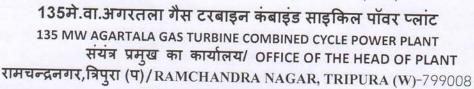


नॉर्थ ईस्टर्न इलेक्ट्रिक पॉवर कॉर्पोरेशन लिमिटेड

NORTH EASTERN ELECTRIC POWER CORPORATION LIMITED

/भारत सरकार का उद्यम|/(A Govt. of India Enterprise)







DATE: 21/11/2019

CIN - U40101ML 1976GOI001658, NO. NEEPCO/AGTCCPP/HOP/T-25(D)/VOL-I/2019-2020/ 461

To,

The Principal Chief Conservator of Forests(C), Govt. of India, Ministry of Environment & Forests, North Eastern Regional Office, Low-U-Sib, Lumbatngen, Near MTC Workshop. Shillong - 793 021.

> Sub: 135 MW Agartala Gas Turbine Combined Cycle Power Plant - Six Monthly Report on status of Environment Clearance (1st Oct,2018 to 31st March,2019).

Sir,

This has reference to the Office Memorandum No.J-1311/1/92-IA Dtd.23/01/1992 of the MOE&F, Govt. of India conveying the Environment Clearance and adherence to the various referred conditions, the Status Report of compliance on conditions by this Project are as under :-

Stipulations as brought out under Memorandum No.J-Status of compliance by Agartala Gas Turbine No. 13011/1/IA Dtd.23/01/1992 of the MOE&F, Govt. of India Combined Cycle Power Plant of NEEPCO Only natural gas is used in the main 2(i) Only natural gas is used in the main feed stock. feed stock. After commissioning of STGs in Zero discharge concepts with respect to liquid effluents 2015-16 liquid effluent is generated and may be followed and as such no liquid effluent will be discharged in environment after proper (ii) allowed to be discharged in the water bodies. Treated treatment. A scheme is already liquid effluent should be used/recycled in the envisaged to recycle the treated plant/irrigation of the green belt/agricultural fields etc. effluent water. Adequate steps should be taken for presentation and Fire protection system for machine control of fire and explosion hazards likely to be caused already exists. Fire tenders from Tripura (iii) due to storage and used of inflammable materials like State Fire Service Stationed in Plant natural gas. area all the round to combat fire. The land has been purchased directly Affected families due to acquisition of land should be from the Govt. of Tripura and no (iv) properly compensated in consultation with the State families have been affected due to the Govt. acquisition. The NOX emissions should be exceed the specified (v) standards of 50 ppm. As the site is located within 25 Within limit km. of the sanctuary. The gaseous emissions from various units should conform to the standards prescribed by the concerned These parameters are within stipulated from (vi) authorities At no time the emission level should be beyond the norms. stipulated standards. In the event of failure of any

CIN NO.U40101ML1976G01001658

Regd. Office: Brookland Compound, Lower New Colony, Shillong - 793 003 Phone No. CMD's Office (0364) 2224487/2226453, Fax - 0364-2226417



	pollution control system adopted by the unit, the respective unit should be shutdown and should not be restarted until the control measure are rectified to achieve the desired standard efficiency.	
(vii)	Adequate No. of Monitoring stations should be provided in consultation with the state Pollution control Board. Further, stack emissions should be monitored periodically. The date of stack emissions and ambient air quality should be sent to the State Pollution Control Board once in 3 months and to this Ministry once in 6 months.	Action has been taken to monitor. Quality of water is monitored at regular interval. There is minimum sound noise beyond the Power House. After installation of CEMS and online data uploading, stack emission can be viewed online on Real Time basis by CPCB and SPCB.
(viii)	A green belt of adequate width not less than 100 meters) and density should be provided all around the Power station.	A green belt with an average width of 100 meters around Power Station including office and Colony Complex with plantation of 45,081 (approx.) plants are maintained.
(ix)	A separate Environment Management Cell with suitably qualified staff to carry out the various functions should be set up under the control of Senior Executives, who will report directly to the Head of the Organization.	An Environment Management Cell is working in the Plant.
3.	Adequate financial provision should be made for implementation of these stipulations and the details of such provisions communicated to this Ministry within three months Financial provisions so made will not be utilized for any other purpose.	Funds are available.

We are also enclosing herewith the test reports (as given below) which was carried out by the Green Tech Environmental Engineer & Consultants, Guwahati in the month of May, 2019.

Assuring our best commitments.

Thanking you,

Enclo:-

- 1) Test Report of Sound Level Monitoring.
- 2) Test Report of Ambient Air.

4) Water Test Report.

Yours faithfully,

CGM(E/M) & Head of Plant,
AGTCCPP, NEEPCO Ltd.,

R.C. Nagar, Tripura (West).

