

**Half Yearly Compliance Report
2024
01 Jun(01 Oct - 31 Mar)**

Acknowledgment

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	NA
MoEF File No.	J-13011/5/2002.IA-II(T)	Entity name as per PAN	NA

Compliance Reporting Details

Reporting Year 2024

Remarks (if any) Compliance of EC Stage-II, letter dated 08.06.2004.

Reporting Period 01 Jun(01 Oct - 31 Mar)

Details of Production and Project Area

Name of Entity / Corporate Office NTPC Ltd.,

	Project Area as per EC Granted	Annual Project Area in Possession
Private	0	0
Revenue Land	0	0
Forest	0	0
Others	0	0
Total	0	0

Production Capacity

Sr. no	Product Name	units	Valid Upto	Capacity	Production last year	Capacity as per CTO
1	Electricity	MW	30/04/2024	1000	7590.55 MU	1000
2	Electricity	MW	30/04/2026	1000	7972.88 MU	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 & 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 at a cost of 853 lakh. Work is completed in March 2024. Geo tagged plantation site photographs are attached		Date: 02/06/2024
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: 31/05/2024
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/Nm ³ .
PPs Submission: Complied High efficiency Electrostatic Precipitator (ESP) having efficiency of 99.9% has been installed to limit outlet SPM emission within 50 mg/Nm ³		Date: 31/05/2024
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 Dipka mines of SECL. The coal is transported from mine end to Power Station by NTPC owned rakes through captive MGR. Coal consumption in FY 2023-24 for stage - II Units is lesser than the stipulated quantity.		Date: 02/06/2024
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: 31/05/2024
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.

<p>PPs Submission: Complied</p> <p>Market survey conducted through M/s. Mind Sight Consultants Pvt. Ltd., Delhi in August 2006 for utilisation of 100 % ash in phased manner. Dry fly ash is being issued free of cost to fly ash brick manufacturers. Nearby cement industries are getting fly ash free of cost from NTPC Sipat. Pond ash is being supplied in NHAI Bilaspur – Uрга, Raipur – Dhamtari, Raipur-Vishalhapattanam, Durg - Aarang NHAI highway projects. Low lying area development works are being undertaken as per CPCB stipulations. The station had signed a MoU for backfilling of ash in Manikpur Open cast mine void and ash filling work is in progress since Sept 2022. Fly ash utilization is being complied as per MoEF & CC notification dated 31.12.2021 and its amendment 30.12.2022.</p>		Date: 31/05/2024
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.)
<p>PPs Submission: Complied</p> <p>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)</p>		Date: 31/05/2024
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.
<p>PPs Submission: Complied</p> <p>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. NTPC conducted “RAINWATER HARVESTING POTENTIAL ASSESSMENT AND DESIGN OF RAINWATER HARVESTING STRUCTURES/FACILITIES/SYSTEMS AT NTPC-SIPAT” through National Institute of Hydrology, Roorkee which was completed in Feb -2023. The findings of the study reveal that Water table in the project area is up to 4 meters, therefore, it is not advisable to plan for artificial Recharge Structure like recharge shaft or injection wells. However, surface run off is captured and used in Cooling Tower.</p>		Date: 02/06/2024
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.
<p>PPs Submission: Complied</p> <p>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 & 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. 32,000 No.s of saplings have been planted through Miyawaki technique at a cost of 853 lakh. Geo tagged site photographs are attached.</p>		Date: 02/06/2024
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: 02/06/2024
11	AIR QUALITY MONITORING AND PRESERVATION	3 (xiv) Ambient air quality data monitoring stations should be set up at the boundary of Sonthi Reserved Forest before the 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: 31/05/2024
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: 31/05/2024
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: 31/05/2024
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 4.5 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: 02/06/2024
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 Complied		Date: 31/05/2024

General Conditions

Sr.No.	Condition Type	Condition Details
1	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: 31/05/2024
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. Contract has been awarded for installation of FGD in Stage# 2 units. Civil construction and equipment erection work is in progress.		Date: 31/05/2024
3	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 All the condition stipulated by CECB have been implemented		Date: 31/05/2024
4	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. Process waste water is treated in ETP and used in process. STP treated water is used in horticulture. Concept of ZLD is complied. No effluent is discharged from Plant.		Date: 31/05/2024
5	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: 31/05/2024
6	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. Six monthly report is submitted at PARIVESH 2.0 portal. Ambient Air Quality and other monitoring reports are submitted in Annexure.		Date: 31/05/2024
7	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: 02/06/2024
8	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. Complied		Date: 02/06/2024
9	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: 31/05/2024
10	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: 31/05/2024
11	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: 31/05/2024
12	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 and complied		Date: 31/05/2024
13	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: 31/05/2024
14	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: 31/05/2024

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: 31/05/2024
<p style="text-align: center;">Visit Remarks</p>		
Last Site Visit Report Date:		13/02/2024
Additional Remarks:		IRO visit observation letter and its compliance status as 31.03.2024 is attached.

Half Yearly Compliance Report
2024
01 Jun(01 Oct - 31 Mar)

Acknowledgment

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)	Category	Thermal Projects
Plot / Survey / Khasra No.	N/A	Sub-District	N/A
State	CHHATTISGARH	Entity's PAN	NA
MoEF File No.	No.J-13011/10/1996-IA.II(T)	Entity name as per PAN	NA

Compliance Reporting Details

Reporting Year 2024
Remarks (if any)
Reporting Period 01 Jun(01 Oct - 31 Mar)

Details of Production and Project Area

Name of Entity / Corporate Office NTPC Ltd.,

	Project Area as per EC Granted	Annual Project Area in Possession
Private	0	0
Revenue Land	0	0
Forest	0	0
Others	0	0
Total	0	0

Production Capacity

Sr. no	Product Name	units	Valid Upto	Capacity	Production last year	Capacity as per CTO
1	Electricity	MW	30/04/2024	1000	7590.55 MU	1000
2	Electricity	MW	30/04/2026	1000	7972.88 MU	1000

Conditions

Specific Conditions

Sr.No.	Condition Type	Condition Details
1	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 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 at a cost of Rs. 853 lakh. Work have been completed in March 2024. Copy of site photograph is attached.		Date: 02/06/2024
2	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 & CC notification dated 31.12.2021 and its amendment dated 30.12.2022. 101.26 % ash utilization is achieved in FY 2023-24.		Date: 02/06/2024
3	GREENBELT	2021 6 (iii) Other conditions of the EC letter dated 08.06.2004 shall remain unchanged.
PPs Submission: Complied Noted. Status of Compliance submitted separately.		Date: 02/06/2024
Visit Remarks		
Last Site Visit Report Date:		13/02/2024
Additional Remarks:		IRO Visit observation letter dated 13.02.2024 and its compliance status as on 31.03.2024 is attached.

