एनटीपीसी NTPC

ISO 14001 DNV REGISTERED FIRM

रामगुण्डम
RAMAGUNDAM

Ref.No:09/EMG/A1/2017/ 663

Date: 20.05.2017

To

THE DIRECTOR
Regional Office (SEZ)
Ministry of Environment Forests & Climate Change
1st and 2nd Floors, Handloom Export Promotional Council
4 Cathedral Garden Road
Nungambakkam, Chennai -560 034

Dear Sir

Sub: Six Monthly Compliance report of EC issued to NTPC Ramagundam STPP Stage-III (1X500MW) -Reg

We are herewith submitting the six monthly compliance reports for Environmental Clearance given to our station pertaining to the period **October 2016 to March 2017**. Also we are submitting the stack data, ambient air quality data and dust concentration data for the period along with report. Also please find enclosed the Soft copy of the report in CD.

Thanking you

Yours faithfully
For NTPC Ltd

(Y.S.GUPTA)
Additional General Manager (EMG)

STATUS OF IMPLEMENTATION OF CONDITIONS STIPULATED IN ENVIRONMENTAL CLEARANCE

NAME OF THE PROJECT: RAMAGUNDAM STPP STAGE-III (1X500MW)

LETTER NO: OMNOJ-1301/20/94-IA-II DATED 25/09/1995.

S. No.	STIPULATIONS	STATUS AS ON 31.03.2017
1.	All the conditions stipulated by the State Pollution Control Board shall be implemented effectively.	All the conditions stipulated by the Telangana State Pollution Control Board (TSPCB) are being implemented effectively.
2.	A stack of height not less than 275 meters shall be provided along with stack monitoring devices.	A Stack height of 275 meter equipped with adequate stack monitoring facilities has been provided.
3.	The Electrostatic Precipitators having efficiency of not less than 99.8 percent shall be installed.	ESP having more than 99.8% efficiency have been provided.
4.	The particulate emission shall not exceed the prescribed limit of 150 mg/Nm^3 at any time.	Particulate emissions are being maintained within the prescribed limit of 115 mg/Nm^3 by Telangana SPCB during the entire operation phase of the plan.
5.	Space provision shall be made for installation of FGD plant, if felt necessary, at future time.	Adequate Space has been provided in the layout for installation of FGD plant in future.
6.	Regular monitoring of air quality (at lest two days a week) in and around the power plant shall be carried out and records maintained. Periodic report (on six monthly basis) on air quality shall be submitted to this Ministry.	Ambient Air Quality monitoring for the station for PM_{10}, $PM_{2.5}$, SO_2 and NO_x is being carried out twice a week at 3 locations identified with TSPCB through MoEF&CC recognized laboratory and record are maintained periodically. Other parameters as per NAAQ standards are being monitored and submitted along with this report.
7.	Recycling and reuse of ash pond effluents shall be undertaken to the extent possible. There shall be no direct discharge into the river Godavari.	The station has AWRS along with treatment system and the ash pond water is treated and reused to the maximum extent. In addition, scheme has been developed for augmenting the existing system and contract awarded and likely to be completed by May 2018.
8.	The proposed study on leaching of heavy metals from the ash pond to ground water will be undertaken early and report furnished to this Ministry. Based on the results of the study, corrective measures if any felt necessary shall be implemented.	A geo-hydrological study on leaching of heavy metals from the ash pond to ground water has been completed under the Indo-Dutch collaboration and the report was also submitted to MoEF&CC on 02.06.1997.
9.	NOC from State Pollution Control Board shall be obtained and furnished.	No Objection Certificate (NOC) was obtained from Telangana State Pollution Control Board (TSPCB) and submitted to MoEF&CC on 23.08.1999.