CIN NO.U40101ML1976G01001658

Regd. Office: Brookland Compound, Lower New Colony, Shillong – 793 003 Phone No. CMD's Office (0364) 2224487/2226453, Fax – 0364-2226417





नारायण पथ, चम्पक नगर, ग्वाहाटी, असम-781028

House No-11, Champaknagar, Narayan Path, Bhetapara, Guwahati-781028, www.greentecheec.in Telefax -0361 2300278 Mobile: 9435046677, 9954089052, E-mail: green_pranjal@hotmail.com, info@greentecheec.in

Report N	lo:GEEC/FL/22/SLM	/2019/05/05	Date:	03/06/201	9	
Name of the Industry		Agartala Gas Turbine Combined Cycle Power Plant	Lab Id.:	GEEC/SL	M/2019/05/05	
Address	,	NEEPCO Limited, AGTCCI	PP, Ramch	andranagar	, Tripura (West	
		Noise Level Repo	7		,	
Monitorir	ng Location:	Plant	Date of M		16/05/2019	
Weather	/Wind:	Calm & Clear .	Sound Let Model	vel Meter	SLM-100, Envirotech	
Monitore	d By:	Mr. Rohan Singh	Sl.No.		13-DTH-2007	
Calibration	on certificate No:	ECL/GTEE/2018-19/MECH/1115	Calibration	n valid upto:	12/07/2019	
		Measurement Resul	ts			
SI. No.		Location	Sound Parameters Leq (d		rs Leq (dBA)	
		At Source				
1 Near Unit I 2 Near T & P Store				90		
				91.2		
3	Near Turbine			88.6		
4	Near Cooling Towe			93		
5	Near SDM Tank		83.4			
6	Near DM Water Tan	ank		87.5		
7	Near Solar Control	Room	71.4			
	A	way from Source				
8	Near ACC			68.4		
9	Near STG Building		68.4 57.8			
10	Near Office					
11	Near Station -2			64.2		
12	Health Care Unit			71.8	3	
13	Near Parking Area		65.4		1	
14	Near DG Room				1	
15	Near office			62.8	3	
Remark:	enes en en v	CPCB Limit Day time Leq < 7	75 dBA		- ALLEHON	

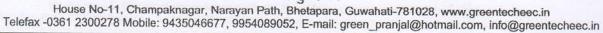
The results relate only to the item tested.

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

The test report cannot be used as an evidence in a court of law without prior written approval of the laboratory.

मुख्य कार्यालय: बीपी चा**तिहर (री**ई) मेलाचकर, शिवसागर, असम-785640 Head Office: B. P. Chaliha Road, Melachakar, Sivasagar, Assam-785640 TeleFax: 0361 2300278 rc-5

नारायण पथ, चम्पक नगर, ग्वाहाटी, असम-781028





Authorised by

Repo	ort No:GEEC/FL/22/SLN	M/2019/05/07	Date:	03/06/2	019
Name of the Industry		Agartala Gas Turbine Combined Cycle Power Plant	Lab Id.:		SLM/2019/05/07
Addr	ess	NEEPCO Limited, AGTCCPP,	Ramchandra	anagar, Tri	pura (West)
		Noise Level Re			
Moni	toring Location:	Office & Residential Area	Date of Mor	nitoring:	16/05/2019
11010000	ther/Wind:	Calm & Clear	Sound Leve Model	l Meter	SLM-100, Envirotech
Moni	tored By:	Mr.Rohan Singh	SI.No.		13-DTH-2007
Calib	ration certificate No:	ECL/GTEE/2018-19/MECH/1115	Calibration v	/alid upto:	12/07/2019
1	Car. 1 2	Measurement Re	sults		
SI.	Location		Sound Parameters Leq (dBA		neters Leq (dBA)
No.			Day	Time	Night Time
1	Guest House		54	1.8	40.4
2	B Type (B9AB & B4A/B)		53.2		39.2
. 3	Main Gate		55	5.0	37.4
4	Park		53.8		39.4
5	Recreation Club		52.4		38.3
6	Near Water Tank		53.7		39.8
7	Near Tennis Court		54.3		37.3
9	Shiv Mandir Area		50.4		37.2
10	Near C Type (C-10/11)		52.5		39.6
11	Near Welfare Centre		54.2		37.3
12	Near C Type (C-1)		53	.2	38.2

The results relate only to the item tested.

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

The test report cannot be used as an evidence in a court of law without prior written approval of the laboratory.

