



POLLU TECH AIDS

(Air & Water Pollution Control Consultants and Turnkey Contractors)

(NABL Accredited Testing Lab as per ISO/IEC 17025:2005)

Off. 080-23492130, Res. : 23490488, E-mail : drppdambal@gmail.com

Date :
27/03/2018

ANALYSIS REPORT OF AMBIENT AIR QUALITY

1. Name of the Company : ANUGRAHA CHEMICALS
2. Address : No. D-46 - D-50, & C-62 TO C-63, KSSIDC Industrial Estate, Doddaballapur-561203, Bangalore (R) Dist.
3. Name of the Location : Near Main Gate
4. Sample Collected by : Raghu. G & Praveen. S. K
5. Date of Collection : Mar 21st, 2018
6. Particulars of sample collected : PM₁₀, PM_{2.5}, NO₂, SO₂
7. Date of Analysis : Mar 22nd, 2018
8. Sample ID : 1275 - 1/A

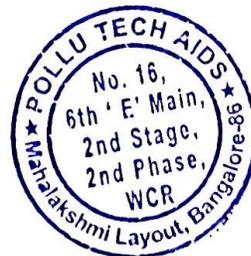
Results:

Sl. No.	Parameters	Protocol	Units	Results	Standard Limits
01	PM ₁₀	IS 5182 (part 23) Gravimetric method	µg/m ³	31.8	100 µg/m ³
02	PM _{2.5}	Lab SOP No. PTA/SOP/104	µg/m ³	10.5	60 µg/m ³
03	SO ₂	IS 5182 (part 2)	µg/m ³	6.2	80 µg/m ³
04	NO ₂	IS 5182 (part 6)	µg/m ³	8.8	80 µg/m ³
05	Ammonia	Indo phenol Blue method	µg/m ³	BDL	400 µg/m ³
06	Benzene (C ₆ H ₆)*	GC	µg/m ³	BDL	5.0 µg/m ³
07	Benzo Pyrene*	GC	ng/m ³	BDL	1.0 ng/m ³
08	Arsenic (As)*	AAS	ng/m ³	BDL	6.0 ng/m ³
09	Nickel (Ni)*	AAS	ng/m ³	BDL	20 ng/m ³
10	Carbon Monoxide	Electrochemical sensor	mg/L	BDL	0.003mg/L
11	Lead (Pb)*	AAS	µg/m ³	BDL	1.0 µg/m ³
12	Ozone (O ₃)	Buffer KI Method	µg/m ³	BDL	100 µg/m ³

- Note: 1. The results refer only to the tested samples and applicable parameter.
2. Samples will be destroyed after one week from the date of issue of test certificate unless otherwise specified. Perishable samples will not be retained
3. BDL = Below Detectable Limit
4. * Authorized laboratory report enclosed for Lead, Arsenic, Nickel, Benzene & Benzo Pyrene
5. Ozone and CO is not in our NABL Scope
6. This Test Report shall not be reproduced without written permission of the Laboratory.

Analyzed by
P.S.K.

Verified by
P.S.K.



Authorized Signatory

Dr. R.P. Dambal
Dr. R.P. Dambal



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Off. 080-23492130, Res. : 23490488, E-mail : drppdambal@gmail.com

Date :27/03/2018

ANALYSIS REPORT OF STACK EMISSION

Name of the Company	ANUGRAHA CHEMICALS
Address	No. D-46 - D-50, & C-62 TO C-63 KSSIDC Industrial estate, Doddaballapur - 56120 Bangalore(R) Dist.
Sample Particulars	SCRUBBER
Date of Sampling	Mar 21 st , 2018
Sampled By	Raghu. G & Praveen. S. K
Date of Analysis	Mar 22 nd , 2018
Sample ID	1275 - 2/E

General Details:

Stack Diameter	0.27 mts.
Stack Cross Sectional Area	0.0613 m ²
Temperature of Flue Gas	58 ^o C
Ambient Temperature	29 ^o C
Velocity of Flue Gas	13.1 m/s

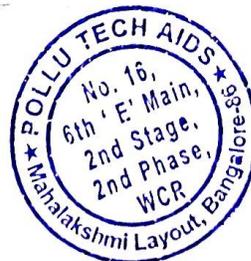
Results:

Sl. No.	Parameters	Protocol	Units	Results	Standard Limit
01	Particulate Matter (at NTP)	IS 11255 (part 1)	mg/Nm ³	12.8	150.0 mg/Nm ³
02	Discharge Rate (at NTP)	IS 11255 (part 1)	Nm ³ /hrs.	2637.6	NS
03	Emission Rate (at NTP)	IS 11255 (part 1)	Kg/hrs.	0.033	NS
04	Acid Mist	---	mg/Nm ³	3.4	50

- Note: 1. The results refer only to the tested samples and applicable parameter.
2. Samples will be destroyed after one week from the date of issue of test certificate unless otherwise specified. Perishable samples will not be retained.
3. NS= Not Specified
4. This Test Report shall not be reproduced without written permission of the Laboratory.

