALITY REPORT

Report Ref. No. : SEC/AA-WA/02-21				End of Analysis : 09 March 2021				
Name of Industry/Customer: <b>Godavari Biorefineries Ltd. [Co-gen Unit]</b>				Report Date : 15 March 2021				
Address: A/p. Sameerwadi – 587316, (Tq) Mudhol, (Dst) Bagalkot.				Lab ID/Sample Ref. No. : WA-AA				
Date of Collection / Sampling : 25 February 2021				Nature of Sample: Ambient Air				
Date of Receipt : 27 February 2021				Sample Collected By: SEC Lab				
Sr. No.	Sampling Station	Wind Direction	Direction & Distance from stack	PM <sub>10</sub> (µg/m <sup>3</sup> )	PM <sub>2.5</sub> (µg/m <sup>3</sup> )	SO <sub>2</sub> (µg/m <sup>3</sup> )	NO <sub>x</sub> (µg/m <sup>3</sup> )	
				Limits	< 100µg/m <sup>3</sup>	< 60µg/m <sup>3</sup>	< 80µg/m <sup>3</sup>	< 80µg/m <sup>3</sup>
				Method of Testing	IS 5182 (Part 23): 2006	SEC/QAL/SOP/AIR/PM2.5/03	IS 5182 (Part 2): 2001	IS 5182 (Part 6): 2006
1.	Near Switch Yard	Easterly	E, 145 meters	73	30	12.00	15.00	

  
Analyzed By



  
Authorized Signatory  
Technical Manager/ Quality Manager

QCI - NABET Accredited ETA Consultant Organization Certificate No. NABET/EIA/1922/RA0159 valid upto June 12, 2022.  
 QCI - NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2021.



# SEC

## Dr. SUBBARAO'S ENVIRONMENT CENTER

"Arundhati", Opp. Sahayognagar, M.S.E.B. Road, Vishrambag, Sangli - 416 415.  
Phone : Sangli - 0233 - 2301857, (M) 9372109522, 9890992118, 9890454493,  
E-mail : bssubbarao@yahoo.com / bssharat@yahoo.com / bsnagjyoti@yahoo.com  
QCI - NABET Accredited ETA Consultant Organization - Certificate No.

NABET / EIA / 1619 / RA 0057 valid upto June 12, 2019,

NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2019


### TEST REPORT

Report Ref. No. : SEC/W-WA/02-21	End of Analysis : 09 March 2021
Name of Industry/Customer: <b>Godavari Biorefineries Ltd. [Co-gen Unit]</b>	Report Date : 15 March 2021
Address: A/p. Sameerwadi – 587316, (Tq) Mudhol, (Dst) Bagalkot.	Lab ID/Sample Ref. No. : WA1
Date of Collection / Sampling : 27 February 2021	Nature of Sample: Water
Date of Receipt : 27 February 2021	Sample Collected By: SEC Lab
Date of Analysis: 01 March 2021	Sample Quantity : 1 lit
Name of Sample : <b>Co-gen ETP Outlet</b>	

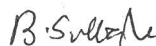
Sr. No.	Test Parameter	Result	Unit	Test Method
1	pH	7.52	-	IS:3025 (P-11) 1983
2	Chemical Oxygen Demand	124	mg/l	IS:3025 (P-58) 2006
3	B.O.D. ( 3 days at 27°C)	51	mg/l	IS:3025 (P-44) 1993
4	Total Dissolved Solids	510	mg/l	IS:3025(P-16)1984
5	Total Suspended Solids	53	mg/l	IS:3025 (P-17) 1984
6	Chloride as Cl <sup>-</sup>	186	mg/l	IS:3025 (P-32) 1988
7	Sulphate as SO <sub>4</sub>	110	mg/l	IS:3025 (P-24) 1986
8	Oil & Grease	ND	mg/l	IS:3025 (P-39) 1991 (RA 2003)

#### Remarks:

Thanking you,

  
Analysed By





Authorized Signatory  
Technical Manager/ Quality Manager

#### Note:


1. The result pertains only for the sample tested.
2. The test result shall not be reproduced except in full, without written approval of the laboratory.
3. Sample is not drawn by Dr.Subbarao's Environment Centre, Sangli.
4. Retention period for the remnant shall be 30 days.
5. ND- Not Detected.