Page 01/01

TeleFax; 0361 2300278

मुख्य कार्यालयः बीपी चालिहा रोड, मेलाचकर, शिवसागर, असम-785640 Head Office: B. P. Chaliha Road, Melachakar, Sivasagar, Assam-785640

नारायण पथ, चम्पक नगर, गुवाहाटी, असम-781028

House No-11, Champaknagar, Narayan Path, Bhetapara, Guwahati-781028, www.greentecheec.in Telefax -0361 2300278 Mobile: 9435046677, 9954089052, E-mail: green_pranjal@hotmail.com, info@greentecheec.in



Format No.: GEEC/FM/4

TEST REPORT

Ref. No.: GEEC/W/2019	/05/16	Date of Reporting:	31/05/2019
Customer Name:	Agartala Gas Turbine Combined Cycle Power Plant		GEEC-WS/19/05/16
Customer Address:	Agartala Gas Turbine Combined Cycle Power Plant Ramchandranagar PO NEEPCO, Agartala, Tripura (W)-79908	Date of Sampling:	16/05/2019
hpling Location:	Boiler SWAS # 1	Sample Receipt Date:	20/05/2019
Sample Description:	Water	Test Start Date:	20/05/2019
Sample Drawn By:	Mr. Rohan Singh	Test Completion Date:	30/05/2019
Sample Condition:	Sealed	Sampling Method:	GEEC/SOP/02

SI. No.	DESCRIPTION	METHOD	UNIT	RESULTS	LIMITS IS:10496- 1983
1	рН	IS 3025 Part 11 1983(RA:2012)		8.66	8.5-9.5
2	TDS	IS 3025 Part 16 1984(RA:2012)	mg/l	BDL	0.05
3#	Total Hardness as CaCO ₃	IS 3025 Part 21 2009	mg/l	BDL	Nil
4	Iron	IS 3025 Part 53 2003(RA:2014)	mg/l	<0.01	0.01
5	Conductivity	IS 3025 Part 14 1984(RA:2012)	mg/l	<0.1	0.3
6	Chloride	IS 3025 Part 32 1988(RA:2014)	mg/l	<2	4

Authorised by: Laboratory In-charg

Belinda Lahor

* The results relate only to the item tested.

* BDL = Below Detection Limit, TDS = 1 mg/l, Hardness = 1 mg/l.

* The parameters marked with # are not under the scope of NABL.

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

* The test report cannot be used as an evidence in a court of law without prior written approval of the laboratory.

PAGE 1 of 1



नारायण पथ, चम्पक नगर, ग्वाहाटी, असम-781028

House No-11, Champaknagar, Narayan Path, Bhetapara, Guwahati-781028, www.greentecheec.in Telefax -0361 2300278 Mobile: 9435046677, 9954089052, E-mail: green_pranjal@hotmail.com, info@greentecheec.in

Format No.: GEEC/FM/49

TEST REPORT

Ref. No.	.: GEEC/W/2019/	05/17		Date of Reporting:	31/05/2019	
Customer Name:		Name: Agartala Gas Turbine Combined Cycle Power Plant		Lab. ID No.:	GEEC-WS/19/05/17	
Custom	er Address:	Agartala Gas Turbine Combined Power Plant Ramchandranagar PO NEEPCO, Agartala, (W)-79908	l Cycle Tripura		16/05/2019	
Samplir	ng Location:	Boiler SWAS # 2		Sample Receipt Date:	20/05/2019	
Sample	Description:	Water		Test Start Date:	20/05/2019	
Sample	Drawn By:	Mr. Rohan Singh		Test Completion Date:	30/05/2019	
Sample	Condition:	Sealed		Sampling Method:	GEEC/SOP/02	
SI. No.	DESCRIPTION	METHOD	UNIT	RESULTS	LIMITS IS:10496- 1983	
1	рН	IS 3025 Part 11 1983(RA:2012)	-	8.83	8.5-9.5	
2	TDS	IS 3025 Part 16 1984(RA:2012)	mg/l	BDL	0.05	
3#	Total Hardness as CaCO ₃	IS 3025 Part 21 2009	mg/l	BDL	Nil	

mg/l ******* End of Report**********

mg/l

mg/l

< 0.01

< 0.1

2.1

Authorised by: Laboratory In-charge

Dr. Belinda Lahon)

0.01

0.3

4

* The results relate only to the item tested.

Iron

Conductivity

Chloride

5

6

ULR Number: TC599119000000895P

* BDL = Below Detection Limit, TDS = 1 mg/l, Hardness = 1 mg/l.

* The parameters marked with # are not under the scope of NABL.

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

IS 3025 Part 53 2003(RA:2014)

IS 3025 Part 14 1984(RA:2012)

IS 3025 Part 32 1988(RA:2014)

* The test report cannot be used as an evidence in a court of law without prior written approval of the laboratory.

