रामागुण्डम
Ramagundam

NTPC Limited

सं/Ref: 09:EMG /E-02/2019 /1658

दिनांक Date: 17.09.2019

To :

The Member Secretary
T.S. Pollution Control Board,
Paryavaran Bhawan,
A-3, Industrial
Estate,Sanathnagar,
HYDERABHAD- 500 018

सेवा में :

सदस्य सचिव
ते स प्रदूषण नियंत्रण बोर्ड
पर्यावरण भवन
उद्योग संपदा
सनत नगर
हैदराबाद 500 018

Dear Sir,

प्रिय महोदय,

Sub: Environmental Statement for the Financial year **2018 – 19** -Reg.

विषय :वित्तीय वर्ष **2018 – 19** के लिए पर्यावरण संबंधी विवरण के संबंध में

Enclosed please find here-with the Environmental Statement for the financial year **2018 – 19** for NTPC-Ramagundam prepared in Form V as per the Government of India Gazette Notification dated 13th March 1992.

भारत सरकार के राजपत्र में प्रकाशित अधिसूचना 13 मार्च 1992 के अनुसार, वित्तीय वर्ष **2018 – 19** के लिये एन टी पी सी लिमि रामगंण्डम का पर्यावरण संबंधी विवरण फार्म-V में इसके साथ संलग्न पायें.

Thanking you,

सधन्यवाद

Yours faithfully/भवदीय,
कृते एन. टी. पी. सी. लिमिटेड.

17/09

(PUSHPENDRA KUMAR LAAD) / (पुष्पेंद्र कुमार लाड़)
(GENERAL MANAGER (T S) / (तकनीकी सेवाएं)

G.L. 18/09/19
Office of the Environmental Engineer
Telangana State Pollution Control Board
Regional Office, Ramagundam,
H. No. Sp. 3, NTPC, TTS,
Near Zilla Parishad High School
JYOTHINAGAR 505 215,
Dist. Peddapalli

The Environmental Engineer/पर्यावरण अभियंता
TS Pollution Control Board /ते स प्रदूषण नियंत्रण बोर्ड
Regional Office: Ramagundam
NTPC- TTS, Jyothinagar 505 215, District, PEDDAPALLI

RAMAGUNDAM SUPER THERMAL POWER STATION
NATIONAL THERMAL POWER CORPORATION LIMITED
P.O. JYOTHI NAGAR DIST: KARIM NAGAR

ENVIRONMENTAL STATEMENT FOR THE YEAR 2018-19

Submission

The Environmental Statement of NTPC- Ramagundam for the financial year 2018-2019 has been prepared in-house by the available in-company professional after audit of the system/schedules of monitoring and the reports generated during the year. The methodology adopted involved a survey of the monitoring program and procedures and critical evaluation and analysis of the data.

The Environmental statement for the year 2018-19 highlights the major Environmental Conservation and operation measures adopted at NTPC- Ramagundam during the period under reference as well as the improvements or change in the performance in these areas compared to the previous years.

Furnished herewith please

Date 17/09/2019

NTPC Limited ★ JYOTHINAGAR Dt. Peddapalli Pin: 505 215 Telangana State ★ Ramagundam Super Thermal Power Station

I/c **Business Unit Head**

प्रेम प्रकाश **PREM PARKASH**
मुख्य महाप्रबंधक Chief General Manager (Project)
Telangana STPP, NTPC Limited
Ramagundam, Jyothinagar - 505 215 (T.S.)