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भारत सरकार

पर्यावरण एवं वन मंत्रालय

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT & FORESTS

Telefax: 24360488

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File No. J-13011/10/1996-IA-II (T) (Pt.)

Dated 20th July 2006

To,

Shri K. Prakasa Rao
Executive Director (Engg.)
National Thermal Power Corporation Limited
Engineering Office Complex -
A-8A, Sector-24
NOIDA-201301 (UP)

Subject: *Permission for using Borrow Earth from ash pond area for construction of ash dyke in Sipat STPP Stage-I (3x660 MW) by NTPC.*

Sir,

This has the reference to your letter No. CC: ED (E): 9512/330 dated 20th July 2004 requesting this Ministry to revise condition 3. v) of this Ministry's letter of even number dated 30th April, 2002 and to allow use of borrow earth from ash pond area for construction of the ash dyke for the above mentioned power project at Sipat.

2. The issue has been examined in the Ministry and I am directed to convey that the Ministry has no objection for using borrow earth for construction of the ash dyke from the designated ash pond area subject to the following conditions:

- (i) A minimum soil cover of 1.5 m shall be left within the ash pond area.
- (ii) Regular monitoring of ground water around the ash pond area shall be carried out by the project proponent and the results shall be submitted to the State Pollution Control Board and the Regional Office of this Ministry.
- (iii) Construction of the ash dyke shall be strictly monitored by the proponent to ensure that the minimum soil cover, as stipulated above, is maintained in the entire ash pond area and no excess stripping of the soil is carried out by the construction company/ies.

3. Accordingly, the condition No. 3. v) of this Ministry's letter of even number dated 30th April, 2002 stands revised.

Yours faithfully,

(Sanchita Jindal)

Additional Director

SECRET

For record & file

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पर्यावरण भवन, सी.जी.ओ. कॉम्प्लेक्स, लोदी रोड, नई दिल्ली-110003
PARYAVARAN BHAWAN, C.G.O. COMPLEX, LODHI ROAD, NEW DELHI-110003



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ANNEXURE- I

Table-I : Ambient Air Quality Monitoring
Period of Observation 01.04.2023 to 30.09.2023

CAAQMS-1 (Track Hopper)

Month	PM2.5	PM10	SO ₂	NO _x	CO ₂
	[µg/m ³]				[ppm]
OCT-2023	16	36.8	30.7	15.3	221.4
NOV-2023	24.8	51.0	37.0	15.5	219.8
DEC-2023	24.1	46.5	19.8	19.6	213.4
JAN-2024	30.3	58.2	13.4	32.8	209.8
FEB-2024	21.8	47.0	12.6	25.5	206.6
MAR-2024	21.7	48.2	13.1	30.4	330.2

CAAQMS-2 (B-Type)

Month	PM2.5	PM10	SO ₂	NO _x	CO ₂
	[µg/m ³]				[ppm]
OCT-2023	8.8	38.2	18.5	18.90	250.3
NOV-2023	12.2	52.6	18.7	41.1	261.4
DEC-2023	34.5	63.4	19.6	67.6	254.3
JAN-2024	34.0	54.0	19.8	52.2	241.3
FEB-2024	31.1	55.7	20.0	39.6	227.9
MAR-2024	23.0	49.2	20.4	44.8	311.9

CAAQMS-3 (Switch Yard)

Month	PM2.5	PM10	SO ₂	NO _x	CO ₂
	[µg/m ³]				[ppm]
OCT-2023	35.4	70.0	18.7	12.1	266.4
NOV-2023	47.7	67.8	20	12.1	267.9
DEC-2023	38.4	51.4	21.5	10.2	254.3
JAN-2024	40.5	53.6	23.5	25.1	250.1
FEB-2024	25.6	46.7	24.4	33.0	246.8
MAR-2024	22.2	42.2	23.15	28.2	254.8

Table-II: Meteorological Observations

Period of Observation: 01.10.2023 to 31.03.2024

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
OCT-2023	21.5	28.3	26.7	51.6	65.5	59.6	0	0	0.5	0.9	0.6
NOV-2023	19.8	27.3	24.4	50.6	79.3	63.9	0	0	0.4	1.1	0.7
DEC-2023	18.2	25.7	20.5	49.8	95.6	68.1	09	26.2	0.5	1.9	1.5
JAN-2024	17.7	22.5	20.3	48.2	85.4	65.4	02	3.1	0.6	1.2	0.80
FEB-2024	19.7	26.6	23.8	40.5	81.3	58.7	10	16.8	0.7	5.7	1.4
MAR-2024	21.4	32.0	27.3	33.3	83.5	53.5	08	42.1	0.5	1.7	1.2

Table-III : Ambient Air Quality Monitoring around Plant area

Month	Janji Village					
	PM2.5	PM10	SO ₂	NO _x	CO	HC
	[µg/m ³]				[mg/m ³]	[ppm]
OCT-2023	24.1	45.0	21.3	20.4	0.431	0.443
NOV-2023	24.8	46.3	23.1	22.0	0.434	0.444
DEC-2023	24.0	44.7	21.6	20.8	0.430	0.438
JAN-2024	25.2	46.5	22.8	21.7	0.433	0.443
FEB-2024	23.5	44.8	22.0	20.7	0.431	0.440
MAR-2024	23.3	44.3	21.5	20.4	0.428	0.437