\*\*\*END of Test Report \*\*\*

QCI - NABET Accredited ETA Consultant Organization Certificate No. NABET/EIA/1922/RA0159 valid upto June 12, 2022.  
QCI - NABL Quality Assurance Laboratory Accreditation Certificate No. TC - 6121 valid upto 09-08-2021.

**Name of the Industry : 1 x 24 MW Cogen Power Plant ,  
Godavari Biorefineries Ltd.**


Sl.no	Parameters	Results
1	Report Sl.No.	09( 2020-21)
2	Stack Attached to	130 TPH Boiler
3	Date of Sampling	06.01.2021
4	Dimensions of Stack	Height - 70 mt, Ø = 3.0 mt
5	C/S area of Stack ( As1)	7.06 m <sup>2</sup>
6	C/S area of sampling Location ( As1)	7.06 m <sup>2</sup>
7	Manometer Reading ( k ) in mm	4.2(ΔP = 4.2 x 0.8 = 3.36)
8	Stack Temperature Ts = ° C + 273	125 + 273 = 398° K
9	Meter Temperature Tm = ° C + 273	30 + 273 = 303° K
10	Velocity of flue gas Vs = C √ K X Ts	0.175 √ 3.36 X 398 = 6.399 mt / Sec
11	Tm / Ts	0.761
12	Nozzle diameter	3/8" = 0.375 inches
13	C/S area of Nozzle An ( m2 )	7.13 x 10 <sup>-5</sup>
14	Rate of Sampling ( LPM ) q = An x Vs x Tm / Ts x 1000 x 60	7.13 x 10 <sup>-5</sup> x 6.399 x 0.761 x 10 <sup>3</sup> x 60 = 20.83
15	Period of Sampling in Minutes	15 Minutes
16	Volume of Sample in ltrs.	20.83 x 15 = 312.45 lts
17	Volume of Sample in m <sup>3</sup>	0.3124
18	Thimble No.	CO GEN - 09
19	Initial weight of Thimble in grams ( W1)	4.01
20	Final Weight of Thimble in grams ( W2)	4.04
21	W2 - W1	0.03
22	SPM mg/ Nm <sup>3</sup>	96.03
23	Rate of Emission Nm <sup>3</sup> /Hr As1 x Vs x 3600 x 298 / Ts	


  
M.S. Godi  
Dy Mgr

  
G. Suryaprakash Rao  
GM- Cogen

**Name of the Industry : 1 x 21.56 MW Cogen Power Plant ,  
Godavari Biorefineries Ltd.**

Sl.no	Parameters	Results
1	Report Sl.No.	10( 2020-21 )
2	Stack Attached to	120 TPH Boiler
3	Date of Sampling	06.01.2021
4	Dimensions of Stack	Height - 70 mt, Ø = 3.0 mt
5	C/S area of Stack ( As1)	7.06 m <sup>2</sup>
6	C/S area of sampling Location ( As1)	7.06 m <sup>2</sup>
7	Manometer Reading ( k ) in mm	4.01(ΔP = 4.01x 0.8 = 3.208)
8	Stack Temperature Ts=° C+ 273	140+ 273 = 413 ° K
9	Meter Temperature Tm =° C+ 273	29+ 273 =302° K
10	Velocity of flue gas Vs = C √ K X Ts	0.175√3.208 X 413= 6.18 mt / Sec
11	Tm / Ts	0.731
12	Nozzle diameter	3/8" = 0.375 inches
13	C/S area of Nozzle An ( m2 )	7.13 x 10 <sup>-5</sup>
14	Rate of Sampling ( LPM ) q = An x Vs x Tm / Ts x 1000 x 60	7.13 x 10 <sup>-5</sup> x 6.18 x 0.731 x 10 <sup>3</sup> x 60=19.32
15	Period of Sampling in Minutes	15Minutes
16	Volume of Sample in ltrs.	19.32 x15 = 289.8 lts
17	Volume of Sample in m3	0.2898
18	Thimble No.	CO GEN - 10
19	Initial weight of Thimble in grams ( W1)	4.016
20	Final Weight of Thimble in grams ( W2)	4.05
21	W2 - W1	0.034
22	SPM mg / Nm3	117.32
23	Rate of Emission Nm3/Hr	
	As1 x Vs x 3600 x 298 /Ts	

