एनटीपीसी
NTPC

रामगुण्डम
RAMAGUNDAM

Ref.No:09/EMG/E-10/2022/ 1948

Date: 28.10.2022

To

SHRI HEMANTH KUMAR, IFS (I/C)
Deputy Director General of Forests (C)
Ministry of Env., Forest and Climate Change,
Integrated Regional Office, Hyderabad 3rd Floor,
Room No. 309, Aranya Bhawan, Opp. RBI, Safiabad – 500004,
Hyderabad, Telangana.

Respected Sir,

Sub: Six Monthly Compliance Report of EC issued to NTPC Ramagundam - Reg

We are herewith submitting the Six-Monthly Compliance Reports for EC given to NTPC Ramagundam station pertaining to the period April-2022 to September-2022. Also, we are submitting the ambient air quality data, stack emission data, dust concentration data and others for the period along with this report.

Thanking you

Yours faithfully

T. Vishal
(Sr. Manager-EMG)

Office of the Environmental Engineer Telangana State Pollution Control Board Regional Office, Ramagundam, H. No. Spectrum @ NTPC, TTS Near Zilla Parishad High School JYOTHINAGAR - 505 215 Dist. Peddapalli (T.S.)

Copy to:

The Environmental Engineer,
Telangana State Pollution Control Board,
Regional Office – Ramagundam,
Jyothinagar, Peddapalli (Dist), Telangana, India - 505215

STATUS OF IMPLEMENTATION OF CONDITIONS STIPULATED IN ENVIRONMENTAL CLEARANCE

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

LETTER NO**: OM No : J-1301/20/94-IA-II DATED 25/09/1995.**

S. No.	Stipulations	Status as on 30.09.2022
1.	All the conditions stipulated by the State Pollution Control Board shall be implemented effectively.	All the conditions stipulated by the State Pollution Control Board are being implemented effectively.
2.	A stack of height not less than 275 meters shall be provided along with stack monitoring devices.	Stack height of 275 meter along with stack monitoring facilities have 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 by Telangana SPCB.
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. Preliminary engineering activities are being taken up for provision of FGD in Stage-III as per the directions given by CPCB vide letter dated December 11, 2017. As per MoEF&CC Notification 31.03.2021 vide G.S.R.243(E) TPP are categorized into three on the basis of their location to comply with the emission norms. According to which NTPC Ramagundam falls under Category C and Non-retiring units and the time line for compliance is upto 31St December 2024.
6.	Regular monitoring of air quality (at least 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 SPCB through NABET and MoEF&CC recognized laboratory and record maintained. Other parameters as per NAAQ standards are being monitored and submitted along with this report as **Table-1.**
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. AWRS augmentation scheme has been developed for additional pipelines to maximize the recirculation of ash pond water. It is kept in service from October,2020.

S. No.	Stipulations	Status as on 30.09.2022
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 under the Indo-Dutch collaboration has been completed. The report was 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 and submitted to MoEF&CC on 23.08.1999.
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.	Dust Suppression and Extraction System in coal handling areas are provided to ensure that the level of dust is well within the prescribed limits. Dust Monitoring data is enclosed as Table-3
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 Utilization starting with at least 20% in the first year and gradually increasing by 10 during subsequent years so as to achieve 100% Utilization by the end of the ninth year shall be prepared and submitted to this Ministry within six months.	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 2021-22, the station has achieved ash utilization of 140%. For ash utilization, station has created following facilities. 1. Station has installed Dry Ash Extraction System. Also, Rail loading facilities commissioned in unit 4&5 to meet the distance customer's demand. 2. Pond ash is utilized in mine stowing purpose, ash dyke raising, clay brick units, etc. 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.
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

S. No.	Stipulations	Status as on 30.09.2022
		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 conform to the standards by SPCB/CPCB.
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 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.	Green belt in and around the plant and township has been developed selecting suitable species in consultation with the authorities of State Forest Department.
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 was undertaken through M/s. Shriram Institute of Industrial Research, Delhi and the report has been submitted 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. It Shall be complied as and when the ash pond will 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. Data is transmitted to TSPCB and CPCB severs also.
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 time. Prior information is given to TSPCB, wherever ESP fields/passes taken into isolation for maintenance.
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 was 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	Permission has been granted for uses of raw coal vide MoEF&CC letter dated 14.12.1998.