Month	Darrabhata Village					
	PM2.5	PM10	SO ₂	NO _x	CO	HC
	[µg/m ³]				[mg/m ³]	[ppm]
OCT-2023	25.2	43.6	23.1	22.4	0.433	0.445
NOV-2023	23.9	43.1	22.6	21.5	0.429	0.442

Month	Sipat Village					
	PM2.5	PM10	SO ₂	NO _x	CO	HC
	[µg/m ³]				[mg/m ³]	[ppm]
OCT-2023	24.0	44.8	22.1	21.5	0.441	0.456
NOV-2023	23.9	44.0	23.5	22.5	0.438	0.451
DEC-2023	24.8	44.8	23.8	22.6	0.443	0.450
JAN-2024	24.1	44.1	22.9	21.9	0.439	0.448
FEB-2024	21.9	41.9	21.0	19.3	0.435	0.445
MAR-2024	22.9	42.9	21.8	20.8	0.435	0.444

ANNEXURE- II

Table-IV

AAQ monitoring at Sonthi Pahar Reserve Forest Area

Month	Location – Parsapali					
	PM 2.5	PM 10	SO ₂	NO _x	CO	HC
	[µg/m ³]				[mg/m ³]	[ppm]
OCT-2023	21.6	38.7	17.6	18.3	0.424	0.525
NOV-2023	23.1	39.1	18.6	19.2	0.424	0.526
DEC-2023	21.9	39.1	19.0	20.0	0.423	0.529
JAN-2024	23.0	39.19	20.1	18.8	0.405	0.523
FEB-2024	23.40	40.27	21.38	20.86	0.403	0.524
MAR-2024	21.3	38.7	20.8	21.0	0.416	0.492



ANNEXURE-III

Table-V: Stack Monitoring

Period of Observation: 01.10.2023 to 31.10.2024

Month	Unit-1				Unit-2				Unit-3				Unit-4				Unit-5			
	Parameter in mg/Nm³																			
	PM	SO₂	NOx	Hg	PM	SO₂	NOx	Hg	PM	SO₂	NOx	Hg	PM	SO₂	NOx	Hg	PM	SO₂	NOx	Hg
Oct-23	45	1053	242	0.0014	47	1068	266	0.0010	45	1068	258	0.0012	45	1071	257	0.0013	45	1060	258	0.0011
Nov-23	46	1051	249	0.0012	44	1060	242	0.0013	45	1068	257	0.0010	45	1054	254	0.0014	45	1068	261	0.0010
Dec-23	44	1067	261	0.0011	47	960	241	0.0016	43	983	234	0.0013	45	1104	245	0.0012	47	1048	234	0.0012
Jan-24	44	1046	248	0.0013	44	1115	240	0.0012	45	952	217	0.0010	46	1056	230	0.0015	45	1042	233	0.0016
Feb-24	45	1062	254	0.0011	45	1051	254	0.0014	45	1005	238	0.0013	45	1039	248	0.0016	46	1103	258	0.0015
Mar-24	45	1097	241	0.0012	44	1076	263	0.0015	45	970	211	0.0012	46	1017	237	0.0014	44	1031	243	0.0013

ANNEXURE-IV

Table-VI: Ground Water Quality Monitoring
Period of Observation: 01.10.2023 to 31.03.2024

Month	Location-I (Hardadih)				
	Ph	TSS	TDS	F	B
		[mg/L]			
OCT-2023	7.1	2	488	BLQ	0.02
NOV-2023	7.3	3	487	0.3	0.01
DEC-2023	7.1	1	474	0.2	0.02
JAN-2024	7.3	2	466	BLQ	0.01
FEB-2024	7.2	2	460	0.2	0.02
MAR-2024	7.3	3	467	0.2	<0.1

Month	Location-II (Sukhricali)				
	pH	TSS	TDS	F	B
		[mg/L]			
OCT-2023	7.4	1	467	0.3	0.01
NOV-2023	7.5	2	475	BLQ	0.03
DEC-2023	7.4	3	487	BLQ	0.03
JAN-2024	7.2	3	482	0.2	0.02
FEB-2024	7.5	2	473	0.3	0.03
MAR-2024	7.2	2	460	0.2	<0.1

Month	Location-III (Ralia)				
	pH	TSS	TDS	F	B
		[mg/L]			
OCT-2023	7.3	3	426	0.2	0.03
NOV-2023	7.6	2	430	0.3	0.02
DEC-2023	7.5	2	434	0.2	0.01
JAN-2024	7.5	1	440	BLQ	0.03
FEB-2024	7.1	1	406	BLQ	0.01
MAR-2024	7.4	2	414	BLQ	<0.1

Location-IV (Bhilai)					
Month	pH	TSS	TDS	F	B
		[mg/L]			
OCT-2023	7.5	2	439	0.2	0.02
NOV-2023	7.3	1	435	BLQ	0.01
DEC-2023	7.6	1	420	0.2	0.02
JAN-2024	7.4	1	414	0.2	0.01
FEB-2024	7.3	3	466	0.2	0.02
MAR-2024	7.6	4	484	0.3	<0.1

Location-V (Gatora)					
Month	pH	TSS	TDS	F	B
		[mg/L]			
OCT-2023	7.6	1	474	BLQ	0.02
NOV-2023	7.8	2	467	0.2	0.01
DEC-2023	7.7	1	460	BLQ	0.03
JAN-2024	7.1	2	456	0.3	0.03
FEB-2024	7.6	2	421	BLQ	0.01
MAR-2024	7.2	1	400	BLQ	<0.1

Location-V (Rank)					
Month	pH	TSS	TDS	F	B
		[mg/L]			
OCT-2023	7.7	2	458	BLQ	0.01
NOV-2023	7.2	1	454	BLQ	0.02
DEC-2023	7.3	2	457	0.2	0.01
JAN-2024	7.3	2	464	0.2	0.02
FEB-2024	7.7	3	485	0.3	0.03
MAR-2024	7.4	2	457	0.2	<0.1