PAGE 1 of 1

मुख्य कार्यालय: बीपी चालिहा रोड, मेलाचकर, शिवसागर, असम-785640 Head Office: B. P. Chaliha Road, Melachakar, Sivasagar, Assam-785640 TeleFax: 0361 2300278



नारायण पथ, चम्पक नगर, गुवाहाटी, असम-781028

House No-11, Champaknagar, Narayan Path, Bhetapara, Guwahati-781028, www.greentecheec.in Telefax -0361 2300278 Mobile: 9435046677, 9954089052, E-mail: green_pranjal@hotmail.com, info@greentecheec.in

Format No.: GEEC/F

TEST REPORT

Ref. No.: GEEC/W/2019/05/19		Date of Reporting:	31/05/2019
Customer Name:	Agartala Gas Turbine Combined Cycle Power Plant	Lab. ID No.:	GEEC-WS/19/05/19
Customer Address:	Agartala Gas Turbine Combined Cycle Power Plant Ramchandranagar PO NEEPCO, Agartala, Tripura (W)-79908	Date of Sampling:	16/05/2019
Sampling Location:	Basin Tap (Guest House of Colony)	Sample Receipt Date:	20/05/2019
mple Description:	Ground Water	Test Start Date:	20/05/2019
Sample Drawn By:	Mr. Rohan Singh	Test Completion Date:	30/05/2019
Sample Condition:	Sealed	Sampling Method:	GEEC/SOP/02

					IS-1050	
SL. NO.	DESCRIPTION	METHOD	UNIT	RESULTS	Requirement (Desirable Limit)	Permissib Limit in th absence c alternate source
1	рН	IS 3025 Part 11 1983(RA:2012)	-	6.59	6.5 to 8.5	-
2	Turbidity	IS 3025 Part 10 1984(RA:2012)	NTU	1	5	10
3	TDS	IS 3025 Part 16 1984(RA:2012)	mg/l	192	500	2000
1#	Total Hardness as CaCO ₃	IS 3025 Part 21 2009	mg/l	60	300	600
5	Iron	IS 3025 Part 53 2003(RA:2014)	mg/l	0.2	0.3	1
6	Chlorides	IS 3025 Part 32 1988(RA:2014)	mg/l	40	250	1000
7	Calcium	IS 3025 Part 40 1991(RA:2014)	mg/l	10	75	200
8	Sulphates	IS 3025 Part 24 1986(RA:2014)	mg/l	60	200	400
9	Alkalinity	IS 3025 Part 23 1986(RA:2014)	mg/l	16	200	600

****** End of Report***********

Authorised by: Laboratory In-charg

Dr. Belinda Laho

^{*} The results relate only to the item tested.

^{*} The parameters marked with # are not under the scope of NABL.

^{*} The test report shall not be reproduced except in full, without written approval of the laboratory.

^{*} The test report cannot be used as an evidence in a court of law without prior written approval of the laboratory.



नारायण पथ, चम्पक नगर, ग्वाहाटी, असम-781028

House No-11, Champaknagar, Narayan Path, Bhetapara, Guwahati-781028, www.greentecheec.in Telefax -0361 2300278 Mobile: 9435046677, 9954089052, E-mail: green_pranjal@hotmail.com, info@greentecheec.in

10-099

Format No.: GEEC/FM/4

TEST REPORT

Ref. No.: GEEC/W/2019/05/18		Date of Reporting:	31/05/2019
Customer Name:	Agartala Gas Turbine Combined Cycle Power Plant	Lab. ID No.:	GEEC-WS/19/05/18
Customer Address:	Agartala Gas Turbine Combined Cycle Power Plant Ramchandranagar PO NEEPCO, Agartala, Tripura (W)-79908	Date of Sampling:	16/05/2019
eampling Location:	Tap (Office)	Sample Receipt Date:	20/05/2019
Sample Description:	Ground Water	Test Start Date:	20/05/2019
Sample Drawn By:	Mr. Rohan Singh	Test Completion Date:	30/05/2019
Sample Condition:	Sealed	Sampling Method:	GEEC/SOP/02 .

					IS-1050	0:2012
SL. NO.	DESCRIPTION	METHOD	UNIT	RESULTS	Requirement (Desirable Limit)	Permissible Limit in the absence of alternate source
	рН	IS 3025 Part 11 1983(RA:2012)		6.92	6.5 to 8.5	-
2	Turbidity	IS 3025 Part 10 1984(RA:2012)	NTU	1	5	10
3	TDS	IS 3025 Part 16 1984(RA:2012)	mg/l	212	500	2000
#	Total Hardness as CaCO ₃	IS 3025 Part 21 2009	mg/l	65	300	600
5	Iron	IS 3025 Part 53 2003(RA:2014)	mg/l	0.21	0.3	1
6	Chlorides	IS 3025 Part 32 1988(RA:2014)	mg/l	44	250	
7	Calcium	IS 3025 Part 40 1991(RA:2014)	mg/l	12		1000
8	Sulphates	IS 3025 Part 24 1986(RA:2014)			75	200
9	Alkalinity		mg/l	64	200	400
	Alkallilly	IS 3025 Part 23 1986(RA:2014)	mg/l	20	200	600

Authorised by: Laporatory In-charge

(Dr. Belinda Lahon)

मुख्य कार्यालय: बीपी चालिहा रोड, मेलाचकर, शिवसागर, असम-785640 Head Office: B. P. Chaliha Road, Melachakar, Sivasagar, Assam-785640

^{*} The results relate only to the item tested.

