Half Yearly Compliance Report
2025
01 Dec(01 Apr - 30 Sep)

Acknowledgement

Proposal Name	NTPC Ltd., Sipat Super Thermal Power Station (Stage-II, 2 x 500 MW)
Name of Entity / Corporate Office	NTPC Ltd.,
Village(s)	N/A
District	BILASPUR

Proposal No.	J-13011/5/2002.IA-II(T)	**Category**	Thermal Projects
Plot / Survey / Khasra No.	N/A	**Sub-District**	N/A
State	CHHATTISGARH	**Entity's PAN**	*****0255D
MoEF File No.	J-13011/5/2002.IA-II(T)	**Entity name as per PAN**	NTPC LIMITED

Compliance Reporting Details

Reporting Year	2025
Remarks (if any)	Compliance of Stage-II EC dated 08.06.2004.
Reporting Period	01 Dec(01 Apr - 30 Sep)

Details of Production and Project Area

Name of Entity / Corporate Office NTPC Ltd.,

	Project Area as per EC Granted	Actual Project Area in Possession
Private	0	938.51
Revenue Land	0	801.22
Forest	0	28.47
Others	1773.51	0
Total	1773.51	1768.2

Production Capacity

Sr. no	Product Name	units	Valid Upto	Capacity	Production last year	Capacity as per CTO
1	Electricity	MW	30/11/2030	1000	7895.26 MU (Million Kilo Watt Hour)	1000

Conditions

Specific Conditions

Sr.No.	Condition Type	Condition Details
1	MISCELLANEOUS	3 (ii) Utilization of land for Stages I & II of the project shall be restricted to 4382.44 acres, which is already in possession of the project authorities. 70 acres of additional land will be acquired by M/s. NTPC for ash based units.
PPs Submission: Complied All steps had been taken to restrict the land for Stage-I and II of Sipat STPP to 4382.44 acres. NTPC pursued with district administration for acquisition of 70 acres of land but could not get. Subsequently, EC exemption was put up before Ministry. MoEF and CC issued EC amendment on 24.12.2021 with stipulation that Afforestation through Miyawaki technique shall be carried out in 10 acres of land in Bilaspur district, preferably within 10 km from plant boundary. Land identified at Bhilmi Village which is approx. 10 kms away from Sipat plant. 32,000 No.s of saplings have been planted through Miyawaki technique. Total project cost for plantation and maintenance for up to two years is INR 853 lakh. Plantation Work is completed in March 2024.		Date: 24/11/2025
2	AIR QUALITY MONITORING AND PRESERVATION	3 (iii) A twin flue stack of 275 m height shall be provided with continuous on-line monitoring equipment, and the data collected should be analyzed and submitted regularly.
PPs Submission: Complied A twin flue stack of 275 m height with continuous on-line monitoring equipment is provided. Online monitoring is continuous, and data is accessible to CPCB and State PCB. Records are being maintained.		Date: 24/11/2025
3	AIR QUALITY MONITORING AND PRESERVATION	3 (iv) High efficiency Electrostatic Precipitator (ESP) having efficiency of 99.8% should be installed to limit outlet SPM emission of 100 mg/Nm3.
PPs Submission: Complied High efficiency Electrostatic Precipitator (ESP) having efficiency of 99.9 percent has been installed to limit outlet SPM emission within 50 mg/Nm3.		Date: 24/11/2025
4	MISCELLANEOUS	3 (v) Coal will be sourced from the nearby Deepika (Extension) mine block of Korba coalfields, located at a distance of about 40 km. The coal will be transported from the mine by captive MGR rakes. The annual requirement of coal will be 760 T/hr @ 100% PLF.
PPs Submission: Complied Coal is sourced from Deepika mines of SECL. The coal is transported from mine end to Power Station by NTPC owned rakes through captive MGR. Coal consumption for stage-II Units is lesser than the stipulated quantity.		Date: 24/11/2025
5	WATER QUALITY MONITORING AND PRESERVATION	3 (vii) Re-circulating type cooling water system with cooling towers shall be provided. Water requirement shall be met from the Right Bank Canal of Hasdeo barrage.
PPs Submission: Complied Cooling water system is designed with induced draught Cooling Towers. Make up water is taken from Hasdeo Right Bank canal		Date: 24/11/2025
6	Statutory compliance	3 (ix) Ash generated to the tune of 2.15 million tones per year shall be used in a phased manner as per the provisions of the Fly Ash Utilization Notification of September, 1999 and its subsequent amendments. By the end of ninth year, full fly ash utilization should be ensured. The cost of ash utilization measures proposed in the total project cost should be intimated.