S. No.	STIPULATIONS	STATUS AS ON 31.03.2017
10.	Dust suppression and dust extraction devices shall be installed in the coal handling areas to ensure that the level of dust is well within the prescribed limits.	Adequate no. of Dust Suppression and Extraction System are already provided in coal handling areas in order to ensure that the level of dust is well within the prescribed limits.
11.	Closed circuit cooling with induced draft cooling tower shall be provided.	Closed cycle cooling system with induced draft cooling towers has been provided.
12.	The workers in the high noise areas will be provided with ear protection devices.	The workers in the high noise area are provided with appropriate ear protection devices.
13.	A workable plan for ash Utilisation starting with at least 20% in the first year and gradually increasing by 10 during subsequent years so as to achieve 100% Utilisation by the end of the ninth year shall be prepared and submitted to this Ministry within six months.	The stage III has been provided with 100% Dry ash extraction system since the inception stage itself. The dry ash is being issued to manufacturers of cement, RMC and brick/blocks. Balance ash of Stage III is being issued to mine stowing and clay brick manufacturers. Revised Ash Utilization Plan submitted to MoEF&CC on 03.08.2000 and the same is being implemented. In compliance to the latest fly ash notification dated 03.11.2009, revised action plan has also been submitted. In FY 2016-17 the station has achieved ash utilization of 93.16%. For 100% ash utilization, station has created following facilities: 1. Station has installed Full Fledged Dry Ash Extraction System. 2. Rail loading facilities commissioned in unit 4&5 to meet the distance customer's demand. 3. Pond ash is utilized in Mine stowing purpose, ash dyke raising, clay brick units, etc.
14.	In order to conserve water at thermal power station, efforts should be made to utilize the treated water to the maximum extent possible.	1. The treated DM effluent, Coal settling ponds effluent and plant effluent are reused for ash handling. The cooling tower blow down is reused in dust suppression system and as service water. 2. To conserve precious water a closed circuit cooling water system with induced draft cooling towers has been adopted. For further reducing water consumption, cooling water treatment is being carried out by chemical dosing to operate the cooling water system at increased COC.
15.	Liquid effluents shall be treated to conform to the standards prescribed by State/Central Pollution Control Board.	An integrated Effluent Treatment Plant (ETP) cum Ash Water Recirculation System (AWRS) has been provided at the station. All effluents from plant area are finally treated and effluent confirming to the standards by SPCB/CPCB are discharged from the plant.

S. No.	STIPULATIONS	STATUS AS ON 31.03.2017
16.	Adequate measures for protection against various hazards such as fire shall be taken to the satisfaction of the respective authorities concerned.	Extensive Fire detection and protection system comprises of adequate piping, hydrants, valves, instrumentation, hoses, nozzles, hose boxes/stations etc. covering the entire power station including all the auxiliaries and buildings in the plant area fitted in the entire power station including all the auxiliaries and buildings in the plant area shall be implemented are provided to the satisfaction of the respective authorities concerned.
17.	Green belt of adequate width shall be developed all around the power plant by selecting suitable species in consultation with the authorities of State Forest Department.	Already green belt has been developed in the available areas of Main plant, township, around stock pile of the coal and other material, road sides, internal roads, around ash pond or dump area, etc.
18.	As the liquid effluents are finally being discharged into river Godavari, a study on bio-magnification of heavy metals in the aquatic life may be taken up and the report submitted to this Ministry.	The study on bio-magnification of heavy metals in the aquatic life was undertaken through M/s. Shriram Institute of Industrial Research, Delhi and the report has been forwarded to MoEF&CC vide letter dated 16.08.2004.
19.	During ash pond reclamation, the selection of species to be planted may be made very carefully taking into consideration the nature of the soil and the total climatic conditions in consultation with the authorities of the State Forest Department.	A pioneering attempt of growing selected species like *Casuarinas Equisetifolia, Acacia Auriculiformis, Cassia Siamea, Eucalyptus Globules* on the ash directly has already been successfully implemented in the abandoned temporary ash pond of RSTPS (before 1990). In the present ash pond reclamation has not yet started. Shall be complied as and when the ash pond is reclaimed.
20.	Stack data to be furnished within three months.	Data is regularly being furnished through six monthly compliance reports. Continuous emission monitoring system (CEMS) for gaseous emissions also has been installed and being monitored continuously.
21.	Information on change of emission load with ESP field failures may be furnished.	Adequate care has been taken in the ESP design and function to ensure emission within stipulated standards all the times.
22.	Copy of the confirmation regarding coal linkage to be provided.	Coal linkage had been accorded vide letter dated 02.09.1999. A copy of this letter is submitted to MoEF&CC on 03.08.2000.
23.	Only washed coal shall be used for the project. Fuel; analysis of the washed coal so used shall be carried out every month and records maintained. The analysis report shall form part of the six monthly report to be submitted to this Ministry.	Permission has been granted for uses of raw coal vide MoEF&CC letter dated 14.12.1998.

