



टांडा/Tanda

Date: 30.04.2022

Ref: NTPC/Tanda/EMG/2022

To,

Regional Office (CZ), Ministry of Environment, Forest & Climate Change Kendriy Bhavan, 5<sup>th</sup> Floor, Secor 'H', Aliganj Lucknow – 226024 (U.P.) Email:rocz.lko-mef@nic.in

### Sub: Half Yearly Compliance report for Environment Clearance of NTPC Tanda (Stage-II) (Period: October-2021 to March-2022)

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

#### Dear Sir,

Please find enclosed half yearly compliance status report for period October-2021 to March-2022 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:

- Zonal Office (North) Central Pollution Control Board PIC-UP Bhawan, Vibhuti Khand, Gomtinagar, Lucknow, Uttar Pradesh, India, 226010
- Regional Office UP Pollution Control Board 1/17/104, Ramnagar Colony, Parikrama Marg, Ayodhya (U.P.)-224001

#### पर्यावरण प्रबंधन समूह Environment Management Group

एनटीपीसी लिमिटेड, टाण्डा, पोस्ट-विद्युत नगर, जिला-अम्बेडकर नगर-224238 (उ0प्र0), फोन : 05273-292280, फैक्स : 05273-284732 NTPC Limited, Tanda, P.O.-Vidyut Nagar, Dist.-Ambedkar Nagar-224238, (U.P.), Phone : 05273-292280, Fax : 05273-284732 पंजीकृत कार्यालय : एन.टी.पी.सी. भवन, स्कोप काम्पलैक्स, 7, इन्स्टीट्यूशनल एरिया, लोधी रोड, नई दिल्ली-110003 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

# (October-2021 TO March-2022)

S. NO.	EC CONDITION	COMPLIANCE STATUS	
SPECIF	SPECIFIC CONDITIONS:		
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/	

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	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.	<ul> <li>Piezometers have been installed in plant premises as well as ash dyke area for Stage-II.</li> <li>Ground water monitoring is being done from existing bore wells available around ash dyke. (Annexure-III). Before charging the ash dyke, baseline ground water quality data have been collected.</li> </ul>
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. Action has been taken to install rainwater harvesting in remaining areas of plant and colony premises. A detailed study for assessment of rainwater harvesting potential and suitable method for recharging/ utilizing is completed through third party. (Annexure-IV)

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	months.	
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.	Space provision for FGD plant has been kept in layout. Work for installation of FGD is in progress.
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, DEDS 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 SOx, NOx and PM2.5 & PM10. 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 equipment's for PM, SO <sub>2</sub> , NOx has already been installed with real-time data transmission system. EC has been amended and online monitoring of only PM is required instead of PM10, PM2.5. 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 Tipplers, Crusher House, transfer points on conveyors, and Ash Dykes etc. (Annexure-V)
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 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	System for extraction of fly ash in dry form along with suitable storage facilities has been envisaged. HCSD

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	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.	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 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

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		Forest Department. However, Green belt around stage-II will be developed after release of lay down area and village land. So far, more than 4 lacs trees have been planted. Further plantation is being carried out every year. Total 33,000 nos. Plantation has been done during the year 2020-21 through UP State Forest Department, Dist: Ambedkarnagar. Plantation of 26250 nos. trees on Three-tier Green Belt pattern has been completed. Tree plantation survival is being ensured by maintenance of the plants up to four years after plantation.
xxiv	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.	Activities were undertaken in and around the Plant. Accordingly, following works have been carried out :
		<ul> <li>Basti: <ol> <li>Mortuary van handed over to District Women's Hospital, Basti.</li> <li>Basic Life Support (BLS) ambulance handed over to District hospital, Basti.</li> </ol> </li> <li>Hussainpur Sudhana: <ol> <li>Construction work of Masjid started in the month of July, 2021 is under progress</li> </ol> </li> </ul>
		<ul> <li>Mahripur:</li> <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 Keotaiah Gopal's shop to river side</li> <li>4. Construction of CC road from Ramlila Stage to Raipur Village Boundary wall.</li> </ul>