^{*} The parameters marked with # are not under the scope of NABL.

^{*} The test report shall not be reproduced except in full, without written approval of the laboratory.

^{*} The test report cannot be used as an evidence in a court of law without prior written approval of the laboratory.



नारायण पथ, चम्पक नगर, गुवाहाटी, असम-781028

House No-11, Champaknagar, Narayan Path, Bhetapara, Guwahati-781028, www.greentecheec.in Telefax -0361 2300278 Mobile: 9435046677, 9954089052, E-mail: green_pranjal@hotmail.com, info@greentecheec.in

TC-5991

Report No. GECC/	FL/22/STK/2019/05/20	Date:	03/06/2019
Name of the	AGARTALA GAS TURBINE	Lab Id	GEEC/STK/2019/05/20
Industry:	POWER PLANT	Edb 1d	
Address	NEEPCO, Ramchandra Nagar,	Date of Sampling	16/05/2019
	TRIPURA (WEST)	Date of Receipt	21/05/2019
		Test Start Date	21/05/2019
		Test End Date	22/05/2019
	STACK MONITOR	ING REPORT	
Stack Details:	HRSG#1	Stack Height (GL) m (Approx)	30
Fuel Used	N.G.	Stack Dia, m	3.5
Sample Porthole height (GL) m	24.05	Area in m ²	9.625
	Flow Charac	teristics	*
Ambient Temp, °C	32.5	Velocity in m/s	13.2
Stack Temp, °C	119	Flow rate m ³ /s	127.05
	Emission [Details	
Parameter		Results	CPCB Standards The Environment (Protection) Rules, 1986
Particulate Matter,	mg/Nm ³	20	
Sulpher Dioxides, (< 4	-
Oxides of Nitrogen		22	100
Carbon Monoxides	, (CO) in %	0.02	
Carbon Dioxide, (C	O ₂) %	6.2	-
Oxygen, O ₂ %		14.8	
Sampling and analy	sis is carried out as per IS: 1125	55 (Part-1, 2, 3 & 7) 198	5,
IS: 13270:1992(Re			
Equipment Details:	Stack Monitoring Kit: SMS-4 Ma	ke: Polltech Pvt.Ltd. &	Orsat Apparatus
Monitored by:	Mr. Rohan Singh		
Remarks:	Parameters tested are within the	e limit as per CPCB / Me	OEF Norms
			Lab in-Charge

The results relate only to the item tested.

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

The test report cannot be used as an evidence in a court of law without prior written approval of the laboratory



नारायण पथ, चम्पक नगर, गुवाहाटी, असम-781028

House No-11, Champaknagar, Narayan Path, Bhetapara, Guwahati-781028, www.greentecheec.in
Telefax -0361 2300278 Mobile: 9435046677, 9954089052, E-mail: green_pranjal@hotmail.com, info@greentecheec.in

GEEC/FM/49A

TC-5991

	99119000000889P	Date:	03/06/2019
Report No: GECC/F	L/22/STK/2019/05/21		GEEC/STK/2019/05/21
lame of the ndustry:	AGARTALA GAS TURBINE POWER PLANT	Lab ld	TO STOCK STATE OF THE STATE OF
Address	NEEPCO, Ramchandra Nagar,	Date of Sampling	16/05/2019
(001000	TRIPURA (WEST)	Date of Receipt	21/05/2019
		Test Start Date	21/05/2019
		Test End Date	22/05/2019
6	STACK MONITOR		
Stack Details:	HRSG#2	Stack Height (GL) m . (Approx)	30
Fuel Used	N.G.	Stack Dia, m	3.5
Sample Porthole neight (GL) m	24.05	Area in m²	9.625
loight (OZ) iii	Flow Charac	cteristics	
Ambient Temp, °C	32.5	Velocity in m/s	12.2
Stack Temp, °C	120	Flow rate m ³ /s	117.43
MELTINE TO SE	Emission	Details	
Parameter		Results	CPCB Standards The Environment (Protection) Rules, 1986
Particulate Matter,	mg/Nm³	21	•
	(SO ₂) in mg/Nm ³	< 4	-
Oxides of Nitroger		28	100
Carbon Monoxide	s. (CO) in %	0.01	-
Carbon Dioxide, (5.1	-
Ovvden O. %		15.9	-
Sampling and ana	llysis is carried out as per IS: 112	255 (Part-1, 2, 3 & 7) 19	85,
IS: 13270:1992(R	eaffirmed 1999)		
Equipment Details	1 10 0110 111	lake: Polltech Pvt.Ltd. 8	& Orsat Apparatus
Monitored by:	Mr. Rohan Singh		The state of the s
Remarks:	Parameters tested are within t	he limit as per CPCB / I	MoEF-Norms
		ENAILS	ov: Lab in-Charge

The results relate only to the item tested.