	PPs Submission: Complied Fly ash is supplied to fly ash brick industries, Cement Industries. Pond ash is supplied in NHAI highway projects, Low lying area development. NTPC Sipat is also carrying out backfilling of Manikpur, Bishrampur and Dugga mine voids Fly ash utilization is being complied as per MoEF and CC notification dated 31.12.2021 and its amendment 30.12.2022. Ash Utilization 101.26 in 20223-24, 102.13 percent in FY 2024-25 and 101.21percent in 2025-26 is achieved.	Date: 24/11/2025
7	MISCELLANEOUS	3 (x) A study on utilization of ash for soil enrichment to be got done by Agricultural University with the terms of Reference approved by the Indian Council of Agricultural Research. (To be done within two months of grant of environmental clearance.)
	PPs Submission: Complied Agricultural related studies and applications have been carried out by fly ash mission, Technology Information, Forecasting and assessment council (TIFAC). TIFAC is an autonomous institution under the Ministry of Science and Technology, Govt of India. For recommendations to the farmers of the nearby villages of Sipat site, study on use of fly ash in Agriculture has been completed by TCB college of Agriculture, Bilaspur (under Indira Gandhi Agriculture University, Raipur)	Date: 24/11/2025
8	WATER QUALITY MONITORING AND PRESERVATION	3 (xi) Rainwater harvesting should be adopted and plan be submitted to MOEF after approval from Central Ground Water Board (CGWB) within three months of environmental clearance.
	PPs Submission: Complied Ground water table in the project area is shallow, hence recharge to ground water is not feasible. NOC issued by Central Ground Water Authority; Ministry of Water Resources (Govt. of India) vide letter No 32-5/CGWA/RWH/OTH/08-905 dated 30.06.2008. However, NTPC Sipat has installed RWH facility of total capacity 1125 m3/hr to capture surface run off for recycle and reuse. A Ground water recharge pond is made in township where storm water is channelized	Date: 24/11/2025
9	MISCELLANEOUS	3 (xii) Details of the plan to develop ash utilizing industrial units in the 70 acre plot proposed by the project proponent should be worked out in consultation with the State Government and the draft plan in this regard should be submitted to MOEF within 6 months of environmental clearance. 70 acres of land will only be utilized for setting up ash based industries.
	PPs Submission: Complied NTPC pursued with district administration for acquisition of 70 acres of land but could not get. Subsequently, an EC exemption was put up before Ministry. MoEF and CC issued EC amendment on 24.12.2021 with stipulation that Afforestation through Miyawaki technique shall be carried out in 10 acres of land in Bilaspur district, preferably within 10 km from plant boundary. 32,000 No.s of saplings have been planted through Miyawaki technique in Bhilmi Village which is approximately 10 kms away from plant. Total project cost for plantation and maintenance up to two years is INR 853 lakh.	Date: 24/11/2025
10	MISCELLANEOUS	3 (xiii) If any displacement/rehabilitation is involved while acquiring 70 acres of additional land for ash based units, R&R policy should be prepared. If the R & R policy of the State Govt. regulations is more stringent, the same will be followed. Issues such as affected families, self-employment etc. may be worked out in consultation with State Govt. and village development advisory committee and local people.
	PPs Submission: Complied EC exemption issued for acquisition of 70 acres of land vide EC amendment letter dated 24.12.2021. Hence, condition gets obsolete.	Date: 24/11/2025
11	AIR QUALITY MONITORING AND	3 (xiv) Ambient air quality data monitoring stations should be set up at the boundary of Sonthi Reserved Forest before the

	PRESERVATION	commissioning of the project.

PPs Submission: Complied Ambient air quality monitoring at Sonthi Pahar Reserve Forest is continued since inception of the project. Records are being maintained.	Date: 24/11/2025

12	WATER QUALITY MONITORING AND PRESERVATION	3 (xv) Water requirement for Stage II of the project should not exceed 3480 m3/hr with ash water recirculation system.

PPs Submission: Complied Water requirement for Stage-II is within the stipulated limits. AWRS is in place.	Date: 24/11/2025

13	Noise Monitoring & Prevention	3 (xvi) Noise level should be limited to 75 Leq and regular maintenance of equipment is undertaken. For people working in the area of generator and other high noise area, earplug should be provided.

PPs Submission: Complied Regular maintenance of equipment will be undertaken for limiting the noise level to 75 Leq. at the plant boundary. Ear plug/ Earmuffs are provided to people working in the high noise area.	Date: 24/11/2025

14	GREENBELT	3 (xvii) A green belt covering a minimum area of 215 acres for the stages I & II of the project shall be developed. The green belt shall have a density of 1500-2000 trees per ha. Necessary financial provision shall be made in the budget for the purpose.

PPs Submission: Complied Greenbelt area is more than 215 acres. So far more than 4.82 lakhs trees have been planted in the green belt area which includes plant boundary, Ash dyke, along MGR and Make up water pump house.	Date: 24/11/2025

15	AIR QUALITY MONITORING AND PRESERVATION	3 (xviii) Continuous monitoring of ambient air quality shall be undertaken for a period of one year at the same locations where it was monitored for the EIA report subsequent to commencement of work for Stage - I, and data furnished to the Ministry.

PPs Submission: Complied 3 nos. of Online AAQMS are connected with CECB and CPCB for real time data.	Date: 24/11/2025

General Conditions

Sr.No.	Condition Type	Condition Details
1	MISCELLANEOUS	3 (i) All conditions stipulated by Chhattisgarh Environment Conservation Board vide their letter no. 87/TS/CECB/2004 dated 06.01.2004 should be strictly implemented.

PPs Submission: Complied Implemented	Date: 24/11/2025

2	MISCELLANEOUS	3 (vi) Space should be provided for retrofitting of Flue Gas Desulphurization (FGD) Unit, if required in future.

PPs Submission: Complied Space is already available for retrofitting of flue Gas Desulphurization (FGD) unit. FGD installation work is in progress in Stage-II Units.	Date: 24/11/2025

3	WATER QUALITY MONITORING AND PRESERVATION	3 (viii) Efforts shall be made to maximize the recycling/reuse of effluents. Parts of treated wastewater conforming to prescribed standards shall be used for greenbelt development.

PPs Submission: Complied The effluent treatment schemes have been designed to optimize, recycle and reuse of all the treated wastewater. 2 x 125 m3 capacity ETP is functional. Process waste water is treated in ETP and used in ash slurry /Fire water / service water. STP treated water is used in horticulture. Concept of ZLD is complied. No effluent is discharged from Plant.	Date: 24/11/2025

4	AIR QUALITY MONITORING AND PRESERVATION	3 (xix) For controlling fugitive dust, regular sprinkling of water in vulnerable areas of the plant should be ensured.

