



एनटीपीसी लिमिटेड  
NTPC Limited  
(A Govt. of India Enterprise)  
(Formerly National Thermal Power Corporation Ltd.)

टांडा/Tanda

Ref: NTPC/Tanda/EMG/2023/233

Date: 25.11.2023

To,  
Regional Office (CZ),  
Ministry of Environment, Forest & Climate Change  
Kendriya Bhawan, 5th Floor,  
Sector 'H', Aliganj  
Lucknow - 226020 (U.P.)  
Email: roc.z.lko-mef@nic.in

**Sub: Half Yearly Compliance report for Environment Clearance of NTPC Tanda (Stage-II)**  
**(Period: April-2023 to September-2023)**

Ref: EC letter No. J- 13012/96/2007-IA. 11 (T) Dated 13<sup>th</sup> April 2011.

Dear Sir,

Please find enclosed half yearly compliance status report for period April-2023 to September- 2023 in respect of Environment Clearance conditions stipulated vide MoEF&CC letter ref. no. J- 13012/96/2007-IA. II(T) dated 13.04.2011 (and further amendments) for NTPC Tanda Super Thermal Power Project (Stage-II: 2 x 660 MW).

Thanking you.

Sincerely,

Arun Kumar Singh

DGM (Chemistry & Environment Management)

Copy to:

1. Zonal Office (North)  
Central Pollution Control Board  
PIC-UP Bhawan, Vibhuti Khand, Gomti Nagar,  
Lucknow, Uttar Pradesh, India, 226010
2. Regional Office  
UP Pollution Control Board  
1/17/104, Ramnagar Colony,  
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एनटीपीसी टाण्डा/NTPC Tanda

विद्युत नगर/Vidyut Nagar

अम्बेडकर नगर/Ambedkar Nagar

पिन-224238 (उ०प्र०) /Pin-224238 (U.P.)

पर्यावरण प्रबंधन समूह Environment Management Group

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Regd. Office : NTPC Bhawan, Scope complex, 7, Institutional Area, Lodhi Road, New Delhi-110 003

**HALF YEARLY COMPLIANCE STATUS REPORT  
FOR ENVIRONMENTAL CLEARANCE OF NTPC TANDA (STAGE-II)  
Vide Letter No. J- 13012/96/2007-IA. II (T) Dated 13th April 2011**

**(APR-2023 TO SEP-2023)**

S. NO.	EC CONDITION	COMPLIANCE STATUS
<b>SPECIFIC CONDITIONS:</b>		
i	Vision document specifying prospective plan for the site shall be formulated and submitted of the Ministry within six months.	Vision Documents and plan have been formulated and already submitted to MOEF&CC, Delhi.
ii	Coal transportation to plant site shall be by rail.	Coal transportation is being done by rail wagons through Indian railways.
iii	Existing de-generated water bodies (if any) in the study area shall be regenerated at the project proponent's expenses in consultation with the state govt.	There are no such de-generated water bodies in our study area.
iv	Hydrogeology of the area shall be reviewed annually from an institute/ organization of repute to assess impact of surface water and ground regime (especially around ash dyke). In case and deterioration is observed specific mitigation measures shall be undertaken and reports/ data of water quality monitored regularly and maintained shall be submitted to the Regional Office of the Ministry.	Hydrogeology study of the area is being carried out by National Institute of Hydrogeology- Roorkee and work is in progress. Interim report submitted by the agency is enclosed. <b>(Annexure-I)</b>
v	Source of water for meeting the requirement during lean season shall be specified and submitted to the Regional Office of the Ministry within three months.	The source of water for the project is Main Tanda Pump Canal on Saryu River, which supplies water throughout the year. Irrigation Department of Uttar Pradesh has already accorded water commitment for Stage-II of the project. Copy of the water commitment is enclosed herewith. <b>(Annexure-II)</b>
vi	No ground water shall be extracted for use in operation of the power plant even in lean season.	Water from Main Tanda Pump Canal is being used for the operation of the plant throughout the year. Ground water is not being used for operation of the power plant.
vii	No water bodies (including natural drainage system) in the area shall be disturbed due to activities associated	Water bodies and natural drains have not been disturbed due to activities associated with the setting up/

S. NO.	EC CONDITION	COMPLIANCE STATUS
	with the setting up/ operation of the power plant.	operation of the power plant.
viii	Minimum required environmental flow suggested by the Competent Authority of the State Govt. shall be maintained in the Channel/ Rivers (as applicable) even in lean season.	The source of water is an irrigation channel regulated by Irrigation Department of Uttar Pradesh. Irrigation Department shall maintain the minimum required flow.
ix	COC of 5.0 shall be adopted.	NTPC Tanda Stage-II has been designed to run on 5.0 COC and is being operated on the same.
x	Regular monitoring of ground water level shall be carried out by establishing a network of existing wells and constructing new piezometers. Monitoring around the ash pond area shall be carried out particularly for heavy metals (Hg, Cr, As, Pb) and records maintained and submitted to the Regional Office of this Ministry. The data so obtained should be compared with the baseline data so as to ensure that the ground water quality is not adversely affected due to the project.	Piezometers have been installed in plant premises as well as ash dyke area for Stage-II.  Ground water monitoring is being done from existing bore wells available around ash dyke. <b>(Annexure-III)</b> . Before charging the ash dyke, baseline ground water quality data have been collected.
xi	Monitoring surface water quality in the area shall also be regularly conducted and records maintained. The monitored data shall be submitted to the Ministry regularly. Further, monitoring points shall be located between the plant and drainage in the direction of flow of ground water and records maintained. Monitoring for heavy metals in ground water shall be undertaken.	Surface water quality is being monitored and reports enclosed herewith as <b>(Annexure-III)</b> .  Ground water monitoring for heavy metals is also being done and reports enclosed as <b>(Annexure-III)</b> .
xii	A well-designed rainwater harvesting shall be put in place before commissioning of the plant. Central Groundwater Authority / Board shall be consulted for finalization of appropriate rainwater harvesting technology / design within a period of three months from the date of this clearance and details shall be furnished. The design of rainwater harvesting shall comprise of rainwater collection from the built up and open area in the plant premises. Action plan and road map for implementation shall be submitted to the Ministry within six	Rainwater Harvesting system has been installed for administrative building roof-top and at main plant TG roof-top area. In the main plant area, work is currently underway.  Based on study, 63 out of 89 Rainwater Harvesting (RWH) structures are fully completed in colony premises. Additionally, 26 RWH structures have completed civil work, with ongoing pipe connection, while recharge pond excavation is finished, and retaining wall work is in progress. A detailed

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	months.	study for assessment of rainwater harvesting potential and suitable method for recharging/ utilizing is completed through third party. <b>(Annexure-IV)</b>
xiii	Additional soil for levelling of the proposed site shall be generated within the sites (to the extent possible) so that natural drainage system of the area is protected and improved.	Additional soil for levelling has been used in such a way that natural drainage is protected and improved.
xiv	Provision for installation of FGD shall be provided for future use.	The layout includes space provision for future FGD installation. The installation work for FGD is now finished, and the system is currently in the commissioning stage.
xv	The project proponent shall undertake measures and ensure that no fugitive fly ash emissions take place at any point of time.	Provision of DFDS, Sprinklers, DEES etc. has been made to control the fugitive fly ash emissions. <b>(Annexure-V)</b>
xvi	Stack of 275 m height shall be installed and provided with continuous online monitoring equipment's for SO <sub>x</sub> , NO <sub>x</sub> and PM <sub>2.5</sub> & PM <sub>10</sub> . Exit velocity of flue gases shall not be less than 22 m/sec. Mercury emissions from stack may also monitored on periodic basis.	A bi-flue stack of height 275m with continuous online monitoring equipments for PM, SO <sub>2</sub> , NO <sub>x</sub> has already been installed with real-time data transmission system. EC has been amended and online monitoring of only PM is required instead of PM <sub>10</sub> , PM <sub>2.5</sub> . Mercury Emissions are also monitored at regular interval <b>(Annexure-VI)</b> .
xvii	High Efficiency Electrostatic Precipitators (ESPs) shall be installed to ensure that particulate emission does not exceed 50 mg/Nm <sup>3</sup> .	High efficiency ESP has been installed in Unit#1 & Unit#2 of Stage-II to limit particulate emissions below 30 mg/Nm <sup>3</sup> .
xviii	Adequate dust extraction system such as cyclones/ bag filters and water spray system in dusty areas such as in coal handling and ash handling points, transfer areas and other vulnerable dusty areas shall be provided.	Various dust extraction and suppression systems have been installed for the coal and ash handling plants of the project like Wagon Tippers, Crusher House, transfer points on conveyors, and Ash Dykes etc. <b>(Annexure-V)</b>
xix	Utilization of 100% Fly Ash generated shall be made from 4 <sup>th</sup> year of operation. Status of implementation shall be reported to the Regional Office of the Ministry from time to time.	Fly ash utilization in Cement manufacturing, filling in roads/embankment by NHAI, brick manufacturing etc. is being done. Dry ash utilization is being done from HCSD silos and bottom ash utilization is being done from ash ponds. Annual

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		Compliance Report is being submitted to the Regional office.
xx	Fly ash shall be collected in dry form and storage facility (silos) shall be provided. Unutilized fly ash shall be disposed off in the ash pond in the form of slurry form. Mercury and other heavy metals (As, Hg, Cr, Pb etc.) will be monitored in the bottom ash as also in the effluents emanating from the existing ash pond. No ash shall be disposed off in low lying area.	System for extraction of fly ash in dry form along with suitable storage facilities has been envisaged. HCSD Silos are ready for ash disposal and dry ash silos are under construction. For disposal of unused ash, wet slurry disposal system with ash water recirculation has been installed. The ash pond effluents and bottom ash are being regularly monitored for heavy metals. <b>Annexure-III.</b>
xxi	Ash pond shall be lined with HDPE/LDPE lining or any other suitable impermeable media such that no leachate takes place at any point of time. Adequate safety measures shall also be implemented to protect the ash dyke from getting breached.	Ash ponds have been lined with impervious liner of bentonite to avoid leachate. Further adequate safety measures shall be taken to protect the ash dyke from breach.
xxii	Sulphur and ash contents in the coal to be used in the project shall not exceed 0.5% and 34% respectively at any given time. In case of variation of coal quality at any point of time fresh reference shall be made to the Ministry for suitable amendments to environmental clearance condition wherever necessary.	Vide notification ref. S.O. 1561(E) dated 21.05.2020, the condition regarding 34% ash content in coal has been amended by the Ministry. Sulphur content in the coal is below 0.5%.
xxiii	Green Belt consisting of 3 tiers of plantations of native species around the plant and 100 m width shall be raised. Wherever 100m width is not feasible a 50 m width shall be raised, and adequate justification shall be submitted to the Ministry. Tree density shall not be less than 2500 per ha with survival rate not less than 80%.	Tanda TPP, Stage-I was designed and commissioned by UPSEB, and it was taken over by NTPC in year 2000. The layout of the project was developed by UPSEB with a little emphasis for provision of green belt all around main plant and township areas. Main Plant and Township for Tanda TPP, Stage-II are proposed to be located within the premises of existing plant boundary for Tanda TPP, Stage-I. Therefore, there is no space available for separate raising of Green Belts for Stage-I and II. Constraint for adequate greenbelt space on west and south sides. Even with the existing constraints of space, afforestation and plantation activities have already been implemented under Stage-I of the project in the form of strips and patches and the same is planned in balance available space in plant and

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		<p>township areas for implementation under Stage-II. In order to compensate for non-availability of area for plantation, the plantation activities are also being undertaken in the surrounding area with the help of State Forest Department.</p> <p>A total of 26,250 trees has been planted in 10 hectares of land to develop a green belt around Stage-II.</p>
xxiv	<p>At least three nearest village shall be adopted and basic amenities like development of roads, drinking water supply, primary health centre, primary school etc. shall be developed in co-ordination with the district administration.</p>	<p>Various Community Developmental Activities were undertaken in and around the Plant. Accordingly, following works have been carried out:</p> <p><b>Ambedkarnagar:</b></p> <ol style="list-style-type: none"> <li>1. 600 LPM Oxygen Generation Plant installed at Combined District Hospital, Ambedkarnagar.</li> <li>2. Mortuary Van provided to Combined District Hospital, Ambedkarnagar.</li> </ol> <p><b>Basti:</b></p> <ol style="list-style-type: none"> <li>1. Mortuary van handed over to District Women's Hospital, Basti.</li> <li>2. Basic Life Support (BLS) ambulance handed over to District hospital, Basti.</li> </ol> <p><b>Hussainpur Sudhana:</b></p> <ol style="list-style-type: none"> <li>1. Construction of Mosque.</li> </ol> <p><b>Mahripur:</b></p> <ol style="list-style-type: none"> <li>1. ANM (Auxiliary Nursing Midwifery) centre constructed and handed over to state administration.</li> <li>2. Construction of Community Hall.</li> <li>3. Construction of CC Road from Keotaiyah Gopal's shop to river side.</li> <li>4. Construction of CC road from Ramlila Stage to Raipur Village Boundary wall.</li> <li>5. CC Road from Ramchander's houses to Mithai Lal's house.</li> <li>6. Mushroom Cultivation Training to Women Self Help Groups.</li> </ol> <p><b>Asopur:</b></p> <ol style="list-style-type: none"> <li>1. Construction of Meeting room &amp;</li> </ol>

