रामगुण्डम RAMAGUNDAM



Ref.No:09/EMG/E-10/2021/1860

Date: 29.11.2021

То

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 to September 2021. 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

(K.S.Rao)

(AGM-EMG&AU)

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: OMNOJ-1301/20/94-IA-II DATED 25/09/1995.

S. No.	Stipulations	Status as on 30.09.2021
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 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.
		Adequate space has been provided in the layout for installation of FGD plant in future.
5.	5. Space provision shall be made for installation of FGD plant, if felt necessary, at future time.	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.
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.
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.
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.

S.	Stipulations	Status as on 30.09.2021
No.	Supulations	514145 45 01 50.07.2021
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.
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 2020-21, the station has achieved ash utilization of 111.08%. For 100% 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.	 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. 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 conform to the standards by SPCB/CPCB.

S.	Stipulations	Status as on 30.09.2021
No.		
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 <i>Casuarinas Equisetifolia, Acacia Auriculiformis,</i> <i>Cassia Siamea, Eucalyptus Globules</i> 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. 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 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.
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

S. No.	Stipulations	Status as on 30.09.2021				
		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 30.09.2021 towards environmental protection an expenditure of 26 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 to September 2021 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 30.09.2021
1.	All the stipulations made in our environmental clearance letter dated 25 th September 1995 referred to above should be strictly implemented	Compliance status of Letter No: OMNOJ- 1301/20/94-IA-II Dated 25/09/1995 is given in the table above.
2.	100% fly ash utilization should be ensured by 9 th year as per the broad utilization Plan submitted along with NTPC's communication no. CC: ESE: 3100:2000: GEN: 4B dated 3 rd 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 2020-21, the station has achieved ash utilization of 111.08%. For 100% ash utilization, station has created following facilities. Station has installed Dry Ash Extraction System.

S. NO.	STIPULATIONS	STATUS AS ON 30.09.2021
		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 2 nd 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 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.	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.	Recommendations Of RO, MoEF&CC	Compliance Status and Action Plan
No.		
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 2018-19 is 110.31% and FY 2019-20 is 118.23% and FY 2020-21 is 111.08%
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	Continuous Emission Monitoring System installed to monitor gaseous emission along with PM and transmitting data to TSPCB and CPCB on continuous basis.
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 30.09.2021 towards environmental protection an expenditure of 26Cr has incurred.

S. No.	Recommendations Of RO, MoEF&CC	Compliance Status and Action Plan
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 Oct 2020 to March2021 was submitted on 02.08.2021.
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.

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												
05.04.2021	61	70	72	27	29	30	18	19	20	20	20	22
06.04.2021	63	71	74	29	27	27	20	18	19	22	21	21
12.04.2021	67	73	71	30	31	25	21	20	16	24	23	20
13.04.2021	64	72	73	25	28	28	19	17	18	21	20	22
19.04.2021	69	74	74	29	32	32	21	20	22	23	24	25
20.04.2021	66	73	71	28	30	26	20	18	17	22	21	20
26.04.2021	65	69	72	25	29	29	17	17	20	20	20	23
27.04.2021	68	73	74	27	31	30	20	19	21	22	22	24
May '21												
03.05.2021	59	68	70	24	26	27	16	17	18	18	18	20
04.05.2021	61	69	72	26	24	24	18	16	17	20	19	19
10.05.2021	65	71	69	27	28	24	19	18	14	22	21	18
11.05.2021	62	70	71	23	25	25	17	15	16	19	18	20
17.05.2021	67	72	72	26	29	31	19	18	20	21	22	23
18.05.2021	64	71	69	25	27	23	18	16	16	20	19	19
24.05.2021	63	67	70	22	26	26	15	15	18	18	18	21
25.05.2021	66	71	72	24	29	28	18	17	19	20	20	22
June'21												
04.06.2021	57	66	68	23	25	25	15	16	17	17	17	19
05.06.2021	59	67	70	25	23	23	17	15	16	19	18	18
08.06.2021	63	69	67	26	27	23	18	17	15	21	20	17
09.06.2021	60	68	69	22	24	24	16	14	15	18	17	19
15.06.2021	65	70	70	25	28	30	18	18	19	20	21	22
16.06.2021	62	69	67	24	26	22	17	15	15	19	18	18
21.06.2021	61	65	68	21	25	25	14	14	17	17	17	20
22.06.2021	64	68	70	23	28	27	17	16	18	19	19	21
28.06.2021	60	65	69	21	26	29	15	17	18	17	18	20
29.06.2021	64	66	68	24	22	21	18	14	14	20	17	17