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

The test report cannot be used as an evidence in a court of law without prior written approval of the laboratory.



नारायण पथ, चम्पक नगर, गुवाहाटी, असम-781028

House No-11, Champaknagar, Narayan Path, Bhetapara, Guwahati-781028, www.greentecheec.in Telefax -0361 2300278 Mobile: 9435046677, 9954089052, E-mail: green_pranjal@hotmail.com, info@greentecheec.in GEEC/FM/49A

TC-5991

LR Number: 1C5	99119000000890P	Date:	03/06/2019	
Report No: GECC/FL/22/STK/2019/05/22 Name of the AGARTALA GAS TURBINE		Lab Id	GEEC/STK/2019/05/22	
ame of the	AGARTALA GAS TORBINE	Las is		
dustry:	POWER PLANT NEEPCO, Ramchandra Nagar,	Date of Sampling	16/05/2019	
ddress	TRIPURA (WEST)	Date of Receipt	21/05/2019	
	TRIFOTOTOTO	Test Start Date	21/05/2019	
		Test End Date	22/05/2019	
	STACK MONITOR	RING REPORT		
Stack Details:	HRSG#3	Stack Height (GL) m . (Approx)	30	
uel Used	N.G.	Stack Dia, m	3.5	
Sample Porthole	24.05	Area in m ²	9.625	
neight (GL) m	Flow Chara	cteristics		
Ambient Temp, °C	Signt Temp °C 32.5 Velocity in m/s		11.4	
Stack Temp, °C	126	Flow rate m ³ /s	109.73	
Otdott / Divipi	Emission	Details	CPCB Standards The	
Parameter		Results	Environment (Protection) Rules, 1986	
		17		
Particulate Matte	r, mg/Nm	< 4		
Sulpher Dioxides	s, (SO ₂) in mg/Nm ³	38	100	
	en (NOx) in ppm	0.01	7.1	
Carbon Monoxid	les, (CO) in %	4.3	-	
Carbon Dioxide,	(CO ₂) %	16.7	-	
Oxygen, O ₂ %		255 (Part-1, 2, 3 & 7) 1	985,	
Sampling and ar IS: 13270:1992(nalysis is carried out as per IS: 11 Reaffirmed 1999)			
Equipment Deta	1 1/1 0/10 1	Make: Politech Pvt.Ltd.	& OTSat Apparation	
Mr. Roban Singh				
Remarks:	Parameters tested are within	the limit as per CPCB	NOET NOTHS	
Tomarko	•	Authorised & &	by: Lab in-Charge	

The results relate only to the item tested.

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

The test report cannot be used as an evidence in a court of law without prior written approval of the laboratory.



नारायण पथ, चम्पक नगर, गुवाहाटी, असम-781028

House No-11, Champaknagar, Narayan Path, Bhetapara, Guwahati-781028, www.greentecheec.in Telefax -0361 2300278 Mobile: 9435046677, 9954089052, E-mail: green_pranjal@hotmail.com, info@greentecheec.in

TC-5991

JLR Number: TC59		Data	03/06/2019	
	L/22/STK/2019/05/23	Date:	GEEC/STK/2019/05/23	
ame of the dustry: AGARTALA GAS TURBINE POWER PLANT		Lab Id		
Address	NEEPCO, Ramchandra Nagar,	Date of Sampling	16/05/2019	
(ddi 000	TRIPURA (WEST)	Date of Receipt	21/05/2019	
		Test Start Date	21/05/2019	
		Test End Date	22/05/2019	
	STACK MONITOR			
Stack Details:	HRSG#4	Stack Height (GL) m . (Approx)	30	
Fuel Used	N.G.	Stack Dia, m	3.5	
Sample Porthole height (GL) m	24.05	Area in m ²	9.625	
neight (GL) in	Flow Charac	cteristics		
Ambient Temp, °C	32.5	Velocity in m/s	10.3	
Stack Temp, °C	114	Flow rate m ³ /s	99.14	
	Emission	Details		
Parameter		Results	CPCB Standards The Environment (Protection) Rules, 1986	
Particulate Matter,	mg/Nm³	15	-	
Sulpher Dioxides,		< 4		
Oxides of Nitroger		32	100	
Carbon Monoxide		0.01	-	
Carbon Dioxide, (6		
Ovygen O. %		15		
Sampling and ana IS: 13270:1992(R	lysis is carried out as per IS: 112 eaffirmed 1999)			
Equipment Details	1 10 0110 114	ake: Polltech Pvt.Ltd. 8	& Orsat Apparatus	
Monitored by:	Mr. Rohan Singh			
Remarks:	Parameters tested are within t	he limit as per CPCB / N	Motif-Norms	
		INVIE	Blackers Blacke	

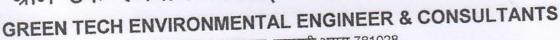
The results relate only to the item tested.