  
M.S. Godi  
Dy Mgr

  
G. Suryaprakash Rao  
GM, Cogen

Name of the Industry : 1 x 24 MW Cogen Power Plant , Godavari Biorefineries Ltd.		
Sl.no	Parameters	Results
1	Report Sl.No.	
2	Stack Attached to	11( 2020-21)
3	Date of Sampling	130 TPH Boiler
4	Dimensions of Stack	21.01.2021
5	C/S area of Stack ( As1)	Height - 70 mt, Ø = 3.0 mt
6	C/S area of sampling Location ( As1)	7.06 m2
7	Manometer Reading ( k ) in mm	7.06 m2
8	Stack Temperature Ts=° C+ 273	4.2(ΔP = 4.2x 0.8 = 3.36)
9	Meter Temperature Tm =° C+ 273	125+ 273 = 398° K
10	Velocity of flue gas Vs = C √ K X Ts	30+ 273 =303° K
11	Tm / Ts	0.175√3.36X 398= 6.399 mt / Sec
12	Nozzle diameter	0.761
13	C/S area of Nozzle An ( m2 )	3/8" = 0.375 inches
14	Rate of Sampling ( LPM ) q = An x Vs x Tm / Ts x 1000 x 60	7.13 x 10 <sup>-5</sup>
15	Period of Sampling in Minutes	7.13 x 10 <sup>-5</sup> x 6.399 x 0.761 x 10 <sup>3</sup> x 60=20.83
16	Volume of Sample in ltrs.	15Minutes
17	Volume of Sample in m3	20.83 x15 = 312.45lts
18	Thimble No.	0.3124
19	Initial weight of Thimble in grams (W1)	CO GEN - 11
20	Final Weight of Thimble in grams ( W2)	4.01
21	W2 - W1	4.03
22	SPM mg/ Nm3	0.02
23	Rate of Emission Nm3/Hr	64.02
	As1 x Vs x 3600 x 298 /Ts	

M.S.Godi  
Dy Mgr

G. Suryabakash Rao  
GM Cogen

Name of the Industry : 1 x 21.56 MW Cogen Power Plant , Godavari Biorefineries Ltd.		
Sl.no	Parameters	Results
1	Report Sl.No.	12( 2020-21 )
2	Stack Attached to	120 TPH Boiler
3	Date of Sampling	21.01.2021
4	Dimensions of Stack	Height - 70 mt, Ø = 3.0 mt
5	C/S area of Stack ( As1)	7.06 m <sup>2</sup>
6	C/S area of sampling Location ( As1)	7.06 m <sup>2</sup>
7	Manometer Reading ( k ) in mm	4.01(ΔP = 4.01 x 0.8 = 3.208)
8	Stack Temperature Ts = ° C + 273	140 + 273 = 413 ° K
9	Meter Temperature Tm = ° C + 273	29 + 273 = 302 ° K
10	Velocity of flue gas Vs = C √ K X Ts	0.175√3.208 X 413 = 6.18 mt / Sec
11	Tm / Ts	0.731
12	Nozzle diameter	3/8" = 0.375 inches
13	C/S area of Nozzle An ( m <sup>2</sup> )	7.13 x 10 <sup>-5</sup>
14	Rate of Sampling ( LPM ) q = An x Vs x Tm / Ts x 1000 x 60	7.13 x 10 <sup>-5</sup> x 6.18 x 0.731 x 10 <sup>3</sup> x 60 = 19.32
15	Period of Sampling in Minutes	15 Minutes
16	Volume of Sample in ltrs.	19.32 x 15 = 289.8 lts
17	Volume of Sample in m <sup>3</sup>	0.2898
18	Thimble No.	CO GEN - 12
19	Initial weight of Thimble in grams (W1)	4.017
20	Final Weight of Thimble in grams ( W2)	4.05
21	W2 - W1	0.033
22	SPM mg / Nm <sup>3</sup>	113.87
23	Rate of Emission Nm <sup>3</sup> /Hr As1 x Vs x 3600 x 298 /Ts	