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

Parameter		PM ₁₀			PM _{2.5}			SO ₂			NO _X	
Location*	BR	RPH	GH	BR	RPH	GH	BR	RPH	GH	BR	RPH	GH
July'21												
05.07.2021	55	63	65	22	23	23	14	15	16	16	16	18
06.07.2021	57	64	67	24	25	21	16	14	15	18	17	17
12.07.2021	43	41	42	19	18	18	16	15	12	19	18	15
13.07.2021	45	43	44	19	19	19	14	13	13	16	15	17
19.07.2021	56	58	48	21	22	21	16	15	17	18	19	20
20.07.2021	42	44	43	18	20	19	15	13	13	17	16	16
26.07.2021	52	60	52	19	23	23	12	12	15	15	15	18
27.07.2021	60	62	64	21	24	24	15	14	16	17	17	19
August '21												
03.08.2021	60	67	69	23	26	18	16	17	18	18	19	15
04.08.2021	61	68	50	26	28	24	18	16	11	19	19	19
09.08.2021	63	70	56	25	30	23	18	19	15	21	21	17
10.08.2021	59	66	54	22	26	22	16	15	14	18	17	18
16.08.2021	62	65	52	23	24	20	17	16	16	19	20	19
17.08.2021	45	45	46	19	21	18	13	14	12	14	17	15
23.08.2021	57	64	57	21	24	24	14	15	16	16	18	19
24.08.2021	64	67	68	24	25	25	17	16	17	19	19	20
September '21							-					
01.09.2021	57	63	65	21	24	24	15	16	17	17	18	19
02.09.2021	59	65	68	24	27	22	17	15	16	18	17	18
09.09.2021	60	67	60	23	29	25	16	18	16	20	20	17
10.09.2021	55	62	57	20	24	23	15	14	15	17	16	19
15.09.2021	64	68	55	25	25	21	18	17	17	20	21	20
16.09.2021	49	50	50	20	22	19	14	15	13	15	18	16
21.09.2021	59	54	63	22	23	20	15	16	14	19	17	17
22.09.2021	54	59	56	19	21	21	14	15	13	18	19	14
27.09.2021	55	60	55	19	22	22	13	14	15	17	17	18
28.09.2021	61	63	64	22	23	23	16	15	16	20	18	19

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

Table 1: Ambient Air Quality Monitoring Data from April - 2021 to September - 2021

	O ₃	Pb	CO	NH_3	As	Ni	C ₆ H ₆	B(a)P
	ng/m ³	(µg/ m ³)	ng/ m ³	(µg/ m ³)	ng/ m ³	ng/ m ³	(µg/ m ³)	ng/ m ³
APRIL'21								
Balancing Reservoir	15.6	<0.01	0.53	<20	<1	<1	<0.01	<0.01
Ramagundam Pump House	14.2	<0.01	0.40	<20	<1	<1	<0.01	<0.01
Guest House	14.8	<0.01	0.49	<20	<1	<1	<0.01	<0.01
MAY'21								
Balancing Reservoir	14.5	<0.01	0.48	<20	<1	<1	<0.01	<0.01
Ramagundam Pump House	13.4	<0.01	0.34	<20	<1	<1	<0.01	<0.01
Guest House	13.9	<0.01	0.45	<20	<1	<1	<0.01	<0.01
JUNE'21								
Balancing Reservoir	<10	<0.01	0.45	<20	<1	<1	<0.01	<0.01
Ramagundam Pump House	<10	<0.01	0.31	<20	<1	<1	<0.01	<0.01
Guest House	<10	<0.01	0.42	<20	<1	<1	<0.01	<0.01
JULY'21			•				•	
Balancing Reservoir	<10	<0.01	0.42	<20	<1	<1	<0.01	<0.01
Ramagundam Pump House	<10	<0.01	0.29	<20	<1	<1	<0.01	<0.01
Guest House	<10	<0.01	0.4	<20	<1	<1	<0.01	<0.01
AUGUST '21			•		•	•		
Balancing Reservoir	<10	<0.01	0.44	<20	<1	<1	<0.01	<0.01
Ramagundam Pump House	<10	<0.01	0.31	<20	<1	<1	<0.01	<0.01
Guest House	<10	<0.01	0.42	<20	<1	<1	<0.01	<0.01
SEPTEMBER'21								
Balancing Reservoir	<10	<0.01	0.41	<20	<1	<1	<0.01	<0.01
Ramagundam Pump House	<10	<0.01	0.35	<20	<1	<1	<0.01	<0.01
Guest House	<10	<0.01	0.39	<20	<1	<1	<0.01	<0.01