S. No.	Stipulations	Status as on 30.09.2022
	records maintained. The analysis report shall form part of the six-monthly report to be submitted to this Ministry.	
24.	Reduction in freshwater 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, 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. For FY-2021-'22 till 31.03.2022 towards environmental protection an expenditure of 52 Cr has incurred.
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.	Six monthly EC Compliance Report and environmental safeguards for the period April 2022 to September 2022 is submitted herewith.

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 30.09.2022
1.	All the stipulations made in our environmental clearance letter dated 25th September 1995 referred to above should be strictly implemented	Compliance status of Letter No: OM No J-1301/ 20/94-IA-II Dated 25/09/1995 is given in the table above.
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.

S. NO.	STIPULATIONS	STATUS AS ON 30.09.2022
		In compliance to latest fly ash notification dated 03.11.2009, revised action plan has also been submitted. In FY 2021-22, the station has achieved ash utilization of 140%. For ash utilization, station has created following facilities. Station has installed Dry Ash Extraction System. Rail loading facilities commissioned in unit 4&5 to meet the distance customer's demand. Pond ash is utilized for 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 was submitted 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&CC 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 for 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 of the project.

RECOMMENDATIONS GIVEN BY MOEF FOR IMMEDIATE CORRECTIVE ACTIONS

(F.No.EP/12.1/109/AP/1430 dtd-05.10.2015)

S. No.	Recommendations Of RO, MoEF&CC	Compliance Status and Action Plan
i.	Condition in EC-6: Regular monitoring of air quality (at least 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. Certified compliance: Ambient air quality monitoring is being carried out twice in a week by third party at 3 locations identified with SPCB and records are being maintained. However, third party monitored AAQ	Third party AAQ monitoring for the NAAQ parameters are being carried out through NABET and MoEF&CC recognized labs and data is submitted to MoEF&CC and state PCB. The parameters conform to latest NAAQ standards.

S. No.	Recommendations Of RO, MoEF&CC	Compliance Status and Action Plan
	parameters are not conformed to the latest NAAQ standards. Further the unit has installed 3 online continuous AAQ monitoring stations which are connected to the server of state PCB. The monitored AAQ data is well within prescribed limits. The monitored data is being submitted along with six monthly compliance report to the MoEF&CC.	
ii.	Condition in EC-7: Recycling and Re-use of ash pond effluents shall be undertaken to the extent possible. There shall be no direct discharge into river Godavari. Certified compliance: It appears that 70% of ash pond water is being treated and reused for ash handling. However, part of ash pond water is being discharged without treatment to the nearby agricultural fields.	Station has installed AWRS for all its units where in ash water to the maximum extent is brought back, treated and reused. AWRS augmentation scheme has been developed for additional pipelines to maximize the recirculation of ash pond water. It is kept in service from October, 2020.
iii.	EC-13 Certified compliance: Reportedly Ash utilization plan submitted. However, PA has not achieved 100% ash utilization. As informed by PA in the year 2014-15 the unit has achieved 64.4% of ash utilization.	Ash utilization for the past 3 years is greater than 100%. AU% for FY 2019-20 is 118.23%, FY 2020-21 is 111.08% and FY 2021-22 is 140%
iv.	EC-15 Certified compliance: An integrated effluent treatment cum ash water recirculation system (AWRS) has been provided. All effluents from plant area are finally treated and treated effluent confirmed to the discharge standards. However, during the visit inadequate treatment of effluent was observed due to maintenance of clarifier. Further the parameters monitored for the inlet and outlet of the ETP are not in uniform manner and it needs to be analysed on daily basis. Domestic effluents are being treated in the STP.	Sufficient care is taken during design and O&M that effluent parameters are well within limits during the maintenance of clarifier as two clarifiers are available. The inlet and outlet effluent parameters are monitored daily basis. Online monitoring of ETP outlet through Effluent Quality Monitoring System is installed. Transmitting data to TSPCB and CPCB on continuous basis.
v.	Certified compliance: Presently ash pond reclamation has not yet started, since it is under use. PA assured to comply with the condition.	Shall be complied.
vi.	Certified compliance: Stack emissions are being monitored by MoEF&CC approved third party and data is being furnished along with six monthly compliance reports. Further continuous on-line stack monitoring has been installed and connected to the server of state PCB. However, in the continuous stack monitoring system, project authority needs to monitor gaseous emission also apart from SPM	Stack emissions are being monitored by MoEF&CC approved third and report is enclosed as Table-2. Continuous Emission Monitoring System installed to monitor gaseous emission along with PM and transmitting data to TSPCB and CPCB on continuous basis.