S. No.	STIPULATIONS	STATUS AS ON 31.03.2017
24.	Reduction in fresh water requirement may be examined taking into account the plant as a combined unit by adopting suitable size of the condenser, flow rate and drift.	The closed cooling water system along with dedicated treatment system for CW water enabled the COC increase from 2.0 to 3.5, which has reduced the water requirement. Blow down of CW system is used for equipment cooling and service water purpose before joining plant effluent.
25.	Separate funds should be allocated for implementation of environment protection measures along with item wise breakup. These costs should be included as part of the project cost. The funds earmarked for the environmental protection measures should not be diverted for other purposes and year wise expenditure should be reported to this Ministry.	The funds on environmental protection measures along with item – wise break-up is provided in the project cost. The total funds earmarked for environmental protection has not been diverted for other purposes.
26.	Regional office of this Ministry at Bangalore will monitor the implementation of above conditions.	Noted.
27.	The project authorities shall submit to this Ministry a half yearly report on the implementation of the stipulated conditions and environmental safeguards.	This report provides the latest status for the period of October 2016 to March 2017 of the implementation of stipulated conditions and environmental safeguards along with soft copy.

STATUS OF IMPLEMENTATION OF CONDITIONS STIPULATED IN ENVIRONMENTAL CLEARANCE

NAME OF THE PROJECT: RAMAGUNDAM STPP STAGE-III (1X500MW)
LETTER NO.J.13011/20/94-I AII (T) DT. NOVEMBER 8, 2000

S. NO.	STIPULATIONS	STATUS AS ON 31.03.2017
1.	All the stipulations made in our environmental clearance letter dated 25th September, 1995 referred to above should be strictly implemented	Status is enclosed separately.
2.	100% fly ash utilization should be ensured by 9th year as per the broad utilization Plan submitted along with NTPC's communication no. CC: ESE: 3100:2000: GEN: 4B dated 3rd August 2000.	The stage III has been provided with 100% Dry ash extraction system since the inception stage itself. The dry ash is being issued to manufacturers of cement, RMC and brick/blocks. Balance ash of Stage III is being issued to mine stowing and clay brick manufacturers. Revised Ash Utilization Plan submitted to MoEF&CC on 03.08.2000 and the same is being implemented. In compliance to latest fly ash notification dated 03.11.2009, revised action plan has also been submitted. In FY 2016-17 the station has achieved ash utilization of 93.16%. For 100% ash utilization, station has created following facilities. 1. Station has installed Full Fledged Dry Ash Extraction System 2. Rail loading facilities commissioned in unit 4&5 to meet the distance customer's demand. 3. Pond ash is utilized in Mine stowing purpose, ash dyke raising, clay brick units, etc.
3.	The findings of the study on Bio-magnification of heavy metals in the aquatic life due to discharge of liquid effluents into Godavari river should be submitted along with the Management Plan within one year.	The study was undertaken through M/s. Shriram Institute of Industrial Research, Delhi and the report has been forwarded to MoEF&CC vide letter dated 16.08.2004.
4.	A copy of the Geo-hydrological study under Indo-Dutch collaboration should be submitted along with the plans for necessary corrective measures to avoid leaching of heavy metals from ash pond area to ground water.	A Geo-hydrological study under the Indo-Dutch collaboration has been completed. The report was submitted to MoEF on 2nd June, 1997. (A detailed study to understand Geology of N2 Ash Pond as recommended in the Indo-Dutch Report has been completed.)
5.	Rs.162.38 crores earmarked for environmental measures should not be diverted for any other activity and provision should be made for additional funds, if required.	The earmarked amount of environmental measures was not diverted for any other activity. Any additional funds required for environmental mitigation measures would be met from miscellaneous fund kept in the Operation & Maintenance fund kept for the project.