PPs Submission: Complied System to control the Fugitive dust by regular sprinkling of water is in place in CHP and ash dyke area.	Date: 24/11/2025

5	AIR QUALITY MONITORING AND PRESERVATION	3 (xx) Regular monitoring of the air quality should be carried out in and around the power plant and records be maintained. Periodic six-monthly reports should be submitted to this Ministry.

PPs Submission: Complied Ambient air quality is monitored continuously through CAAQMS installed in plant premises and manual monitoring outside the plant. Reports are submitted to Ministry, CPCB and CECB as well. Ambient Air Quality and other monitoring reports for April to Sep 2025 are enclosed herewith. Annexure.	Date: 24/11/2025

6	MISCELLANEOUS	3 (xxi) The project proponent should advertise at least in two local newspapers widely circulated in the region around the project, one of which should be in the vernacular language of the locality concerned, informing that the project has been accorded environmental clearance and copies of clearance letters are available with the State Pollution Control Board/Committee and may also be seen at Website of the Ministry of Environment and forests at http://envfor.nic.in.

PPs Submission: Complied Information about Environmental Clearance was made available through a press release. Advertisement also issued in two local newspapers.	Date: 24/11/2025

7	MISCELLANEOUS	3 (xxii) A separate environment monitoring cell with suitable qualified staff should be set up for implementation of the stipulated environmental safeguards.

PPs Submission: Complied A dedicated Environmental Management Group has been set up with suitable qualified and experienced executives as per the requirement.	Date: 24/11/2025

8	MISCELLANEOUS	3 (xxiii) Half-yearly report on the status of implementation of the stipulated conditions and environmental safeguards should be submitted to this Ministry/Regional Office/CPCB/ SPCB.

PPs Submission: Complied Half yearly report is submitted on the Ministry s PARIVESH 2.0 portal.	Date: 24/11/2025

9	MISCELLANEOUS	3 (xxiv) Regional Office of the Ministry of Environment & Forests located at Bhopal will monitor the implementation of the stipulated conditions. Complete set of Environmental Impact Assessment Report and Environment Management plan should be forwarded to

		the Regional Office for their use during monitoring.
PPs Submission: Complied Submitted as per stipulation.		Date: 24/11/2025
10	MISCELLANEOUS	3 (xxv) Separate funds should be allocated for implementation of environmental protection measures along with item-wise break-up. These cost should be included as part of the project cost. The funds earmarked for the environment protection measures should not be diverted for other purposes and year-wise expenditure should be submitted to the Ministry.
PPs Submission: Complied Separate funds had been allocated for implementation of environmental protection measures. The funds so allocated are not diverted for other purposes. Environmental protection systems are in place.		Date: 24/11/2025
11	MISCELLANEOUS	3 (xxvi) Full cooperation should be extended to the Scientists/Officers from the Ministry/Regional Office of the Ministry at Bhopal/the CPCB/the SPCB who would be monitoring the compliance of environmental status.
PPs Submission: Complied Noted		Date: 24/11/2025
12	MISCELLANEOUS	4. The Ministry reserves the right to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the Ministry.
PPs Submission: Complied Noted		Date: 27/11/2025
13	MISCELLANEOUS	5. The environmental clearance accorded shall be valid for a period of 5 years for construction/operation of the power plant. In case, if the project authorities fails to do so within this stipulated period, this environmental clearance shall stand lapsed automatically.
PPs Submission: Complied Noted		Date: 27/11/2025
14	MISCELLANEOUS	6. In case of any deviation or alteration in the project proposed from those submitted to this Ministry for clearance, a fresh reference should be made to the Ministry to assess the adequacy of the condition (s) imposed and to add additional environmental protection measures required if any.
PPs Submission: Complied Noted		Date: 27/11/2025
15	Statutory compliance	7. The above stipulations would be enforced among others under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act 1981, the Environment (Protection) Act, 1986, Hazardous Waste (Management and handling) Rules, 1989 and its amendments, the Public Liability Insurance Act, 1991 and its amendments, the Environment Impact Assessment Notification of January, 1994 and its amendments.

PPs Submission: Complied Noted	Date: 27/11/2025

Visit Remarks

Last Site Visit Report Date:	N/A
Additional Remarks:	

Note: This acknowledgement is as per the details submitted by project proponent. In no way is this document to be considered as conclusion on any action on the compliance of the project. This is strictly for the project proponent's reference purpose.

Half Yearly Compliance Report
2025
01 Dec(01 Apr - 30 Sep)

Acknowledgement

Proposal Name	NTPC Ltd., Sipat Super Thermal Power Station, Stage-II (2 x 500 MW) (First Amendment)
Name of Entity / Corporate Office	NTPC Ltd.,
Village(s)	N/A
District	BILASPUR

Proposal No.	No. J-13011/05/2002-IA.II(T)
Plot / Survey / Khasra No.	N/A
State	CHHATTISGARH
MoEF File No.	No.J-13011/10/1996-IA.II(T)

Category	Thermal Projects
Sub-District	N/A
Entity's PAN	*****0255D
Entity name as per PAN	NTPC LIMITED

Compliance Reporting Details

Reporting Year	2025
Remarks (if any)	Compliance to conditions of Stage II EC dated 24.12.2021
Reporting Period	01 Dec(01 Apr - 30 Sep)

Details of Production and Project Area

Name of Entity / Corporate Office NTPC Ltd.,

	Project Area as per EC Granted	Actual Project Area in Possession
Private	0	938.51
Revenue Land	0	801.22
Forest	0	28.47
Others	1773.51	0
Total	1773.51	1768.2

Production Capacity

Sr. no	Product Name	units	Valid Upto	Capacity	Production last year	Capacity as per CTO
1	Electricity	MW	30/11/2030	1000	7895.26 MU (Million Kilo Watt Hour)	1000

Conditions

Specific Conditions

Sr.No.	Condition Type	Condition Details
1	MISCELLANEOUS	2021 6 (i) Fly ash utilization plan shall be adhered, and 100% Ash utilization shall be carried out strictly as per extent rules and regulations of the Ministry in this regard. Backfilling in the low-lying area shall be carried out as per the CPCB guidelines.