Analyzed by
R.P. Dambal

Verified by
Raghu G. Praveen S. K.



Authorized Signatory

R.P. Dambal
Dr. R.P. Dambal



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Date :27/03/2018.....

ANALYSIS REPORT OF STACK EMISSION

Name of the Company	ANUGRAHA CHEMICALS
Address	No. D-46 - D-50, & C-62 TO C-63 KSSIDC Industrial estate, Doddaballapur- 561203 Bangalore(R) Dist.
Sample Particulars	Wood Boiler
Date of Sampling	Mar 21 st , 2018
Sampled By	Raghu. G & Praveen. S. K
Date of Analysis	Mar 22 nd , 2018
Sample ID	1275 - 3/E

General Details:

Stack Diameter	0.38 mts.
Stack Cross Sectional Area	0.114 m ²
Temperature of Flue Gas	154 ^o C
Ambient Temperature	29 ^o C
Velocity of Flue Gas	21.1 m/s

Results:

Sl. No.	Parameters	Protocol	Units	Results	Standard
01	Particulate Matter (at NTP)	IS 11255 (part 1)	mg/Nm ³	33.8	150.0 mg/Nm ³
02	Discharge Rate (at NTP)	IS 11255 (part 1)	Nm ³ /hrs.	6123.9	NS
03	Emission Rate (at NTP)	IS 11255 (part 1)	Kg/hrs.	0.207	NS
04	Oxides of Sulphur	IS 11255 (part 2)	mg/Nm ³	11.3	NS
05	Oxides of Nitrogen	IS 11255 (part 7)	mg/Nm ³	12.7	NS

- Note: 1. The results refer only to the tested samples and applicable parameter.
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Authorized Signatory

Dr. R.P. Dambal



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Off. 080-23492130, Res. : 23490488, E-mail : drrpdambal@gmail.com

Date :27/03/2018...

ANALYSIS REPORT OF STACK EMISSION

Name of the Company	ANUGRAHA CHEMICALS
Address	No. D-46 - D-50, & C-62 TO C-63 KSSIDC Industrial estate, Doddaballapur- 561203 Bangalore(R) Dist.
Sample Particulars	Revomax Diesel Boiler
Date of Sampling	Mar 21 st , 2018
Sampled By	Raghu. G & Praveen. S. K
Date of Analysis	Mar 22 nd , 2018
Sample ID	1275 - 4/E

General Details:

Stack Diameter	0.22 mts
Stack Cross Sectional Area	0.041 m ²
Temperature of Flue Gas	106 ^o C
Ambient Temperature	29 ^o C
Velocity of Flue Gas	17.1 m/s

Results:

Sl. No.	Parameters	Protocol	Units	Results	Standard
01	Particulate Matter (at NTP)	IS 11255 (part 1)	mg/Nm ³	28.1	150.0 mg/Nm ³
02	Discharge Rate (at NTP)	IS 11255 (part 1)	Nm ³ /hrs.	2011.1	NS
03	Emission Rate (at NTP)	IS 11255 (part 1)	Kg/hrs.	0.056	NS
04	Oxides of Sulphur	IS 11255 (part 2)	mg/Nm ³	8.0	NS
05	Oxides of Nitrogen	IS 11255 (part 7)	mg/Nm ³	9.5	NS

- Note: 1. The results refer only to the tested samples and applicable parameter.
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Analyzed by
R.P. Dambal

Verified by
Raghu G

Authorized Signatory

Dr. R.P. Dambal
R.P. Dambal





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Date :27/03/2018.....