TABLE-1: AMBIENT AIR QUALITY MONITORING DATA FOR OCT ' 2016 TO MARCH '2017

Month/Date	Location	Concentration ($\mu g/m^3$)			
		PM-10	PM-2.5	SO2	NO_x
OCTOBER'16					
03.10.2016	Balancing Reservoir	36	18	21	18
	Ramagundam Pump House	29	15	22	17
	Guest House	38	17	24	20
07.10.2016	Balancing Reservoir	35	18	20	17
	Ramagundam Pump House	38	19	21	18
	Guest House	39	22	25	19
10.10.2016	Balancing Reservoir	34	20	24	20
	Ramagundam Pump House	33	16	21	16
	Guest House	43	21	24	18
14.10.2016	Balancing Reservoir	36	19	21	17
	Ramagundam Pump House	34	20	22	18
	Guest House	40	21	23	19
17.10.2016	Balancing Reservoir	35	18	21	17
	Ramagundam Pump House	32	15	22	21
	Guest House	39	19	20	18
21.10.2016	Balancing Reservoir	35	18	19	17
	Ramagundam Pump House	34	15	24	20
	Guest House	37	18	20	16
24.10.2016	Balancing Reservoir	35	17	21	18
	Ramagundam Pump House	33	18	22	17
	Guest House	39	23	24	19
28.10.2016	Balancing Reservoir	34	16	21	20
	Ramagundam Pump House	36	18	23	18
	Guest House	41	21	22	17
31.10.2016	Balancing Reservoir	38	20	22	19
	Ramagundam Pump House	31	17	24	18
	Guest House	39	19	26	21
NOVEMBER'16					
04.11.2016	Balancing Reservoir	37	20	21	18
	Ramagundam Pump House	36	18	23	19
	Guest House	40	21	27	22
07.11.2016	Balancing Reservoir	35	20	22	20
	Ramagundam Pump House	33	17	21	18
	Guest House	41	19	24	20
11.11.2016	Balancing Reservoir	34	17	25	19
	Ramagundam Pump House	31	16	20	16
	Guest House	40	22	27	21
14.11.2016	Balancing Reservoir	35	20	23	19
	Ramagundam Pump House	33	17	21	18
	Guest House	42	22	25	20
18.11.2016	Balancing Reservoir	36	18	22	20
	Ramagundam Pump House	32	16	20	17
	Guest House	39	21	24	21
21.11.2016	Balancing Reservoir	34	18	23	19
	Ramagundam Pump House	31	16	21	17
	Guest House	42	24	26	22
25.11.2016	Balancing Reservoir	36	19	24	21
	Ramagundam Pump House	33	17	21	16
	Guest House	41	23	24	20

TABLE-1: AMBIENT AIR QUALITY MONITORING DATA FOR OCT ' 2016 TO MARCH '2017

Month/Date	Location	Concentration ($\mu g/m^3$)			
		PM-10	PM-2.5	SO2	NO_x
DECEMBER'16					
05.12.2016	Balancing Reservoir	45	24	24	20
	Ramagundam Pump House	37	20	28	15
	Guest House	42	22	20	17
06.12.2016	Balancing Reservoir	40	19	25	20
	Ramagundam Pump House	44	23	26	21
	Guest House	43	22	28	23
12.12.2016	Balancing Reservoir	48	24	25	19
	Ramagundam Pump House	39	19	23	17
	Guest House	37	18	21	15
13.12.2016	Balancing Reservoir	42	21	26	20
	Ramagundam Pump House	36	17	19	14
	Guest House	41	20	24	18
19.12.2016	Balancing Reservoir	44	22	23	20
	Ramagundam Pump House	45	24	22	18
	Guest House	38	18	26	19
20.12.2016	Balancing Reservoir	37	19	24	21
	Ramagundam Pump House	34	17	19	14
	Guest House	42	22	26	20
26.12.2016	Balancing Reservoir	45	23	24	19
	Ramagundam Pump House	39	19	20	15
	Guest House	42	20	26	18
27.12.2016	Balancing Reservoir	39	19	25	22
	Ramagundam Pump House	35	18	23	17
	Guest House	45	23	26	21
JANUARY'17					
02.01.2017	Balancing Reservoir	48	26	25	21
	Ramagundam Pump House	39	22	24	19
	Guest House	44	24	22	16
03.01.2017	Balancing Reservoir	41	18	25	21
	Ramagundam Pump House	42	24	28	22
	Guest House	43	22	28	23
09.01.2017	Balancing Reservoir	45	25	26	20
	Ramagundam Pump House	41	20	25	18
	Guest House	39	21	24	17
10.01.2017	Balancing Reservoir	46	23	28	21
	Ramagundam Pump House	38	19	21	16
	Guest House	43	23	26	19
16.01.2017	Balancing Reservoir	47	24	24	21
	Ramagundam Pump House	42	21	24	20
	Guest House	40	19	23	18
17.01.2017	Balancing Reservoir	40	20	25	21
	Ramagundam Pump House	37	18	20	17
	Guest House	41	22	24	19
23.01.2017	Balancing Reservoir	43	23	26	20
	Ramagundam Pump House	41	20	22	18
	Guest House	42	18	24	17
24.01.2017	Balancing Reservoir	42	21	27	21
	Ramagundam Pump House	38	19	24	18
	Guest House	40	18	24	18
30.01.2017	Balancing Reservoir	41	20	25	20
	Ramagundam Pump House	39	17	22	16
	Guest House	42	21	27	20
31.01.2017	Balancing Reservoir	44	23	26	23
	Ramagundam Pump House	39	20	23	19
	Guest House	37	17	24	18