S. NO.	EC CONDITION	COMPLIANCE STATUS
		<ol> <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>
		<ul> <li>Asopur:</li> <li>1. Construction of Meeting room &amp; toilet in Aliganj Police Station</li> <li>2. Construction of Overhead Water Tank for supply of potable drinking water is being planned.</li> </ul>
		<ul> <li>Hakimpur: <ol> <li>Construction of Overhead Water Tank for supply of drinking water completed.</li> <li>ANM (Auxiliary Nursing Midwifery) centre constructed and handed over to state administration.</li> <li>Construction of toilet in Primary school</li> </ol></li></ul>
		<b>Kakrahi:</b> 1. Construction of 05-seated toilet complex
		<ul> <li>Samhariya:</li> <li>1. Construction of 05-seated toilet complex</li> <li>2. Construction of CC Road &amp; nalah drain</li> </ul>
		<ul> <li>Khairpur/Fatehpur/Salahpur Rajor</li> <li>1. Widening of Tanda-Maya road</li> <li>2. Repair work of BRC Bhavan at Block Education Office</li> </ul>
XXV	The project proponent shall also adequately contribute in the development of the neighbouring	Various activities for development of the neighbouring villages have been undertaken:
	villages. Special package with implementation schedule for providing potable drinking water supply in the nearby villages and schools shall be	1. Construction of Overhead Water Tank for supply of drinking water completed at Hakimpur.
	undertaken in a time bound manner.	2. Construction of Overhead Water Tank for supply of drinking water in process at Asopur.
		Detailed activities listed in <b>Annexure-VII.</b>

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xxvi	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.	<ul> <li>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: <ol> <li>4-month long training on 'Oyster Mushroom Farming' was given to 24 women of 2 Self-Help Groups (SHGs). They were also trained on selling the produce in local market.</li> <li>3-days 'Modern Farming Techniques' &amp; 'Animal Husbandry' to 28 farmers of nearby villages was provided.</li> <li>440-hrs 'Electrician Training' is being provided to 30 youth from nearby villages.</li> <li>A self-help group (Prerna) based Sanitary Napkin Manufacturing Unit is installed under CSR Program for Ladies of nearby villages.</li> </ol> </li> <li>Further a Village Development advisory committee (VDAC) meeting was held on 02.08.2021 with DM (Ambedkarnagar) to identify CSR &amp; community development work and make action plan for implementation. The interaction via VDAC is done on regular intervals.</li> </ul>
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.	<ul> <li>School- <ol> <li>Film Based Teaching Methodology (FBTM) installed at 3 schools of the vicinity.</li> <li>Furniture distributed at schools in project affected &amp; nearby villages.</li> <li>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> </ol> </li> </ul>
		1. 6 health camps organized at various project affected and

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		<ul> <li>nearby villages. A total of 894 people received free medical consultation &amp; medicines.</li> <li>2. 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>3. 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>4. Sanitary napkin vending machines were installed, sanitary napkins were distributed, and awareness programs were conducted to promoted Menstrual Hygiene.</li> </ul>
		<ul> <li>Water &amp; Sanitation-</li> <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> </ul>
		<b>Renewable Energy-</b> 1. 340 Solar Lights installed at key locations of the vicinity.
		<b>Sports-</b> 1. 3-day District & Divisional Sports Competition supported at Eklavya Stadium, Ambedkarnagar.
		<ol> <li>3-day Handball Training camp organized at Sunflower School, Makhdoom Nagar.</li> <li>3-day long State-Level Handball</li> </ol>
		Competition organized in coordination with District Olympic Association at Eklavya Stadium, Ambedkarnagar.
		4. Support provided to Green Air. Clean Air' marathon at

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		Akbarpur. 5. Organisation of 'Sansad Khel Mahakumbh', Basti supported under CSR. In all these different activities the recommendations of Sachhar Committee are 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 month along with road map for implementation.	CSR Budget approved for the year 2021-22 was Rs.282.60 Lakhs while CSR expenditure for FY 2021-22 was Rs. 226.70 Lakhs. Community Development expenditure for FY 2021-22 was 598.27 Lakhs. 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. (Annexure-VIII MOM Record Notes)
В. (	GENERAL CONDITIONS:	
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. (Annexure-IX)
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.

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iii.	Adequate safety measures shall be provided in the plant area to check/ minimize spontaneous fires in coal yard, 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.	Adequate safety measures like water sprinklers have been provided at coal stock yard to check/ minimize 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> , NOx, PM2.5 & PM10 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	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>

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	put on the website of the company.	
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 http:/www.envfor.nic.in	Advertisement has already been published in Hindustan Times and Dainik Jagaran on 23.04.2012.
х	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parisad/ 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.