ANALYSIS REPORT OF STACK EMISSION

Name of the Company	ANUGRAHA CHEMICALS
Address	No. D-46 - D-50, & C-62 TO C-63 KSSIDC Industrial estate, Doddaballapur- 561203 Bangalore(R) Dist.
Sample Particulars	D.G. Set 320 KVA
Date of Sampling	Mar 21 st , 2018
Sampled By	Raghu. G & Praveen. S. K
Date of Analysis	Mar 22 nd , 2018
Sample ID	1275 - 5/E

General Details:

Stack Diameter	0.16 mts.
Stack Cross Sectional Area	0.02 m ²
Temperature of Flue Gas	132 ^o C
Ambient Temperature	29 ^o C
Velocity of Flue Gas	18.8 m/s

Results:

Sl. No.	Parameters	Protocol	Units	Results	Standard
01	Particulate Matter (at NTP)	IS 11255 (part 1)	mg/Nm ³	30.4	150.0 mg/Nm ³
02	Discharge Rate (at NTP)	IS 11255 (part 1)	Nm ³ /hrs.	1009.2	NS
03	Emission Rate (at NTP)	IS 11255 (part 1)	Kg/hrs.	0.030	NS
04	Oxides of Sulphur	IS 11255 (part 2)	mg/Nm ³	12.9	NS
05	Oxides of Nitrogen	IS 11255 (part 7)	mg/Nm ³	14.5	NS

- Note: 1. The results refer only to the tested samples and applicable parameter.
2. Samples will be destroyed after one week from the date of issue of test certificate unless otherwise specified. Perishable samples will not be retained.
3. NS= Not Specified
4. This Test Report shall not be reproduced without written permission of the Laboratory.

Analyzed by
R.P.

Verified by
Raghu G.

Authorized Signatory

Dr. R.P. Dambal





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(NABL Accredited Testing Lab as per ISO/IEC 17025:2005)

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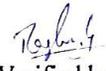
Date : 27/03/2018

AMBIENT NOISE LEVEL MONITORING REPORT

Name of the Company	ANUGRAHA CHEMICALS
Address	No. D-46 - D-50, & C-62 TO C-63 KSSIDC Industrial estate, Doddaballapur- 561203 Bangalore(R) Dist.
Date of Sampling	Mar 21 st , 2018
Sampled By	Praveen. S. K
Sample ID	1275 - 6/N

Sl. No.	Point No.	Sample Location	Results in dB	Standard Limits in dB (A) Leq
01	01	Near DG set 320KVA (When On) Near DG set 320KVA (When Off)	65.1 58.4	75
02	02	Near Main gate	59.2	70
03	03	GLR unit (When On) GLR unit (When Off)	62.8 54.3	75
04	04	SSR unit (When On) SSR unit (When Off)	64.1 54.9	75

- Note: 1. The results refer only to the tested samples and applicable parameter.
2. Samples will be destroyed after one week from the date of issue of test certificate unless otherwise specified. Perishable samples will not be retained
3. This Test Report shall not be reproduced without written permission of the Laboratory.


Verified by



Authorized Signatory


Dr. R.P. Dambal



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(NABL Accredited Testing Lab as per ISO/IEC 17025:2005)

Off. 080-23492130, Res. : 23490458, E-mail : drrpdambal@gmail.com

Date :

27/03/2018

ANALYSIS REPORT OF TANK WATER SAMPLE

Name of the Company	M/s ANUGRAHA CHEMICALS
Address	No. D-46 - D-50, & C-62 TO C-63 KSSIDC Industrial estate, Doddaballepur-551203 Bangalore(R) Dist.
Sample Particulars	Tank Water Sample
Sample Received on	Mar 21 st , 2018
Sample Tested on	Mar 22 nd , 2018
Sample ID	1275 - 7/W

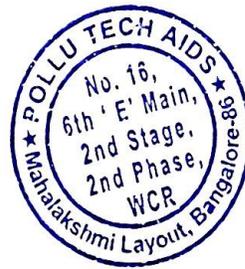
Sl. No.	Parameters	Protocol	Units	Results	Standard Limit (Required - permissible)
01	pH Value	IS 3025 (part 11) 2012, Electrometric method	pH	7.3	6.5 - 8.5
02	Color	IS 3025 (part 4) 2012, Platinum cobalt method	Hazen Units	<5	5 - 15
03	Odor	IS 3025 (part 5) 2012,	Unobjectionable	Agreeable	Unobjectionable
04	Conductivity	IS 3025 (part 14) 2013, Electrometric method	μ S/cm	1030	2500
05	Turbidity	IS 3025 (part 10) 2012, Turbidimetric method	NTU	1.0	1-5
06	Total Dissolved Solids	IS 3025 (part 16) 2012, Gravimetric Method	mg/L	692	500 - 2000
07	Total Suspended Solid	IS 3025 (part 17) 2012, Gravimetric method	mg/L	2.7	--
08	Total Hardness as CaCO ₃	IS 3025 (part 21) 2014, EDTA Titrimetric method	mg/L	248	200 - 600
09	Calcium as Ca	IS 3025 (part 40) 2014, EDTA Titrimetric method	mg/L	156	75 - 200
10	Magnesium as Mg	IS 3025 (part 46) 2014, EDTA Titrimetric method	mg/L	22.3	30 - 100
11	Chloride (as Cl)	IS 3025 (part 32) 2014, Argentometric method	mg/L	144	250 - 1000