M.S.Godi  
Dy Mgr

G. Suryaprakash Rao  
GM-Cogen

**45.56 MWH COGENERATION POWER PLANT GBL SAMEERWADI  
 AMBIENT AIR QUALITY MONITORING REPORTS  
 FOR THE MONTH JANUARY-2021**

<b>SPM ANALYSIS REPORT</b>	
Sampling station	Near Switch Yard
Period	10.00 am to 10.00 am
Direction/Distance	S.E to N.W/100 mts
Date of analysis	01.01.2021
Duration	24.00 Hrs
<b>RESULTS</b>	
Initial weight of the filter paper (wi)	2.01
Final weight of the filter paper (wf)	2.45
Difference in weight (grams)	0.44
Average air flow m <sup>3</sup> /hr	1.17
Ambient temperature degree centigrade	26
<b>CALCULATION:</b>	
SPM in mg/Nm <sup>3</sup>	0.26116
SPM in micro gram/Nm <sup>3</sup>	261.16

  
 M.S. Godi


  
 G. Suryaprakash Rao  
 GM Co-Gen



**45.56 MWH COGENERATION POWER PLANT GBL SAMEERWADI**  
**AMBIENT AIR QUALITY MONITORING REPORTS**  
**FOR THE MONTH JANUARY-2021**

<b>SPM ANALYSIS REPORT</b>	
Sampling station	Near Switch Yard
Period	10.00 am to 10.00 am
Direction/Distance	S.E to N.W/100 mts
Date of analysis	06.01.2021
Duration	24.00 Hrs
<b>RESULTS</b>	
Initial weight of the filter paper (wi)	2.02
Final weight of the filter paper (wf)	2.45
Difference in weight (grams)	0.43
Average air flow m <sup>3</sup> /hr	1.17
Ambient temperature degree centigrade	27
<b>CALCULATION:</b>	
SPM in mg/Nm <sup>3</sup>	0.25522
SPM in micro gram/Nm <sup>3</sup>	255.22


  
M.S. Godi

  
G. Suryaprakash Rao  
GM Co-Gen

**45.56 MWH COGENERATION POWER PLANT GBL SAMEERWADI  
 AMBIENT AIR QUALITY MONITORING REPORTS  
 FOR THE MONTH JANUARY-2021**

<b>SPM ANALYSIS REPORT</b>	
Sampling station	Near Switch Yard
Period	10.00 am to 10.00 am
Direction/Distance	S.E to N.W/100 mts
Date of analysis	13.01.2021
Duration	24.00 Hrs
<b>RESULTS</b>	
Initial weight of the filter paper (wi)	2.01
Final weight of the filter paper (wf)	2.49
Difference in weight (grams)	0.48
Average air flow m <sup>3</sup> /hr	1.17
Ambient temperature degree centigrade	27
<b>CALCULATION:</b>	
SPM in mg/Nm <sup>3</sup>	0.28490
SPM in micro gram/Nm <sup>3</sup>	284.90


  
 M.S. Godi

  
 G. Suryaprakash Rao  
 GM Co-Gen

**45.56 MWH COGENERATION POWER PLANT GBL SAMEERWADI  
 AMBIENT AIR QUALITY MONITORING REPORTS  
 FOR THE MONTH JANUARY-2021**

<b>SPM ANALYSIS REPORT</b>	
Sampling station	Near Switch Yard
Period	09.00 am to 09.00 am
Direction/Distance	S.E to N.W/100 mts
Date of analysis	20.01.2021
Duration	24.00 Hrs
<b>RESULTS</b>	
Initial weight of the filter paper (wi)	2.01
Final weight of the filter paper (wf)	2.49
Difference in weight (grams)	0.48
Average air flow m <sup>3</sup> /hr	1.17
Ambient temperature degree centigrade	28
<b>CALCULATION:</b>	
SPM in mg/Nm <sup>3</sup>	0.28490
SPM in micro gram/Nm <sup>3</sup>	284.90