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xii	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 & 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.	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.
xiii	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.	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.
xiv	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 & Forests.	Six monthly compliance reports are being submitted regularly to the MoEF&CC Regional office, CPCB zonal office and SPCB Head Office. Status is also uploaded on organization's website.

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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
Conditi	ons as per EC amendment dated 22.08.2	019
i	Stack of 275 m height shall be installed and provided with continuous online monitoring equipment's for SOx, NOx 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> , NOx 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.
Conditi	ons as per EC amendment dated 28.05.2	018 for validity extension
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. NOx 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.

С	conditions as per EC amendment dated 22.0	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.	Particulate Matter (PM) emissions are being maintained within the limit of 30 mg/NM3 as per revised emission norms. FGD installation is in progress for SO <sub>2</sub> emission norms compliance.
		issue has been taken up.
		As per the MoEF&CC notification dated 31.03.2021, the applicable timelines for compliance to new emission norms is 31.12.2024.
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.	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)
		Erection work of FGD system is in progress. ( <b>Annexure-X</b> )
		Pilot project for Selective Catalytic Reduction (SCR) system for reducing NOx emissions are being carried out for evaluation of adequacy and efficacy.
		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.

Hydrogeology Study Interim Report



#### Water Availability for Tanda Stage-II

zizen-3604/07-27-話-4-140(500)ロセノ06

प्रेषक,

ए०के०एस०पुण्डीर, विशेष सचिव, उत्तर प्रदेश शासन।

सेवा में.

डायरेक्टर (टेक्निकल), एन०डी०पी०सी०लिमिटेठ, एन०डी०पी०सी० भवन स्कोप काम्पलैक्स, १, इंस्टीट्यूशनल एरिया, लोधी रोड, नई दिल्ली।

सिंचाई अनुभाग-4

#### लखनऊदिनांकः 20 अगस्त, 2007

विषयः दाण्डा तापीय विद्युत परियोछना द्वितीय चरण (2x660 एम0ठव्यू0) 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 क्यूरेक पानी की उपलब्धता के संबंध में कनिटमेंट/क्लीयरेक्स की वांछना की गयी है।

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

(1) 'एन०र्छ0पी०सी० को दी जाने वाली कुल 110 क्यूसेक की जलापूर्त (पूर्व में दी जा रही 45 क्यूसेक तथा प्रस्तावित 65 व्यूसेक की सन्निलित करते हुए) हेतु टाण्डो प्रस्प कैनाल की प्रस्तावित क्षमता दृद्धि परियोजना के निर्माण कार्यों की वास्तविक लागत (रू० 535.00 लाख अजुमानित) का वहन एन०टी०पी०सी० द्वारा किया जायेगा तथा निर्माण कार्य उत्तर प्रदेश सिंघाई विभाग द्वारा सम्पदित किया जायेगा।

(2) टाण्डा प्रम्य हाऊस एग्रोच चैंगल प्रम्य हाकस से पावर प्लाण्ट तक लिंख चैनल का अनुरक्षण एवं संधालन के व्यय का वहन एन०टी०पी०सी० द्वारा किया जायेगा।

(3) एन०द्यै०पी०सी०, तण्डा द्वारा पम्पों के अंचालन एवं पम्प हाऊस परिसर को निःशुल्क विद्युत की आपूर्ति तथा पम्पों के संचालन एवं रख-रखाव प्रयम चरण की भौति द्वितीय चरण हेतु किया जायेगा।

(4) सिंचाई विभाग, उत्तर प्रदेश द्वारा आवश्यकलाबुसार जल मूल्य में की जाने वाली वृद्धि एन०टी०पी०सी०, खण्डा को जान्य तथा वहन करनी होगी।

3- कृपया इस संबंध में एनं0दी0पी0सी0 के आंभमत से उत्तर प्रदेश शासन को अवगत कराने का कष्ट करें, ताकि विस्तृत परियोजना प्रस्ताव तैयार कराकर एनं0दी0पी0सी0 को प्रस्तुत किया जा सके।

