

Ref: NKSTPP/EMG/ Env. Statement/80

Dated: - 03.09.2026

To
The Member Secretary,
Jharkhand State Pollution Control Board,
T.A. Division Building, HEC Campus,
Dhurwa, Ranchi, Jharkhand – 834004.

Sub: Submission of Environment Statement for the period April 2025 to March 2026 for NTPC-North Karanpura.

Dear Sir,

In reference to the above cited subject, we are submitting Environment Statement for the period April 2025 to March 2026 for NTPC-North Karanpura Super Thermal Power Project.

This is for your kind information and record please.

Thanking you,

Yours Sincerely,

Sanjoy Kumar
03/09/2026

Sanjoy Kumar
DGM(EMG)
NTPC North Karanpura, Tandwa

Enc: As Above:

Copy to: Regional Officer, JSPCB,
PTC Chowk, Matwari Road,
Hazaribagh - 825310

संजय कुमार/ Sanjoy Kumar
उप महाप्रबंधक (ई एम जी)
Dy. General Manager (EMG)
एनटीपीसी लिमिटेड, नॉर्थ करणपुरा- 825321
NTPC Limited, North Karanpura- 825321

नॉर्थ करणपुरा सुपर थर्मल पावर प्रोजेक्ट (3x660 मेगावाट) टण्डवा, जिला: चतरा, झारखण्ड (825321)
North Karanpura Super Thermal Project (3x660MW) Tandwa, Dist: Chatra, Jharkhand (825321)
पंजीकृत कार्यालय: एनटीपीसी भवन, स्कोप कॉम्प्लेक्स, 7 इंस्टीट्यूशन एरिया, लोधी रोड, नई दिल्ली-110003
Registered office NTPC Bhawan, Scope Complex, 7 Institutional Area, Lodhi Road New Delhi- 110003
www.ntpc.co.in

(SEE RULE – 14)
ENVIRONMENT STATEMENT FOR THE FINANCIAL YEAR
ENDING 31ST MARCH, 2026

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PART – A

- i) Name and Address of the occupier of the industry. : **Alok Kumar Tripathi**
Executive Director
NTPC LTD., North Karanpura STPP
PO – Tandwa, Distt. – Chatra
(Jharkhand), Pin:- 825415
- ii) Industry category (Primary - STC Code) (Secondary - SIC Code) : Primary (Thermal Power Plant)
- iii) Production capacity : 1980 MW (3x660 MW)
- iv) Year of establishment : **Unit-I:** 1st March, 2023;
Unit-II: 20th March, 2024;
Unit-III: 15th June, 2025
- v) Date of the last Environmental Statement submitted : 23/10/2025

PART – B

WATER AND RAW MATERIAL CONSUMPTION

i) Water Consumption KL/day*	Drawn	Consumed
a) Process (For DM Plant & Ash Disposal)	7575	7575
b) Industrial Cooling	23038.15	23038.15
c) Domestic	1062	1062

*Average annual consumption in Kilo Liter per Day rounded off to nearest integer.

Name of product	Water Consumption per unit of product output	
	During the previous financial year 2024-25	During the current financial year 2025-26
Electricity	0.88 L/ KWh	0.80 L/KWh

ii) Raw Material Consumption

Name of Raw Materials ☐	Name of Product	Consumption of Raw Material per unit of output	
		During the previous financial year 2024-25	During the current financial year 2025-26
Coal	Electricity	0.75 Kg/KWh	0.70 Kg/KWh
Oil	-do-	0.38 ml/ KWh	0.39 ml/KWh

Industry may use codes if disclosing details of raw material would violate contractual obligations otherwise all industries have to name the raw materials used.

Mr. Alok Kumar Tripathi

(Signature)

PART - C

POLLUTION GENERATED

(Parameter as specified in the consent issued)