  
 M.S. Godi

  
 G. Suryaprakash Rao  
 GM Co-Gen

**45.56 MWH COGENERATION POWER PLANT GBL SAMEERWADI  
 AMBIENT AIR QUALITY MONITORING REPORTS  
 FOR THE MONTH JANUARY-2021**

<b>SPM ANALYSIS REPORT</b>	
Sampling station	Near Switch Yard
Period	09.00 am to 09.00 am
Direction/Distance	S.E to N. W/100 mts
Date of analysis	29.01.2021
Duration	24.00 Hrs
<b>RESULTS</b>	
Initial weight of the filter paper (wi)	2.01
Final weight of the filter paper (wf)	2.55
Difference in weight (grams)	0.54
Average air flow m <sup>3</sup> /hr	1.16
Ambient temperature degree centigrade	28
<b>CALCULATION:</b>	
SPM in mg/Nm <sup>3</sup>	0.32328
SPM in micro gram/Nm <sup>3</sup>	323.28

  
 M.S. Godi

  
 G. Suryaprakash Rao  
 GM Co-Gen

45.56 MW CO- GENERATION POWER PLANT, GBL SAMEERWADI  
SOUND LEVEL MONITORING REPORTS FOR THE MONTH OF JANUARY - 2021

Date: 10.02.2021

S.NO	DATE	STATION	DAY TIME (dB)	NIGHT TIME (dB)
1	04.01.2021	Near Switch yard	70	65
2	13.01.2021	Near Switch yard	70	60
3	21.01.2021	Near turbine hall	70	60
4	30.01.2021	Near turbine hall	70	60

  
M.S. Godi

  
G. Suryaprakash Rao

**Name of the Industry :1 x 24 MW Cogen Power Plant ,  
Godavari Biorefineries Ltd.**

Sl.no	Parameters	Results
1	Report Sl.No.	13( 2020-21)
2	Stack Attached to	130 TPH Boiler
3	Date of Sampling	04.02.2021
4	Dimensions of Stack	Height - 70 mt, Ø = 3.0 mt
5	C/S area of Stack ( As1)	7.06 m <sup>2</sup>
6	C/S area of sampling Location ( As1)	7.06 m <sup>2</sup>
7	Manometer Reading ( k ) in mm	4.2(ΔP = 4.2x 0.8 = 3.36)
8	Stack Temperature Ts=° C+ 273	125+ 273 = 398° K
9	Meter Temperature Tm =° C+ 273	30+ 273 =303° K
10	Velocity of flue gas Vs = C √ K X Ts	0.175√3.36X 398= 6.399 mt / Sec
11	Tm / Ts	0.761
12	Nozzle diameter	3/8" = 0.375 inches
13	C/S area of Nozzle An ( m2 )	7.13 x 10 <sup>-5</sup>
14	Rate of Sampling ( LPM ) q = An x Vs x Tm / Ts x 1000 x 60	7.13 x 10 <sup>-5</sup> x 6.399 x 0.761 x 10 <sup>3</sup> x 60=20.83
15	Period of Sampling in Minutes	15Minutes
16	Volume of Sample in ltrs.	20.83 x15 = 312.45lts
17	Volume of Sample in m3	0.3124
18	Thimble No.	CO GEN - 13
19	Initial weight of Thimble in grams (W1)	4.01
20	Final Weight of Thimble in grams ( W2)	4.04
21	W2 - W1	0.03
22	SPM mg/ Nm3	96.03
23	Rate of Emission Nm3/Hr	
	As1 x Vs x 3600 x 298 /Ts	