S. NO.	EC CONDITION	COMPLIANCE STATUS
		<p>toilet in Aliganj Police Station.</p> <p>2. Construction of Overhead Water Tank for supply of potable drinking water is being planned.</p> <p><b>Hakimpur:</b></p> <ol style="list-style-type: none"> <li>1. Construction of Overhead Water Tank for supply of drinking water completed.</li> <li>2. ANM (Auxiliary Nursing Midwifery) centre constructed and handed over to state administration.</li> <li>3. Construction of toilet in Primary school.</li> </ol> <p><b>Kakrahi:</b></p> <ol style="list-style-type: none"> <li>1. Construction of 05-seated toilet complex.</li> <li>2. Construction of CC Road.</li> <li>3. Construction of boundary wall, installation of gate and Graveyard development works.</li> </ol> <p><b>Samhariya:</b></p> <ol style="list-style-type: none"> <li>1. Construction of 05-seated toilet complex</li> <li>2. Construction of CC Road &amp; nalah drain.</li> <li>3. Construction of A.N.M. center.</li> </ol> <p><b>Khairpur/Fatehpur/Salahpur Rajor</b></p> <ol style="list-style-type: none"> <li>1. Widening of Tanda-Maya Road.</li> <li>2. Repair work of BRC Bhavan at Block Education Office.</li> <li>3. Procurement of PCs for Fatehpur Primary School-Tanda.</li> <li>4. Construction of CC Road and drain in Bahadurpur village.</li> </ol>
xxv	<p>The project proponent shall also adequately contribute in the development of the neighbouring villages. Special package with implementation schedule for providing potable drinking water supply in the nearby villages and schools shall be undertaken in a time bound manner.</p>	<p>Various activities for development of the neighbouring villages have been undertaken:</p> <ol style="list-style-type: none"> <li>1. Construction of Overhead Water Tank for supply of drinking water completed at Hakimpur.</li> <li>2. Construction of Overhead Water Tank for supply of drinking water in process at Asopur.</li> </ol> <p>Detailed activities listed in <b>Annexure-VII.</b></p>

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xxvi	<p>CSR scheme shall be identified based on need-based assessment in and around the villages within 5 km of the site and in constant consultation with the village Panchayat and the District administration. As part of CSR prior identification of local employable youth and eventual employment in the project after imparting relevant training shall be also undertaken. Income generation projects consistent with the traditional skills of the people shall be undertaken. Development of fodder farm, fruit bearing orchards, vocational training etc. can form a part of such programme. Company shall provide separate budget for community development activities and income generating programmes. Vocational training programme for possible self-employment and jobs shall be imparted to identify villagers free of cost.</p>	<p>CSR scheme has been identified based on need-assessment survey and consultation with village Panchayats and District Administrations through VDACs, Stakeholder Engagement meetings and regular interactions. Vocational training/income generation opportunities in various areas have been provided to local employable youth such as:</p> <ol style="list-style-type: none"> <li>1. 4-month long training on <b>'Oyster Mushroom Farming'</b> was given to 24 women of 2 Self-Help Groups (SHGs). They were also trained on selling the produce in local market.</li> <li>2. Training of <b>'Jhumar making'</b> was provided to 40 women in project affected villages.</li> <li>3. Training of <b>'Terracotta making'</b> (Designing models of Clay, Statues, decorative items etc). was given to 12 Women.</li> <li>4. 3-days <b>'Modern Farming Techniques'</b> &amp; <b>'Animal Husbandry'</b> to 28 farmers of nearby villages was provided.</li> <li>5. 440-hrs <b>'Electrician Training'</b> is being provided to 30 youth from nearby villages.</li> <li>6. A self-help group (Prerna) based <b>Sanitary Napkin Manufacturing Unit</b> is installed under CSR Program for Ladies of nearby villages.</li> <li>7. Vocational training for 21 candidate is under pipeline from CIPET for Machine Operator Assistance – plastic processing course.</li> <li>8. 40 days long training on <b>'Tailoring'</b> was given to 30 women. In addition to tailoring, sewing machine were also distributed to 30 women.</li> </ol> <p>Further a <b>Village Development advisory committee (VDAC)</b> meeting was held on 03.06.2023 with DM (Ambedkar Nagar) to identify CSR &amp; community development work and make action plan for implementation. The interaction via VDAC is done on regular intervals.</p>

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		Stakeholder meeting was also held on 27.06.2023.
xxvii	The project proponent shall take into consideration the Sachar Committee Report while implementation of social welfare schemes under CSR and due attention shall be given to more participatory developments schemes for sustainability.	<p><b>School-</b></p> <ol style="list-style-type: none"> <li>1. Film Based Teaching Methodology (FBTM) installed at 3 government schools in the vicinity and 6 FBTM installation work is under pipeline.</li> <li>2. Furniture distributed at schools in project affected &amp; nearby villages.</li> <li>3. Inclusive Education for PCPs, Equipments &amp; Aid for PCPs, Support of Sri Ram Awadh Andha Vidyalaya and Lok Jagriti Sansathan dedicated to mentally disabled persons.</li> <li>4. Scholarship to SC/ST and Physically Challenged persons in Vivekananda Shishukunj Vidyalaya in NTPC Colony.</li> </ol> <p><b>Health-</b></p> <ol style="list-style-type: none"> <li>1. Maternal and Child Health Clinic (MMU) in PAV's (Asopur, Mehripur, Hakeempur, Jot Jaina, Fattehpur, Katariya)</li> <li>2. 6 health camps organized at various project affected and nearby villages. A total of 894 people received free medical consultation &amp; medicines.</li> <li>3. 2 animal health camps were organized at Hakimpur &amp; Asopur villages. A total of 694 animals including cows, buffalos, dogs etc. were treated in the camp. The caretakers of the animals received free consultation, medicines, and feed as necessary.</li> <li>4. 27,100 Face masks and 16,260 soaps distributed amongst 5420 families of project affected and nearby villages and regular sanitization of villages was done.</li> <li>5. Sanitary napkin vending machines were installed, sanitary napkins were distributed, and awareness programs were conducted to promoted Menstrual Hygiene.</li> <li>6. Free 3 day visit of Homeopathic</li> </ol>

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		<p>doctor is begin organised in nearby villages (Hakimpur, Maharipur, Husainpur Sudhana)</p> <p>7. Health ATM is provided in public places at 4 locations in Ambedkarnagar.</p> <p><b>Water &amp; Sanitation-</b></p> <ol style="list-style-type: none"> <li>1. Overhead water tank constructed at Hakimpur village.</li> <li>2. Overhead water tank work in pipeline at Asopur village.</li> <li>3. 77 family toilets constructed at Katariya village, after which it was declared Open Defecation Free (ODF).</li> <li>4. Renovation and Construction of River ghat, culvert, Toilet etc.</li> <li>5. Rejuvenation of pond Haroon Raseed Baba Sthal at Asopur - village under CSR work is under pipeline.</li> <li>6. Support to District Administration for rejuvenation of Darwan lake in Akbarpur, Ambedkar Nagar, UP is under pipeline.</li> </ol> <p><b>Renewable Energy-</b></p> <ol style="list-style-type: none"> <li>1. 410 Solar Lights installed at key locations of the vicinity. Additionally, 100 Solar light installation is under pipeline.</li> </ol> <p><b>Sports-</b></p> <ol style="list-style-type: none"> <li>1. 3-day District &amp; Divisional Sports Competition supported at Eklavya Stadium, Ambedkarnagar.</li> <li>2. 3-day Handball Training camp organized at Sunflower School, Makhdoom Nagar.</li> <li>3. 3-day long State-Level Handball Competition organized in coordination with District Olympic Association at Eklavya Stadium, Ambedkarnagar.</li> <li>4. Support provided to 'Green Air. Clean Air' marathon at Akbarpur.</li> <li>5. Organisation of 'Sansad Khel Mahakumbh', Basti supported under CSR.</li> </ol>

S. NO.	EC CONDITION	COMPLIANCE STATUS
		In all these different activities the recommendations of Sachhar Committee is being taken into consideration and priorities among beneficiaries given accordingly.
xxviii	An amount of Rs 25.0 Crores shall be earmarked as one-time capital cost for CSR programme as committed by the project proponent. Subsequently a recurring expenditure of Rs. 5.0 Crores per annum shall be earmarked as recurring expenditure for CSR activities. Details of the activities to be undertaken shall be submitted within six months along with road map for implementation.	CSR Budget approved for the year 2023-24 was Rs.270 Lakhs while CSR expenditure for FY 2023-24 till date is Rs. 101.32 Lakhs. Community Development expenditure till now is 322.9 Lakhs and an amount of 90 lakhs is utilized for FY 2023-24 till now. Details of the various CSR & CD activities undertaken are given at <b>Annexure-VII.</b>
xxix	It shall be ensured that an in-built monitoring mechanism for the schemes identified is in place and annual social audit shall be got done from the nearest Government institute of repute in the region. The project proponent shall also submit the status of implementation of the scheme from time to time.	Monthly CSR/CD Review of BUH level in the presence of HOD's is held at regular interval to assess the schemes. NTPC has an in-built system for monitoring of CSR Plan at project, RHQ and Corporate level. In addition, internal audits and Need Assessment Survey are also undertaken through internal mechanism and through local government Institute. <b>(Annexure-VIII MOM Record Notes)</b>
<b>B. GENERAL CONDITIONS:</b>		
i.	The treated effluents conforming to the prescribed standards only shall be re-circulated and reused within the plant. Arrangements shall be made that effluents and storm water do not get mixed.	An integrated system for collection, treatment, recycle and reuse of the effluents system for the project has been provided. Separate drainage arrangements have been made so that effluents and storm water do not get mixed. <b>(Annexure-IX)</b>
ii.	A sewage treatment plant shall be provided (as applicable) and the treated sewage shall be used for raising greenbelt/ plantation.	Sewage Treatment Plant is available for treatment of domestic effluents of colony. One Package STP has been installed for domestic effluent of plant service building. Further package STPs are being installed for new project buildings. Treated sewage is being used for irrigation in greenbelt development / plantation.
iii.	Adequate safety measures shall be provided in the plant area to check/ minimize spontaneous fires in coal yard,	Adequate safety measures like water sprinklers have been provided at coal stock yard to check/ minimize

S. NO.	EC CONDITION	COMPLIANCE STATUS
	especially during summer season. Copy of these measures with full details along with location plant layout shall be submitted to the Ministry as well as to the Regional Office of the Ministry.	spontaneous fires in coal yard.
iv.	Storage facilities for auxiliary liquid fuel such as LDO and/ HFO/ LSHS shall be made in the plant area in consultation with Department of Explosives, Nagpur. Sulphur content in the liquid fuel will not exceed 0.5%. Disaster Management Plan shall be prepared to meet any eventuality in case of an accident taking place due to storage of oil.	No separate facility for LDO is made with respect to Tanda stage-II. Existing capacity of Stage-I LDO storage Tank-2&4 is sufficient to cater the need of Stage-II. Further the sulphur content in liquid fuel will be ensured within 0.5%. Disaster Management Plan is already in place to meet any eventuality in case of an accident taking place due to storage of oil.
v.	First Aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.	First Aid and sanitation arrangements have been made for the drivers and other contract workers. Toilets and drinking water arrangements have been made.
vi	Noise levels emanating from turbines shall be so controlled such that the noise in the work zone shall be limited to 85 dBA from source. For people working in high noise area, requisite personal protective equipments like ear plugs/ earmuffs etc, shall be provided. Workers engaged in noisy areas such as turbine area, air compressors etc. shall be periodically examined to maintain audiometric record and for treatment for any hearing loss including shifting to non noisy/ less noisy areas.	Noise level requirements are being complied and sufficient measures have been taken to limit noise level up to 85 dBA. Personal protective equipment is being provided and Periodical Health check-up / examination of the engaged workers is being done.
vii	Regular monitoring of ambient air ground level concentration of SO <sub>2</sub> , NO <sub>x</sub> , PM <sub>2.5</sub> & PM <sub>10</sub> and Hg shall be carried out in the impact zone and records maintained. If at any stage these levels are found to exceed the prescribed limits, necessary control measures shall be provided immediately. The location of the monitoring stations and frequency of monitoring shall be decided in consultation with SPCB. Periodic reports shall be submitted to the Regional Office of this Ministry. The data shall also be put on the website of the company.	Ambient Air Quality monitoring is being done in the surrounding area and records are being maintained and submitted to UP SPCB on regular basis. <b>Annexure-III</b>

S. NO.	EC CONDITION	COMPLIANCE STATUS
viii	Provision shall be made for the housing of construction labour (as applicable) within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	Housing of construction labour (as applicable) with all necessary infrastructure and facilities are being provided within the site by concerned agencies as per contract.
ix	The project proponent shall advertise in at least two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned within seven days from the date of this clearance letters 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 <a href="http://www.envfor.nic.in">http://www.envfor.nic.in</a>	Advertisement has already been published in Hindustan Times and Dainik Jagaran on 23.04.2012.
x	A copy of the clearance letter shall be sent by the proponent to the concerned Panchayat, Zila Parishad/ Municipal Corporation, urban local body, and the local NGO, if any, from whom suggestions/ representations, if any, received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.	Clearance letter have been made available to all concerned and has been displayed on company's web page.
xi	An Environmental Cell comprising of at least one expert in environmental science /engineering occupational health and social scientist shall be created at the project site itself and shall be headed by an officer of appropriate superiority and qualification. It shall be ensured that the Head of the Cell shall directly report to the Head of the organization viz. of CMD of M/s. NTPC and he shall be held responsible for implementation of environmental regulations and social impact improvement/ mitigation measures.	An Environmental Management Group (EMG) has been established. Qualified and experienced officers have been posted and head of the EMG is reporting to the top management.