DATE	PM (mg/Nm ³)						
	Unit -1	Unit -2	Unit -3	Unit -4	Unit -5	Unit -6	Unit -7
APRIL'21							
	73	68	Shut down	97	85	98	45
	78	75		98	82	95	47
MAY' 21							
	69	66	Shut down	90	81	95	47
	54	51		86	79	98	43
JUNE' 21							
	77	60	Shut down	82	86	91	44
	91	61		75	96	94	46
JULY' 21							
	78	72	Shut down	83	88	92	45
	72	60		74	85	97	48
AUGUST'21						•	
	82	73	Shut down	94	92	97	46
	85	81		91	91	89	92
SEPTEMBER'21							
	81	76	Shut down	97	89	92	47
	78	74		95	93	90	45

Table 3 : Dust Monitoring Data (PM₁₀) from April - 2021 to September - 2021

DATE	LOCATION	Dust Concentration (PM10) in μ g/m ³		
APRI ' 2021				
05.04.2021	ESP Stage –I area	88		
06.04.2021	DAETP Stage-I	95		
07.04.2021	BURNER FLOOR Stage-II	94		
08.04.2021	Bricks Plant	52		
09.04.2021	Ash Pond Area	56		
10.04.2021	Mill Area Stage-I	98		
MAY' 2021				
04.05.2021	ESP Stage –I area	92		
05.05.2021	DAETP Stage-I	94		
06.05.2021	BURNER FLOOR Stage-II	97		
07.05.2021	Bricks Plant	58		
08.05.2021	Ash Pond Area	50		
10.05.2021	Mill Area Stage-I	95		
JUNE' 2021				
05.06.2021	ESP Stage –I area	91		
07.06.2021	DAETP Stage-I	96		
08.06.2021	BURNER FLOOR Stage-II	97		
09.06.2021	Bricks Plant	50		
11.06.2021	Ash Pond Area	48		
12.06.2021	Mill Area Stage-I	98		
JULY'2021				
05.07.2021	ESP Stage –I area	90		
06.07.2021	DAETP Stage-I	92		
07.07.2021	BURNER FLOOR Stage-II	95		
08.07.2021	Bricks Plant	55		
09.07.2021	Ash Pond Area	52		
10.07.2021	Mill Area Stage-I	96		
AUGUST'2021				
03.08.2021	ESP Stage – I area	92		
04.08.2021	DAETP Stage-I	93		
05.08.2021	BURNER FLOOR Stage-II	98		
06.08.2021	Bricks Plant	51		
07.08.2021	Ash Pond Area	45		
09.08.2021	Mill Area Stage-I	97		
SEPTEMBER '2021				
04.09.2021	ESP Stage – I area	89		
06.09.2021	DAETP Stage-I	91		
07.09.2021	BURNER FLOOR Stage-II	96		
08.09.2021	Bricks Plant	52		
09.09.2021	Ash Pond Area	50		
10.09.2021	Mill Area Stage-I	98		