M.S.Godi  
Dy Mgr



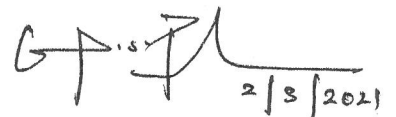
G. Suryaprakash Rao  
GM- Cogen

**Name of the Industry : 1 x 21.56 MW Cogen Power Plant ,  
Godavari Biorefineries Ltd.**

Sl.no	Parameters	Results
1	Report Sl.No.	14( 2020-21 )
2	Stack Attached to	120 TPH Boiler
3	Date of Sampling	04.02.2021
4	Dimensions of Stack	Height - 70 mt, $\varnothing = 3.0$ mt
5	C/S area of Stack ( As1)	7.06 m <sup>2</sup>
6	C/S area of sampling Location ( As1)	7.06 m <sup>2</sup>
7	Manometer Reading ( k ) in mm	4.01 ( $\Delta P = 4.01 \times 0.8 = 3.208$ )
8	Stack Temperature Ts = ° C + 273	140 + 273 = 413 ° K
9	Meter Temperature Tm = ° C + 273	29 + 273 = 302 ° K
10	Velocity of flue gas Vs = C $\sqrt{K X Ts}$	0.175 $\sqrt{3.208 \times 413} = 6.18$ mt / Sec
11	Tm / Ts	0.731
12	Nozzle diameter	3/8" = 0.375 inches
13	C/S area of Nozzle An ( m2 )	7.13 x 10 <sup>-5</sup>
14	Rate of Sampling ( LPM ) q = An x Vs x Tm / Ts x 1000 x 60	7.13 x 10 <sup>-5</sup> x 6.18 x 0.731 x 10 <sup>3</sup> x 60 = 19.32
15	Period of Sampling in Minutes	15 Minutes
16	Volume of Sample in ltrs.	19.32 x 15 = 289.8 lts
17	Volume of Sample in m3	0.2898
18	Thimble No.	CO GEN - 14
19	Initial weight of Thimble in grams (W1)	4.013
20	Final Weight of Thimble in grams ( W2)	4.04
21	W2 - W1	0.027
22	SPM mg / Nm3	93.17
23	Rate of Emission Nm3/Hr	
	As1 x Vs x 3600 x 298 / Ts	





M.S. Godi  
Dy Mgr

 2/3/2021

G. Suryaprakash Rao  
GM- Cogen

Name of the Industry :1 x 24 MW Cogen Power Plant ,		
Godavari Biorefineries Ltd.		
Sl.no	Parameters	Results
1	Report Sl.No.	15( 2020-21)
2	Stack Attached to	130 TPH Boiler
3	Date of Sampling	20.02.2021
4	Dimensions of Stack	Height - 70 mt, Ø = 3.0 mt
5	C/S area of Stack ( As1)	7.06 m <sup>2</sup>
6	C/S area of sampling Location ( As1)	7.06 m <sup>2</sup>
7	Manometer Reading ( k ) in mm	4.2(ΔP = 4.2x 0.8 = 3.36)
8	Stack Temperature Ts=° C+ 273	125+ 273 = 398° K
9	Meter Temperature Tm =° C+ 273	30+ 273 =303° K
10	Velocity of flue gas Vs = C √ K X Ts	0.175√3.36X 398= 6.399 mt / Sec
11	Tm / Ts	0.761
12	Nozzle diameter	3/8" = 0.375 inches
13	C/S area of Nozzle An ( m <sup>2</sup> )	7.13 x 10 <sup>-5</sup>
14	Rate of Sampling ( LPM ) q = An x Vs x Tm / Ts x 1000 x 60	7.13 x 10 <sup>-5</sup> x 6.399 x 0.761 x 10 <sup>3</sup> x 60=20.83
15	Period of Sampling in Minutes	15Minutes
16	Volume of Sample in ltrs.	20.83 x15 = 312.45lts
17	Volume of Sample in m <sup>3</sup>	0.3124
18	Thimble No.	CO GEN - 15
19	Initial weight of Thimble in grams (W1)	4.01
20	Final Weight of Thimble in grams ( W2)	4.035
21	W2 - W1	0.025
22	SPM mg/ Nm <sup>3</sup>	80.03
23	Rate of Emission Nm <sup>3</sup> /Hr	
	As1 x Vs x 3600 x 298 /Ts	