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

The test report cannot be used as an evidence in a court of law without prior written approval of the laboratory.



ग्रीन टेक एनवायर्नमेंटलइंजीनियर और कंसल्टेंट्स





नारायणपथ, चम्पकनगर, गुवाहाटी,असम-781028

House No-11, Champaknagar, Narayan Path, Bhetapara, Guwahati-781028, www.greentecheec.in Telefax -0361 2300278 Mobile: 9435046677, 9954089052, E-mail:green_pranjal@hotmail.com,info@greentecheec.in

TC5991 Format No.: GEEC/FM/48

TEST REPORT

JLR NO.: TC5991190	GEEC/AA/2019/05/19	Date of Reporting:	31/05/2019	
Test Report No:	The state of the s			
Customer Name: Agartala Gas Turbine Combined Lab. ID No.: Cycle Power Plant		Lab. ID No.:	GEEC/AA/2019/05/19	
Customer Address:	Agartala Gas Turbine Combined Cycle Power Plant Ramchandranagar, PO NEEPCO, Agartala, Tripura (W)-79908	Date of Sampling:	16/05/2019 to 17/05/2019	
Sampling Location:	Near Power House		Max.	Min.
Wind Direction/ ather Condition:	Calm and Clear	Ambient Temperature:	32.5°C	23.2°C
Enpling Condition:	In GFA and PTFE Filter Paper	Sample Receipt Date:	21/05/2019	
Equipments Details:	RDS and ADS Fine Dust Sampler	Test Start Date: 21/05/2019		
Monitored By:	Mr. Rohan Singh	Test End Date:	31/05/2019	

AMBIENT AIR QUALITY

Sampling and Analysis carried out as per GEEC/SOP/01

SI. No.	Parameters	Unit	Results	Limits	Test Method
1	Particulate Matter (PM ₁₀)	μg/m³	68	100	IS 5182(23)
2	Particulate Matter (PM _{2.5})	μg/m ³	42	60	CPCB Guidelines
3	Sulphur Dioxide (SO ₂)	µg/m ³	6	80	IS 5182(2)
4	Nitrogen Dioxide (NO ₂)	μg/m ³	9	80	IS 5182(VI)
5*	Ozone (O ₃)	µg/m ³	20	180	CPCB Guidelines
7	Carbon Monoxide (CO)	mg/m ³	<1.5	2	IS 5182(22)
7	Lead (Pb)	μg/m³	<0.01	1	IS 5182(22)
8*	Benzene (C ₆ H ₆) µg/m ³	μg/m³	<1	5	CPCB Guidelines
9*	Benzo(a)Pyrene (BaP)- Particulate Phase only	ng/m³	<1	1	CPCB Guidelines
10*	Arsenic (As)	ng/m³	<1	6	CPCB Guidelines
11*	Nickel (Ni)	ng/m ³	<1	20	CPCB Guidelines
12*	Ammonia (NH ₃)	μg/m ³	<5	400	CPCB Guidelines

Authorised by: Lab -in-Charge

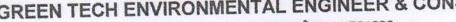
(Dr. Belinda Lahon)

^{*} The results relate only to the item tested.

^{*} The parameters marked with * are not under the scope of NABL.

^{*} The test report shall not be reproduced except in full, without written approval of the laboratory .

^{*} The report cannot be used as an evidence in a court of law without prior written approval of the laboratory.







Format No.: GEEC/FM/48

TEST REPORT

ULR NO.: TC5991190	00000886P			
Test Report No: GEEC/AA/2019/05/20 Da		Date of Reporting:	31/05/2019	
Customer Name:	Agartala Gas Turbine Combined Cycle Power Plant	ed Cycle Lab. ID No.:		19/05/19
Customer Address:	Agartala Gas Turbine Combined Cycle Power Plant Ramchandranagar, PO NEEPCO, Agartala, Tripura (W)-79908	Date of Sampling:	16/05/2019 to 17/05/2019	
Sampling Location:	Guest House (Colony)		Max.	Min.
Vind Direction/ Veather Condition:	Calm and Clear	Ambient Temperature:	32.5°C	23.2°C
Sampling Condition: In GFA and PTFE Filter Paper		Sample Receipt Date:	21/05/2019	
Equipments Details:	RDS and ADS Fine Dust Sampler	Test Start Date:	21/05/2019	
Monitored By: Mr. Rohan Singh		Test End Date:	31/05/2019	