भवदीय,

-सि\_\_\_\_\_ (ए०के०एस०षुण्डीर) विशेष सविध

SKN GRO

संख्याः-- 1052 / 21-- 27-सिं0-- 4-- 16(डब्ल्यू) / 1996

प्रेषक,

मुश्ताक अहमद विशेष सचिव, उत्तर प्रदेश, शासन।

सेवा में,

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

#### सिंचाई अनुमाग-4

### लखनऊः दिनांक 30 सितम्बर, 2021

विषयः—महरीपुर रिधत एन०टी०पी०सी० 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 रिषदा एन0टी0पी0सी0 लिमिटेड टाण्डा तापीय विद्युत गृह को प्रथम चरण में 45 क्यूसेक तक अपेय जल निम्नलिखित शर्तों पर उपलब्ध कराये जाने की स्वीकृति सहर्ष प्रदान करते हैं:-

- एनठटी0पी0सी0 लिमिटेड टाण्डा को टाण्डा पम्प नहर से 45 वयूसेक तक पानी की आपूर्ति की आयेगी।
- सामान्य नहर बन्दी तथा अन्य किसी कार्य से नहर बन्दी की अवधि में आवश्यक जल का प्रबन एनoटीoपीoसीo लिमिटेड अपना स्वतंत्र प्रबन्ध करेगा।
- 3. इस जल की आपूर्ति हेतु इनलेट और यापस करने हेतु समस्त कार्य, जो कराये जायेंगे, इसके निर्माण का व्यय एन0टी0पी0सी0 लिमिटेड द्वारा ही वहन किया जायेगा। एन0टी0पी0सी0 लिमिटेड सिंबाई विभाग द्वारा प्रश्नगत जलापूर्ति हेतु कराये गये कार्यों की वास्तविक लागत का 2 प्रतिशत घनराशि अनुरक्षण हेतु उपलब्ध करायेगा। इस घनराशि में प्रति वर्ष 10 प्रतिशत वृद्धि की जायेगी।
- 4. अमिशासी अमियन्ता, उपखण्ड अधिकारी (सहायक अमियन्ता) एवं अवर अमियन्ता या कोई अन्य सिंचाई विमाग के अधिकारी/प्रतिनिधि पम्प हाउस या अन्य माप सम्बनिवत प्रणाली, जहाँ पर पानी की आपूर्ति मापी जा सके, तक पहुँचने के लिये स्वतंत्र हो तथा उपमोक्ता द्वारा इस सम्बन्ध में हर सम्मव सहयोग किया जायेगा।
  - 5. दिये जाने वाले जल का प्रयोग सिर्फ प्लाण्ट को ठण्डा करने हेतु किया जायेगा। एन०टी०पी०सी० लिमिटेड टाण्डा, नहर द्वारा जलापूर्ति में अपना कोई गंदा जल अधवा उत्प्रधाह नहीं डालेंगे। इस प्रयोजन हेतु सिंचाई विभाग के अधिकारी/कर्मचारियों को एन०टी०पी०सी० टाण्डा लिमिटेड के प्लाण्ट का निरीक्षण करने का अधिकार होगा।
  - 6. रायल्टी चार्ज रूo 600000.00 (रूo छ: लाख मात्र) प्रति क्यूसेक प्रतिवर्ष एवं अतिरिक्त जल मूल्य/जल कर रूo 12.48 (बारह रूo अठतालिस पैसे मात्र) प्रतिहजार घन फुट की दर से वास्तविक जल उपमोग के आधार पर शासनादेश संख्या-2953/11-27-सिo-04-08 (जल)/82 लखनऊ दिनांक-15 जुलाई 2011 के अनुसार उपमोक्ता 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 उपमोक्ता द्वारा रायल्टी चार्ज एव जलमूल्य का भुगतान किया जायेगा।

7. पानी की वास्तविक आपूर्ति को सुनिष्टिवत करने के लिए उपमोक्ता द्वारा अति आधुनिक जल मापन यंत्र (Digital Flow Meter) लगाया जायेगा तथा आपूर्तिकर्ता एवं उपमोक्ता, संयुक्त रूप से मीटर रीडिंग का निरीक्षण करेंगें। अधिशासी अभियन्ता द्वारा उपमोक्ता को संयुक्त निरीक्षण की तिथि की जानकारी 03 दिन पूर्व दी जायेगी। जल को मापने हेतु लगाया गया मीटर उपमोक्ता द्वारा ठीक अवस्था में चालू हालत में रखा जायेगा। यदि मीटर खराब पाया जाता है तो इस दशा में पम्पों की अधिकतम् क्षमता 60 क्यूसेक के अनुसार जल की आपूर्ति मानकर रायल्टी एवं जल मूल्य की गणना की जायेंगी, जो उपमोक्ता को मान्य होगी।

यदि आपूर्तिकर्ता के नियंत्रण के बाहर अथवा किसी दुर्घटना अथवा सूखा अथवा किसी देवींग आपदा के कारण जल आपूर्ति बाधित होती है तो इसकी जिम्मेदारी आपूर्तिकर्ता की नहीं होगी और न ही इसके लिये उपमोक्ता द्वारा किसी प्रतिकर की माँग की जायेगी।

9.