S. NO.	EC CONDITION	COMPLIANCE STATUS
xii	<p>The proponent shall upload the status of compliance of the stipulated environmental clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutants levels namely, SPM, RSPM, (PM2.5 &amp; PM10), SO<sub>2</sub>, NO<sub>x</sub> (ambient levels as well as stack emissions) shall be displayed at a convenient location near the main gate of the company in the public domain.</p>	<p>The compliance status is being updated on regular interval and being submitted to the Regional Office of MOEF, the Zonal Office of CPCB and the SPCB.</p> <p>The same is also uploaded on website of the company.</p> <p>Criteria pollutants levels are being displayed on plant main gate.</p>
xiii	<p>The environment statement for each financial year ending 31<sup>st</sup> March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of the Ministry by e-mail.</p>	<p>This condition has been noted and Environment Statement (Form-V) along with environment clearance conditions compliance status will be submitted to SPCB and respective regional office by e-mail.</p>
xiv	<p>The project proponent shall submit six monthly reports on the status of the implementation of the stipulated environmental safeguards to the Ministry of Environment and Forests, its Regional Office, Central Pollution Control Board and State Pollution Control Board. The project proponent shall upload the status of compliance of the environment of the environmental clearance conditions on their website and update the same periodically and simultaneously send the same by e-mail to the Regional Office, Ministry of Environment &amp; Forests.</p>	<p>Six monthly compliance reports are being submitted regularly to the MoEF&amp;CC Regional office, CPCB zonal office and SPCB Head Office. Status is also uploaded on organization's website.</p>

S. NO.	EC CONDITION	COMPLIANCE STATUS
xv	Regional Office of the Ministry of Environment & forests will monitor the implementation of the stipulated conditions. A completed set of documents including Environmental Impact Assessment Report and Environment Management Plan along with the additional information submitted from time to time shall be forwarded to the Regional Office for their use during monitoring. Project proponent will up-load the compliance status in their website and up-date the same from time to time at least six-monthly basis. Criteria pollutants levels including NOx (from stack and ambient air) shall be displayed at the main gate of the power plant.	A copy of EIA Report has already been sent to Regional Office on 27.04.2012.  Arrangement for display of criteria pollutant on main gate has been made.  The compliance status is being updated on regular interval and being submitted to the Regional Office of MOEF, the Zonal Office of CPCB and the SPCB. The same is also uploaded on website of the company. Criteria pollutants levels are being displayed on plant main gate.
xvi	Separate funds shall be allocated for implementation of environmental protection measures along with item-wise break-up. This cost shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and year-wise expenditure should be reported to the Ministry.	Separate funds (Rs.1426.04Crores) have been allocated for environmental protection measures. It includes High Efficiency ESPs (Rs. 202.93 Crores), 275 m High Stack (Rs.36.66Crores), Coal Dust Extraction and Suppression Systems (Rs.4.0Crores), Ash Management (Rs.140Crores), FGD (Rs.593.0 Crores), Cooling Towers (Rs.255.00 Crores), Main Plant Effluent Treatment Plant including Central Monitoring Basin (Rs.9.0 Crores), Sewage Treatment Plant (Rs. 1.0 Crores), Disposal of Unused Ash (Rs.150.0Crores), Afforestation and Green Belt Development (Rs.2.0 Cr.), Control of Fire and Explosion Hazard (Rs.31.95 Cr.), Env. Lab. Equipment (Rs.0.5 Cr.)
xvii	The project authorities shall inform the Regional Office as well as the Ministry regarding the date of financial closure and final approval of the project by the concerned authorities and the dates of start of land development work and commissioning of plant.	The date of financial closer will be intimated with the completion of project. Board has approved Project cost: Rs.9188.98 Crore on 10.09.2014.
xviii	Full cooperation should be extended to the Scientists / Officers from the Ministry / Regional Office of the Ministry at Bangalore / CPCB / SPCB who would be monitoring the compliance of environmental status.	Full cooperation is being extended to the Scientists/ Officers from the Ministry/ Regional Office of the Ministry at Lucknow/ CPCB/ SPCB visiting the project. The same shall be ensured in future also.

S.NO.	EC CONDITION	COMPLIANCE STATUS
<b>Conditions as per EC amendment dated 22.08.2019</b>		
i	Stack of 275 m height shall be installed and provided with continuous online monitoring equipment's for SO <sub>x</sub> , NO <sub>x</sub> and PM emissions. Exit velocity of flue gases shall not be less than 22 m/sec. Mercury emissions from stack may also monitored on periodic basis.	A bi-flue stack of height 275 m with continuous online monitoring equipment's for Particulate Matter, SO <sub>2</sub> , NO <sub>x</sub> and Mercury has already been installed. Data transmission system has been installed for continuous data transmission to CPCB.
ii	High efficiency ESP shall be installed to ensure meeting of latest emission norms	High efficiency ESP has been installed in Unit#1 & Unit#2 of Stage-II to limit particulate emissions below 30 mg/Nm <sup>3</sup> .
iii	As per the revised Tariff Policy notified by Ministry of Power vide dated 28.01.2016, project proponent shall explore the use of treated sewage water from the Sewage Treatment Plant of Municipality/ local bodies/ similar organization located within 50 km radius of the proposed power project to minimise the water drawl from surface water bodies. The details of Sewage Treatment Plants located within 50km radius along with the capacities shall be submitted.	There are no municipality sewage treatment plants within 50km radius of the power plant. The treated effluent from plant and colony Sewage Treatment Plants is used for horticulture/ gardening activities.
<b>Conditions as per EC amendment dated 28.05.2018 for validity extension</b>		
i	Revised emission standards as per Ministry's Notification dated 07.12.2015 and subsequent amendments notified from time to time shall be complied. In case, plant is ready for commissioning and not meeting revised emission norms, operations shall be stopped unless otherwise and extension is given to the said power plant through a specific direction or an amendment to the notification.	Particulate Matter (PM) emissions are being maintained within the limit of 30 mg/NM <sup>3</sup> as per revised emission norms. Installation of FGD is in progress for compliance to SO <sub>2</sub> emission norms. NO <sub>x</sub> emission norms compliance issue has been taken up at corporate level.  As per the MoEF&CC notification dated 31.03.2021, the applicable timelines for compliance to new emission norms is 31.12.2024.
ii	As per the specific condition no. xxviii of EC, Capital budget of Rs.25 Crores for CSR activities shall be revised in commensurate with the revised project cost Rs.7,800 Crores.	Budget revision is being taken up appropriately.

**Conditions as per EC amendment dated 22.04.2020 for validity extension**

i	Revised emission norms vide Ministry's notification dated 07.12.2015 shall be met during operations. In case plant is not meeting emission standards, either operations shall be stopped or extension to install pollution control measures shall be obtained.	<p>Particulate Matter (PM) emissions are being maintained within the limit of 30 mg/NM<sup>3</sup> as per revised emission norms. FGD installation is in progress for SO<sub>2</sub> emission norms compliance.</p> <p>NOx emission norms compliance issue has been taken up.</p> <p>As per the MoEF&amp;CC notification dated 31.03.2021, the applicable timelines for compliance to new emission norms is 31.12.2024.</p>
ii	The physical and financial progress of installation of FGD and De-NOx control systems to meet new emission norms shall be submitted to Ministry and its Regional Office.	<p>Flue Gas Desulphurization (FGD) package has been awarded to M/s. GE Power India Limited on 18.09.2018 (Total Cost Rs.593.0 Crores)</p> <p>Commissioning work of FGD system is in progress. (<b>Annexure-X</b>)</p> <p>Pilot project for Selective Catalytic Reduction (SCR) system for reducing NOx emissions is being carried out for evaluation of adequacy and efficacy.</p> <p>For NOx emission control, Low-NOx burners and overfire air system has been provided. Evaluation of the De-NOx systems like SCR/SNCR is being undertaken.</p>

*Interim Report*

**HYDRO-GEOLOGICAL STUDY FOR TANDA STPP, STAGE-II  
(2X660 MW), UTTAR PRADESH**



Submitted to  
NATIONAL THERMAL POWER CORPORATION  
TANDA

by



**NATIONAL INSTITUTE OF HYDROLOGY**  
(An ISO 9001:2008 Institute under MoWR, RD and GR, Govt. of India)  
ROORKEE - 247667 (UTTARAKHAND)

**MARCH 2022**

संख्या-3604/07-27-सिं-4-140(डब्लू)परि/06

प्रेषक,

ए०के०एस०पुण्डीर,  
विशेष सचिव,  
उत्तर प्रदेश शासन।

सेवा में,

डायरेक्टर (डिविजनल),  
एन०टी०पी०सी०लिमिटेड,  
एन०टी०पी०सी० भवन स्कोप काम्प्लैक्स,  
7, इंस्टीट्यूशनल एरिया,  
लोधी रोड, नई दिल्ली।

सिंचाई अनुभाग-4

तखनऊ:दिनांक: 20 अगस्त, 2007

विषय: टण्डा तापीय विद्युत परियोजना द्वितीय चरण (2x660 एम०डब्लू०) हेतु जल की उपलब्धता के संबंध में।

महोदय,

उपर्युक्त विषयक कृपया अपने पत्र संख्या-सी०सी०ई०एस०एन०:1530:0: 1, दिनांक 08-06-07 का संदर्भ ग्रहण करें जिसके द्वारा प्रश्नगत तापीय परियोजना हेतु 65 क्यूसेक पानी की उपलब्धता के संबंध में कमिजनेट/प्लीयरेन्स की वांछना की गयी है।

2- इस संबंध में मुझे यह कहने का निदेश हुआ है कि उत्तर प्रदेश शासन टण्डा तापीय विद्युत परियोजना द्वितीय चरण हेतु 65 क्यूसेक पानी एन०टी०पी०सी० को उपलब्ध कराये जाने हेतु निम्न शर्तों के अधीन सहमत है:-

(1) एन०टी०पी०सी० को दी जाने वाली कुल 110 क्यूसेक की जलापूर्ति (पूर्व में दी जा रही 45 क्यूसेक तथा प्रस्तावित 65 क्यूसेक को सम्मिलित करते हुए) हेतु टण्डा, पम्प कैनाल की प्रस्तावित क्षमता वृद्धि परियोजना के निर्माण कार्य की वारसदिक लागत (रु० 535.00 लाख अनुमानित) का वहन एन०टी०पी०सी० द्वारा किया जायेगा तथा निर्माण कार्य उत्तर प्रदेश सिंचाई विभाग द्वारा सम्पादित किया जायेगा।

(2) टण्डा पम्प हाऊस एप्रोच चैनल पम्प हाऊस से पावर प्लांट तक लिंक चैनल का अनुरक्षण एवं संचालन के व्यय का वहन एन०टी०पी०सी० द्वारा किया जायेगा।

(3) एन०टी०पी०सी०, टण्डा द्वारा पम्पों के संचालन एवं पम्प हाऊस परिसर को निःशुल्क विद्युत की आपूर्ति तथा पम्पों के संचालन एवं रख-रखाव प्रथम चरण की भाँति द्वितीय चरण हेतु किया जायेगा।

(4) सिंचाई विभाग, उत्तर प्रदेश द्वारा आवश्यकतानुसार जल मूल्य में की जाने वाली वृद्धि एन०टी०पी०सी०, टण्डा को मान्य तथा वहन करनी होगी।

3- कृपया इस संबंध में एन०टी०पी०सी० के अभिमत से उत्तर प्रदेश शासन को अवगत कराने का कष्ट करें, ताकि विस्तृत परियोजना प्रस्ताव तैयार कराकर एन०टी०पी०सी० को प्रस्तुत किया जा सके।

भवदीय,

  
(ए०के०एस०पुण्डीर)  
विशेष सचिव

प्रेषक,

मुस्ताक अहमद  
विशेष सचिव,  
उत्तर प्रदेश, शासन।

सेवा में,

प्रमुख अभियन्ता एवं विभागाध्यक्ष,  
सिंचाई एवं जल संसाधन विभाग,  
उत्तर प्रदेश, शासन।

सिंचाई अनुभाग-4

लखनऊ दिनांक 30 सितम्बर, 2021

विषय-महरीपुर स्थित एन0टी0पी0सी0 लिमिटेड टाण्डा तापीय विद्युत गृह को 45 क्यूसेक अपेय जल टाण्डा पम्प नहर से दिये जाने के सम्बन्ध में।

महोदय,

उपरोक्त विषयक मुख्य अभियन्ता (जल संसाधन) के पत्र सं0-240/अनिम-8/यू0-6/टी0-28 दिनांक 04.07.2014 के संदर्भ में मुझे यह कहने का निर्देश हुआ है कि राज्यपाल महोदय द्वारा महरीपुर स्थित एन0टी0पी0सी0 लिमिटेड टाण्डा तापीय विद्युत गृह को प्रथम वरण में 45 क्यूसेक तक अपेय जल निम्नलिखित शर्तों पर उपलब्ध कराये जाने की स्वीकृति सहमति प्रदान करते हैं-

1. एन0टी0पी0सी0 लिमिटेड टाण्डा को टाण्डा पम्प नहर से 45 क्यूसेक तक पानी की आपूर्ति की जायेगी।
2. सामान्य नहर बन्दी तथा अन्य किसी कार्य से नहर बन्दी की अवधि में आवश्यक जल का प्रथम एन0टी0पी0सी0 लिमिटेड अपना स्वतंत्र प्रबन्ध करेगा।
3. इस जल की आपूर्ति हेतु इनलेट और वापस करने हेतु समस्त कार्य, जो कराये जायेंगे, इसके निर्माण का व्यय एन0टी0पी0सी0 लिमिटेड द्वारा ही वहन किया जायेगा। एन0टी0पी0सी0 लिमिटेड सिंचाई विभाग द्वारा प्रश्नगत जलापूर्ति हेतु कराये गये कार्यों की वास्तविक लागत का 2 प्रतिशत घनराशि अनुदान हेतु उपलब्ध करायेगा। इस घनराशि में प्रति वर्ष 10 प्रतिशत वृद्धि की जायेगी।
4. अभिशक्ती अभियन्ता, उपस्युक्त अधिकारी (साहायक अभियन्ता) एवं अवर अभियन्ता या कोई अन्य सिंचाई विभाग के अधिकारी/प्रतिनिधि पम्प हाउस या अन्य माप सम्बन्धित प्रणाली, जहाँ पर पानी की आपूर्ति मापी जा सके, तक पहुँचने के लिये स्वतंत्र ही तथा उपरोक्त द्वारा इस सम्बन्ध में हर सम्भव सहयोग किया जायेगा।
5. दिये जाने वाले जल का प्रयोग सिर्फ प्लाण्ट को ठण्डा करने हेतु किया जायेगा। एन0टी0पी0सी0 लिमिटेड टाण्डा, नहर द्वारा जलापूर्ति में अपना कोई भी गंदा जल अथवा उत्स्राव नहीं डालेगा। इस प्रयोजन हेतु सिंचाई विभाग के अधिकारी/कर्मचारियों को एन0टी0पी0सी0 टाण्डा लिमिटेड के प्लाण्ट का निरीक्षण करने का अधिकार होगा।
6. रायल्टी चार्ज ₹0 600000.00 (₹0 छः लाख मात्र) प्रति क्यूसेक प्रतिवर्ष एवं अतिरिक्त जल मूल्य/जल कर ₹0 12.48 (बारह ₹0 अठतालिस पैसे मात्र) प्रतिहजार घन फुट की दर से वास्तविक जल उपयोग के आधार पर शासनादेश संख्या-2953/11-27-सि0-04-08 (जल)/82 लखनऊ दिनांक-15 जुलाई 2011 के अनुसार उपरोक्त द्वारा आपूर्तिकर्ता को भुगतान किया जायेगा तथा राज्य सरकार समय-समय पर रायल्टी चार्ज एवं जल मूल्य की दरों को पुनरीक्षित