PPs Submission: Complied Ash utilization is being complied in pursuance to MoEF and CC notification dated 31.12.2021 and its amendment dated 30.12.2022. Ash Utilization 101.26 Percent in 2023-24, 102.13 Percent in FY 2024-25, 101.21 Percent in 2025-26 (up to 30.Sept.2025) is achieved. NTPC Sipat is continuously trying to achieve 100 Percent utilization of ash.	Date: 26/11/2025

2	GREENBELT	2021 6 (ii) 10 acres of land shall be identified outside the project boundary in the Bilaspur district (Preferably within 10 km radius of project cover area) to carry out afforestation using Miyawaki plantation technique with more than 90% survival rate as committed by the PP vide letter No.CC:ESE:9518:2021:GEN Dated 23.11.2021.

PPs Submission: Complied 32,000 No.s of saplings have been planted through Miyawaki technique in Bhilmi village which is approximately 10 kms away from plant. Plantation Work had been completed in March 2024. Total project cost for plantation and maintenance up to two years is INR 853 lakh. Attachment - Photographs	Date: 27/11/2025

3	GREENBELT	2021 6 (iii) Other conditions of the EC letter dated 08.06.2004 shall remain unchanged.

PPs Submission: Complied Noted.	Date: 26/11/2025

Visit Remarks

Last Site Visit Report Date:	N/A
Additional Remarks:	

Note: This acknowledgement is as per the details submitted by project proponent. In no way is this document to be considered as conclusion on any action on the compliance of the project. This is strictly for the project proponent's reference purpose.

Attachment to condition No 2(xvi) of EC stage I dt 22.02.1999
condition No 3(vii) of EC stage I dt 08.09.2014

ANNEXURE- I

Table-I : Ambient Air Quality Monitoring
Period of Observation 01.04.2025 to 30.09.2025

CAAQMS-1 (Track Hopper)

Month	PM2.5	PM10	SO_2	NOx	CO_2
	[µg/m³]				[ppm]
Apr-2025	29.8	74.9	37.3	49.3	358.0
May-2025	20.6	48.5	32.9	49.6	393.1
Jun-2025	20.5	44.0	21.8	32.5	412.1
July-2025	8.2	16.8	25.9	42.0	344.7
Aug-2025	11.5	25.1	30.8	41.0	344.6
Sep-2025	13.3	25.2	28.1	41.9	319.6

CAAQMS-2 (B-Type)

Month	PM2.5	PM10	SO_2	NOx	CO_2
	[µg/m³]				[ppm]
Apr-2025	24.6	95.9	35.7	23.6	376.4
May-2025	19.8	36.9	34.4	26.7	388.3
Jun-2025	19.5	32.6	33.4	29.3	391.4
July-2025	12.1	16.7	28.5	30.8	398.3
Aug-2025	12.1	19.7	35.4	41.6	357.2
Sep-2025	15.4	20.2	26.1	33.7	411.8

CAAQMS-3 (Switch Yard)

Month	PM2.5	PM10	SO_2	NOx	CO_2
	[µg/m³]				[ppm]
Apr-2025	31.6	54.2	24.1	27.5	461.3
May-2025	36.3	22.4	24.7	27.2	460.8
Jun-2025	19.8	40.0	24.9	27.3	429.7
July-2025	10.8	20.3	26.2	28.9	427.3
Aug-2025	10.3	30.7	38.8	27.6	331.5
Sep-2025	10.3	31.3	31.1	27.3	340.0

Table-II: Meteorological Observations

Period of Observation: 01.04.2025 to 30.09.2025

Month	Temperature, °C			Relative Humidity, %			Rainfall		Wind Speed, m/s		
	Min	Max	Monthly average	Min	Max	Average	Rainy Days	Total Rainfall, mm	Min	Max	Mean
Apr-2025	20.8	32.7	26.7	49.8	95.8	67.1	3	0.3	0.7	1.9	1.3
May-2025	21.1	28.8	24.9	20.5	95.6	58.3	4	1.4	0.5	1.6	1.3
Jun-2025	20.6	28.6	24.7	49.8	95.6	58.3	8	2.6	0.5	1.4	0.9
July-2025	18.7	22.7	20.6	47.6	95.8	70.6	25	9.3	0.2	0.9	0.6
Aug-2025	19.7	24.3	22.9	21.2	96.7	57.9	11	2.2	0.4	1.2	0.7
Sep-2025	20.2	22.8	21.9	21.2	96.7	58.7	11	5.7	0.3	0.9	0.6

Table-III : Ambient Air Quality Monitoring around Plant area

Month	Janji Village					
	PM2.5	PM10	SO_2	NO_X	CO	HC
	[µg/m³]				[mg/m³]	[ppm]
Apr-2025	25.1	40.9	24.0	22.4	0.434	0.442
May-2025	32.3	51.4	25.4	24.4	0.446	0.458
Jun-2025	27.3	43.0	23.0	21.7	0.435	0.443
July-2025	26.2	42.1	22.2	20.5	0.432	0.446
Aug-2025	24.2	36.7	23.8	23.1	0.437	0.450
Sep-2025	22.2	39.7	20.8	19.8	0.429	0.437