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यदि महरीपुर पम्प नहर रिमोढलिंग की जाती है या पम्प हाउस के पम्पों को बदला जाता है जिसके फलस्वरूप पम्पिंग स्टेशन एवं मशीनरी को मोढिफाई किये जाने की आवश्यकता होती है. तो उसका पूर्ण उत्तर उपमोक्ता का होगा और सम्पूर्ण का मार उपमोक्ता द्वारा ही वहन किया जायेगा।

- 10. जपमोक्ता (एन०टी०पी०सी० लिमिटेड टाण्डा) द्वारा अदातन समय तक का जलमूल्य एवं रायत्टी का भुगतान कर विया गया है और मविष्य में उपमोगानुसार जलमूल्य/्रायल्टी आदि का लागू वरों के अनुसार भुगतान समयानुसार किया जायेगा।
- 11. यह शासनावेश विनांक 11 जून 2014 से प्रमावी समझा जायेगा।
- 12 इस प्रयोजन हेतु एन०टी०मी०सी० लिमिटेड टाण्डा तथा सिंचाई एवं जल संसाध विमाग के मुछा 10 वर्षों हेतु अनुबंध किया जायेगा। 10 वर्षों के उपरान्त अगले 10 वर्ष के लिए नया अनुबंध निष्पादित किया जायेगा।

भवदीय

( मुझ्ताक अहमद ) विशेष सचिव

### संख्या:-1052(1)/20-27-सिं0-4-तददिनांक।

प्रतिलिपि निम्नलिखित को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित है--

- प्रयम्घ निवेशक, नेशनल धर्मल पावर कार्पोरेशन लिमिटेड, एन0टी0पी0सी0 लिमिटेड भवन स्कोप काम्प्लेक्स-7 इन्स्टीट्यूशनल एरिया, लोवी रोड, नई विल्ली पिन-110003।
- मुख्य अभियन्ता (शा ला०) सिंवाई विमाग, उत्तर प्रदेश, गंगा सिंबाई मवन, तेलीबाग, लखनऊ।
- 3/ मुख्य महाप्रबंधक, एनoटीoपीoसीo लिप्टिंड टाण्डा, अम्बेडकरनगर।
- अधिशासी अमियन्ता, सिंधाई खण्ड टाण्डा, अम्बेडकरनगर।

DUM (EMB) Soa "up. + socode pl. Arig" 12/10/2021

आज्ञा से,

२०२२४७२
 (अमित प्रणव )
 संयुक्त सचिव

### **Environmental Monitoring Reports**

### **Ambient Air 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 : 09AAACE6076H12I

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

				FORMAT NO. ECO/OS/FORMAT/I
NAME &	NTPC Limited		ULR No.	TC 95392200000655F
ADDRESS OF	Tanda Thermal	Power Project	Test Report No.	ECO/LAB/AA/0101/0655/03/2022
CUSTOMER:	P.O. Vidyut Nagar, Ambedkar Nagar-224 238 (U.P.)		Issue Date of Test Report	21.03.2022
Type of Sample		Ambient Air Sample		
Sample Registration No.		101	Name of Location	Near Village Fatehpur
Sampling Method		As per Reference Method	Sample Collected By	ELPL Representative
Date of Sample Co	llection	15.03.2022	Time of Sample Collection	10.30 AM
Date of Sample Re	ceived	16.03.2022	Time of Sample Received	10.15 AM
Start Date of Analysis		16.03.2022	End Date of Analysis 21.03.2022	
Weather Condition		Partially Cloudy	Sampling Duration 24 HRS	
Environmental Condition		Temperature: 20 ± 5 °C	Sample ID Code	ECTAL ADDRESS AVECTICES
		Humidity: 30 - 80 % RH	Sample ID Code	ECO/LAB/0655/03/2022