Pollutants	Qty. of pollutants discharged (Mass/day)	Conc. of pollutants discharged (Mass/Volume)	% of variation from prescribed standards with reasons
(a) Water: Main Plant Effluent (480 m³/Day)			
1. pH (Limit- 6.5-8.5)	7.67		---
2. TSS (Limit- 100 mg/L)	13.13 Kg/Day	27.36 mg/L	(-) 72.64
3. BOD (Limit-30 mg/L)	8.54 Kg/Day	17.79 mg/L	(-) 40.69
4. COD (Limit-250 mg/L)	60.64 Kg/Day	126.33 mg/L	(-) 49.47
5. O&G (Limit- 10 mg/L)	1.29 Kg/Day	2.69 mg/L	(-) 73.08
(b) Air : (Avg. of Stack Emission Unit-I) (2025-26)			
SPM (Limit-30 mg/nm ³)	2246.28 Kg/Day	26.65 mg/nm ³	(-) 11.16
SO ₂ (Limit-100 mg/ nm ³)	86912.62 Kg/Day	1023.95 mg/nm ³	(+) 923.95
NO _x (Limit-100 mg/ nm ³)	25068.00 Kg/Day	296.29 mg/nm ³	(+) 196.29
(c) Air : (Avg. of Stack Emission Unit-II) (2025-26)			
SPM (Limit-30 mg/ nm ³)	2316.58 Kg/Day	27.36 mg/nm ³	(-) 8.80
SO ₂ (Limit-100 mg/ nm ³)	87518.75 Kg/Day	1024.60 mg/nm ³	(+) 924.60
NO _x (Limit-100 mg/ nm ³)	25705.16 Kg/Day	301.52 mg/nm ³	(+) 201.52
(d) Air : (Avg. of Stack Emission Unit-III) (2025-26)			
SPM (Limit-30 mg/ nm ³)	2230.13 Kg/Day	27.37 mg/nm ³	(-) 8.77
SO ₂ (Limit-100 mg/ nm ³)	90979.89 Kg/Day	1127.09 mg/nm ³	(+) 1027.09
NO _x (Limit-100 mg/ nm ³)	22689.59 Kg/Day	278.99 mg/nm ³	(+) 178.99

Mr. Anil Kumar

Signature

PART - D
(HAZARDOUS WASTES)

Authorization for Hazardous Waste (Management & Handling) Rules, 2016 granted by JSPCB, vide letter No.: JSPCB/RO/HZB/HWM-9395097/2021/10 20/12/2021 valid up to: **19.12.2026**.

The Authorization is granted for the following wastes and qty. generated from Process & Pollution Control Facilities as below:-

Sl. No.	Hazardous Wastes	Cat. No.	Sanctioned Qty. as per above Authorization Letter No.	Hazardous Wastes Generated
1.	Used / Spent Oil	5.1	300 KL/annum	38.43 KL
2.	Wastes or Residues Containing Oil	5.2	2 KL/annum	NIL
3.	Empty barrels/containers/liners contaminated with hazardous chemicals /wastes	33.1	3.0 ton/annum	NIL
4.	Sludge and filters contaminated with oil	3.3	1 KL/annum	NIL
5.	Spent ion exchange resin containing toxic metals	35.2	3.0 ton/annum	NIL

PART - E
(SOLID WASTES)

		Total Quantity	
		During the previous financial year 2024-25	During the current financial year 2025-26
(a)	From Process Mill Reject	N.A	N.A
(b)	From Pollution Control Facilities Ash	2875712 MT	3442944
(c) i.	Quantity recycled or re-utilized within the unit Ash	NIL (Ash Dyke Raising)	NIL (Ash Dyke Raising)
ii.	Land Filling	NIL	NIL
iii.	- Agriculture	NIL	NIL
	- Cenosphere	NIL	NIL
	- Clay brick kiln	NIL	800.16
	- Asbestos	NIL	NIL
	-Roads/Rail Embankment	2262301 MT	1707773.86
	- CLSM	NIL	NIL
	- Ash Concrete	NIL	NIL
	- Bottom Ash Cover	NIL	NIL
iv.	-Sold (Mill Reject)	NIL	NIL
	-Ash (Cement Industries)	NIL	NIL
v.	-Disposed Mill Reject	NIL	NIL
	-Disposed Ash	2300654 MT	1708574

MD Ashrafuddin

[Signature]

PART - F

Please specify the characteristics (in terms of composition and quantum) of Hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes. Authorization of Hazardous Waste (Management & Handling) Rules, 2016.

Hazardous Waste Generation and Method of Disposal Data (during financial year 2025-26):

Sl. No.	Hazardous Wastes	Quantity Generated	Mode of Disposal		
			Disposal Method	Recyclable	Incinerable
01.	Used / Spent Oil	38.43 KL	Stored in barrels in covered storage Yard. Dispose through auction to Authorized Recycler	38.43 KL	-
02.	Wastes or Residues Containing Oil	NIL	Stored in barrels in covered storage Yard. Dispose through auction to Authorized Recycler	NIL	-
03.	Empty barrels/containers/liners contaminated with hazardous chemicals /wastes	NIL	Through auction to Authorized Recycler	NIL	-
04.	Sludge and filters contaminated with oil	NIL	Through auction to Authorized Recycler	NIL	-

Solid Waste Generation:

Coal Consumption - 8873568 MT
 Ash % - 49.63
 Ash Generated - 3442944 MT
 Ash Disposed off - 1708574 MT

Md. Jafar Uddin

[Signature]

PART – G**Impact of the pollution abatement measures taken on conservation of natural resources and on the cost of production.**

Pollution control measures adopted has resulted in economization of consumption of natural resources and general improvement in the quality of environment in and around the plant.