  
M.S. Godi  
Dy Mgr

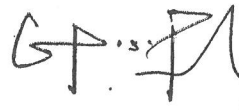
  
2/3/2021  
G. Suryaprakash Rao  
GM- Cogen



**Name of the Industry : 1 x 21.56 MW Cogen Power Plant ,  
Godavari Biorefineries Ltd.**

Sl.no	Parameters	Results
1	Report Sl.No.	16( 2020-21 )
2	Stack Attached to	120 TPH Boiler
3	Date of Sampling	20.02.2021
4	Dimensions of Stack	Height - 70 mt, Ø = 3.0 mt
5	C/S area of Stack ( As1)	7.06 m <sup>2</sup>
6	C/S area of sampling Location ( As1)	7.06 m <sup>2</sup>
7	Manometer Reading ( k ) in mm	4.01(ΔP = 4.01 x 0.8 = 3.208)
8	Stack Temperature Ts = ° C + 273	140 + 273 = 413 ° K
9	Meter Temperature Tm = ° C + 273	29 + 273 = 302° K
10	Velocity of flue gas Vs = C √ K X Ts	0.175√3.208 X 413 = 6.18 mt / Sec
11	Tm / Ts	0.731
12	Nozzle diameter	3/8" = 0.375 inches
13	C/S area of Nozzle An ( m2 )	7.13 x 10 <sup>-5</sup>
14	Rate of Sampling ( LPM ) q = An x Vs x Tm / Ts x 1000 x 60	7.13 x 10 <sup>-5</sup> x 6.18 x 0.731 x 10 <sup>3</sup> x 60 = 19.32
15	Period of Sampling in Minutes	15 Minutes
16	Volume of Sample in ltrs.	19.32 x 15 = 289.8 lts
17	Volume of Sample in m3	0.2898
18	Thimble No.	CO GEN - 16
19	Initial weight of Thimble in grams (W1)	4.011
20	Final Weight of Thimble in grams ( W2)	4.04
21	W2 - W1	0.029
22	SPM mg / Nm3	100.07
23	Rate of Emission Nm3/Hr	
	As1 x Vs x 3600 x 298 / Ts	

M.S.Godi  
Dy Mgr

  
 G. Suryaprakash Rao  
 GM- Cogen  
 2/3/2021

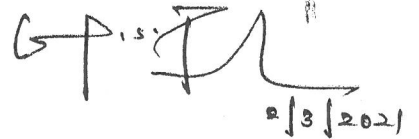
45.56 MW CO- GENERATION POWER PLANT, GBL SAMEERWADI  
SOUND LEVEL MONITORING REPORTS FOR THE MONTH OF FEBRUARY - 2021

Date: 2.03.2021

S.NO	DATE	STATION	DAY TIME (dB)	NIGHT TIME (dB)
1	02.02.2021	Near Switch yard	70	65
2	13.02.2021	Near Switch yard	70	60
3	21.02.2021	Near turbine hall	65	55
4	27.02.2021	Near turbine hall	65	60



M.S. Godi

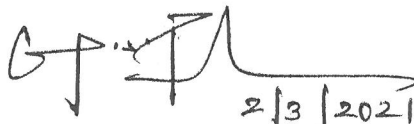


G. Suryaprakash Rao

**45.56 MWH COGENERATION POWER PLANT GBL SAMEERWADI  
AMBIENT AIR QUALITY MONITORING REPORTS  
FOR THE MONTH FEBRUARY-2021**

<b>SPM ANALYSIS REPORT</b>	
Sampling station	Near Switch Yard
Period	09.00 am to 09.00 am
Direction/Distance	S.E to N.W/100 mts
Date of analysis	01.02.2021
Duration	24.00 Hrs
<b>RESULTS</b>	
Initial weight of the filter paper (wi)	2.01
Final weight of the filter paper (wf)	2.54
Difference in weight (grams)	0.53
Average air flow m <sup>3</sup> /hr	1.17
Ambient temperature degree centigrade	31
<b>CALCULATION:</b>	
SPM in mg/Nm <sup>3</sup>	0.31458
SPM in micro gram/Nm <sup>3</sup>	314.58

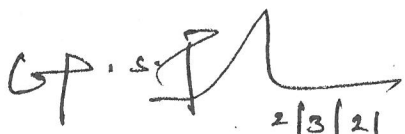
  
M.S.Godi

  
2/3/2021  
G.Suryaprakash Rao  
GM Co-Gen

**45.56 MWH COGENERATION POWER PLANT GBL SAMEERWADI  
 AMBIENT AIR QUALITY MONITORING REPORTS  
 FOR THE MONTH FEBRUARY-2021**