Location-V (Janji)					
Month	pH	TSS	TDS	F	B
		[mg/L]			
OCT-2023	7.4	2	454	BLQ	0.03
NOV-2023	7.2	3	462	0.2	0.02
DEC-2023	7.5	3	467	0.3	0.03
JAN-2024	7.2	4	480	0.2	0.01
FEB-2024	7.3	3	470	0.2	0.03
MAR-2024	7.1	3	479	0.3	<0.1

Location-V (Kaudia)					
Month	pH	TSS	TDS	F	B
		[mg/L]			
OCT-2023	7.5	1	428	0.3	0.02
NOV-2023	7.3	2	432	0.3	0.01
DEC-2023	7.2	1	422	BLQ	0.02
JAN-2024	7.1	1	415	0.2	0.03
FEB-2024	7.5	1	405	BLQ	0.02
MAR-2024	7.3	2	442	BLQ	<0.1

Location-V (Darrabhata)					
Month	pH	TSS	TDS	F	B
		[mg/L]			
OCT-2023	7.6	3	407	BLQ	0.01
NOV-2023	7.6	1	400	BLQ	0.03
DEC-2023	7.4	1	407	0.2	0.03
JAN-2024	7.3	2	422	BLQ	0.02
FEB-2024	7.2	1	410	BLQ	0.01
MAR-2024	7.5	1	427	0.2	<0.1

Location-V (Deori)					
Month	pH	TSS	TDS	F	B
		[mg/L]			
OCT-2023	7.3	2	438	0.2	0.03
NOV-2023	7.5	2	434	0.3	0.02
DEC-2023	7.3	3	447	BLQ	0.01
JAN-2024	7.4	3	454	0.2	0.02
FEB-2024	7.6	4	482	0.3	0.01
MAR-2024	7.2	4	487	0.4	<0.1

Location-V (Nvaadih)					
Month	pH	TSS	TDS	F	B
		[mg/L]			
OCT-2023	7.2	1	417	0.2	0.01
NOV-2023	7.2	2	422	BLQ	0.02
DEC-2023	7.1	2	414	0.2	0.02
JAN-2024	7	1	408	BLQ	0.03
FEB-2024	7.2	2	424	0.2	0.03
MAR-2024	7.6	1	408	BLQ	<0.1

Table-VII : Heavy Metals monitoring around plant villages

Month	Location-I (Hardadih)							
	Fe	Hg	Cd	Cr	Pb	Zn	As	Cu
	[mg/L]							
OCT-2023	0.25	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
NOV-2023	0.24	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
DEC-2023	0.26	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
JAN-2024	0.24	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
FEB-2024	0.23	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
MAR-2024	0.21	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ

Month	Location-II (Sukhripali)							
	Fe	Hg	Cd	Cr	Pb	Zn	As	Cu
	[mg/L]							
OCT-2023	0.22	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
NOV-2023	0.21	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
DEC-2023	0.24	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
JAN-2024	0.26	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
FEB-2024	0.25	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
MAR-2024	0.23	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ

Month	Location-III (Ralia)							
	Fe	Hg	Cd	Cr	Pb	Zn	As	Cu
	[mg/L]							
OCT-2023	0.24	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
NOV-2023	0.23	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
DEC-2023	0.23	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
JAN-2024	0.22	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
FEB-2024	0.23	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
MAR-2024	0.22	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ

Month	Location-IV (Bhilai)							
	Fe	Hg	Cd	Cr	Pb	Zn	As	Cu
	[mg/L]							
OCT-2023	0.23	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
NOV-2023	0.22	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
DEC-2023	0.22	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
JAN-2024	0.25	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
FEB-2024	0.22	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ

MAR-2024	0.25	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
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Month	Location-V (Gatora)							
	Fe	Hg	Cd	Cr	Pb	Zn	As	Cu
	[mg/L]							
OCT-2023	0.24	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
NOV-2023	0.24	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
DEC-2023	0.25	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
JAN-2024	0.21	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
FEB-2024	0.20	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
MAR-2024	0.22	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ

Month	Location-V (Rank)							
	Fe	Hg	Cd	Cr	Pb	Zn	As	Cu
	[mg/L]							
OCT-2023	0.22	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
NOV-2023	0.21	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
DEC-2023	0.24	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
JAN-2024	0.20	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
FEB-2024	0.23	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
MAR-2024	0.25	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ

Month	Location-V (Janji)							
	Fe	Hg	Cd	Cr	Pb	Zn	As	Cu
	[mg/L]							
OCT-2023	0.23	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
NOV-2023	0.21	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
DEC-2023	0.22	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
JAN-2024	0.20	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
FEB-2024	0.24	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
MAR-2024	0.22	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ

Month	Location-V (Kaudia)							
	Fe	Hg	Cd	Cr	Pb	Zn	As	Cu
	[mg/L]							
OCT-2023	0.25	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
NOV-2023	0.23	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
DEC-2023	0.26	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
JAN-2024	0.24	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
FEB-2024	0.22	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
MAR-2024	0.24	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ

	Location-V (Darrabhata)							
Month	Fe	Hg	Cd	Cr	Pb	Zn	As	Cu
	[mg/L]							
OCT-2023	0.22	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
NOV-2023	0.22	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
DEC-2023	0.25	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
JAN-2024	0.23	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
FEB-2024	0.26	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
MAR-2024	0.21	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ

	Location-V (Deori)							
Month	Fe	Hg	Cd	Cr	Pb	Zn	As	Cu
	[mg/L]							
OCT-2023	0.24	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
NOV-2023	0.25	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
DEC-2023	0.24	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
JAN-2024	0.22	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
FEB-2024	0.21	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
MAR-2024	0.23	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ

	Location-V (Nvaadih)							
Month	Fe	Hg	Cd	Cr	Pb	Zn	As	Cu
	[mg/L]							
OCT-2023	0.22	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
NOV-2023	0.21	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
DEC-2023	0.22	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
JAN-2024	0.21	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
FEB-2024	0.23	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
MAR-2024	0.25	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ

BDL – Below Detection Limit / BLQ- Below Limit of Quantification, LOQ-Limit of Quantification
Minimum Detection Limit (mg/l): Cu: 0.002, Zn: 0.1, Cd : 0.002 Cr(Total):0.002, Pb:0.002, As : 0.002, Hg:0.0005

Main Plant Effluent Monitoring
Period of Observation: 01.10.2023 to 31.03.2024

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 01.10.2023 to 31.03.2024

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]		
OCT-2023	7.5	14.6	5.8	37.2
NOV-2023	7.4	13.7	5.5	29.9
DEC-2023	7.4	14.2	5.3	31.0
JAN-2024	7.4	12.7	5.5	28.6
FEB-2024	7.4	13.6	5.2	33.7
MAR-2024	7.4	13.3	5.6	33.2

Table-IX: Noise Monitoring
(Period of Observation: 01.10.2023 to 31.03.2024)

Locations	Date of Monitoring	Noise Levels in dB(A)	
		Day Time	Nighttime
Material gate	12-09-2023	58.4	46.3
CCR	12-09-2023	55.4	42.2
CHP	12-10-2023	58.4	49.2
Ralia	12-10-2023	45.2	37.6
Bhilai	12-10-2023	40.4	35.3
Hardadih	12-10-2023	45.2	40.8
Sukhripali	12-10-2023	43.5	37.6

Gataura	12-10-2023	46.2	40.5
ADM Gate	12-10-2023	57.5	48.2
Turbine Hall	12-10-2023	58.3	49.3
B-Type	12-10-2023	52.5	44.6
Material gate	13-11-2023	56.4	44.4
CCR	13-11-2023	53.2	40.4
CHP	13-11-2023	57.4	48.7
Ralia	13-11-2023	46.4	38.2
Bhilai	13-11-2023	42.3	36.5
Hardadih	13-11-2023	47.2	41.5
Sukhripali	13-11-2023	41.5	36.2
Gataura	13-11-2023	45.2	39.6
ADM Gate	13-11-2023	58.2	47.6
Turbine Hall	13-11-2023	57.4	48.2
B-Type	13-11-2023	51.4	43.5
Material gate	12-12-2023	55.2	43.2
CCR	12-12-2023	51.2	41.4
CHP	12-12-2023	58.4	49.4
Ralia	12-12-2023	44.3	37.2
Bhilai	12-12-2023	43.4	37.2
Hardadih	12-12-2023	48.2	42.4
Sukhripali	12-12-2023	43.8	37.5
Gataura	12-12-2023	46.4	40.4
ADM Gate	12-12-2023	59.5	48.2
Turbine Hall	12-12-2023	55.2	46.7
B-Type	12-12-2023	49.5	42.1
Material gate	12-01-2024	56.5	44.6
CCR	12-01-2024	50.4	40.2
CHP	12-01-2024	56.4	48.3
Ralia	12-01-2024	42.1	36.4
Bhilai	12-01-2024	44.3	38.6
Hardadih	12-01-2024	50.4	44.3
Sukhripali	12-01-2024	41.6	35.6
Gataura	12-01-2024	48.4	42.1
ADM Gate	12-01-2024	58.4	47.3
Turbine Hall	12-01-2024	53.3	44.2
B-Type	12-01-2024	50.6	43.3
Material gate	12-02-2024	55.4	42.3
CCR	12-02-2024	52.4	41.3
CHP	12-02-2024	53.4	45.7
Ralia	12-02-2024	40.3	35.3
Bhilai	12-02-2024	42.6	36.4
Hardadih	12-02-2024	50.3	40.2
Sukhripali	12-02-2024	38.6	34.7

Gataura	12-02-2024	47.4	40.4
ADM Gate	12-02-2024	52.3	48.5
Turbine Hall	12-02-2024	56.4	45.2
B-Type	12-02-2024	51.3	44.8
Material gate	12-03-2024	54.2	41.6
CCR	12-03-2024	51.6	40.6
CHP	12-03-2024	54.6	46.3
Ralia	12-03-2024	39.6	34.6
Bhilai	12-03-2024	43.3	37.4
Hardadih	12-03-2024	51.2	41.6
Sukhripali	12-03-2024	39.6	33.6
Gataura	12-03-2024	48.5	41.2
ADM Gate	12-03-2024	53.5	49.6
Turbine Hall	12-03-2024	57.3	46.3
B-Type	12-03-2024	50.4	43.2

Ambient Air Quality Around MGR

(from Oct'2023 to Mar'2024)

Month	Lutra		Bitkula		Nirtu		Jhanjh		Utarda		Nevsa	
	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Oct-23	38.46	21.59	40.3	21.85	38.79	20.8	38.55	21.08	37.88	20.82	39.49	22.11
Nov-23	38.59	20.98	38.34	21.44	37.24	22.00	37.46	21.44	38.12	21.19	38.73	21.69
Dec-23	38.93	21.80	37.73	20.21	37.28	19.90	37.01	21.51	37.15	22.33	37.27	21.04
Jan-24	37.9	21.56	38.73	20.86	38.15	20.19	36.41	21.6	36.72	20.73	36.38	21.92
Feb-24	39.12	22.05	39.22	21.60	37.38	21.83	38.68	21.49	39.31	22.8	39.19	22.56
Mar-24	39.69	23.82	36.78	21.37	37.64	20.55	37.13	21.77	37.98	20.59	37.96	21.23

Miyawaki Plantation at Bhilmi Village







NTPC Limited
(A Government of India Enterprise)
Sipat Super Thermal Power Project
PO Ujwal Nagar
District Bilaspur
Chhattisgarh- 495555, India
Telephone No. : 07752-246552 Fax No. : 07752-246507

Service Purchase Order

PAN No. : AAACN0255D
CIN No. : L40101DL1975GOI007966

Purchase Order No. : 4600074699-060-1019 **Date** : 19.05.2023 **(version : 0)**

To **Vendor Code** : 1035822
MANAGING DIRECTOR CG RAJYA VAN VIKAS NIGAM LIMITED
Lokash Plaza, Shankar Nagar Road
Shankar Nagar
RAIPUR
Chhattisgarh
India - 492001