TABLE-1: AMBIENT AIR QUALITY MONITORING DATA FOR OCT ' 2016 TO MARCH '2017

Month/Date	Location	Concentration (µg/m^3)			
		PM-10	PM-2.5	SO2	NO_X
FEBRUARY'17					
06.02.2017	Balancing Reservoir	51	29	27	23
	Ramagundam Pump House	41	24	26	21
	Guest House	47	26	25	18
07.02.2017	Balancing Reservoir	49	27	26	22
	Ramagundam Pump House	42	23	27	22
	Guest House	47	25	28	21
13.02.2017	Balancing Reservoir	48	27	28	22
	Ramagundam Pump House	41	21	24	20
	Guest House	44	23	26	19
14.02.2017	Balancing Reservoir	49	25	29	23
	Ramagundam Pump House	40	21	23	18
	Guest House	45	24	27	21
20.02.2017	Balancing Reservoir	49	26	25	21
	Ramagundam Pump House	41	23	24	20
	Guest House	44	22	25	19
21.02.2017	Balancing Reservoir	45	24	27	23
	Ramagundam Pump House	40	21	22	19
	Guest House	44	23	25	21
27.02.2017	Balancing Reservoir	46	26	28	22
	Ramagundam Pump House	41	22	24	20
	Guest House	44	20	26	19
28.02.2017	Balancing Reservoir	45	23	29	23
	Ramagundam Pump House	40	21	25	20
	Guest House	43	20	26	21
MARCH'17					
06.03.2017	Balancing Reservoir	53	31	29	24
	Ramagundam Pump House	44	26	27	23
	Guest House	48	27	24	19
07.03.2017	Balancing Reservoir	51	29	28	24
	Ramagundam Pump House	43	25	28	21
	Guest House	46	26	25	22
13.03.2017	Balancing Reservoir	50	28	26	21
	Ramagundam Pump House	43	22	25	20
	Guest House	46	24	23	19
14.03.2017	Balancing Reservoir	52	26	29	22
	Ramagundam Pump House	42	23	22	20
	Guest House	47	25	26	22
20.03.2017	Balancing Reservoir	51	27	24	23
	Ramagundam Pump House	43	24	25	22
	Guest House	47	25	26	21
21.03.2017	Balancing Reservoir	49	24	29	23
	Ramagundam Pump House	44	22	24	20
	Guest House	46	23	25	21
27.03.2017	Balancing Reservoir	49	25	27	21
	Ramagundam Pump House	42	23	25	20
	Guest House	46	20	26	20
28.03.2017	Balancing Reservoir	48	23	28	23
	Ramagundam Pump House	41	22	24	20
	Guest House	45	20	26	21

OTHER PARAMETERS AS PER NAAQ STANDARDS

DATE/LOCATION	Ozone(µg/m3)			CO (µg/m3)		
28.10.2016	6 AM-2 PM	2PM - 10PM	10 PM - 6 AM	6 AM-2 PM	2PM - 10PM	10 PM - 6 AM
Balancing Reservoir	51	38	34	0.5	0.4	0.4
Ramagundam Pump House	38	27	22	0.5	<0.1	<0.1
Guest House	34	29	20	0.4	0.3	<0.1
	Pb	NH3	C6H6	B(a)P	AS	Ni
	(µg/m3)	(µg/m3)	(µg/m3)	ng/m3	ng/m3	ng/m3
Balancing Reservoir	<0.001	64	<0.1	<0.5	<2.0	<2.0
Ramagundam Pump House	<0.001	56	<0.1	<0.5	<2.0	<2.0
Guest House	<0.001	42	<0.1	<0.5	<2.0	<2.0