S. No.	Recommendations Of RO, MoEF&CC	Compliance Status and Action Plan
vii.	Certified compliance: PA informed they have spent more than the earmarked amount. However, no separate account is being maintained under environmental protection measures.	Capital nature expenditure of environment is already captured separately. Environment Management recurring expenditures for operation and maintenance are also being captured. For FY-2021-'22 till 31.03.2022 towards environmental protection an expenditure of 52 Cr has incurred.
viii.	Certified compliance: PA submitted hard copy of six monthly compliance report to the MoEF&CC. Soft copy of the six monthly compliance report has not been submitted to RO of the MoEF &CC regularly. Six monthly compliance report needs to be submitted by Project Authority both in hard and soft copies along with monitored data to the Regional office of MoEF&CC. The same needs to be uploaded on the website of the company and periodically	Soft copy and hard copy both are being submitted. Last report for the period October2021 to March2022 was submitted on 16.04.2022.
ix.	Certified compliance: Treated water is partly utilized for ash handling/ash slurry pumping and partly discharged in to River Godavari. It appears that unit do not have dedicated pipeline till the discharge point of the river rather the treated water of the unit getting mixed up with domestic waste water drainages before confluence into the river Godavari. Necessary corrective action needs to be taken to avoid conflict in near future regarding treatment of effluents by M/s.NTPC.	Technical and logistical feasibility examination.

Table 1: Ambient Air Quality Monitoring Data from April - 2022 to September - 2022

Parameter	PM_{10}			$PM_{2.5}$			SO_2			NO_X		
Location*	BR	RPH	GH	BR	RPH	GH	BR	RPH	GH	BR	RPH	GH
April '21												
04.04.2022	53.0	44.0	61.0	26.0	21.0	28.0	7.1	6.6	8.2	15.5	15.5	17.6
05.04.2022	47.0	48.0	56.0	22.0	23.0	26.0	8.3	7.5	7.9	16.6	14.6	16.1
11.04.2022	56.0	43.0	59.0	27.0	21.0	27.0	7.6	7.9	8.1	14.7	13.9	15.8
12.04.2022	52.0	46.0	49.0	25.0	22.0	22.0	9.3	8.4	8.4	16.0	16.4	17.0
18.04.2022	49.0	51.0	55.0	21.0	24.0	24.0	8.1	7.4	9.3	14.8	15.5	16.9
19.04.2022	51.0	47.0	57.0	23.0	22.0	26.0	7.7	7.9	8.7	17.0	15.1	15.8
25.04.2022	53.0	45.0	53.0	25.0	21.0	25.0	8.2	6.5	7.5	16.3	14.7	17.5
27.04.2022	58.0	49.0	61.0	27.0	23.0	28.0	6.9	6.1	8.9	15.9	15.6	16.3
May '21												
02.05.2022	47.0	44.0	59.0	23.0	21.0	27.0	7.4	6.7	9.3	16.6	13.9	18.2
03.05.2022	51.0	49.0	54.0	25.0	23.0	25.0	6.9	5.9	8.9	13.7	15.5	17.0
09.05.2022	45.0	43.0	63.0	21.0	19.0	29.0	7.9	8.1	9.2	15.8	14.7	16.9
10.05.2022	53.0	51.0	49.0	26.0	25.0	23.0	8.2	7.7	8.2	14.9	16.0	17.7
16.05.2022	50.0	48.0	61.0	25.0	22.0	27.0	7.7	7.2	7.9	15.5	15.2	15.8
17.05.2022	58.0	42.0	52.0	27.0	19.0	23.0	6.9	6.5	9.5	16.7	16.9	17.6
23.05.2022	49.0	46.0	59.0	22.0	21.0	26.0	8.2	8.0	8.7	15.9	14.7	18.1
24.05.2022	57.0	51.0	48.0	25.0	24.0	22.0	7.7	7.2	8.1	17.3	15.2	16.4
June '22												
01.06.2022	44.0	42.0	51.0	22.0	20.0	28.0	7.6	7.6	9.3	15.6	14.4	17.2
02.06.2022	53.0	47.0	58.0	26.0	22.0	26.0	8.0	6.1	9.7	14.1	16.9	16.3
06.06.2022	42.0	41.0	55.0	20.0	18.0	28.0	7.1	7.5	8.8	16.3	14.0	15.7
07.06.2022	49.0	56.0	48.0	23.0	26.0	22.0	8.6	6.4	8.1	15.0	15.6	18.0
13.06.2022	53.0	44.0	57.0	26.0	20.0	25.0	7.2	7.9	8.0	14.3	16.7	16.6
14.06.2022	47.0	50.0	50.0	24.0	24.0	24.0	77.0	8.0	9.6	16.9	14.5	15.9
20.06.2022	45.0	43.0	53.0	21.0	20.0	27.0	8.5	8.1	7.8	15.2	13.9	17.3
27.06.2022	53.0	49.0	47.0	25.0	23.0	23.0	7.4	7.6	8.3	17.0	15.7	18.0