12	Total Alkalinity as CaCO ₃	IS 3025 (part 23) 2014, Titrimetric method	mg/L	280	200 - 600
13	Nitrate (as NO ₃)	IS 3025 (part 34) 2014, Chromotropic method	mg/L	6.8	45
14	Iron (as Fe)	IS 3025 (part 53) 2014, 1,10,Phenonthroline method	mg/L	0.08	0.3
15	Fluoride (as F)	APHA 23 rd Edition, 4500-F'D, Spands Method	mg/L	0.7	1.0-1.5
16	Sulphate (as SO ₄)	IS 3025 (part 24) 2014, Turbidimetric method	mg/L	40.6	200 - 400
17	BOD (3 days at 27°C)	IS 3025 (part 44) 2014, Winkler Method	mg/L	0.9	30.0
18	COD	IS 3025 (part 58) 2012, Open Reflux method	mg/L	48	250.0

- Note: 1. Odor, Turbidity is not in our NABL scope
 2. This certificate is related only to the sample tested.
 3. Sample Analysis done as per BIS/APHA method.
 4. BDL = Below Detectable Limit
 5. Samples will be destroyed after one week from the date of issue of test certificate unless otherwise specified. Perishable samples will not be retained
 6. This Test Report shall not be reproduced without written permission of the Laboratory.

Psk
 Analyzed by

R.P. Dambal
 Verified by



Authorized Signatory

R.P. Dambal
 Dr. R.P. Dambal



GENERAL ANALYTICAL LABORATORY

Estd.: 1977

Analysts of Industrial Effluent, Water, Air and Noise Pollution, Light Illumination

ISO/IEC 17025-2005 Accredited Laboratory - NABL

OHSAS 18001 : 2007

Lab: 080-2334 0395

Off: 080-2334 0396

TEST REPORT

Report No: GAL/TR/SRF/20180319

Report Date: 24/03/2018

ANALYSIS REPORT OF AMBIENT AIR QUALITY

1. Name of the Company	M/S. ANUGRAHA CHEMICALS
2. Address	No. D-46-D-50 & C-62, C-63, KSSIDC Industrial Estate, Doddaballapur-561203. Bangalore (R) Dist.
3. Name of the Location	Near Main Gate
4. Sample collected by	Raghu.G & Praveen.S. K
5. Date of Sample Collected	22/03/2018
6. Date of Analysis	23/03/2018
7. Sample number	SRF No: 20180319/ 2017-18
8. Method adopted	Cyclonic Flow Technique Method

Results:

<u>Sl. No</u>	<u>Particulars</u>	<u>Protocol</u>	<u>Units</u>	<u>Results</u>	<u>NAAQ Standards</u>
01	Lead	AAS	µg/m ³	BDL	1.0
02	Arsenic	AAS	ng/m ³	BDL	6.0
03	Nickel	AAS	ng/m ³	BDL	20.0
04	Benzene	Gas Chromatography	µg/m ³	BDL	5.0
05	Benzo Pyrene	Gas Chromatography	ng/m ³	BDL	1.0

1/1

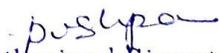
Note:

1. BDL-Below Detectable limit.
2. The results refer only to the tested samples and applicable parameter.
3. This report is not to be reproduced wholly or in a part and cannot be used as an evidence in Court of Law without prior permission writing.
4. Sample (s) or not drawn by us unless otherwise stated.
5. Samples will be destroyed after fifteen days from the date of issue of test certificate unless Otherwise specified. Perishable samples will not be retained.

END OF THE REPORT


Analyzed By


Verified By


Authorised Signatory

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16, 17th Cross, 13th Main Road,
Malleswaram, BENGALURU - 560 055

E-mail : lakkegowda@hotmail.com
Web Site : www.generalanalyticallaboratory.com