21.11.2016	ozone(µg/m3)			CO (µg/m3)		
	6 AM-2 PM	2PM - 10PM	10 PM - 6 AM	6 AM-2 PM	2PM - 10PM	10 PM - 6 AM
Balancing Reservoir	54	42	36	0.6	0.5	0.4
Ramagundam Pump House	40	29	24	0.6	<0.1	<0.1
Guest House	36	31	22	0.5	0.4	<0.1
	Pb	NH3	C6H6	B(a)P	AS	Ni
	(µg/m3)	(µg/m3)	(µg/m3)	ng/m3	ng/m3	ng/m3
Balancing Reservoir	<0.001	66	<0.1	<0.5	<2.0	<2.0
Ramagundam Pump House	<0.001	58	<0.1	<0.5	<2.0	<2.0
Guest House	<0.001	44	<0.1	<0.5	<2.0	<2.0

27.12.2016	Ozone(µg/m3)			CO (µg/m3)		
	6 AM-2 PM	2PM - 10PM	10 PM - 6 AM	6 AM-2 PM	2PM - 10PM	10 PM - 6 AM
Balancing Reservoir	46	40	33	0.5	0.4	0.2
Ramagundam Pump House	42	33	22	0.5	<0.1	<0.1
Guest House	34	30	19	0.4	0.3	<0.1
	Pb	NH3	C6H6	B(a)P	AS	Ni
	(µg/m3)	(µg/m3)	(µg/m3)	ng/m3	ng/m3	ng/m3
Balancing Reservoir	<0.001	52	<0.1	<0.5	<2.0	<2.0
Ramagundam Pump House	<0.001	49	<0.1	<0.5	<2.0	<2.0
Guest House	<0.001	38	<0.1	<0.5	<2.0	<2.0

30.01.2017	Ozone(µg/m3)			CO (µg/m3)		
	6 AM-2 PM	2PM - 10PM	10 PM - 6 AM	6 AM-2 PM	2PM - 10PM	10 PM - 6 AM
Balancing Reservoir	44	38	31	0.5	0.4	0.2
Ramagundam Pump House	40	31	20	0.4	<0.1	<0.1
Guest House	32	28	17	0.3	0.2	<0.1
	Pb	NH3	C6H6	B(a)P	AS	Ni
	(µg/m3)	(µg/m3)	(µg/m3)	ng/m3	ng/m3	ng/m3
Balancing Reservoir	<0.001	49	<0.1	<0.5	<2.0	<2.0
Ramagundam Pump House	<0.001	46	<0.1	<0.5	<2.0	<2.0
Guest House	<0.001	35	<0.1	<0.5	<2.0	<2.0

23.02.2017	Ozone(µg/m3)			CO (µg/m3)		
	6 AM-2 PM	2PM - 10PM	10 PM - 6 AM	6 AM-2 PM	2PM - 10PM	10 PM - 6 AM
Balancing Reservoir	46	40	33	0.6	0.5	0.3
Ramagundam Pump House	42	34	23	0.5	<0.1	<0.1
Guest House	34	30	19	0.4	0.3	<0.1
	Pb	**NH3**	**C6H6**	**B(a)P**	**AS**	**Ni**
	(µg/m3)	**(µg/m3)**	**(µg/m3)**	**ng/m3**	**ng/m3**	**ng/m3**
Balancing Reservoir	<0.001	51	<0.1	<0.5	<2.0	<2.0
Ramagundam Pump House	<0.001	48	<0.1	<0.5	<2.0	<2.0
Guest House	<0.001	37	<0.1	<0.5	<2.0	<2.0