Month	Kaudia Village					
	PM2.5	PM10	SO_2	NO_X	CO	HC
	[µg/m³]				[mg/m³]	[ppm]
Apr-2025	25.8	39.5	24.3	23.3	0.437	0.447
May-2025	33.4	50.4	26.4	25.7	0.454	0.466
Jun-2025	25.4	40.8	23.7	22.8	0.439	0.450
July-2025	25.6	40.8	21.4	23.0	0.440	0.451
Aug-2025	24.4	41.8	25.5	22.5	0.429	0.441

Month	Sipat Village					
	PM2.5	PM10	SO_2	NO_X	CO	HC
	[µg/m³]				[mg/m³]	[ppm]
Apr-2025	25.5	40.8	24.0	22.9	0.436	0.448
May-2025	27.1	44.5	22.9	22.6	0.440	0.451
Jun-2025	26.5	44.9	22.7	22.2	0.438	0.450
July-2025	25.4	42.6	22.2	21.5	0.441	0.453
Aug-2025	25.1	42.0	27.7	25.1	0.435	0.444

Month	Darrabhata Village					
	PM2.5	PM10	SO_2	NO_X	CO	HC
	[µg/m³]				[mg/m³]	[ppm]
Sep-2025	26.9	40.5	25.5	23.3	0.434	0.448

Month	Deori Village					
	PM2.5	PM10	SO_2	NO_X	CO	HC
	[µg/m³]				[mg/m³]	[ppm]
Sep-2025	23.4	42.4	22.7	21.9	0.437	0.449

Table-IV

AAQ monitoring at Sonthi Pahar Reserve Forest Area

Month	Location – Parsapali					
	PM 2.5	PM 10	SO_2	NOx	CO	HC
	[µg/m³]				[mg/m³]	[ppm]
Apr-2025	26.0	45.0	23.9	22.3	0.468	0.474
May-2025	26.2	45.4	24.2	23.0	0.467	0.474
Jun-2025	24.7	43.8	22.4	21.5	0.461	0.472
July-2025	22.1	41.6	21.0	19.7	0.454	0.464
Aug-2025	20.6	39.8	19.4	18.5	0.450	0.460
Sep-2025	19.5	38.8	18.3	17.3	0.447	0.458

ANNEXURE-II

Table-V: Stack Monitoring

Period of Observation: 01.04.2025 to 30.09.2025

Month	Unit-1				Unit-2				Unit-3				Unit-4				Unit-5			
	Parameter in mg/Nm^3																			
	PM	SO_2	NO_X	Hg	PM	SO_2	NO_X	Hg	PM	SO_2	NO_X	Hg	PM	SO_2	NO_X	Hg	PM	SO_2	NO_X	Hg
Apr-25	44	830	214	0.016	45	1015	245	0.012	45	1068	256	0.013	41	982	244	0.011	40	936	202	0.014
May-25	43	813	213	0.013	41	985	259	0.010	46	928	233	0.015	44.0	1043	239	0.011	39	1023	221	0.012
Jun-25	46	933	245	0.013	42	934	222	0.014	43	952	223	0.012	43.0	969	238	0.013	45	968	268	0.016
July-25	43	1036	257	0.011	39	1037	217	0.015	40	1029	217	0.016	40.6	1000	237	0.012	43	1010	236	0.013
Aug-25	44	1061	235	0.015	44	1084	220	0.014	44	1007	212	0.014	45.4	1102	240	0.011	#	#	#	#
Sep-25	44	1091	263	0.013	45	1110	235	0.016	43	991	211	0.013	41.3	1020	214	0.014	40	958	239	0.012

#.Under Shut Down

ANNEXURE-III

Table-VI: Ground Water Quality Monitoring
Period of Observation: 01.04.2025 to 30.09.2025

Legend :BDL – Below Detection Limit / BLQ- Below Limit of Quantification, LOQ-Limit of Quantification
Minimum Detection Limit (mg/l): F:0.2

Month	Location-I (Hardadih)				
	pH	TSS	TDS	F	B
		[mg/L]			
Apr-2025	7.2	05	474	0.3	<0.1
May-2025	7.5	06	494	0.4	<0.1
Jun-2025	7.2	06	488	0.4	<0.1
July-2025	7.1	02	456	0.2	<0.1
Aug-2025	7.3	02	428	BLQ	<0.1
Sep-2025	7.1	04	444	0.2	<0.1

Month	Location-II (Sukhripali)				
	pH	TSS	TDS	F	B
		[mg/L]			
Apr-2025	7.3	04	455	0.2	<0.1
May-2025	7.2	03	418	BLQ	<0.1
Jun-2025	7.5	03	422	BLQ	<0.1
July-2025	7.3	05	438	BLQ	<0.1
Aug-2025	7.5	04	455	BLQ	<0.1
Sep-2025	7.2	06	475	0.4	<0.1

Month	Location-III (Ralia)				
	pH	TSS	TDS	F	B
		[mg/L]			
Apr-2025	7.5	03	436	BLQ	<0.1
May-2025	7.3	04	453	0.2	<0.1
Jun-2025	7.1	06	478	BLQ	<0.1
July-2025	7.4	02	420	BLQ	<0.1
Aug-2025	7.2	03	440	0.2	<0.1
Sep-2025	7.5	02	414	BLQ	<0.1

Location-IV (Bhilai)					
Month	pH	TSS	TDS	F	B
		[mg/L]			
Apr-2025	7.4	06	487	0.4	<0.1
May-2025	7.1	05	470	0.3	<0.1
Jun-2025	7.3	04	454	0.2	<0.1
July-2025	7.2	04	432	02	<0.1