Note: BR = Balancing Reservoir RPH= Ramagundam Pump House GH=Guest House.*

Table 1: Ambient Air Quality Monitoring Data from April - 2022 to September - 2022

Parameter	PM10			PM2.5			SO2			NOX		
Location*	BR	RPH	GH	BR	RPH	GH	BR	RPH	GH	BR	RPH	GH
July '22												
04.07.2022	41.0	37.0	40.0	18.0	16.2	19.0	6.98	6.63	7.7	10.9	11.1	11.1
05.07.2022	37.0	39.0	38.0	16.0	18.0	17.0	7.74	6.56	7.1	10.2	12.6	10.3
11.07.2022	36.0	35.0	41.0	18.0	17.0	20.0	6.96	7.84	8.0	11.6	11.9	12.3
12.07.2022	39.0	36.0	37.0	17.0	19.0	19.0	7.27	6.98	6.4	10.7	10.8	11.4
18.07.2022	35.0	47.0	39.0	16.0	17.0	18.0	7.33	7.63	7.5	11.9	11.3	10.9
19.07.2022	39.0	39.0	43.0	17.0	18.0	20.0	6.98	6.54	7.1	11.5	11.4	11.6
25.07.2022	43.0	41.0	41.0	20.0	20.0	18.0	7.11	7.88	3.7	10.8	12.5	12.1
26.07.2022	38.0	40.0	40.0	18.0	18.0	17.0	7.63	6.71	3.2	10.3	11.7	10.7
August '22												
01.08.2022	36.0	36.0	37.0	17.0	16.0	16.0	7.85	7.23	7.0	11.2	10.6	10.8
02.08.2022	38.0	42.0	42.0	19.0	18.0	19.0	6.79	7.36	6.9	10.8	10.8	11.6
08.08.2022	39.0	38.0	39.0	20.0	16.0	18.0	6.87	6.87	7.6	10.5	11.8	10.7
09.08.2022	41.0	40.0	40.0	21.0	20.0	17.0	8.01	7.21	7.3	12.2	12.6	10.5
16.08.2022	40.0	45.0	42.0	20.0	21.0	21.0	6.75	6.91	7.4	10.8	10.8	11.2
17.08.2022	36.0	42.0	40.0	19.0	19.0	22.0	7.22	7.25	7.2	10.2	10.5	10.9
22.08.2022	39.0	38.0	38.0	17.0	20.0	20.0	8.63	8.31	6.6	11.2	11.1	11.5
23.08.2022	42.0	36.0	37.0	20.0	16.0	19.0	8.56	7.22	6.8	10.7	11.2	11.2
September '22												
05.09.2022	43.0	35.0	43.0	20.0	18.0	21.0	6.60	7.20	7.9	10.7	12.9	12.2
06.09.2022	39.0	42.0	40.0	18.0	20.0	19.0	7.40	6.50	7.3	11.6	11.6	11.7
12.09.2022	40.0	37.0	39.0	19.0	17.0	18.0	6.90	6.30	6.5	11.7	13.0	12.6
13.09.2022	42.0	40.0	45.0	20.0	19.0	22.0	7.80	7.20	7.8	12.2	12.7	10.9
19.09.2022	38.0	37.0	41.0	18.0	18.0	19.0	7.10	6.60	8.4	10.4	13.3	11.5
20.09.2022	41.0	42.0	38.0	19.0	20.0	17.0	6.50	7.40	7.3	12.0	12.4	12.2
26.09.2022	38.0	39.0	44.0	17.0	18.0	21.0	6.40	7.10	8.0	11.1	13.7	10.9
27.09.2022	41.0	43.0	42.0	20.0	21.0	20.0	6.80	6.30	7.5	10.8	12.8	11.7