कर सकती है, जिसके अनुसार उपभोक्ता द्वारा रायस्ती चार्ज एवं जलमूल्य का भुगतान किया जायेगा।

7. पानी की वास्तविक आपूर्ति को सुनिश्चित करने के लिए उपभोक्ता द्वारा अति आधुनिक जल मापन यंत्र (Digital Flow Meter) लगाया जायेगा तथा आपूर्तिकर्ता एवं उपभोक्ता, संयुक्त रूप से मीटर रीडिंग का निरीक्षण करेंगे। अधिशासी अभियन्ता द्वारा उपभोक्ता को संयुक्त निरीक्षण की तिथि की जानकारी 03 दिन पूर्व दी जायेगी। जल को मापने हेतु लगाया गया मीटर उपभोक्ता द्वारा ठीक अवस्था में चालू हालत में रखा जायेगा। यदि मीटर खराब पाया जाता है तो इस दशा में पम्पों की अधिकतम क्षमता 60 क्यूसेक के अनुसार जल की आपूर्ति मानकर रायस्ती एवं जल मूल्य की गणना की जायेगी, जो उपभोक्ता को मान्य होगी।
8. यदि आपूर्तिकर्ता के नियंत्रण के बाहर अथवा किसी दुर्घटना अथवा सूखा अथवा किसी वैकल्पिक आपदा के कारण जल आपूर्ति बाधित होती है तो इसकी जिम्मेदारी आपूर्तिकर्ता की नहीं होगी और न ही इसके लिये उपभोक्ता द्वारा किसी प्रतिकर की माँग की जायेगी।
9. यदि महरीपुर पम्प बाहर सिमोटलिंग की जाती है या पम्प हाउस के पम्पों को बदला जाता है जिसके फलस्वरूप पम्पिंग स्टेशन एवं मशीनरी को मोडिफाई किये जाने की आवश्यकता होती है, तो उसका पूर्ण उत्तर उपभोक्ता का होगा और सम्पूर्ण का भार उपभोक्ता द्वारा ही वहन किया जायेगा।
10. उपभोक्ता (एन०टी०पी०सी० लिमिटेड टाण्डा) द्वारा अद्यतन समय तक का जलमूल्य एवं रायस्ती का भुगतान कर दिया गया है और भविष्य में उपभोगानुसार जलमूल्य/रायस्ती आदि का लघु दरों के अनुसार भुगतान समयानुसार किया जायेगा।
11. यह शासनादेश दिनांक 11 जून 2014 से प्रभावी समझा जायेगा।
12. इस प्रयोजन हेतु एन०टी०पी०सी० लिमिटेड टाण्डा तथा सिंचाई एवं जल संसाधन विभाग के मध्य 10 वर्षों हेतु अनुबंध किया जायेगा। 10 वर्षों के तदनुसार अगले 10 वर्षों के लिए नया अनुबंध निष्पादित किया जायेगा।

भवदीय

( मुस्ताक अहमद )  
विशेष सचिव

संख्या-1052(1)/20-27-सि०-4-तददिनांक।

प्रतिलिपि निम्नलिखित को सूचनात्मक एवं आवश्यक कार्यवाही हेतु प्रेषित है:-

1. प्रबन्ध निदेशक, नेशनल वर्मल पावर कार्पोरेशन लिमिटेड, एन०टी०पी०सी० लिमिटेड भवन स्कोप काम्प्लेक्स-7 इन्स्टीट्यूशनल एरिया, लोदी रोड, नई दिल्ली पिन-110003।
2. मुख्य अभियन्ता (शा.सं.) सिंचाई विभाग, उत्तर प्रदेश, गंगा सिंचाई भवन, तेलीबाग, लखनऊ।
3. मुख्य महाप्रबंधक, एन०टी०पी०सी० लिमिटेड टाण्डा, अम्बेडकरनगर।
4. अधिशासी अभियन्ता, सिंचाई सप्लाय टाण्डा, अम्बेडकरनगर।

आज्ञा से,

SUM (EMA)  
for inf. & records pl.  
Ariq  
12/10/2024

( अमित प्रणव )  
संयुक्त सचिव

Environmental Monitoring ReportsAmbient Air Quality Monitoring

**ecoMen**  
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An approved Laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India, New Delhi

TEST REPORT

FORMAT NO. ECO/QS/FORMAT/10

NAME & ADDRESS OF CUSTOMER:	NTPC Limited Tanda Thermal Power Project P.O. Vidyut Nagar, AmbedkarNagar-224238 (U.P.)		ULR No.	TC953923000002265F
			Test Report No.	ECO/LAB/AA/0226/2265/09/2023
			Issue Date of Test Report	05.10.2023
Type of Sample	Ambient Air		Name of Location	Near Fatehpur Village
Sample Registration No.	0226		Sample Collected By	Mr. Arvind Singh
Sampling Method	As per Reference Method		Time of Sample Collection	11.25 AM
Date of Sample Collection	28.09.2023 to 29.09.2023		Time of Sample Received	10.15 AM
Date of Sample Received	30.09.2023		End Date of Analysis	04.10.2023
Start Date of Analysis	30.09.2023		Sampling Duration	24Hrs.
Weather Condition	Sunny		Sample ID Code	ECO/LAB/2265/09/2023
Environmental Condition	Temperature:	25 ± 2 °C		
	Humidity:	59 %		
Details of Instrument used	Instrument ID	RDS (ECO/AR/RFD/07) & FDS (ECO/AR/FD/15)		
	Calibration due on	31.05.2024		

S. No.	TEST PARAMETERS	PROTOCOL	DETECTION RANGE	RESULTS	Limit as per National Ambient Air Quality Standards
1.	Particulate Matter (PM <sub>10</sub> ) µg/m <sup>3</sup>	IS:5182(Part-23)	10-1000	57.38	100
2.	Particulate Matter (PM <sub>2.5</sub> ) µg/m <sup>3</sup>	IS:5182(Part-24)	10-100	26.94	60
3.	Sulphur Di-Oxide (SO <sub>2</sub> ) µg/m <sup>3</sup>	IS:5182 (Part-2)	9-200	11.30	80
4.	Nitrogen Di-Oxide (NO <sub>2</sub> ) µg/m <sup>3</sup>	IS:5182 (Part-6)	5-200	16.18	80

**Statement of Conformity:** Analyzed parameters in above tested sample are within standard limit as per MoEF/CPCB Guidelines.  
**Note-**

1. Test results relate to the items sampled & tested.
2. Test report shall not be reproduced except in full without approval of the laboratory.
3. The test samples will be disposed of after one Month from the date of issue of test report.

---End of Report---

Verified By  
*Vikas Kumar*  
Technical Manager  
(Vikas Kumar)

Authorized By  
*Abhishek Kumar Singh*  
Quality Manager  
(Abhishek Kumar Singh)



## Ambient Air Quality Monitoring

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An approved Laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India, New Delhi

### TEST REPORT

FORMAT NO. ECO/QS/FORMAT/10

<b>NAME &amp; ADDRESS OF CUSTOMER:</b>	NTPC Limited Tanda Thermal Power Project P.O. Vidyut Nagar, AmbedkarNagar-224238 (U.P.)		ULR No.	TC95392300002264F
			Test Report No.	ECO/LAB/AA/0226/2264/09/2023
			Issue Date of Test Report	05.10.2023
<b>Type of Sample</b>	Ambient Air			
<b>Sample Registration No.</b>	0226	<b>Name of Location</b>	Near Maharipur Village	
<b>Sampling Method</b>	As per Reference Method		<b>Sample Collected By</b>	Mr. Arvind Singh
<b>Date of Sample Collection</b>	28.09.2023 to 29.09.2023		<b>Time of Sample Collection</b>	10.45 AM
<b>Date of Sample Received</b>	30.09.2023		<b>Time of Sample Received</b>	10.15 AM
<b>Start Date of Analysis</b>	30.09.2023		<b>End Date of Analysis</b>	04.10.2023
<b>Weather Condition</b>	Sunny		<b>Sampling Duration</b>	24Hrs.
<b>Environmental Condition</b>	Temperature:	25 ± 2 °C	<b>Sample ID Code</b>	ECO/LAB/2264/09/2023
	Humidity:	59 %		
<b>Details of Instrument used</b>	<b>Instrument ID</b>	RDS (ECO/AR/RFD/06) & FDS (ECO/AR/FD/13)		
	<b>Calibration due on</b>	31.05.2024		

S. No.	TEST PARAMETERS	PROTOCOL	DETECTION RANGE	RESULTS	Limit as per National Ambient Air Quality Standards
1.	Particulate Matter (PM <sub>10</sub> ) µg/m <sup>3</sup>	IS:5182(Part-23)	10-1000	66.18	100
2.	Particulate Matter (PM <sub>2.5</sub> ) µg/m <sup>3</sup>	IS:5182(Part-24)	10-100	23.92	60
3.	Sulphur Di-Oxide (SO <sub>2</sub> ) µg/m <sup>3</sup>	IS:5182 (Part-2)	9-200	13.22	80
4.	Nitrogen Di-Oxide (NO <sub>2</sub> ) µg/m <sup>3</sup>	IS:5182 (Part-6)	5-200	18.48	80

**Statement of Conformity:** Analyzed parameters in above tested sample are within standard limit as per MoEF/CPCB Guidelines.

**Note-**

1. Test results relate to the items sampled & tested.
2. Test report shall not be reproduced except in full without approval of the laboratory.
3. The test samples will be disposed of after one Month from the date of issue of test report.

---End of Report---

Verified By  
*Vikas Kumar*  
Technical Manager  
(Vikas Kumar)

Authorized By  
*Abhishek Kumar Singh*  
Quality Manager  
(Abhishek Kumar Singh)



## Stack Emission Quality Monitoring

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An approved Laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India, New Delhi

### TEST REPORT

FORMAT NO. ECO/QS/FORMAT/12

NAME & ADDRESS OF CUSTOMER	NTPC Limited Tanda Thermal Power Project P.O. Vidyut Nagar, Ambedkar Nagar-224 238 (U.P.)	ULR No.	TC953923000002269F
		Test Report No.	ECOLAB/AS/0226/2269A/09/2023
		Issue Date of Test Report	05.10.2023
Type of Sample	Stack Emission		
Sample Registration No.	0226	Name of Location	Unit-5 (Pass-A & Pass-B)
Sampling Method	IS: 11255	Sample Collected By	ELPL Representative
Date of Sample Collection	29.09.2023	Time of Sample Collection	10.00 AM
Date of Sample Received	30.09.2023	Time of Sample Received	11.05 AM
Start Date of Analysis	30.09.2023	End Date of Analysis	04.10.2023
Weather Condition	Sunny	Sampling Duration	30.00 min
Environmental Condition	Temperature: 25 ± 2 °C	Sample ID Code	ECO/LAB/2269A/09/2023
	Humidity: 58%		
Instrument Name & Lab ID	Stack Kit	ECO/AR/STACK/110/02 (Due date of Cal:01.06.2024)	
	Calibration due on		

Stack Details			
I) Above the Ground Level(m)	275	Ambient Temperature (°C)	31.80
II) Above the Platform(m)	-	Stack Temperature (°C)	120.00
Material of Stack	MS	Inside Diameter of Stack at sampling port (m)	7.650
Stack Attached	Unit- 5 (Pass-A & Pass-B)	Cross Sectional Area of Stack (M <sup>2</sup> )	45.94
Capacity of Boiler(MW)	660	Velocity of Flue Gas (m/sec.)	23.40
Shape of Stack	Circular	Flow Rate of Flue Gas (Nm <sup>3</sup> /hr.)	3001454.48
Type of Fuel Used	Coal	Pollution Control Unit	ESP
Load (MW)	579.0		

Sl. No.	TEST PARAMETERS	Unit	PROTOCOL	Detection Range	RESULTS	Standards as per CPCB
1.	Particulate Matter (PM) at 6% O <sub>2</sub>	mg/Nm <sup>3</sup>	IS 11255:Part 1:1985(Reaff.:2019)	10-1000	26.84	30.0
2.	Sulphur Dioxide (SO <sub>2</sub> ) at 6% O <sub>2</sub>	mg/Nm <sup>3</sup>	IS 11255:Part 2:1985 (Reaff.:2019)	5-1000	932.00	100
3.	Nitrogen Oxides (NOx) at 6% O <sub>2</sub>	mg/Nm <sup>3</sup>	IS 11255:Part 7:2005 (Reaff.:2017)	5-1000	314.00	100
4.	Carbon Monoxide (CO)	%	IS 13270::1992 (Reaff.: 2009)	0.2-90	12.92	-
5.	Carbon Dioxide (CO <sub>2</sub> )	%	IS 13270::1992 (Reaff.:2009)	0.2-90	11.36	-
6.	Oxygen (O <sub>2</sub> )	%	IS 13270::1992 (Reaff.:2009)	0.2-90	9.40	-

**Statement of conformity:** Analyzed parameters in above tested sample are within standard limit as per CPCB Guidelines.

**Note:**

1. Test results relate to the items sampled & tested.
2. Test report shall not be reproduced except in full without approval of the laboratory.
3. The test samples will be disposed of after one Month from the date of issue of test report.