Subject: : Tree plantation by MIYAWAKI method near NTPC SIPAT by CG Rajya Van Vikas Nigam Ltd (Year 2022-24) on Deposit work basis (At UCHBHATTI)

Pradip Ref:Sipat/Ash Mgmt./2022-23/800055255/877322

NIT NO. : Dated
Your Offer No. :
Your Reference :
Our Reference : Sipat/Ash Mgmt./2022-23/800055255/877322

Dear Sir,

This has reference to our above mentioned NIT, Your offer and subsequent discussions. We are pleased to accept your offer opened on and confirm having awarded on you the work of Tree plantation by MIYAWAKI method near NTPC SIPAT by CG Rajya Van Vikas Nigam Ltd (Year 2022-24) on Deposit work basis (At UCHBHATTI) Pradip Ref:Sipat/Ash Mgmt./2022-23/800055255/877322 of total value INR 46,836,920.00 (Rupee FOUR CRORE SIXTY-EIGHT LAKH THIRTY-SIX THOUSAND NINE HUNDRED TWENTY ONLY) mentioned in the scope of works, special terms & conditions, Bill of quantities etc.

The duration of the service period shall be from 01.06.2023 to 31.05.2025. Though the duration of contract shall remain same, the actual date of commencement of the contract shall be as per the direction of EIC. Mr. PRAWISH MINJ - 100617 (SENIOR MANAGER, ASH DYKE MANAGEMENT) shall be EIC for this work.

This service purchase order along with its annexure is being issued to you in duplicate .We request you to return the duplicate copy of this service purchase order, duly signed on each page by your authorised signatory in token of your unequivocal acknowledgment of the same within 15 days from the date of this service purchase order. If no communication is received within 15 days of receipt of Purchase Order, it will be treated that order has been accepted in entirety.

We thank you for the interest shown by you in our project and the cooperation extended to us. We expect to receive your continued cooperation in future also.

Thanking You,
For & on behalf of NTPC Limited.

Sivaiah Dugyala (Sr.Manager, C&M)

Enclosures :

Name of Work:		(Bill of Quantity) Tree plantation by MIYAWAKI method near NTPC SIPAT by CG Rajya Van Vikas Nigam Ltd (Year 2022-24) on Deposit work basis (At UCHBHATTI) Pradip Ref:Sipat/Ash Mgmt./2022-23/800055255/877322					
SI No.	Code	Description	Unit	Quantity	Net Price	Amount	Long Text
Delivery/Invoicing Address: 1019 Sipat Super Thermal Power Project PO Ujwal Nagar District Bilaspur Chhattisgarh 495555 India 07752-246552 07752-246507 Invoicing to be done on GST No. : 22AAACN0255D4Z5							
10		Tree Plantation by MIYAWAKI Method	AU	1.000	46,836,920.00	46,836,920.00	
Tax: IN:Central GST-ND @ 9.00 % Extra IN: StateGST-ND @ 9.00 %							
10 .10		Plantation & maintn Yr-1	NO	32,000	1,282.9100	41,053,120.00	YES
10 .20		Replantation/Maintn Yr-2	NO	32,000	145.4500	4,654,400.00	YES
10 .30		Chainlink fencing work in 1000 M	RMT	2,000	564.7000	1,129,400.00	YES
TOTAL OF BOQ PART : 00010						INR 46836920.00	
Amount						46836920.00	
Other Charges						0.00	
Net Amount on BOQ PART : 00010						INR 46836920.00	
Net Total Amount						INR 46,836,920.00	
Less Rebate/Amount						INR 0.00	
Grand Total						INR 46,836,920.00	
INR FOUR CRORE SIXTY-EIGHT LAKH THIRTY-SIX THOUSAND NINE HUNDRED TWENTY ONLY							

Terms & Conditions

Invoice to be raised on delivery/invoice address against the given PO line items.

Special Instruction

1.Contract value is inclusive of all Taxes and Duties along with scope of work, terms & conditions, excluding GST. GST @18% shall be paid extra.

2.Contract Period: Completion period shall be 02 years.

3.Security Deposit not applicable.

4.CAR insurance policy shall not be applicable.

5.Contract Agreement:(Applicable only if awarded contract value is more than Rs. TWO Lakhs),You shall enter into a formal Agreement with NTPC on non-judicial stamp paper of value Rs. 250.00 (or as applicable), within a period of thirty (30) days from the date of issue of this Letter of Award as per NTPC approved format.

6. Settlement of Disputes:

It is specifically agreed that all differences and disputes between the parties arising out of the Contract shall be settled by the process of settlement and arbitration act Clauses 56.0.0 and 57.0.0 of General Conditions of Contract. The provisions of the Arbitration Act, 1996 shall apply to the arbitration proceedings. The arbitrator shall give reasoned and speaking award.

7. EIC has to ensure availability of all the valid documents during the tenancy of the contract period.

8. NTPC Ltd reserves the right to terminate the contract during its tenancy without assigning any reason with a notice period of one month.

9.All the other terms and conditions are as per GCC,SCC and scope of the work.

10.Payment docs required (tentative): a) Invoice b) Utilization certificate c) Statutory Compliances as applicable

Break up of Price (For Service Related Lines Only)

SI No.	Service Code	Description	Qty.	UOM	Rate	Premium	Discount	Addl Discount	Net Rate	Value
10 .10		Plantation & maintn Yr-1	32,000	NO	1,282.91	0.00	0.00	0.00	1,282.9100	41,053,120.00
10 .20		Replantation/Maintn Yr-2	32,000	NO	145.45	0.00	0.00	0.00	145.4500	4,654,400.00
10 .30		Chainlink fencing work in 1000 M	2,000	RMT	564.70	0.00	0.00	0.00	564.7000	1,129,400.00

SCOPE OF WORK

00010 : Tree Plantation by MIYAWAKI Method

*** SCOPE OF WORK ***

Scope of the work is defined in following paragraphs:

1. NATURE OF WORK:

Work primarily consists of providing services for tree plantation over approximately 4.00-hectare area in village UCHBHATTI area nearby NTPC Sipat; maintenance and guarding of the plants including all related supporting works for 02 years and finally handing over the plants to NTPC Sipat.