Note: BR = Balancing Reservoir RPH= Ramagundam Pump House GH=Guest House.*

Table 1: Ambient Air Quality Monitoring Data from April - 2022 to September - 2022

	O_3	Pb	CO	NH_3	As	Ni	C_6H_6	B(a)P
	($\mu g/m^3$)	($\mu g/m^3$)	(mg/m^3)	($\mu g/m^3$)	(ng/m^3)	(ng/m^3)	($\mu g/m^3$)	(ng/m^3)
April '22								
Balancing Reservoir	14.2	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Ramagundam Pump House	15	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Guest House	15.9	BDL	BDL	BDL	BDL	BDL	BDL	BDL
May '22								
Balancing Reservoir	13	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Ramagundam Pump House	13.7	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Guest House	14.2	BDL	BDL	BDL	BDL	BDL	BDL	BDL
June '22								
Balancing Reservoir	14	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Ramagundam Pump House	12.8	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Guest House	13.2	BDL	BDL	BDL	BDL	BDL	BDL	BDL
July'22								
Balancing Reservoir	10.8	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Ramagundam Pump House	12	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Guest House	11.5	BDL	BDL	BDL	BDL	BDL	BDL	BDL
August '22								
Balancing Reservoir	10.8	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Ramagundam Pump House	10.8	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Guest House	12.3	BDL	BDL	BDL	BDL	BDL	BDL	BDL
September'22								
Balancing Reservoir	11.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Ramagundam Pump House	10.7	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Guest House	11.4	BDL	BDL	BDL	BDL	BDL	BDL	BDL

Table 2 : Stack Monitoring Data from April - 2022 to September - 2022

DATE	PM (mg/Nm^3)						
	Unit -1	Unit -2	Unit -3	Unit -4	Unit -5	Unit -6	Unit -7
April -2022							
	Shut down	87.4	82.6	89.7	85.3	88	50
May -2022							
	Shut down	84.7	80	91.2	82.1	83.6	41.4
June -2022							
	79.8	85.4	82	89.7	85	78.1	shutdown
July-2022							
	63.6	67.2	61.8	79.6	68.5	77.8	shutdown
August-2022							
	60.6	64.6	58.4	75.4	68.5	75.2	42.4
September-2022							
	59.3	55.8	62.3	66.4	58.7	64.1	34.7

Table 3 : Dust Monitoring Data (PM_{10}) from April - 2022 to September - 2022

Date	Location	Dust Concentration (PM_{10}) in $\mu g/m^3$
April -2022		
04.04.2022	ESP Stage –I area	92
05.04.2022	DAETP Stage-I	94
08.04.2022	BURNER FLOOR Stage-II	98
11.04.2022	Bricks Plant	38
18.04.2022	Ash Pond Area	41
19.04.2022	Mill Area Stage-I	96
May -2022		
02.05.2022	ESP Stage –II area	92
09.05.2022	DAETP Stage-II	94
10.05.2022	BURNER FLOOR Stage-I	98
11.05.2022	Bricks Plant	45
13.05.2022	Ash Pond Area	43
14.05.2022	Mill Area Stage-II	96
June -2022		
03.06.2022	ESP Stage –II area	89
04.06.2022	DAETP Stage-II	93
07.06.2022	BURNER FLOOR Stage-I	97
09.06.2022	Bricks Plant	52
11.06.2022	Ash Pond Area	41
14.06.2022	Mill Area Stage-II	98
July -2022		
04.07.2022	ESP Stage –I area	91
06.07.2022	DAETP Stage-I	95
08.07.2022	BURNER FLOOR Stage-II	93
13.07.2022	Bricks Plant	48
21.07.2022	Ash Pond Area	39
23.07.2022	Mill Area Stage-I	97
August - 2022		
02.08.2022	ESP Stage –II area	89
05.08.2022	DAETP Stage-II	92
10.08.2022	BURNER FLOOR Stage-I	95
16.08.2022	Bricks Plant	52
24.08.2022	Ash Pond Area	46
26.08.2022	Mill Area Stage-II	97
September -2022		
02.09.2022	ESP Stage –I area	93
03.09.2022	DAETP Stage-I	90
05.09.2022	BURNER FLOOR Stage-II	96
19.09.2022	Bricks Plant	49
22.09.2022	Ash Pond Area	52
24.09.2022	Mill Area Stage-I	98