FORM-V

ENVIRONMENTAL STATEMENT FOR THE FINANCIAL YEAR ENDING 31st MARCH 2019

PART-A

I	Name and address of the Owner/Occupier of the industry operation or process	**Dr. P.P.Kulkarni** **Executive Director** NTPC-RAMAGUNDAM, P.O.:JYOTHINAGAR, RAMAGUNDAM, DIST: PEDDAPALLI (TS)
II	Industry Category (STC/SIC Code)	N/A
III	Production Capacity	2600 MW
IV	Year of Establishment	UNIT- I 200 MW - 1983 October UNIT- II 200 MW - 1984 May UNIT- III 200 MW - 1984 December UNIT- IV 500 MW - 1988 June UNIT- V 500 MW - 1989 March UNIT- VI 500 MW - 1989 October UNIT- VII 500 MW - 2004 September
V	Date of last Environmental Statement submitted	28.09.2018

PART – B

WATER AND RAW MATERIAL CONSUMPTION

(i). Water Consumption (m^3/day)

a	**For Process**	i)DM Water for boiler feed = 2942 ii)Ash water + D.M. effluent used for regeneration = 6133 + 441 = 6574	Total 9,516	Total effluent recirulated **=1,16,510 m^3/day**
b	**For Cooling**	i)Condenser cooling water = 1,45,547 ii)Clarified water for auxiliary cooling = 71,850	Total 1,74,560	
c	**For Domestic**		11,525	
	Total		**2,38,432**	

Process (Plant) Water Drawn Per Product Output (Liter/Kilo Watt Hour):

Name of Products	Process water consumption per unit of product output	
	2017-18	**2018-19**
Electricity generation 18547.900 MU	**0.1355 Lit/kWH**	0.1285 Lit/kWH

ii. Raw material consumption

Name of raw materials	Name of products	Consumption of raw material per unit of output	
		2017-18	2018-19
a. Coal (kg/kwh)	Electricity generation	0.631	0.623
b. Fuel Oil (ml/kwh)		0.282	0.329

PART – C

POLLUTION DISCHARGE TO ENVIRONMENT/UNIT OF OUTPUT

I. Wastewater Discharged (2018-2019)

Plant Effluent: 2,450 m^3/day, Sewage Effluent: 2,800 m^3/day

Pollutants	Quantity of Pollutant (kg/day)	Concentration of Pollutant (mg/l)	% of variation from prescribed standard with reasons
i. Process Effluent			
TSS	156.8	64.0	Nil
ii. Domestic Effluent			
BOD	84.0	30.5	Nil
TSS	106.4	38.0	Nil

II. Stack Emissions:

Flue Gas Flow Rate	
Stage – I (3 units of 200 MW)	924315 Nm^3/Hr/Unit
Stage – II (3 units of 500 MW)	3386930 Nm^3/Hr/Unit
Stage – III (1 unit of 500 MW)	2436873 Nm^3/Hr/Unit

Pollutant	Quantity of Pollutant Discharged (kg/day)	Concentration of Pollutant Discharged (mg/Nm^3)	% of Variation from Prescribed Standard with Reasons.
Stage – I : SPM	5625	84.53	Nil
Stage – II : SPM	23737	97.33	Nil
Stage – III : SPM	3604	61.63	Nil

PART – D

HAZARDOUS WASTES

(as specified under Hazardous waste/Management and handling Rules 1989)

Hazardous Wastes	Total Quantity	
	During the previous financial year	During the current financial year
a. From Process	No hazardous waste is generated in the process of electricity generation. However, hazardous waste generated during maintenance activities are given as per the following statement	
b. From Pollution Control facilities		

STATEMENT OF HAZARDOUS WASTE INVENTORY

S. No	Physical Form with Description	Total Quantity stock (Approx. Volume/ Weight)	
		as on 31.03.2018	as on 31.03.2019
1)	Used lube oil	19.855 MT (86.97 MT disposed in 2017-18)	81.74 MT (99.84 MT disposed in 2018-19)
2)	Used oil & grease drums	631 no's	606 no's
3)	Used lead acid batteries	Nil 279 nos and 3.357MT disposed in 2017-18)	Nil
4)	Detoxified containers and container liners of Hazardous waste and chemicals	Nil	Nil
5)	Used resins	Nil (790Lts disposed in 2017-18)	Nil
6)	Used torch cells	Nil	Nil
7)	Oil soaked cotton	665 Kg (1140 Kg disposed in 2017-18)	935 Kgs
8)	Oil Soaked fuller earth	1920 Kgl (2470 Kgs disposed in 2017-18)	4710 Kg