<b>SPM ANALYSIS REPORT</b>	
Sampling station	Near Switch Yard
Period	10.00 am to 10.00 am
Direction/Distance	S.E to N.W/100 mts
Date of analysis	06.02.2021
Duration	24.00 Hrs
<b>RESULTS</b>	
Initial weight of the filter paper (wi)	2.01
Final weight of the filter paper (wf)	2.44
Difference in weight (grams)	0.43
Average air flow m <sup>3</sup> /hr	1.17
Ambient temperature degree centigrade	30
<b>CALCULATION:</b>	
SPM in mg/Nm <sup>3</sup>	0.25522
SPM in micro gram/Nm <sup>3</sup>	255.22


  
 M.S. Godi

  
 G. Suryaprakash Rao  
 GM Co-Gen

**45.56 MWH COGENERATION POWER PLANT GBL SAMEERWADI  
 AMBIENT AIR QUALITY MONITORING REPORTS  
 FOR THE MONTH FEBRUARY-2021**

<b>SPM ANALYSIS REPORT</b>	
Sampling station	Near Switch Yard
Period	10.00 am to 10.00 am
Direction/Distance	S.E to N.W/100 mts
Date of analysis	13.02.2021
Duration	24.00 Hrs
<b>RESULTS</b>	
Initial weight of the filter paper (wi)	2
Final weight of the filter paper (wf)	2.42
Difference in weight (grams)	0.42
Average air flow m3/hr	1.17
Ambient temperature degree centigrade	30
<b>CALCULATION:</b>	
SPM in mg/Nm3	0.24929
SPM in micro gram/Nm3	249.29

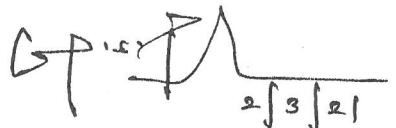
  
 M.S. Godi

  
 G. Suryaprakash Rao  
 GM Co-Gen  
 2/3/2021

**45.56 MWH COGENERATION POWER PLANT GBL SAMEERWADI  
AMBIENT AIR QUALITY MONITORING REPORTS  
FOR THE MONTH FEBRUARY-2021**

<b>SPM ANALYSIS REPORT</b>	
Sampling station	Near Switch Yard
Period	10.00 am to 10.00 am
Direction/Distance	S.E to N.W/100 mts
Date of analysis	18.02.2021
Duration	24.00 Hrs
<b>RESULTS</b>	
Initial weight of the filter paper (wi)	2
Final weight of the filter paper (wf)	2.45
Difference in weight (grams)	0.45
Average air flow m <sup>3</sup> /hr	1.17
Ambient temperature degree centigrade	29
<b>CALCULATION:</b>	
SPM in mg/Nm <sup>3</sup>	0.26709
SPM in micro gram/Nm <sup>3</sup>	267.09

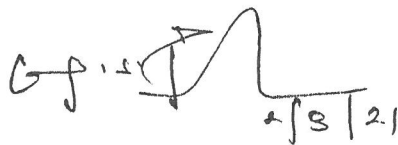
  
M.S. Godi

  
G. Suryaprakash Rao  
GM Co-Gen

**45.56 MWH COGENERATION POWER PLANT GBL SAMEERWADI  
AMBIENT AIR QUALITY MONITORING REPORTS  
FOR THE MONTH FEBRUARY-2021**

<b>SPM ANALYSIS REPORT</b>	
Sampling station	Near Switch Yard
Period	10.00 am to 10.00 am
Direction/Distance	S.E to N.W/100 mts
Date of analysis	25.02.2021
Duration	24.00 Hrs
<b>RESULTS</b>	
Initial weight of the filter paper (wi)	2.04
Final weight of the filter paper (wf)	2.45
Difference in weight (grams)	0.41
Average air flow m <sup>3</sup> /hr	1.17
Ambient temperature degree centigrade	30
<b>CALCULATION:</b>	
SPM in mg/Nm <sup>3</sup>	0.24335
SPM in micro gram/Nm <sup>3</sup>	243.35

  
M.S. Godi

  
G. Suryaprakash Rao  
GM Co-Gen