Aug-2025	7.6	07	474	0.4	<0.1
Sep-2025	7.3	05	459	0.3	<0.1

Location-V (Gatora)					
Month	**pH**	**TSS**	**TDS**	**F**	**B**
		[mg/L]			
Apr-2025	7.7	03	421	BLQ	<0.1
May-2025	7.4	03	434	BLQ	<0.1
Jun-2025	7.6	05	444	BLQ	<0.1
July-2025	7.5	03	475	0.3	<0.1
Aug-2025	7.3	05	463	0.3	<0.1
Sep-2025	7.5	03	432	BLQ	<0.1

Location-V (Rank)					
Month	**pH**	**TSS**	**TDS**	**F**	**B**
		[mg/L]			
Apr-2025	7.3	04	466	0.3	<0.1
May-2025	7.6	06	480	0.3	<0.1
Jun-2025	7.2	05	474	0.3	<0.1
July-2025	7.6	07	494	0.4	<0.1
Aug-2025	7.1	06	488	0.4	<0.1
Sep-2025	7.2	07	488	0.4	<0.1

Location-V (Janji)					
Month	**pH**	**TSS**	**TDS**	**F**	**B**
		[mg/L]			
Apr-2025	7.3	05	484	0.4	<0.1
May-2025	7.5	04	446	BLQ	<0.1
Jun-2025	7.3	02	432	BLQ	<0.1
July-2025	7.4	02	464	0.4	<0.1
Aug-2025	7.2	02	424	BLQ	<0.1
Sep-2025	7.4	03	438	0.2	<0.1

Location-V (Kaudia)					
Month	**pH**	**TSS**	**TDS**	**F**	**B**
		[mg/L]			
Apr-2025	7.1	03	444	BLQ	<0.1
May-2025	7.2	03	424	BLQ	<0.1
Jun-2025	7.2	04	440	0.2	<0.1

July-2025	7.5	03	426	0.2	<0.1
Aug-2025	7.3	04	435	BLQ	<0.1
Sep-2025	7.1	06	0.4	BLQ	<0.1

Location-V (Darrabhata)					
Month	**pH**	**TSS**	**TDS**	**F**	**B**
		[mg/L]			
Apr-2025	7.4	06	494	0.4	<0.1
May-2025	7.6	06	474	0.3	<0.1
Jun-2025	7.5	03	452	BLQ	<0.1
July-2025	7.2	03	440	BLQ	<0.1
Aug-2025	7.1	06	494	0.4	<0.1
Sep-2025	7.1	06	486	0.4	<0.1

Location-V (Deori)					
Month	**pH**	**TSS**	**TDS**	**F**	**B**
		[mg/L]			
Apr-2025	7.6	03	414	BLQ	<0.1
May-2025	7.5	04	460	0.3	<0.1
Jun-2025	7.1	05	464	0.3	<0.1
July-2025	7.6	07	488	0.3	<0.1
Aug-2025	7.5	03	464	0.3	<0.1
Sep-2025	7.6	02	424	BLQ	<0.1

Location-V (Nvaadih)					
Month	**pH**	**TSS**	**TDS**	**F**	**B**
		[mg/L]			
Apr-2025	7.2	04	465	0.3	<0.1
May-2025	7.4	05	486	0.4	<0.1
Jun-2025	7.6	07	492	0.4	<0.1
July-2025	7.3	05	448	BLQ	<0.1
Aug-2025	7.2	05	475	0.3	<0.1
Sep-2025	7.5	05	462	0.3	<0.1

Surface Water (Pond)Quality Monitoring
Period of Observation: 01.04.2025to 30.09.2025

Month	Location-I (Hardadih)				
	pH	TSS	TDS	F	B
		[mg/L]			
Apr-2025	7.2	15	348	0.2	<0.1
May-2025	7.3	12	320	BLQ	<0.1
Jun-2025	7.1	15	332	BLQ	<0.1
July-2025	7.5	13	351	0.3	<0.1
Aug-2025	7.3	12	321	BLQ	<0.1
Sep-2025	7.2	14	315	BLQ	<0.1

Month	Location-II (Sukhripali)				
	pH	TSS	TDS	F	B
		[mg/L]			
Apr-2025	7.1	18	382	0.5	<0.1
May-2025	7.5	17	378	0.3	<0.1
Jun-2025	7.3	14	340	0.3	<0.1
July-2025	7.2	12	313	BLQ	<0.1
Aug-2025	7.1	13	352	BLQ	<0.1
Sep-2025	7.2	15	338	0.2	<0.1

Month	Location-III (Ralia)				
	pH	TSS	TDS	F	B
		[mg/L]			
Apr-2025	7.4	12	314	BLQ	<0.1
May-2025	7.2	14	334	BLQ	<0.1
Jun-2025	7.5	17	367	0.4	<0.1
July-2025	7.6	14	375	0.4	<0.1
Aug-2025	7.2	18	390	0.4	<0.1
Sep-2025	7.5	19	374	0.4	<0.1

Location-IV (Bhilai)					
Month	pH	TSS	TDS	F	B
		[mg/L]			
Apr-2025	7.6	16	354	0.4	<0.1
May-2025	7.5	18	388	0.4	<0.1
Jun-2025	7.2	15	360	0.3	<0.1
July-2025	7.7	15	363	0.3	<0.1

Aug-2025	7.6	17	376	0.3	<0.1
Sep-2025	7.2	17	351	0.3	<0.1

Location-V (Gatora)					
Month	**pH**	**TSS**	**TDS**	**F**	**B**
		[mg/L]			
Apr-2025	7.3	14	328	BLQ	<0.1
May-2025	7.7	15	350	0.3	<0.1
Jun-2025	7.6	18	384	0.4	<0.1
July-2025	7.3	17	388	0.3	<0.1
Aug-2025	7.4	16	384	0.4	<0.1
Sep-2025	7.3	20	386	0.4	<0.1