----End of Report----

Verified By  
  
Technical Manager  
(Vikas Kumar)

Authorized By  
  
Quality Manager  
(Abhishek Kumar Singh)



## Stack Emission Quality Monitoring

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### TEST REPORT

FORMAT NO. ECO/QS/FORMAT/12

NAME & ADDRESS OF CUSTOMER	NTPC Limited Tanda Thermal Power Project P.O. Vidyut Nagar, Ambedkar Nagar-224 238 (U.P.)	ULR No.	TC953923000002270F
		Test Report No.	ECOLAB/AS/0226/2270/09/2023
		Issue Date of Test Report	05.10.2023
Type of Sample	Stack Emission		
Sample Registration No.	0226	Name of Location	Unit-6 (Pass-A & Pass-B)
Sampling Method	IS: 11255	Sample Collected By	ELPL Representative
Date of Sample Collection	29.09.2023	Time of Sample Collection	10.50 AM
Date of Sample Received	30.09.2023	Time of Sample Received	11.05 AM
Start Date of Analysis	30.09.2023	End Date of Analysis	04.10.2023
Weather Condition	Sunny	Sampling Duration	31.00 min
Environmental Condition	Temperature: 25 ± 2 °C	Sample ID Code	ECO/LAB/2270/09/2023
	Humidity: 59%		
Instrument Name & Lab ID	Stack Kit	ECO/AR/STACK/110/02 (Due date of Cal:01.06.2024)	
	Calibration due on		

Stack Details			
I) Above the Ground Level(m)	275	Ambient Temperature (°C)	32.00
II) Above the Platform(m)	-	Stack Temperature (°C)	122.0
Material of Stack	MS	Inside Diameter of Stack at sampling port (m)	7.650
Stack Attached	Unit-6 (Pass-A & Pass-B)	Cross Sectional Area of Stack (M <sup>2</sup> )	45.94
Capacity of Boiler(MW)	660	Velocity of Flue Gas (m/sec.)	23.47
Shape of Stack	Circular	Flow Rate of Flue Gas (Nm <sup>3</sup> /hr.)	2997155.84
Type of Fuel Used	Coal	Pollution Control Unit	ESP
Load (MW)	560.00		

S. No.	TEST PARAMETERS	Unit	PROTOCOL	Detection Range	RESULTS	Standards as per CPCB
1.	Particulate Matter (PM) at 6% O <sub>2</sub>	mg/Nm <sup>3</sup>	IS 11255:Part 1:1985(Reaff.:2019)	10-1000	27.80	30.0
2.	Sulphur Dioxide (SO <sub>2</sub> ) at 6% O <sub>2</sub>	mg/Nm <sup>3</sup>	IS 11255:Part 2:1985 (Reaff.:2019)	5-1000	964.00	100.0
3.	Nitrogen Oxides (NOx) at 6% O <sub>2</sub>	mg/Nm <sup>3</sup>	IS 11255:Part 7:2005 (Reaff.:2017)	5-1000	286.00	100.0
4.	Carbon Monoxide (CO)	%	IS 13270::1992 (Reaff.:2009)	0.2-90	8.67	
5.	Carbon Dioxide (CO <sub>2</sub> )	%	IS 13270	0.2-90	10.95	-
6.	Oxygen (O <sub>2</sub> )	%	IS 13270	0.2-90	10.14	-

**Statement of Conformity:** Analyzed parameters in above tested sample are within standard limit as per CPCB Guidelines.

**Note:**

1. Test results relate to the items sampled & tested.
2. Test report shall not be reproduced except in full without approval of the laboratory.
3. The test samples will be disposed of after one Month from the date of issue of test report.

----End of Report----

Verified By

  
Technical Manager  
(Vikas Kumar)

Authorized By

  
Quality Manager  
(Abhishek Kumar Singh)



## Ash Pond Effluent Quality Monitoring

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An approved Laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India, New Delhi

### TEST REPORT

NAME & ADDRESS OF CUSTOMER:		FORMAT NO. ECO/QS/FORMAT/07	
		M/s. NTPC Limited Tanda Thermal Power Project Vidyut Nagar, Tanda, Uttar Pradesh 224238	ULR No.
Type of Sample	Waste Water	Issue Date of Test Report	24.08.2023
Sample Registration No.	0165	Name of Location	Ash Pond Effluent
Sampling Method	APHA 23rd Ed.2017, 1060 A+B	Sample Collected By	Ecomen Lab Team
Date of Sample Collection	12.08.2023	Time of Sample Collection	-
Date of Sample Receipt	14.08.2023	Time of Sample Receipt	10:00 AM
Start Date of Analysis	14.08.2023	End Date of Analysis	24.08.2023
Laboratory Environmental Condition	Temperature: 25 ± 2 °C	Sample Quantity	As per Requirement
	Humidity: 57%	Sample ID Code	ECO/LAB/1647/08/2023

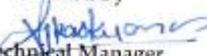
Sl. No.	Tests	Unit	Protocol	Limits of Detection	Result	G.S.R 422(E) Desirable Limit
1.	Temperature	°C	APHA, 23rd Ed. 2017, 2550A+B	10-100	28.7	shall not exceed 5°C
2.	pH	-	APHA, 23rd Ed. 2017, 4500 H* A+B	2-12	7.26	5.5-9.0
3.	Electrical Conductivity	us/cm	APHA, 23rd Ed. 2017, 2510, A+B	2-2000	660.0	-
4.	Total Suspended Solid as TSS	mg/l	APHA, 23rd Ed. 2017, 2540D	5-5000	37.4	100.0
5.	Total Dissolved Solids as TDS	mg/l	APHA, 23rd Ed. 2017, 2540-C	10-10000	395.0	-
6.	Oil & Grease as O & G	mg/l	APHA, 23rd Ed. 2017, 5520 A+D	2.5-1000	BDL	10.0
7.	Biochemical Oxygen Demand as BOD (5 days at 20°C)	mg/l	APHA, 23rd Ed. 2017, 5210 A+B	5-10000	5.8	30.0
8.	Chemical Oxygen Demand as COD	mg/l	APHA, 23rd Ed. 2017, 5220 A+C	5-50000	40.0	250.0
9.	Iron as Fe	mg/l	APHA, 23rd Ed. 2017, 3500 Fe B	0.02-100	0.24	3.0
10.	Copper as Cu	mg/l	APHA, 23rd Ed. 2017, 3111-A+B	0.05-5	BDL	2.0
11.	Total Chromium as Cr	mg/l	APHA, 23rd Ed. 2017, 3111-A+B	0.05-50	BDL	2.0
12.	Zinc as Zn	mg/l	APHA, 23rd Ed. 2017, 3111-A+B	0.02-50	0.18	5.0

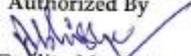
**Statement of Conformity:** The above tested parameters confirm as per GSR-422(E) limits for above tested parameters and the results are related to the sample tested. BDL- Below Detection Limit

**Note:**

1. Test results relate to the items sampled & tested.
2. Test report shall not be reproduced except in full without approval of the laboratory.
3. The test samples will be disposed of after one Month from the date of issue of test report.

---End of Report---

Verified By  
  
Technical Manager  
(Vikas Kumar)

Authorized By  
  
Quality Manager  
(Abhishek Kumar Singh)



**TEST REPORT**

NAME & ADDRESS OF CUSTOMER:		Test Report No.	FORMAT NO. ECO/QS/FORMAT/07
M/s. NTPC Limited Tanda Thermal Power Project Vidyut Nagar, Tanda, Uttar Pradesh 224238			ECOLAB/WW/0165/1647/08/2023
Type of Sample	Waste Water	Issue Date of Test Report	24.08.2023
Sample Registration No.	0165	Name of Location	Ash Pond Effluent
Sampling Method	APHA 23 <sup>rd</sup> Ed.2017, 1060 A+B	Sample Collected By	Ecomen Lab Team
Date of Sample Collection	12.08.2023	Time of Sample Collection	-
Date of Sample Receipt	14.08.2023	Time of Sample Receipt	10:00 AM
Start Date of Analysis	14.08.2023	End Date of Analysis	24.08.2023
Laboratory Environmental Condition	Temperature: 25 ± 2 °C	Sample Quantity	As per Requirement
	Humidity: 57%	Sample ID Code	ECO/LAB/1647/08/2023

Sl. No.	TESTS	Unit	PROTOCOL	DETECTION RANGE	RESULT	G.S.R 422(E)
						Desirable Limit
1.	Mercury as Hg	mg/l	APHA, 23 <sup>rd</sup> Ed. :2017, 3112 A+B	0.001-1	BDL	0.01
2.	Lead as Pb	mg/l	APHA, 23 <sup>rd</sup> Ed. :2017, 3111 A+B	0.01-1	BDL	0.1
3.	Cadmium as Cd	mg/l	APHA, 23 <sup>rd</sup> Ed. :2017, 3111 A+B	0.002-2	BDL	2.0
4.	Arsenic as As	mg/l	APHA, 23 <sup>rd</sup> Ed. :2017, 3114 C	0.01-2	BDL	0.2

**Statement of Conformity:** The above tested parameters confirm as per GSR-422(E)limits for above tested parameters and the results are related to the sample tested. BDL- Below Detection Limit

**Note:**

1. Test results relate to the items sampled & tested.
2. Test report shall not be reproduced except in full without approval of the laboratory.
3. The test samples will be disposed of after one Month from the date of issue of test report.

---End of Report---

Verified By  
*Vikas Kumar*  
Technical Manager  
(Vikas Kumar)

Authorized By  
*Abhishek Kumar Singh*  
Quality Manager  
(Abhishek Kumar Singh)



## STP Effluent Quality Monitoring

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An approved Laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India, New Delhi

### TEST REPORT

FORMAT NO. ECO/QS/FORMAT/07

NAME & ADDRESS OF CUSTOMER:	NTPC Limited Tanda Thermal Power Project Vidyut Nagar, Tanda, Uttar Pradesh 2210038	ULR No.	TC 953923000002283F
		Test Report No.	ECO/LAB/WW/0226/2283/09/2023
		Issue Date of Test Report	05.10.2023
Type of Sample	Waste Water		
Sample Registration No.	0226	Name of Location	STP Outlet
Sampling Method	APHA 23 <sup>rd</sup> Ed.2017, 1060 A+B	Sample Collected By	Ecomen Lab Team
Date of Sample Collection	29.09.2023	Time of Sample Collection	-
Date of Sample Received	30.09.2023	Time of Sample Received	11:00 AM
Start Date of Analysis	30.09.2023	End Date of Analysis	05.10.2023
Laboratory Environmental Condition	Temperature: 25 ± 2 °C	Sample Quantity	As per Requirement
	Humidity: 57%	Sample ID Code	ECO/LAB/2283/09/2023

Sl. No.	Tests	Unit	Protocol	Limits of Detection	Result	G.S.R 422(E) Desirable Limit
1.	pH	-	APHA, 23rd Ed. 2017, 4500 H+ A+B	2-12	7.80	5.5-9.0
2.	Total Suspended Solid as TSS	mg/l	APHA, 23rd Ed. 2017, 2540D	5-5000	23.8	100.0
3.	Total Dissolved Solids as TDS	mg/l	APHA, 23rd Ed. 2017, 2540-C	10-10000	506.0	-
4.	Biochemical Oxygen Demand as BOD (5 days at 20°C)	mg/l	APHA, 23rd Ed. 2017, 5210 A+B	5-10000	7.0	30.0
5.	Chemical Oxygen Demand as COD	mg/l	APHA, 23rd Ed. 2017, 5220 A+C	5-50000	60.0	250.0
6.	Total Nitrogen as N	mg/l	APHA, 23rd Ed. : 2017, 4500 Norg A+C	5-100	16.0	100.0
7.	Total Phosphorous as P	mg/l	APHA, 23rd Ed. : 2017, 4500-PD	0.5-100	1.22	5.0

**Statement of Conformity:** The above tested parameters confirm as per G.S.R 422(E) limits .

Note: -

1. Test results relate to the items sampled & tested.
2. Test report shall not be reproduced except in full without approval of the laboratory.
3. The test samples will be disposed of after one Month from the date of issue of test report.
4. BDL- Below Detection Limit

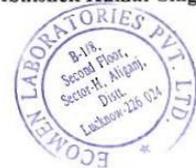
----End of Report----

Verified By

  
Technical Manager  
(Vikas Kumar)

Authorized By

  
Quality Manager  
(Abhishek Kumar Singh)



**TEST REPORT**

FORMAT NO. ECO/QS/FORMAT/07

NAME & ADDRESS OF CUSTOMER:	NTPC Limited Tanda Thermal Power Project Vidyut Nagar, Tanda, Uttar Pradesh 2210038	Test Report No.	ECO/LAB/WW/0226/2283/09/2023
		Issue Date of Test Report	05.10.2023
Type of Sample	Waste Water		
Sample Registration No.	0226	Name of Location	STP Outlet
Sampling Method	APHA 23 <sup>rd</sup> Ed.2017, 1060 A+B	Sample Collected By	Ecomen Lab Team
Date of Sample Collection	29.09.2023	Time of Sample Collection	-
Date of Sample Received	30.09.2023	Time of Sample Received	11:00 AM
Start Date of Analysis	30.09.2023	End Date of Analysis	05.10.2023
Laboratory Environmental Condition	Temperature: 25 ± 2 °C	Sample Quantity	As per Requirement
	Humidity: 57%	Sample ID Code	ECO/LAB/2283/09/2023

Sl. No.	Tests	Unit	Protocol	Limits of Detection	Result	G.S.R 422(E)
						Desirable Limit
1.	Faecal Coliform	MPN/100 ml	IS 1622:1981, RA 2019	-	178.0	-

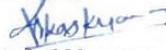
**Statement of Conformity:** The above tested parameters confirm as per G.S.R 422(E) limits .