S. No	Physical Form with Description	Total Quantity stock (Approx. Volume/ Weight)	
		as on 31.03.2018	as on 31.03.2019
9)	E Waste	0.271 MT (7.5MT disposed in 2017-18)	0.234 MT (10 MT disposed in 2018-19)

PART-E

SOLID WASTES

Sl. No.	Description	Total Quantity	
		During the previous financial year (2017-18)	During the Current financial year (2018-19)
A	**From Process**		
	i. Mill Rejects	27,077 MT	25,415 MT
	ii. Clarifier sludge	Negligible	Negligible
B.	**From Pollution Control Facility**		
	i. Ash collected from ESP & Boiler furnace bottom	45,46,704 MT	42,75,189 MT
	ii. Sewage sludge	NIL	NIL
C.	**(1) Quantity recycled or re-utilized within the unit**		
	i. Ash (For Dyke raising, low lying area fill, Own Brick manufacturing units, etc)	10,52,510 MT	13,72,313 MT
	ii. Mill Rejects (For Dyke raising temporary approach road)	NIL	NIL
	(2) Sold		
	i. Fly ash sold to Cement/RMC Manufacturing industries	4,25,982 MT	6,70,500 MT
	ii. Mill Rejects	NIL	
	(3) Disposed		
	i. Ash (disposed to ash pond)	(-) 43,311 MT	(-) 4,40,886 MT
	ii. Ash (issued to brick/RMC industries & others at free of cost)	31,11,525 MT	26,73,262 MT
	iii. Sewage Sludge (Taken by near-by villagers for manure at free of cost)	NIL	NIL
	iv.Mill Rejects	NIL	NIL

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		as on 31.03.2018	as on 31.03.2019
9)	E Waste	0.271 MT (7.5MT disposed in 2017-18)	0.234 MT (10 MT disposed in 2018-19)

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	iii. Sewage Sludge (Taken by near-by villagers for manure at free of cost)	NIL	NIL
	iv.Mill Rejects	NIL	NIL

PART – H

ADDITIONAL MEASURES/INVESTMENT PROPOSAL FOR ENVIRONMENT PROTECTION INCLUDING ABATEMENT OF POLLUTION PREVENTION OF POLLUTION

- Ammonia dosing system for effective control of stack particulate emission for Stage –II (Units-4, 5 & 6).

PART – I

ANY OTHER MEASURES FOR IMPROVING THE QUALITY OF THE ENVIRONMENT

- Total 19,000 planted for afforestation & saplings distributed.
- All the Stage-I, II and III units are provided with high efficient Electro-static Precipitators (ESP) of more than 99.5% efficiency and are in operation.
- The ash pond water generated is brought back to the Ash Water Recirculation System (AWRS), treated, mixed with other plant effluents and is reused for ash handling.
- Liquid Waste Treatment Plant (LWTP) to conserve water by increasing Cycle of Concentration (COC) of cooling water has been in operation.
- Dry Ash Extraction and Transportation Plant (DAETP) are in operation enabling issue of Ash to Cement, RMC and brick manufacturing industries.
- Rail loading facility is set up for bulk transportation of fly ash to cement industries.

Date: 17/09/19

NTPC Limited ★ JYOTHINAGAR Dt. Peddapalli Pin: 505 215 Telangana State ★ Ramagundam Super Thermal Power Station

Signature

प्रेम प्रकाश PREM PARKASH
मुख्य महाप्रबंधक Chief General Manager (Project)
Telangana STPP, NTPC Limited
Ramagundam, Jyothinagar - 505 215 (T.S.)