AMBIENT AIR QUALITY

Sampling and Analysis carried out as per GEEC/SOP/01

SI. No.	Parameters	Unit	Results	Limits	Test Method
1	Particulate Matter (PM ₁₀)	μg/m³	62	100	IS 5182(23)
2	Particulate Matter (PM _{2.5})	μg/m ³	36	60	CPCB Guidelines
3	Sulphur Dioxide (SO ₂)	μg/m ³	<5	80	IS 5182(2)
4	Nitrogen Dioxide (NO ₂)	μg/m³	8	80	IS 5182(VI)
5*	Ozone (O ₃)	µg/m³	30	180	CPCB Guidelines
(*)	Carbon Monoxide (CO)	mg/m ³	<1.5	2	IS 5182(22)
7	Lead (Pb)	µg/m³	<0.01	1	IS 5182(22)
8*	Benzene (C ₆ H ₆) µg/m ³	μg/m³	<1	5	CPCB Guidelines
9*	Benzo(a)Pyrene (BaP)- Particulate Phase only	ng/m³	<1	1	CPCB Guidelines
10*	Arsenic (As)	ng/m ³	<1	6	CPCB Guidelines
11*	Nickel (Ni)	ng/m³	<1	20	CPCB Guidelines
12*	Ammonia (NH ₃)	µg/m³	<5	400	CPCB Guidelines

End of Report

Authorised by: Lab in-Charge

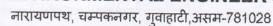
(Dr. Belinda Lahon)

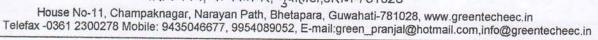
^{*} The results relate only to the item tested,

^{*} The parameters marked with * are not under the scope of NABL.

^{*} The test report shall not be reproduced except in full, without written approval of the laboratory .

^{*} The report cannot be used as an evidence in a court of law without prior written approval of the laboratory







TC5991

Format No.: GEEC/FM/48

TEST REPORT

Test Report No: GEEC/AA/2019/05/21		Date of Reporting:	31/05/2019		
Customer Name:	Agartala Gas Turbine Combined Cycle Power Plant		GEEC/AA/2019/05/21		
Customer Address:	Agartala Gas Turbine Combined Cycle Power Plant Ramchandranagar, PO NEEPCO, Agartala, Tripura (W)-79908	ver Plant nchandranagar, PO NEEPCO,		16/05/2019 to 17/05/2019	
Sampling Location:	Agartala Guest House(Rly Station)		Max.	Min	
	d Direction/ Calm and Clear Ambient Temperature:		IVIAX.	Min.	
V wather Condition:			32.5°C	23.2°C	
Sampling Condition: In GFA and PTFE Filter Paper S		Sample Receipt Date:	21/05/2019		
Equipments Details: IDDS - 1 ADS -:		Test Start Date:	21/05/2019		
Monitored By: Mr. Rohan Singh		Test End Date:	31/05/2019		

AMBIENT AIR QUALITY

Sampling and Analysis carried out as per GEEC/SOP/01

SI. No.	Parameters	Unit	Results	Limits	Test Method
1	Particulate Matter (PM ₁₀)	μg/m³	74	100	IS 5182(23)
2	Particulate Matter (PM _{2.5})	μg/m ³	45	60	CPCB Guidelines
3	Sulphur Dioxide (SO ₂)	μg/m ³	7	80	IS 5182(2)
4	Nitrogen Dioxide (NO ₂)	μg/m ³	11	80	IS 5182(VI)
5*	Ozone (O ₃)	µg/m³	10	180	CPCB Guidelines
U	Carbon Monoxide (CO)	mg/m ³	<1.5	2	IS 5182(22)
7	Lead (Pb)	μg/m³	<0.01	1	IS 5182(22)
8*	Benzene (C ₆ H ₆) μg/m ³	μg/m ³	<1	5	CPCB Guidelines
9*	Benzo(a)Pyrene (BaP)- Particulate Phase only	ng/m³	<1	1	CPCB Guidelines
	Arsenic (As)	ng/m³	<1	6	CPCB Guidelines
	Nickel (Ni)	ng/m³	<1	20	CPCB Guidelines
12*	Ammonia (NH ₃)	μg/m³	<5	400	CPCB Guidelines

Authorised by: Lab -in-Charge

(Dr. Belinda Lahon)

^{*} The results relate only to the item tested.

^{*} The parameters marked with * are not under the scope of NABL.

^{*} The test report shall not be reproduced except in full, without written approval of the laboratory

^{*} The report cannot be used as an evidence in a court of law without prior written approval of the laboratory.