18.03.2017	Ozone(µg/m3)			CO (µg/m3)		
	6 AM-2 PM	2PM - 10PM	10 PM - 6 AM	6 AM-2 PM	2PM - 10PM	10 PM - 6 AM
Balancing Reservoir	48	42	35	0.7	0.6	0.4
Ramagundam Pump House	44	36	25	0.6	<0.1	<0.1
Guest House	36	32	21	0.5	0.4	<0.1
	Pb	**NH3**	**C6H6**	**B(a)P**	**AS**	**Ni**
	(µg/m3)	**(µg/m3)**	**(µg/m3)**	**ng/m3**	**ng/m3**	**ng/m3**
Balancing Reservoir	<0.001	53	<0.1	<0.5	<2.0	<2.0
Ramagundam Pump House	<0.001	50	<0.1	<0.5	<2.0	<2.0
Guest House	<0.001	39	<0.1	<0.5	<2.0	<2.0

TABLE-2: STACK MONITORING DATA FOR OCT - 2016 TO MARCH - 2017

DATE	SPM (mg/Nm^3)						
	Unit -1	Unit -2	Unit -3	Unit -4	Unit -5	Unit -6	Unit -7
OCTOBER '16							
04.10.2016	85	97	90				
05.10.2016				110	108	105	
06.10.2016							78
24.10.2016	89	93	96				
25.10.2016				108	106	104	
NOVEMBER'16							
07.11.2016	91	98	93				
08.11.2016				106	110	105	
24.11.2016	97	94	90				
25.11.2016				110	107	109	
26.11.2016							75
DECEMBER'16							
05.12.2016	88	92	86				
06.12.2016				108	110		79
08.12.2016						106	
20.12.2016	93	89	95				
22.12.2016				110	105	108	
23.12.2016							72
JANUARY'17							
03.01.2017	90	85	93				
04.01.2017				106		108	
06.01.2017					109		75
21.01.2017							70
23.01.2017	80	83	87				
25.01.2017				104	106	103	
FEBRUARY'17							
02.02.2017							77
03.02.2017	86	90	95				
04.02.2017					107	105	
06.02.2017				109			
16.02.2017	82	86	89				
20.02.2017				107	109	106	
21.02.2017							78
MARCH'17							
04.03.2017				108	110	110	
06.03.2017	92	95	87				
07.03.2017							74
20.03.2017	85	89	93				
21.03.2017					108	109	
23.03.2017				106			83

TABLE-3: DUST MONITORING (PM- 10) DATA FOR OCT ' 2016 TO MARCH '2017

DATE	LOCATION	Dust Concentration (PM 10) in $\mu g/m^3$
OCTOBER '2016		
04.10.2016	ESP Stage - II Area	88
04.10.2016	DAETP Stage -I Area	84
05.10.2016	BURNER FLOOR Stage - II	94
05.10.2016	BRICK PLANT	62
06.10.2016	ASH POND AREA	78
06.10.2016	MILL AREA STAGE - I	96
NOVEMBER'16		
03.11.2016	ESP Stage - I Area	90
03.11.2016	DAETP Stage -I Area	86
04.11.2016	BURNER FLOOR Stage - I	98
04.11.2016	BRICK PLANT	74
05.11.2016	ASH POND AREA	62
05.11.2016	MILL AREA STAGE -II	97
DECEMBER'16		
05.12.2016	ESP Stage - II Area	96
05.12.2016	DAETP Stage -IArea	77
06.12.2016	BURNER FLOOR Stage - II	85
06.12.2016	BRICK PLANT	54
07.12.2016	ASH POND AREA	66
07.12.2016	MILL AREA STAGE - I	92
JANUARY'16		
03.01.2017	ESP Stage - I Area	87
03.01.2017	DAETP Stage -I Area	82
04.01.2017	BURNER FLOOR Stage - I	93
04.01.2017	BRICK PLANT	54
06.01.2017	ASH POND AREA	72
06.01.2017	MILL AREA STAGE - II	94
FEBRUARY'16		
06.02.2017	ESP Stage - II Area	85
06.02.2017	DAETP Stage -I Area	91
07.02.2017	BURNER FLOOR Stage - II	88
07.02.2017	BRICK PLANT	52
09.02.2017	ASH POND AREA	78
09.02.2017	MILL AREA STAGE - I	84
MARCH'16		
06.03.2017	ESP Stage - I Area	95
06.03.2017	DAETP Stage -I Area	86
07.03.2017	BURNER FLOOR Stage - I	96
07.03.2017	BRICK PLANT	64
08.03.2017	ASH POND AREA	82
08.03.2017	MILL AREA STAGE - I	94