With the installation of micro-processor-based control system for ESPs, the efficiency of ESP has increased because of automatic control of electric parameters; on the other hand, it has decreased the power consumption of ESPs. This saving in power consumption indirectly saves coal which is the main raw material and natural source for generation of electricity.

Large scale afforestation has been taken up by NTPC NKSTPP around the station which acts as oxygen sink and also helps in improving natural environment. In 2025-26, we have planted 12000 saplings in and around NTPC Township including free distribution of fruit bearing saplings among local villagers.

We are always working to economize the generation cost and thus reduction of power tariff. Several initiatives have been taken for reduction in auxiliary power consumption. Also, by optimization of coal consumption, we are able to improve our heat rate. In turn improvement in cost optimization and heat rate improves the quality of environment in the way of better health of neighborhood people and employees, which are incomparable.

PART – H**Additional measures/investment proposal for environmental protection including abatement of pollution, prevention of pollution**

Sl. No.	Area	Investment (In Crore Rs.)
1	Electrical precipitator	152
2	Chimney	340.22
3	Aux. cooling Towers including Civil works	16
4	Flue gas Desulfurization System(FGD)	518.51
5	Ash handling Civil works	64
6	Ash handling mechanical works	243
7	Ash Dyke	125
8	Sewerage Collection, treatment and disposal at PTS Township	2.06
9	Effluent treatment Plant	15
10	Sewerage Collection, treatment and disposal at ETS Township	1.37
11	Dust Extraction and Suppression System	3
12	Fire Protection System: Control of fire and Explosion Hazards	29
13	Sewerage Collection, treatment and disposal at ETS Township	2.38
14	Rainwater Harvesting System	2.51
15	Rehabilitation and Resettlement	317.12
16	Afforestation	3.21

01 Afforestation:

Area of green belt / afforestation – At present total 50730 no. trees are planted at township and nearly surrounding area. In year 2025-26, 12000 no. trees are planted at township area and outside plant boundary and Fruit bearing tree saplings are distributed among Project affected Villages.

Md Akbaruddin

[Signature]

- 02 Rain Water Harvesting:**
83,499 Cum Capacity of RWH Pond and 15 recharge pit is constructed in Plant area. RWH pond of capacity 8400 Cum and 4 recharge pit is constructed in ETS township.
- 03 Effluent Treatment Plant:**
The plant effluent is treated in Effluent Treatment Plant (ETP) The parameters of treated effluent are monitored through online Effluent Quality Monitoring System (EQMS) and offline through third party monitoring. Parameters are well within limits and treated effluent is used in plant for process.
- 04 Management of Domestic Waste:**
Domestic waste collected from residences from and sent to Bio Methanation gas plant (200 kg/day) at ETS Township from which Methane gas is used in cooking at our CISF Canteen.
- 05 Ground Water Monitoring:**
Ground water monitoring is being done by NABL done by accredited / MOEF authorized Laboratory of ground water. Drinking water from surrounding areas on half yearly basis. No adverse result found.
Hydro geological Study around plant and ash dyke was done by NKSTPP through M/s IIT Roorkee from 2023-25 for identification and delineation of Aquifer geometry and Drainage pattern watershed. Ground water and surface level monitoring & monitoring of heavy metals. Same work will be carried out by M/s Centre for ground water recharge from 2026-28.
- 06 Monitoring of Mercury in Stack:**
Monitoring of mercury in stack through NABL accredited / MOEF authorized Laboratory. Report are being submitted to JSPCB regularly.
- 07 Installation of Root top:**
1100 KWp has been envisaged inside NKSTPP premises. Work has been awarded to M/s Solluz Energy Private Limited, New Delhi. 654 KWp is completed. Work in progress.
- 08 Installation of FGD:**
In order to meet new environment norms published by MoEF CC in December 2015, we are installing FGD in our units. Work has been awarded to M/s BHEL. Work in progress.

PART - I

Any other particular for improving the quality of Environment

To save natural resources like water. NKSTPP has installed Air Cooled Condenser which is India's first air cooled condenser in Thermal Power Plants which in turn saving of 30.5 million cubic meter water.

Ms. Ashwini Laddi

J. Kumar