Note: -

1. Test results relate to the items sampled & tested.
2. Test report shall not be reproduced except in full without approval of the laboratory.
3. The test samples will be disposed of after one Month from the date of issue of test report.
4. BDL- Below Detection Limit

---End of Report---

Verified By

  
Technical Manager  
(Vikas Kumar)

Authorized By

  
Quality Manager  
(Abhishek Kumar Singh)



## Plant Effluent Quality Monitoring

**ecomen**  
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**ECOMEN LABORATORIES PVT. LTD.**

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An approved Laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India, New Delhi

### TEST REPORT

FORMAT NO. ECO/QS/FORMAT/07

NAME & ADDRESS OF CUSTOMER:	NTPC Limited Tanda Thermal Power Project	ULR No.	TC 953923000002276F
	Vidyut Nagar, Tanda, Uttar Pradesh 2210038	Test Report No.	ECO/LAB/WW/0226/2276/09/2023
		Issue Date of Test Report	05.10.2023
Type of Sample	Waste Water		
Sample Registration No.	0226	Name of Location	Main Plant Effluent Stage-II
Sampling Method	APHA 23 <sup>rd</sup> Ed.2017, 1060 A+B	Sample Collected By	Ecomen Lab Team
Date of Sample Collection	29.09.2023	Time of Sample Collection	-
Date of Sample Received	30.09.2023	Time of Sample Received	11:00 AM
Start Date of Analysis	30.09.2023	End Date of Analysis	05.10.2023
Laboratory Environmental Condition	Temperature: 25 ± 2 °C	Sample Quantity	As per Requirement
	Humidity: 56 %	Sample ID Code	ECO/LAB/2276/09/2023

Sl. No.	Tests	Unit	Protocol	Limits of Detection	Result	G.S.R 1002(E)
						Desirable Limit
1.	Colour	Hazen	APHA, 23rd Ed. 2017, 2120 B	5-100	<5.0	Colourless
2.	Temperature	°C	APHA, 23rd Ed. 2017, 2550A+B	10-100	26.4	Shall not exceed 5°C
3.	pH	-	APHA, 23rd Ed. 2017, 4500 H <sup>+</sup> A+B	2-12	7.33	5.5-9.0
4.	Electrical Conductivity	us/cm	APHA 23rd Ed. 2017, 2510, A+B	2-2000	728.0	-
5.	Total Suspended Solid as TSS	mg/l	APHA, 23rd Ed. 2017, 2540D	5-5000	39.3	100.0
6.	Total Dissolved Solids as TDS	mg/l	APHA, 23rd Ed. 2017, 2540-C	10-10000	436.0	-
7.	Oil & Grease as O & G	mg/l	APHA, 23rd Ed. 2017, 5520 A+D	2.5-1000	BDL	10.0
8.	Biochemical Oxygen Demand as BOD (5 days at 20°C)	mg/l	APHA, 23rd Ed. 2017, 5210 A+B	5-10000	9.0	30.0
9.	Chemical Oxygen Demand as COD	mg/l	APHA, 23rd Ed. 2017, 5220 A+C	5-50000	92.0	250.0
10.	Dissolved Oxygen as DO	mg/l	APHA, 23rd Ed. : 2017, 4500 A+C	1 -15	5.9	-
11.	Sulfate as SO <sub>4</sub>	mg/l	APHA, 23rd Ed. 2017, 4500 -SO <sub>100</sub> E	1.0-250	45.0	-
12.	Ammonical Nitrogen as NH <sub>3</sub> -N	mg/l	APHA, 23rd Ed. 2017, 4500 NO <sub>3</sub> - B	5-100	BDL	50.0
13.	Iron as Fe	mg/l	APHA, 23rd Ed. 2017, 3500 Fe B	0.02-100	0.25	3.0
14.	Dissolved Phosphate as PO <sub>4</sub>	mg/l	APHA, 23rd Ed. 2017, 4500 - PD	0.5-100	BDL	5.0
15.	Copper as Cu	mg/l	APHA, 23rd Ed. 2017, 3111-A+ B	0.05-5	BDL	2.0
16.	Total Chromium as Cr	mg/l	APHA, 23rd Ed. 2017, 3111-A+ B	0.05-50	BDL	2.0
17.	Hexavalent Chromium as Cr <sup>6+</sup>	mg/l	APHA, 23rd Ed. 2017, 3500Cr-A+ B	0.05-20	BDL	0.1
18.	Zinc as Zn	mg/l	APHA, 23rd Ed. 2017, 3111-A+ B	0.02-50	0.20	5.0
19.	Phenolic Compounds as C <sub>6</sub> H <sub>5</sub> OH	mg/l	APHA, 23rd Ed. 2017, 5530 A+C	1-10	BDL	1.0
20.	Sulphide as S	mg/l	APHA, 23rd Ed. 2017, 4500-S2- B	0.1-10	BDL	2.0

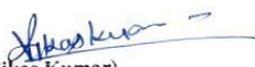
**Statement of Conformity:** The above tested parameters confirm as per GSR-1002(E) limits for above tested parameters.

**Note: -**

1. Test results relate to the items sampled & tested.
2. Test report shall not be reproduced except in full without approval of the laboratory.
3. The test samples will be disposed of after one Month from the date of issue of test report.
4. BDL- Below Detection Limit

---End of Report---

Verified By

  
(Vikas Kumar)  
Technical Manager

Authorized By

  
(Abhishek Kumar Singh)  
Quality Manager  
Lucknow-226 024

## Plant Effluent Quality Monitoring

**ecoMen**  
LABORATORIES PVT LTD.

### ECOMEN LABORATORIES PVT. LTD.

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E-mail: [contactus@ecomen.in](mailto:contactus@ecomen.in), Website: [www.ecomen.in](http://www.ecomen.in), CIN - U74210UP1989PTC010601, GSTIN : 09AAACE6076H1Z1

An approved Laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India, New Delhi

### TEST REPORT

NAME & ADDRESS OF CUSTOMER:		FORMAT NO. ECO/QS/FORMAT/07	
NTPC Limited Tanda Thermal Power Project Vidyut Nagar, Tanda, Uttar Pradesh 2210038		Test Report No.	ECO/LAB/WW/0226/2276/09/2023
Type of Sample		Issue Date of Test Report	05.10.2023
Waste Water			
Sample Registration No.	0226	Name of Location	Main Plant Effluent Stage-II
Sampling Method	APHA 23 <sup>rd</sup> Ed.2017, 1060 A+B	Sample Collected By	Ecomen Lab Team
Date of Sample Collection	29.09.2023	Time of Sample Collection	-
Date of Sample Received	30.09.2023	Time of Sample Received	11:00 AM
Start Date of Analysis	30.09.2023	End Date of Analysis	05.10.2023
Laboratory Environmental Condition	Temperature: 25 ± 2 °C	Sample Quantity	As per Requirement
	Humidity: 56 %	Sample ID Code	ECO/LAB/2276/09/2023

Sl. No.	TESTS	Unit	PROTOCOL	DETECTION RANGE	RESULT	G.S.R 1002 (E)
						Desirable Limit
1.	Selenium as Se	mg/l	APHA, 23rd Ed. : 2017, 3500 Se A+C	0.02-10	BDL	0.05
2.	Mercury as Hg	mg/l	APHA, 23rd Ed. : 2017, 3112 A+B	0.001-1	BDL	-
3.	Lead as Pb	mg/l	APHA, 23rd Ed. : 2017, 3111 A+B	0.01-1	BDL	0.1
4.	Cadmium as Cd	mg/l	APHA, 23rd Ed. : 2017, 3111 A+B	0.002-2	BDL	0.01
5.	Arsenic as As	mg/l	APHA, 23rd Ed. : 2017, 3111 A+B	0.01-2	BDL	0.2
6.	Cyanide as CN	mg/l	APHA, 23rd Ed. : 2017, 4500 CN- A+B	-	BDL	-

**Statement of Conformity:** The above tested parameters confirm as per GSR-1002(E)limits for above tested parameters.

**Note: -**

1. Test results relate to the items sampled & tested.
2. Test report shall not be reproduced except in full without approval of the laboratory.
3. The test samples will be disposed of after one Month from the date of issue of test report.
4. BDL- Below Detection Limit

----End of Report----

Verified By

  
(Vikas Kumar)  
Technical Manager

Authorized By

  
(Abhishek Kumar Singh)  
Quality Manager



## Surface Water Quality Monitoring



**ECOMEN LABORATORIES PVT. LTD.**

Second Floor Hall, House No. B-1/8, Sector H, Aliganj, Lucknow - 226 024  
Phone No. : 0522 - 4079201/2746282

E-mail: contactus@ecomen.in, Website: www.ecomen.in, CIN - U74210UP1989PTC010601, GSTIN : 09AAACE6076H1Z1



An approved Laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India, New Delhi

### TEST REPORT

NAME & ADDRESS OF CUSTOMER:	M/s. NTPC Limited Tanda Thermal Power Project Vidyut Nagar, Tanda, Uttar Pradesh 224238	ULR No.	FORMAT NO. ECO/QS/FORMAT/07 TC 9539230000001646F
		Test Report No.	ECOLAB/SW/0165/1646/08/2023
Type of Sample	Surface Water	Issue Date of Test Report	24.08.2023
Sample Registration No.	0165	Name of Location	Ghaghara River Down Stream
Sampling Method	As per Reference Method	Sample Collected By	Ecomen Lab Team
Date of Sample Collection	12.08.2023	Time of Sample Collection	-
Date of Sample Received	14.08.2023	Time of Sample Receipt	10:00 AM
Start Date of Analysis	14.08.2023	End Date of Analysis	24.08.2023
Laboratory Environmental Condition	Temperature: 25 ± 2 °C	Sample Quantity	As per Requirement
	Humidity: 57 %	Sample ID Code	ECO/LAB/1646/08/2023

Sl. No.	TESTS	Unit	PROTOCOL	DETECTION RANGE	RESULT	INDIAN STANDARDS as IS-2296(C)
1.	Colour	Hazen	APHA, 23rd Ed. : 2017, 2120 B	5-100	20.0	300
2.	Temperature	°C	APHA, 23rd Ed. : 2017, 2550 A+B	5.00 - 80	28.6	-
3.	pH	-	APHA, 23rd Ed. : 2017, 4500H+A+B	2 - 12	7.51	8.5
4.	Conductivity	us/cm	APHA, 23rd Ed. : 2017, 2510-A + B	1-2000	416.0	-
5.	Total Dissolved Solids as TDS	mg/l	APHA, 23rd Ed. : 2017, 2540-C	5 - 5000	324.0	1500
6.	Total Suspended Solids as TSS	mg/l	APHA, 23rd Ed. : 2017, 2540-D	5 - 5000	36.0	-
7.	Chemical Oxygen Demand as COD	mg/l	APHA, 23rd Ed. : 2017, 5220 A+C	2-1000	62.0	-
8.	Biochemical Oxygen Demand as BOD (5 days at 20°C)	mg/l	APHA, 23rd Ed. 2017, 5210 A+B	1-1000	5.2	3.0
9.	Oil & Grease as O&G	mg/l	APHA, 23rd Ed. 2017, 5520 A+D	5-600	BDL	0.1
10.	Dissolved Oxygen as DO	mg/l	APHA, 23rd Ed. : 2017, 4500 A+C	1-15	6.9	4
11.	Alkalinity as CaCO3	mg/l	APHA, 23rd Ed. : 2017, 2320 A+B	5-1500	88.0	-
12.	Total Hardness as CaCO3	mg/l	APHA, 23rd Ed. : 2017, 2340 A+C	5 - 1500	96.0	-
13.	Calcium as Ca	mg/l	APHA, 23rd Ed. : 2017, 3500 Ca A+B	5 - 1000	20.8	-
14.	Magnesium as Mg	mg/l	APHA, 23rd Ed. : 2017, 3500 Mg A+B	5 - 1000	10.69	-
15.	Potassium as K	mg/l	APHA, 23rd Ed. : 2017, 3500 K, A+B	1 - 100	1.85	-
16.	Sodium as Na	mg/l	APHA, 23rd Ed. : 2017, 3500 Na, A+B	1 - 100	8.8	-
17.	Chloride as Cl	mg/l	APHA, 23rd Ed. : 2017, 4500 Cl A+B	5 - 1000	30.0	600
18.	Sulphate as SO4	mg/l	APHA, 23rd Ed. : 2017, 4500-SO42- E	1-250	34.5	400
19.	Nitrate Nitrogen as NO3	mg/l	APHA, 23rd Ed. : 2017, 4500-NO3 2- E	5 - 100	7.60	50
20.	Fluoride as F	mg/l	APHA, 23rd Ed. : 2017, 4500-C	0.05-10	0.24	1.5
21.	Iron as Fe	mg/l	APHA, 23rd Ed. : 2017, 3500 Fe B	0.02-50	0.10	50.0
22.	Arsenic as As	mg/l	APHA, 23rd Ed. : 2017, 3111 A+B	0.01-2	BDL	0.2
23.	Total Chromium as T. Cr.	mg/l	APHA, 23rd Ed. : 2017, 3111 A+B	0.05-10	BDL	-
24.	Hexavalent Chromium as Cr+6	mg/l	APHA, 23rd Ed. : 2017, 3111 A+B	0.05-20	BDL	0.05
25.	Phosphate as PO4	mg/l	APHA, 23rd Ed. : 2017, 4500-P, A+B+D	0.100 - 50	0.19	-
26.	Copper as Cu	mg/l	APHA, 23rd Ed. : 2017, 3111 A+B	0.05-5	BDL	1.5
27.	Phenolic Compound as C6H5OH	mg/l	APHA, 23rd Ed. : 2017, 5530 A+C	0.05 - 10	BDL	-

**Statement of Conformity:** The above tested parameters confirm as per IS-2296 Class-C limits for above tested parameters.

**Note:**

1. Test results relate to the items sampled & tested.
2. Test report shall not be reproduced except in full without approval of the laboratory.
3. The test samples will be disposed of after one Month from the date of issue of test report.
4. BDL- Below Detection Limit

Verified By

*(Signature)*  
Technical Manager  
(Vikas Kumar)

---End of Report---

Authorized By  
*(Signature)*  
Quality Manager  
(Abhishek Kumar Singh)

## Surface Water Quality Monitoring



### ECOMEN LABORATORIES PVT. LTD.

Second Floor Hall, House No. B-1/8, Sector-H, Allganj, Lucknow - 226 024  
Phone No. : 0522 - 4079201/2746282

E-mail: contactus@ecomen.in, Website: www.ecomen.in, CIN - U74210UP1989PTC010601, GSTIN : 09AAACE6076H1Z1

An approved Laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India, New Delhi

### TEST REPORT

NAME & ADDRESS OF CUSTOMER:		FORMAT NO. ECO/QS/FORMAT/07	
M/s. NTPC Limited Tanda Thermal Power Project Vidyut Nagar, Tanda, Uttar Pradesh 224238		Test Report No.	ECOLAB/SW/0165/1646/08/2023
		Issue Date of Test Report	24.08.2023
Type of Sample	Surface Water		
Sample Registration No.	0165	Name of Location	Ghaghara River Down Stream
Sampling Method	As per Reference Method	Sample Collected By	Ecomen Lab Team
Date of Sample Collection	12.08.2023	Time of Sample Collection	-
Date of Sample Received	14.08.2023	Time of Sample Received	10:00 AM
Start Date of Analysis	14.08.2023	End Date of Analysis	24.08.2023
Laboratory Environmental Condition	Temperature: 25 ± 2 °C	Sample Quantity	As per Requirement
	Humidity: 57 %	Sample ID Code	ECO/LAB/1646/08/2023

Sl. No.	TESTS	Unit	PROTOCOL	DETECTION RANGE	RESULT	INDIAN STANDARDS as IS-2296(C)
1.	Selenium as Se	mg/l	APHA, 23rd Ed.: 2017, 3500 Se A+C	0.02-10	BDL	0.05
2.	Mercury as Hg	mg/l	APHA, 23rd Ed.: 2017, 3112 A+B	0.001-1	BDL	-
3.	Lead as Pb	mg/l	APHA, 23rd Ed.: 2017, 3111 A+B	0.01-1	BDL	0.1
4.	Cadmium as Cd	mg/l	APHA, 23rd Ed.: 2017, 3111 A+B	0.002-2	BDL	0.01
5.	Silica as SiO <sub>2</sub>	mg/l	APHA, 23rd Ed.: 2017, 4500 SiO <sub>2</sub> A+B	1-50	17.25	-
6.	Total coliform	MPN/100 ml	IS 1622:1981, RA:2019	1.8	Absent	5000

**Statement of Conformity:** The above tested parameters confirm as per IS-2296 Class-C limits for above tested parameters.