Plantation work shall be executed by Miyawaki method maintaining 1.0m x 1.0 m area for each plant. An estimated number of plants to be accommodated are 32000 which may slightly vary as per actual site conditions. Species of plants shall be selected according to Miyawaki method based on their survival, rate of growth, final height, and other considerations.

The work shall be strictly executed as per technical specifications, standard practices of works, bill of quantities and instructions of Engineer in Charge.

Envisaged items for this work are described below broadly:

- 1.1. Preparation of designated area for plantation. Areas are located near UCHBHATTI Village.
- 1.2. Planting of plants as per manner described in Miyawaki method. This will include all marking, surveying, excavation, cleaning, watering, supply of nutrients and other plantation specific sub items.
- 1.3. Guarding and other maintenance of plants for 02 years.
- 1.4. Cutting and cleaning of weeds and suitable disposal of the same for protecting trees from invading vegetation and fire.
- 1.5. Complete supervision, monitoring and providing necessary safety measures for all the operations for complete contract period.
- 1.6. Maintaining records of daily work progress and submitting in jointly agreed formats at required intervals.
- 1.7. Handing over the trees to NTPC on completion of 02 years after ensuring prescribed survival rate of the planted plants and suitable replacement of damaged plants, if any.
- 1.8. Providing suitable sign boards as per instructions of EIC at suitable places showing number of trees, area and other specific details regarding plantation activity carried out.
- 1.9. Followings shall be deemed to be included in the scope of work:
 - (a) All legal and statutory compliances applicable to this work.
 - (b) Any minor work, not explicitly mentioned here but are necessary to complete the main scope of work shall deemed to be included in the scope.

2. LOCATION:

Location of the work is near village UCHBHATTI nearby NTPC Sipat.

3. RESOURCES:

Agency shall deploy manpower, plant saplings, watering tools, nutrients, manure, fertilizers, and all other

necessary materials/tools/equipment for this work at all required locations, NTPC shall not issue any material/tool/equipment for this work. Agency shall deploy a supervisor to look after the work progress, maintenance of records, processing of bills, measurement etc trained and educated enough to carry out these activities smoothly. During the whole contract period, agency shall provide all required resources to comply with safety provisions applicable to work site and working manpower.

Defects Liability Period: NIL

*** SPECIAL CONDITIONS OF CONTRACT ***

#A. GENERAL:

1. For all the conditions, not specifically mentioned here NTPC's General Conditions of Contract (GCC) shall be applicable and binding for this work.
2. The Number of proposed plants may be less/more as per actual site condition and land availability.
3. The chemical fertilizers, insecticides, pesticides will be used as per requirements.
4. The plants shall be selected according to proposed area, the site condition and other factor. Before supplying the particular species of plants to site, acceptance of Engineer-In-Charge shall be taken by the agency.
5. After 02 years, Chhattisgarh Rajya Van Vikas Nigam will hand over the plants with minimum of 80% survival. Special care should be taken by the agency to maintain the rate of survival as it is a new method of planting.
6. Supply of Ash and transported to site shall be in the scope of NTPC. Laying, spreading and its handling shall be in the scope on van vikas nigam.
7. Van vikas needs to take care of the handling and spreading of ash so that no pollution is caused whatsoever.

#B. TERMS of PAYMENT:

1. Payment Terms.

a) Planting of trees and maintenance of plantation for 1 year:- 80% Advance on deposit basis, on start of the plantation activity for 1st year plantation and maintenance balance 20% After successful completion of 1st year of plantation activity.

b) Replenishment of damaged tree and maintenance of plantation for 2nd year:- 80% Advance on deposit basis, on start of 2nd year maintenance activity and Balance 20% After successful completion of 2nd year maintenance.

c) Fencing RCC Pole with Chain link Wire : 100% payment On start of the plantation activity.

3. Payment of prevailing Minimum wages to laborer's and compliance of all statutory provisions are to be ensured by Chhattisgarh Rajya Van Vikas Nigam.

4. Being a Govt PSU, CG Rajya Van Vikas Nigam Ltd is exempted from submitting HR clearance. However, CGRVVN shall make prescribed minimum wages to their contract workers.

5. Security Deposit not applicable.

6. Applicable taxes shall be deducted from each running bills unless agency submit relevant exemption/waiver from authorized agencies.

7. No idle charge is admissible on account of manpower, vehicle, equipment, or any other deployment by the

agency for temporary stoppage of work.

8. CAR insurance policy shall not be applicable.

#C. AGENCY'S OBLIGATION:

1. Agency shall provide necessary tools/equipment to their workers according to nature of work.

2. Agency shall maintain all the site instructions, hindrances and other execution related joint records in a page numbered register. Entries in the register shall be jointly reviewed and signed time to time. Register shall be referred for all/any work-related action. It would be agency's responsibility to keep the register protected and produce it to EIC, whenever required.

3. No work shall be carried out without prior information to EIC or his authorized representative. In such occurrences executed works may not be measured and paid.

#D. SITE SAFETY:

1. All safety rules and instructions shall be adhered to by the executing agency. Special attention to be given to safety hazards related with excavation work, day-night transportation, road safety, dusting and other closely related hazards to work.

2. All deployed manpower shall be equipped with suitable PPEs i.e. safety shoes, Gum Boot, Helmet, Dust mask, Hand Gloves etc.

3. All necessary safety measures shall be taken at site by the agency which might be further modified/enhanced as per direction of Engineer-In-Charge.