Location-V (Rank)					
Month	**pH**	**TSS**	**TDS**	**F**	**B**
		[mg/L]			
Apr-2025	7.5	14	340	0.3	<0.1
May-2025	7.2	13	325	0.2	<0.1
Jun-2025	7.4	14	315	BLQ	<0.1
July-2025	7.1	12	329	BL Q	<0.1
Aug-2025	7.2	16	362	0.2	<0.1
Sep-2025	7.1	16	328	BLQ	<0.1

Location-V (Janji)					
Month	**pH**	**TSS**	**TDS**	**F**	**B**
		[mg/L]			
Apr-2025	7.2	16	350	0.3	<0.1
May-2025	7.6	14	321	BLQ	<0.1
Jun-2025	7.2	17	374	0.4	<0.1
July-2025	7.3	14	359	0.3	<0.1
Aug-2025	7.4	17	379	0.3	<0.1
Sep-2025	7.3	18	359	0.3	<0.1

Location-V (Kaudia)					
Month	**pH**	**TSS**	**TDS**	**F**	**B**
		[mg/L]			
Apr-2025	7.5	17	380	0.4	<0.1
May-2025	7.3	16	357	0.3	<0.1
Jun-2025	7.5	15	348	0.3	<0.1

July-2025	7.0	14	382	0.4	<0.1
Aug-2025	7.2	14	358	0.2	<0.1
Sep-2025	7.1	16	343	0.3	<0.1

Location-V (Darrabhata)					
Month	**pH**	**TSS**	**TDS**	**F**	**B**
		[mg/L]			
Apr-2025	7.2	16	364	0.4	<0.1
May-2025	7.5	17	397	0.4	<0.1
Jun-2025	7.1	15	325	BLQ	<0.1
July-2025	7.1	12	340	BLQ	<0.1
Aug-2025	7.0	12	328	BLQ	<0.1
Sep-2025	7.2	15	324	0.2	<0.1

Location-V (Deori)					
Month	**pH**	**TSS**	**TDS**	**F**	**B**
		[mg/L]			
Apr-2025	7.3	15	340	BLQ	<0.1
May-2025	7.2	15	331	BLQ	<0.1
Jun-2025	7.6	16	350	0.3	<0.1
July-2025	7.5	15	371	0.4	<0.1
Aug-2025	7.4	16	371	0.4	<0.1
Sep-2025	7.6	19	363	0.4	<0.1

Location-V (Nvaadih)					
Month	**pH**	**TSS**	**TDS**	**F**	**B**
		[mg/L]			
Apr-2025	7.6	14	318	BLQ	<0.1
May-2025	7.7	15	340	0.2	<0.1
Jun-2025	7.2	14	327	BLQ	<0.1
July-2025	7.2	13	321	BLQ	<0.1
Aug-2025	7.3	15	347	BLQ	<0.1
Sep-2025	7.4	14	309	BLQ	<0.1

Table-VII : Heavy Metals monitoring around plant villages

Legend: BDL – Below Detection Limit / BLQ- Below Limit of Quantification, LOQ-Limit of Quantification
Minimum Detection Limit (mg/l): Cu: 0.002, Zn: 0.01, Cd : 0.002 Cr(Total):0.002, Pb:0.002, As : 0.002, Hg:0.0005

Month	Location-I (Hardadih)							
	Fe	Hg	Cd	Cr	Pb	Zn	As	Cu
	[mg/L]							
Apr-2025	0.25	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
May-2025	0.27	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
Jun-2025	0.23	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
July-2025	0.21	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
Aug-2025	0.23	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
Sep-2025	0.21	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ

Month	Location-II (Sukhripali)							
	Fe	Hg	Cd	Cr	Pb	Zn	As	Cu
	[mg/L]							
Apr-2025	0.26	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
May-2025	0.25	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
Jun-2025	0.27	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
July-2025	0.24	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
Aug-2025	0.25	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
Sep-2025	0.22	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ

Month	Location-III (Ralia)							
	Fe	Hg	Cd	Cr	Pb	Zn	As	Cu
	[mg/L]							
Apr-2025	0.22	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
May-2025	0.23	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
Jun-2025	0.25	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
July-2025	0.26	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
Aug-2025	0.21	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
Sep-2025	0.25	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ

Month	Location-IV (Bhilai)							
	Fe	Hg	Cd	Cr	Pb	Zn	As	Cu
	[mg/L]							
Apr-2025	0.25	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
May-2025	0.24	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
Jun-2025	0.28	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
July-2025	0.22	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ

Aug-2025	0.25	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
Sep-2025	0.23	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ

Month	Location-V (Gataura)							
	Fe	Hg	Cd	Cr	Pb	Zn	As	Cu
	[mg/L]							
Apr-2025	0.23	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
May-2025	0.21	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
Jun-2025	0.22	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
July-2025	0.27	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
Aug-2025	0.26	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
Sep-2025	0.28	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ

Month	Location-VI (Rank)							
	Fe	Hg	Cd	Cr	Pb	Zn	As	Cu
	[mg/L]							
Apr-2025	0.21	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
May-2025	0.23	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
Jun-2025	0.25	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
July-2025	0.23	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
Aug-2025	0.23	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
Sep-2025	0.22	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ

Month	Location-VII (Janji)							
	Fe	Hg	Cd	Cr	Pb	Zn	As	Cu
	[mg/L]							
Apr-2025	0.21	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
May-2025	0.20	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
Jun-2025	0.23	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
July-2025	0.25	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
Aug-2025	0.24	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
Sep-2025	0.23	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ

Month	Location-VIII (Kaudia)							
	Fe	Hg	Cd	Cr	Pb	Zn	As	Cu
	[mg/L]							
Apr-2025	0.24	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
May-2025	0.23	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
Jun-2025	0.22	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
July-2025	0.23	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
Aug-2025	0.21	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
Sep-2025	0.24	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ

Month	Location-IX (Darrabhata)							
	Fe	Hg	Cd	Cr	Pb	Zn	As	Cu
	[mg/L]							
Apr-2025	0.25	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
May-2025	0.21	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
Jun-2025	0.25	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
July-2025	0.22	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
Aug-2025	0.25	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
Sep-2025	0.22	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ

Month	Location-X (Deori)							
	Fe	Hg	Cd	Cr	Pb	Zn	As	Cu
	[mg/L]							
Apr-2025	0.23	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
May-2025	0.24	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
Jun-2025	0.26	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
July-2025	0.27	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
Aug-2025	0.24	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
Sep-2025	0.21	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ

Month	Location-XI (Nvaadih)							
	Fe	Hg	Cd	Cr	Pb	Zn	As	Cu
	[mg/L]							
Apr-2025	0.22	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
May-2025	0.22	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
Jun-2025	0.24	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
July-2025	0.23	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
Aug-2025	0.21	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
Sep-2025	0.23	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ

Main Plant Effluent Monitoring
Period of Observation: 01.04.2025 to 30.09.2025

NTPC Sipat is in compliance to zero liquid discharge. There is no discharge outside plant area from CMB. After treatment, water is being reused in ash slurry system.

Table-VIII: Sanitary Effluent Monitoring
Period of Observation 01.04.2025 to 30.09.2025

At NTPC Sipat there is zero sanitary effluent discharge, treated sanitary effluent being used in horticulture.

Month	Sanitary Effluents			
	pH	TSS	BOD	COD
		[mg/L]		
Apr-2025	7.3	14.2	6.7	39.4
May-2025	7.3	13.3	6.4	38.1
Jun-2025	7.4	13.2	6..0	37.2
July-2025	7.4	13.7	6.3	38.7
Aug-2025	7.3	13.9	6.4	37.7
Sep-2025	7.3	13.6	6.3	37.7

ANNEXURE – IV

Table-IX: Noise Monitoring
(Period of Observation: 01.04.2025 to 30.09.2025)

Locations	Date of Monitoring	Noise Levels in dB(A)	
		Day Time	Nighttime
Material gate	15-04-2025	49.3	40.6
CCR	15-04-2025	46.7	33.5
CHP	15-04-2025	44.5	42.3
Ralia	15-04-2025	36.7	30.2
Bhilai	15-04-2025	35.2	31.7
Hardadih	15-04-2025	40.6	35.2
Sukhripali	15-04-2025	41.6	31.5
Gataura	15-04-2025	39.5	32.2
ADM Gate	15-04-2025	57.5	43.2
Turbine Hall	15-04-2025	60.2	42.6
B-Type	15-04-2025	51.7	38.7
Material gate	15-05-2025	51.4	42.3
CCR	15-05-2025	47.3	32.4
CHP	15-05-2025	46.5	43.7
Ralia	15-05-2025	37.3	32.4
Bhilai	15-05-2025	34.4	30.7
Hardadih	15-05-2025	39.4	34.7
Sukhripali	15-05-2025	38.4	29.3
Gataura	15-05-2025	41.7	33.7
ADM Gate	15-05-2025	58.3	43.7
Turbine Hall	15-05-2025	61.4	44.6
B-Type	15-05-2025	50.4	37.4
Material gate	14-06-2025	52.3	43.4
CCR	14-06-2025	45.2	35.6
CHP	14-06-2025	48.2	44.7
Ralia	14-06-2025	35.4	30.7
Bhilai	14-06-2025	36.8	32.7
Hardadih	14-06-2025	41.4	33.2
Sukhripali	14-06-2025	40.7	31.6
Gataura	14-06-2025	39.5	32.6
ADM Gate	14-06-2025	56.4	44.5

Locations	Date of Monitoring	Noise Levels in dB(A)	
		Day Time	Nighttime
Turbine Hall	14-06-2025	58.6	45.3
B-Type	14-06-2025	51.0	38.6
Material gate	12-07-2025	50.4	41.3
CCR	12-07-2025	46.4	37.2
CHP	12-07-2025	49.5	43.4
Ralia	12-07-2025	33.2	28.4
Bhilai	12-07-2025	37.2	31.7
Hardadih	12-07-2025	40.4	30.7
Sukhripali	12-07-2025	43.3	33.7
Gataura	12-07-2025	38.7	32.0
ADM Gate	12-07-2025	54.2	42.4
Turbine Hall	12-07-2025	56.3	46.2
B-Type	12-07-2025	51.3	39.5
Material gate	12-08-2025	48.4	42.3
CCR	12-08-2025	44.3	35.7
CHP	12-08-2025	50.4	40.8
Ralia	12-08-2025	35.7	30.2
Bhilai	12-08-2025	34.8	28.4
Hardadih	12-08-2025	38.3	31.7
Sukhripali	12-08-2025	41.7	34.4
Gataura	12-08-2025	37.4	31.5
ADM Gate	12-08-2025	53.6	40.5
Turbine Hall	12-08-2025	55.2	47.2
B-Type	12-08-2025	50.4	39.7
Material gate	11-09-2025	49.6	44.2
CCR	11-09-2025	47.2	34.4
CHP	11-09-2025	51.2	42.3
Ralia	11-09-2025	36.4	31.3
Bhilai	11-09-2025	35.2	29.5
Hardadih	11-09-2025	37.3	32.5
Sukhripali	11-09-2025	42.3	35.3
Gataura	11-09-2025	38.3	32.5
ADM Gate	11-09-2025	51.5	42.3
Turbine Hall	11-09-2025	54.3	46.2
B-Type	11-09-2025	48.6	40.2