**Note:**

1. Test results relate to the items sampled & tested.
2. Test report shall not be reproduced except in full without approval of the laboratory.
3. The test samples will be disposed of after one Month from the date of issue of test report.
4. BDL- Below Detection Limit

---End of Report---

Verified By

*Vikas Kumar*  
Technical Manager  
(Vikas Kumar)

Authorized By

*Abhishek Kumar Singh*  
Quality Manager  
(Abhishek Kumar Singh)



# Ground Water Quality Monitoring



**ECOMEN LABORATORIES PVT. LTD.**  
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E-mail: contactus@ecomen.in, Website: www.ecomen.in, CIN - U74210UP1989PTC010601, GSTIN : 09AAACE6076H1Z1

An approved Laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India, New Delhi

NAME & ADDRESS OF CUSTOMER:		ULR No.	TC95392300002281F
NTPC Limited Tanda Thermal Power Project Vidyut Nagar, Tanda, Uttar Pradesh 22010038		Test Report No.	ECO/LAB/GW/0226/2281/09/2023
		Issue Date of Test Report	05.10.2023
Type of Sample	Ground Water		
Sample Registration No.	0226	Name of Location	Village Sudhana Hussainpur(Shiva Beej Bhandar)
Sampling Method	APHA 23 <sup>rd</sup> Ed.2017, 1060 A+B	Sample Collected By	Ecomen Lab Team
Date of Sample Collection	29.09.2023	Time of Sample Collection	-
Date of Sample Received	30.09.2023	Time of Sample Received	11:00 AM
Start Date of Analysis	30.09.2023	End Date of Analysis	05.10.2023
Laboratory Environmental Condition	Temperature: 25 ± 2 °C	Sample Quantity	As per requirement
	Humidity: 57 %	Sample ID Code	ECO/LAB/2281/09/2023

Sl. No.	TESTS	Unit	PROTOCOL	DETECTION RANGE	RESULT	INDIAN STANDARDS as per IS 10500:2012 (Reaff.2018)	
						Desirable	Permissible
1.	Colour	Hazen	APHA, 23rd Ed. : 2017, 2120 B	5-100	<5.0	5	15
2.	Temperature	°C	APHA, 23rd Ed. : 2017, 2550 A+B	5.00 to 80	26.9	-	-
3.	pH	-	APHA, 23rd Ed. : 2017, 4500H <sup>+</sup> A+B	2- 12	7.27	6.5-8.5	No Relax
4.	Conductivity	us/cm	APHA, 23rd Ed. : 2017, 2510-A + B	1-2000	710.0	-	-
5.	Total Dissolved Solids as TDS	mg/l	APHA, 23rd Ed. : 2017, 2540-C	5- 5000	435.0	500	2000
6.	Total Suspended Solids as TSS	mg/l	APHA, 23rd Ed. : 2017, 2540-D	5-5000	BDL	-	-
7.	Chemical Oxygen Demand as COD	mg/l	APHA, 23rd Ed. : 2017, 5220 A+C	2-1000	BDL	-	-
8.	Biochemical Oxygen Demand as BOD (5 days at 20°C)	mg/l	APHA, 23rd Ed. 2017, 5210 A+B	1-1000	BDL	-	-
9.	Oil & Grease as O&G	mg/l	APHA, 23rd Ed. 2017, 5520 A+D	2.5-1000	BDL	-	-
10.	Dissolved Oxygen as DO	mg/l	APHA, 23rd Ed. : 2017, 4500 A+C	1-15	6.6	-	-
11.	Alkalinity as CaCO <sub>3</sub>	mg/l	APHA, 23rd Ed. : 2017, 2320 A+B	5- 1500	216.0	200	600
12.	Total Hardness as CaCO <sub>3</sub>	mg/l	APHA, 23rd Ed. : 2017, 2340 A+C	5- 1500	228.0	200	600
13.	Calcium as Ca	mg/l	APHA, 23rd Ed. : 2017,3500 Ca A+B	5- 1000	54.4	75	200
14.	Magnesium as Mg	mg/l	APHA, 23rd Ed. : 2017, 3500 Mg A+B	5- 1000	22.35	30	100
15.	Potassium as K	mg/l	APHA, 23rd Ed. : 2017, 3500 K, A+B	1- 100	2.56	-	-
16.	Sodium as Na	mg/l	APHA, 23rd Ed. : 2017, 3500 Na, A+B	1- 100	28.7	-	-
17.	Chloride as Cl	mg/l	APHA, 23rd Ed. : 2017, 4500 Cl A+B	5- 1000	36.0	250	1000
18.	Sulphate as SO <sub>4</sub>	mg/l	APHA, 23rd Ed. : 2017, 4500-SO <sub>4</sub> <sup>2-</sup> -100- E	1- 250	29.5	200	400
19.	Nitrate Nitrogen as NO <sub>3</sub>	mg/l	APHA, 23rd Ed. : 2017, 4500-NO <sub>3</sub> <sup>2-</sup> - E	5- 100	7.6	45	No Relax
20.	Fluoride as F	mg/l	APHA, 23rd Ed. : 2017, 4500-C	0.05- 10	0.48	1	1.5
21.	Iron as Fe	mg/l	APHA, 23rd Ed. : 2017,3500 Fe B	0.02-50	0.14	0.05	No Relax
22.	Total Chromium as T. Cr.	mg/l	APHA, 23rd Ed. : 2017, 3111 A+B	0.05- 10	BDL	-	-
23.	Phosphate as PO <sub>4</sub>	mg/l	APHA, 23rd Ed. : 2017, 4500-P +A+B+D	0.100 - 50	BDL	-	-
24.	Phenolic Compound as C <sub>6</sub> H <sub>5</sub> OH	mg/l	APHA, 23rd Ed. : 2017, 5530 A+C	0.05- 10	BDL	0.001	0.002
25.	Copper as Cu	mg/l	APHA, 23rd Ed. : 2017, 3111 A+B	0.05-5	BDL	0.05	1.5
26.	Mercury as Hg	mg/l	APHA, 23rd Ed. : 2017, 3112 A+B	0.001-1	BDL	0.001	No Relax
27.	Lead as Pb	mg/l	APHA, 23rd Ed. : 2017, 3111 A+B	0.01-1	BDL	0.01	No Relax
28.	Cadmium as Cd	mg/l	APHA, 23rd Ed. : 2017, 3111 A+B	0.002-2	BDL	0.003	No Relax
29.	Arsenic as As	mg/l	APHA, 23rd Ed. : 2017, 3111 A+B	0.01-2	BDL	0.01	0.05
30.	Hexavalent Chromium as Cr+6	mg/l	APHA, 23rd Ed. : 2017,3111A+B	0.05-20	BDL	-	-
31.	Silica as SiO <sub>2</sub>	mg/l	APHA, 23rd Ed. : 2017, 4500 SiO <sub>2</sub> A+B	2-50	3.04	-	-

**Statement of Conformity:** The above tested parameters confirm as per IS-10500-2012 (Reaff.-2018) limits for above tested parameters.

Note:

1. Test results relate to the items sampled & tested.
2. Test report shall not be reproduced except in full without approval of the laboratory.
3. The test samples will be disposed of after one Month from the date of issue of test report.
4. BDL- Below Detection Limit

---End of Report---

Verified By

*(Signature)*  
 Technical Manager  
 (Vikas Kumar)

Authorized Signatory  
 Quality Manager  
 (Abhishek Kumar Singh)

## Ground Water Quality Monitoring

**ecomen**  
LABORATORIES PVT LTD.

**ECOMEN LABORATORIES PVT. LTD.**

Second Floor Hall, House No. B-1/8, Sector-H, Aliganj, Lucknow - 226 024  
Phone No. : 0522 - 4079201/2746282

E-mail: [contactus@ecomen.in](mailto:contactus@ecomen.in), Website: [www.ecomen.in](http://www.ecomen.in), CIN - U74210UP1989PTC010601, GSTIN : 09AAACE6076H1Z1

An approved Laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India, New Delhi

### TEST REPORT

FORMAT NO. ECO/QS/FORMAT/09

NAME & ADDRESS OF CUSTOMER:	NTPC Limited Tanda Thermal Power Project Vidyut Nagar, Tanda, Uttar Pradesh 22010038	Test Report No.	ECO/LAB/GW/0226/2281/09/2023
		Issue Date of Test Report	05.10.2023
Type of Sample	Ground Water		
Sample Registration No.	0226	Name of Location	Village Sudhana Hussainpur(Shiva Beej Bhandar)
Sampling Method	APHA 23 <sup>rd</sup> Ed.2017, 1060 A+B	Sample Collected By	Ecomen Lab Team
Date of Sample Collection	29.09.2023	Time of Sample Collection	-
Date of Sample Receipt	30.09.2023	Time of Sample Receipt	11:00 AM
Start Date of Analysis	30.09.2023	End Date of Analysis	05.10.2023
Laboratory Environmental Condition	Temperature: 25 ± 2 °C	Sample Quantity	As per requirement
	Humidity: 57 %	Sample ID Code	ECO/LAB/2281/09/2023

Sl. No.	TESTS	Unit	PROTOCOL	DETECTION RANGE	RESULT	INDIAN STANDARDS per IS 10500:2012 (Reaff:2018)	
						Desirable	Permissible
1.	Selenium as Se	mg/l	APHA, 23rd Ed. : 2017,3500 Se A+C	0.02-10	BDL	0.01	No Relax
2.	Total coliform	CFU/100 ml	IS 15185 : 2016, RA 2021	18	Absent	-	-

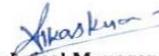
**Statement of Conformity:** The above tested parameters confirm as per IS-10500-2012 (Reaff.-2018) limits for above tested parameters.

**Note:**

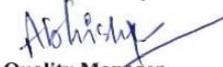
1. Test results relate to the items sampled & tested.
2. Test report shall not be reproduced except in full without approval of the laboratory.
3. The test samples will be disposed of after one Month from the date of issue of test report.
4. BDL- Below Detection Limit

----End of Report----

Verified By

  
Technical Manager  
(Vikas Kumar)

Authorized By

  
Quality Manager  
(Abhishek Kumar Singh)



**Rain Water Harvesting & Piezometer**

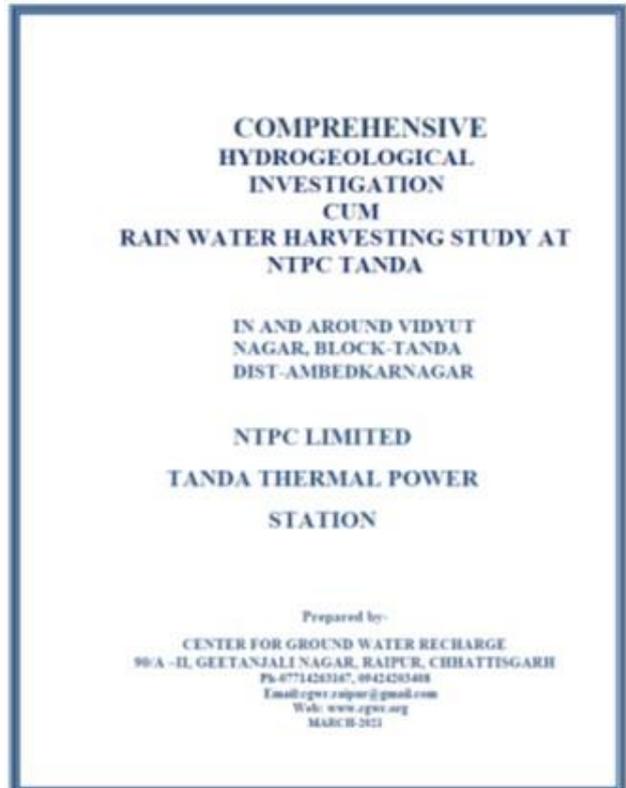


**Rain Water Harvesting Pit  
TG Rooftop Stage-II**



**Rain Water Harvesting Pit  
Administrative Building Rooftop**

**(Rain Water Harvesting Systems)**



**(Piezometer monitoring)**



**(Rainwater Harvesting pits in colony)**

**Fugitive Emission Control Systems**



**(Dust Extraction Dust Suppression at Crusher House)**



**(Dry Fog Dust Suppression System at Wagon Tippler)**



**(Sprinkler at Coal Stack Yard)**

Continuous Monitoring Systems



Continuous Emission Monitoring System



Continuous Ambient Air Quality Monitoring Station

**CSR Works and Expenditure Details****CSR Activities for FY 2023-24:**

Year	Sl. No.	CSR Activities	Expenditure (in Lakhs) Rs.
FY 2023-24	1.	Maternal and Child Health Clinic (MMU) in PAV's (Asopur, Mehripur, Hakeempur, Jot Jaina, Fatehpur, Katariya).	20
	2.	Homeopathic doctor clinic in PAV's (Hakimpur, Mehripur, Hussainpur Sudhana).	2.86
	3.	Support to clean air and green air marathon.	0.75
	4.	Providing a support to E- Rickshaw given under CSR for the e-rickshaw reiparement.	0.13
	5.	Andh Gyan Vidyalaya ration Supply.	2.00
	6.	Assistance for Ambedkarnagar Mahotsava.	8.00
	7.	Supply of one water cooler with RO to ADM office, Ambedkar Nagar.	0.447
	8.	Food packets for flood relief under CSR.	0.78
	9.	Assistance for Kanwar and Urs to Dist. Admin Under CSR.	1.23
	10.	Purchase of medicines for MMU worth Rs 5 lakhs through Jan Aushadhi Kendra Under CSR.	5.00