#E. STATUTORY COMPLIANCES REGARDING CONTRACT LABOUR:

1. Agency shall bear all responsibilities regarding transport, food and commuting of their workers and staff.

SERVICE SPECIFICATIONS

10 .10 - Plantation & maintn Yr-1

Raising of poly-pots(15x25 size 1 to 2 feet plants), cleaning, digging of] trench, Feeling of trench with rice husk, cocopit, vermi compost, aligning & stacking, digging of pits size 30x30x30 cm, adding of forat, bone mill, neem cake, chloropyriphos, sinking of plant in cow urine. Planting work supporting of plant with bamboo, soil as reured, mannuring as required, vermi mannuring of boi fertilizer in each pits including cost of material, linden powder, or other directed insecticides, pesticides as per needs cleaning of grasses in whole area, cutting back grasses and weed growth within 1 m dia including hoeing making soil friable,causality replacement of plants against died, watering of plants as per requirement, From December to November end. including all labour, tools equipment, fire protects on general protection of planting area etc. with all leads and lift as well as transportation, loading, unloading, of plants, materials, soil form yard menure, chemical fertilizer, insecticides, pesticides including maintenance of first year, including 25% Administrative

10 .20 - Replantation/Maintn Yr-2

Causality replacement of plants, against, died, weeding out Grasses, manuring (bio-fertilizers or other fertilizers) in two split dose in the month of December to February including weeding out grasses, hoeing, spraying dusting of insecticides pesticides watering, protectionary works as item No. | including labour tools equipments etc. maintenance after completion of first year including watch & ward and 25% Administrative charges/supervision.

10 .30 - Chainlink fencing work in 1000 M

Fencing Ree Pole With Chainlink Wire (3 x 3 mtr.Interval) Ist Year

Prepared By:
SIVAIAH DUGYALA

List of Documents

Please note that below documents are needed to be provided along with Invoice.

S.No.	Document Description
1	Invoice

NTPC VENDOR PAYMENT PORTAL & PAYMENT PROCEDURE

1. For all the cases where payment documents are to be directly submitted to NTPC (excluding Payment through Bank cases), the Invoice and supporting document(s) as required in the Purchase Order have to be Digitally Signed with class II or III digital signature and uploaded in the **&gv_cocd&** Vendor Payment Portal <https://pradip.ntpc.co.in/VendorFinal/Login.jsp>.

In such cases, there will be no requirement of physical copy of invoice & documents except for Lorry Receipts (LRs)/ Delivery Challan, which are normally sent along with the material/ transporter. Bank Guarantees to be sent in original wherever applicable.

2. From 01.01.2020, NTPC will accept only digitally signed Invoice & supporting documents from Vendors for direct payment cases. Submission of documents in physical form shall not be accepted by NTPC unless otherwise asked for in the PO.

For such cases of physical submission, Vendors are required to send complete set of documents including invoice etc. addressed to the "Invoice Receipt Center" of the Delivery/ Invoicing Address as mentioned in the Purchase Order Annexure 1/ BOQ Sheet.

While submitting the Invoice/ Bills & related documents in physical form, Vendors are required to mention the following details on the top of the envelope:

- a. Invoice/Bill reference No.
- b. **NTPC PO No./ Package no.**
- c. **NTPC Vendor Code as per PO**

In addition to above, vendors are requested to mention their correspondence E-mail & Mobile No. in the Covering Letter, through which invoice processing related information/clarification request may be sent.

3. Vendors can track / monitor the status of payments from the Vendor payment portal. Help documents are available in the portal. Vendors are requested to make full use of the Vendor Payment Portal.

4. For payment cases through bank, all original documents are to be submitted in bank as per terms of PO.

Alternate Mode of Payment for Micro Small & Medium Enterprises (MSMEs):

Trade Receivables Discounting System (TReDS) is a regulatory framework put in place by the Reserve Bank of India under the Payment and Settlement Systems Act 2007 (PSS Act) to facilitate the financing of trade receivables (invoices) of MSMEs through invoice financing by multiple financiers.

The Reserve Bank of India has granted approval to Mynd Solutions Pvt Limited, A.TREDS Ltd and Receivables Exchange of India Ltd (RXIL) to set up and operate TReDS platforms. The Respective TReDS platforms names of the above-mentioned entities are M1xchange, Invoicemart and TREDS.

Currently NTPC Limited is transacting with M1xchange and RXIL TReDS platforms. MSME Vendors may choose the TReDS platforms as an alternate payment mechanism.

For queries/ details, the vendor may directly contact M1xchange or RXIL at:-

M1XCHANGE:-

URL: <https://m1xchange.com>
Toll free No.: 1800-103-7261

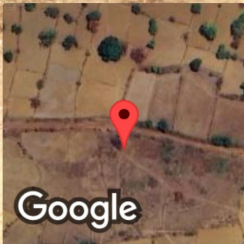
RXIL:-

URL: <https://www.rxil.in/Home/Index>
Phone: 022-40771424, 40771426
Toll free No.: 1800 1038 311

Vendor must ensure the delivery of material and service before uploading invoices at TReDS portal for discounting. After uploading invoices on TReDS portal, vendor has to upload invoices on NTPC payment portal in case of Non-GeM contract and in case of GeM Contract invoices shall be uploaded on GeM portal, immediately. All relevant documents required for processing of payments as per P.O/Contract terms and conditions shall be made available by the Vendor along with the invoice.



GPS Map Camera



Bilaspur, Chhattisgarh, India
Unnamed Road, Chhattisgarh 495009, India
Lat 22.203557°
Long 82.254425°
01/06/24 05:01 PM GMT +05:30



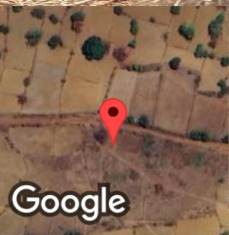
 GPS Map Camera



Bilaspur, Chhattisgarh, India
Unnamed Road, Chhattisgarh 495009, India
Lat 22.203567°
Long 82.254352°
01/06/24 05:02 PM GMT +05:30



 GPS Map Camera



Google

Bilaspur, Chhattisgarh, India
Unnamed Road, Chhattisgarh 495009, India
Lat 22.203548°
Long 82.254484°
01/06/24 05:01 PM GMT +05:30