Year	Sl. No.	CSR Activities	Expenditure (in Lakhs) Rs.
FY 2022-23	1	Support to the Andh Vidyalaya, Ayodhya	3
	2	School bag and stationery kits distribution to schools located in PAV'S(Project Affected villages).	20
	3	Maternal and Child Health Clinic (Mobile Medical Units-MMU) in PAV's	50
	4	Providing Homeopathic doctor+ clinic in PAV's	6.7
	5	Health camp conducted in old age home, blind school, physically challenge school, Raipur gram panchayat,	1.23
	6	Ventilator to SMT. Rama Pandey Memorial Hospital and Maternity home	6.24
	7	Blanket distribution to Fatehpur, Mehripur, Jot Jaina, Kakrahi gram panchayat and District Jail.	2.7
	8	Installation of 500 Solar streetlights at Ambedkar Nagar, Lok Sabha Constituency.	106
	9	Support District level school Sports.	4.5
	10	Support to MP/Sansad Green Marathon.	0.75
	11	Providing sports material to Fatehpur gram panchayat.	0.10
	12	Vocational training for AC repair to Village youth.	2.68
	13	Farmer Training to PAV's Village.	1.86
	14	Fashion designing training for women of PAV's.	2.120
	15	Support to Jagriti Vikas Kendra physical challenge school.	0.90

16	Animal health camp in Raipur and Kakrahi.	1.720
17	Support to Jila Prashashan Protshahan Samiti, Ambedkar Nagar(Ambedkar Nagar Foundation Day Festival).	4
18	Water cooler with RO at District Court Ambedkarnagar.	0.52
16	Procurement of flags under Har Ghar Tiranga campaign.	5.75
17	Solar Panel at Hanumangarhi Basti (3 KVA Solar Panel at Hanuman Garhi Vikram Jot Basti).	3.5
18	Food packets for flood affected population of Tanda.	1.7
19	School shed for Mid-Day Meal in Fareedpur kala and Katriya primary school.	18.3
20	Providing 5 computer to Fatehpur primary school.	1.85
21	Scholarship to ST/SC/PWD student.	2.55
22	Health ATM to Hospital.	14.3
23	Support to Shravan Kshetra Mahotsav.	0.5

### CD Activities Head wise Expenditure

Year	Sl. No.	Sector/ Head	Expenditure (in Lakhs) Rs.
FY 2023-24 (Apr 23-Oct 23)	I	Water	11.72
	II	Education included ITI	0
	III	Health	0
	IV	Road	62.09
	V	Infrastructure other than road	13.26
	VI	Sanitation	0
	VII	Toilet	0
	VIII	Skill Development	2.92
	IX	Sport & Culture	0
	X	Physically Challenged Persons (PCP)	0
	XI	Women Empowerment	0
	XII	Others (if not covered in above sector)	0
<b>Grand Total Expenditure (I-XII)</b>			<b>90.00</b>

**Detail of work carried out under  
CD - Community Development**

Year	Sl. No.	Name of village	Name of work
FY 2013-14	1	Affected 09 Villages	AC/Refrigerator Training
FY 2014-15	1	Affected 09 Villages	Electrical Training
	2	Affected 09 Villages	Welding Training
FY2015-16	1	Salahpur Rajour	Construction of Toilets in village- Salahpur Rajour & Hasimpur.
	2	Affected Villages (09)	Plumbing Training
FY 2016-17	1	Salahpur Rajour	Construction of Primary school at Salahpur Rajour
	2	Salahpur Rajour	Construction of junior high school at Salahpur Rajour
	3	Salahpur Rajour	Construction of primary school (Toilets& Boundary wall) at Salahpur Rajour
	4	Salahpur Rajour	Construction of Toilets in vill- salahpur Rajour
	5	DM Office	Misc. civil Works at office of DM Ambedkar Nagar
	6	DM Office	Procurement of DG Set(25KVA)
	7	DM Office	Misc. work related to installation of DG Set
	8	Tehsil Tanda	Civil work (Hexagonal shed) at Tehsil Tanda

Year	Sl. No.	Name of village	Name of work
FY 2017-18	1	Salahpur Rajour	Drinking water facility for School at Salahpur Rajour and Hasimpur.
	2	Salahpur Rajour	Construction of Verandah sheds for Primary and Junior high school at Salahpur Rajour
	3	Salahpur Rajour	Procurement of Furniture for Primary and Junior high school at salahpur Rajour
	4	Salahpur Rajour	Providing of White board & Misc. Stationary for newly constructed School
	5	Salahpur Rajour	Supply, Installation of Play Equipment for Primary and Junior high school at Salahpur Rajour.
	6	Sharifpur	Construction of Roads & drains.
	7	Husainpur Sudhana	Construction of Roads & drains.
	8	Yadav Dhaba to new school building	Repairing of Road from Main Road to Gate no.6 and from Yadav Dhaba to new School building at NTPC-Tanda.
	9	DM Office	Misc. Civil & Electrical works
	10	DM Office	Air Conditioning of DM Office Conference Room

	11	DM Office	Installation of partition at court of ADM (F&R), Ambedkar Nagar in Collectorate
	12	Salahpur Rajour	Electrification of Primary & Junior high School at Salahpur Rajour.
	13	Husainpur Sudhana	Scholarship to Rukhsar Fatima
<b>FY 2018-19</b>	1	Husainpur Sudhana	Installation of India Marka hand pumps in the constituency of MP, Ambedkar Nagar
	2	Husainpur Sudhana	Construction of Primary School at Husainpur Sudhana Part-I
	3	Husainpur Sudhana	Construction of Primary School at Husainpur Sudhana Part-II
	4	Husainpur Sudhana	Construction of junior high school at Husainpur Sudhana.
	5	Kakrahi	Construction of road & drains.
	6	Purabaxsarai	Construction of Toilets & Boundary wall for Primary School.
	7	Tehsil Tanda	Construction of 10-seater toilet by M/s. Sulabh International social Service (SISO Lucknow at Tehsil-Tanda.
	8	Katriya & Wajidpur	Construction of 08 nos. Dustbins along the north side of road from village Kateria to village Vazidpur under CD.
	9	NTPC Colony nearby villages	Construction & Installation of dustbin 07 nos. Nearby villages of NTPC-Tanda under CD works.
	10	Affected09 Villages	Installation of 60 nos. 12W LED Solar Street light in project affected villages of NTPC-Tanda.

<b>Year</b>	<b>Sl.No.</b>	<b>Name of village</b>	<b>Name of work</b>
<b>FY 2019-20</b>	1	NTPC Township	Construction of civil works in basic primary School
	2	Affected09 Villages	Installation of solar LED streetlight in Project affected villages of NTPC Tanda under R&R -CD Activities.
	3	DM Office	Procurement of 50,000 Nos. Of bags for Dist. Admin
	4	ADM (F&R) Office	Misc. Civil works at ADM (F&R) office
	5	ADM (F&R) Office	Construction of room and other works in Office cum residence at ADM (Rajasva), Ambedkar Nagar
	6	Tehsil Tanda	Renovation work at Tehsil Tanda.
	7	Affected 09 Villages	Conducting Electrical Mechanic Training
	8	Kutubpur	Construction of A.N.M. Center
	9	Akbarpur (DM office)	Construction of 10 Set Sulabh Toilets
	10	Mahripur Keshavpur Pachpkhara)	Construction of Panchayat Bhawan/Barat Ghar
	11	Samhariya	Construction Of Panchayat Bhawan
	12	Asopur	Construction Of sheds at Cementery at Asopur
	13	Kataria	Construction Of 77 nos. Toilets
	14	Husainpur Sudhana	Constructions of common facilities (toilets, boundary wall & gate) for school Complex at Husainpur Sudhana.

15	Husainpur Sudhana	Electrical Connection Installation expenditure (one time) of primary & junior high school.
16	Asopur	Interlocking tile work in primary school.
17	Mahripur (Keshavpur Pachpkhara)	Dismantling & Construction of roof on courtyard and installation of submersible pump& motor with water tank for toilet at primary school Mehripur.
18	Khairpur	Construction of boundary wall for Anganwadi center.
19	Khairpur	Construction of cement concrete road.
20	Yadav Dhaba to govt. School Hasimpur	Widening & strengthening of the connecting road (running adjacent to NTPC Tanda boundary wall) in village Hasimpur (Salahpur Gram sabha)
21	Husainpur sudhana	Construction of 05 seated toilet complex at Husainpur Sudhana village under CD-CSR works.
22	Mahripur (Keshavpur Pachpkhara)	Construction of 05 seated toilet complex at Mahripur village under CD-CSR works.
23	Kakrahi	Construction of 05 seated toilet complex at Kakrahi Village
24	Samhariya	Construction of 05 seated toilet complex at Jyotjaina/ Samhariya village
25	Miranpur Sadarali	Construction of 05 seated toilet complex.
26	Faridpurkala	Construction of 05 seated toilet complex.
27	Kakrahi	Renovation of Ramlila and shiv Mandir.
28	Lucknow	Installation of 12-watt LED streetlight under CD activities at Lucknow & Nearby area.
29	ADM (F&R) Office	Blankets to District Administration
30	Police line-ABN	Providing profile sheet for Community center at Policeline Ambedkar Nagar.
31	Husainpur Sudhana	Procurement of Furniture of Primary & Junior High School at Husainpur Sudhana.

Year	Sl. No.	CSR Activities
FY 2020-21	1	Support to the Andh Vidyalaya, Ayodhya for one month.
	2	COVID-19 Distress Relief Fund
	3	Distribution of Mask and Sanitizer to Education Department Tanda Block
	4	Support to the Andh Vidyalaya, Ayodhya
	5	Distribution of 400Kg Rice and 105Ltr. Oil to DM Ambedkarnagar
	6	Additional food items distribution to nearby villages
	7	Support to E-Voice
	8	Distribution of PPE Kit to District Hospital via DM Ambedkarnagar
	9	Distribution of Cloth Mask
	10	Procurement of Cotton cloth for Mask+ Stitching
	11	Distribution of Soap
	12	Distribution of Sanitizers
	13	Sanitization in nearby villages of Project
	14	Distribution of Hand wash and Gloves.
	15	Distribution of Soaps
	16	Need Assessment / Impact Assessment Study

Year	Sl. No.	CD Activities
<b>FY 2022-23</b>	1	Construction of Mosque at Hussainpur Sudhana village.
	2	Construction of CC Road at Kakrahi village.
	3	Construction of boundary wall, installation of gate and Graveyard development works at Kakrahi village.
	4	Construction of ANM Centre at Samhariya village

## Records of CSR &amp; CD Activities Review Meeting

 योजना एवं प्रणाली विभाग P&S Department		NTPC LTD TANDA	
<b>Record note of BUH(T) Review Meeting</b>		Deptt/Package	Date: 15.11.2023
		CSR/CD Progress & Budget Review	Time: 16:30 Hrs
Sl No	Action point identified	Target Date	Action By
<b>Community Development Activities</b>			
1	<p><b>MOU Target for FY 2023-24-</b> Rs 5 Crores utilisation of Budget for Community development activities (<i>FY 2023-24 Utilisation till Oct'23: - 95.78 Lacs</i>). Phasing of expenditure is to be planned. It is a commitment given under Environment clearance of Stage-II that CSR/CD related activities target is to be achieved. Therefore, following are the identified action plans:</p>		
a	<p><b>Completed Contracts:-</b> All final Technical deviations are to be processed for release of final payment &amp; contract closure as per commitments. Processing of deviations/time extensions &amp; release of payments to be done timely. (<b>Cases- 15 Nos</b>). Cases pertaining to the year 2020 and 2021 have to be closed on priority.</p> <p><b>Final deviation &amp; Time Extension (Cases 11 nos.) to be processed by 30.11.2023. Final Bill (04 cases) to be processed by 30.11.2023. Balance cases have to be closed by Dec 23.</b></p> <p>For closed cases (143 nos.) CCP initiation is to be done in PRADIP, it shall be monitored in next meeting.</p> <p>Final deviation is to be initiated within 3 months of work completion as per circular 22-23/010 dated 28.09.2022. (attached)</p> <p>Communication is to be given to all agencies which have not submitted final RA bills since long and accordingly, all such contracts have to be closed immediately. <b>Amount which is lying with NTPC for more than 3 years have to be added in Income in consultation with site Finance.</b></p>	As per Annexure-I	CCD
b	<p><b>Running Contracts (Approx Rs 85.87 Lacs):-</b> Works have to be expedited &amp; payments have to be processed on time. (<b>Total- 03 cases under progress</b>)</p>	As per Annexure-II	CCD/ R&R
c	<p>Presently, CD/ CSR budget utilization is less for this FY and is to be increased to meet the target. Works worth Rs. 2.02 Crs. are under award, which needs to be expedited for PO placement.</p> <p>New works to be identified with the help of Gram Pradhans/ District Magistrate &amp; relevant approvals to be initiated after preliminary report from Standing Committee.</p>	As per Annexure-III	CCD/ C&M/ R&R
d	<p>Geotagging of all the assets/ buildings/ infrastructure built under CD CSR works is to be done.</p>	Immediate	CCD/ R&R
e	<p><b>CSR Budget Utilized in FY 2023-24: Rs. 88.70 Lacs/ 270 Lacs.</b></p> <p>List of all the CSR activities identified in FY 2023-24 shall be discussed in the next meeting. Works which are under award needs to be expedited.</p>	As per Annexure-IV & V	CCD/ R&R
f	<p>All CD/CSR works should be inline with top management directives, stakeholder engagement and as per CD/ CSR policy.</p>	Immediate	CCD/ R&R
g	<p>It is to be ensured that CCD/R&amp;R/CSR groups have to meet before the next review meeting and filter out the exception points. Only the exceptions shall be discussed in the review meeting.</p>	Immediate	All Concerned
Distribution:- All present			<b>Rishabh Jayaswal</b> Senior Manager (P&S)

**Effluent Treatment System**



**(Waste Service Water Sump with Oil Skimmer)**



**(Tube Settler and Neutralization Pit)**



**(Central Monitoring Basin)**



**(Sewage Treatment Plant at Township)**

**Flue Gas Desulphurization**

**Ball Mill**



**Day Silo**

**Bulk Silo**



**DMCW Pump**



**Booster Fan Outlet Duct**



**ECB-I Control Room**



**Panel Room**