#### TEST REPORT

SL No.	TEST PARAMETERS	PROTOCOL	DETECTION RANGE	RESULTS	Limit as per National Ambient Air Quality Standards
t.	Particulate Matter (PM10) µg/m3	IS:5182(Part-23)	2-1000	78.8	100
2.	Particulate Matter (PM23) µg/m3	IS:5182(Part-24)	2-100	48.3	60
3.	Sulphur Di-Oxide (SO2) µg/m3	IS:5182 (Part-2:)	5-200	12.7	80
4.	Nitrogen Di-Oxide (NO2) µg/m3	1S:5182 (Part-6)	5-200	22.6	80
5.	Mercury as (Hg) µg/m3	USEPA	-	BDL	-

----End of Report----

Opinion/Observation: Analyzed parameters in above tested sample are within standard limit as per NAAQMS Guidelines.

Verified By

Technical Manager

Authorized By

Quality Manager

Ecomen Laboratories Pvt. Ltd. Second Floor Hall, House No. 6-198, Sector-H, Aliganj, Lucknow-225024

#### 21

## **Ambient Air 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 : 09AAACE6076H1ZI

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

#### TEST REPORT

				FORMAT NO. ECO/QS/FORMAT/1 TC 953922000000656F			
NAME & NTPC Limited ADDRESS OF Tanda Thermal P			ULR No.				
		l Power Project	Test Report No.	ECO/LAB/AA/0101/0656/03/2022			
CUSTOMER:	P.O. Vidyut Nagar, Ambedkar Nagar-224 238 (U.P.)		Issue Date of Test Report 21.03.2022				
Type of Sample		Ambient Air Sample	Ambient Air Sample				
Sample Registration No.		101	Name of Location	Near Village Maharipur			
Sampling Method		As per Reference Method	Sample Collected By ELPL Representative				
Date of Sample Co	llection	14.03.2022	Time of Sample Collection	12.30 PM			
Date of Sample Re	ceived	16.03.2022	Time of Sample Received	10.15 AM			
Start Date of Analy	sis	16.03.2022	End Date of Analysis	21.03.2022			
Weather Condition		Partially Cloudy	Sampling Duration	24 HRS			
Environmental Condition		Temperature: 20 ± 5 °C	Samula ID Carla	ECO/I A B/0656/02/2022			
		Humidity: 30 - 80 % RH	- Sample ID Code	ECO/LAB/0656/03/2022			

SI. No.	TEST PARAMETERS	PROTOCOL	DETECTION RANGE	RESULTS	Limit as per National Ambient Air Quality Standards
L	Particulate Matter (PM10) µg/m3	IS:5182(Part-23)	2-1000	74.2	100
2.	Particulate Matter (PM2.5) µg/m3	IS:5182(Part-24)	2-100	45.3	60
З.	Sulphur Di-Oxide (SO2) µg/m3	IS:5182 (Part-2)	5-200	127	80
4.	Nitrogen Di-Oxide (NO2) µg/m3	IS:5182 (Part-6)	5-200	21.8	80
5.	Mercury as (Hg) µg/m <sup>3</sup>	USEPA	-	BDL	-

Opinion/Observation: Analyzed parameters in above tested sample are within standard limit as per NAAQMS Guidelines.

Verified By

baskyo Technical Manager

Authorized By

Quality Manager Ecomen Laboratories Pvt. 114 Second Floor Hall, House No. or you Sector-H, Aligeni, Luchner-22024

----End of Report----

### **Stack Emission 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 : 09AAACE6076H1ZI

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

### TEST REPORT

NAME & ADDRESS	NTPC Limite	d Tanda Thermal Power Project	ULR No.	TC 953922000000660F		
OF CUSTOMER	P.O. Vidyut Nagar,		Test Report No.	ECOLAB/AS/0101/0660/03/2022		
	Ambedkar Na	gar-224 238 (U.P.)	Issue Date of Test Repo	ort 21.03.2022		
Type of Sample		Stack Emission	Stack Emission			
Sample Registration No	0.	101	Name of Location	Unit-5 (Pass-A & Pass-B)		
Sampling Method		1S: 11255	Sample Collected By	ELPL Representative		
Date of Sample Collection		14.03.2022	Time of Sample Collect	ion 10:40 AM		
Date of Sample Receipt		16.03.2022	Time of Sample Receipt	t 10:30 AM		
Start Date of Analysis		16.03.2022	End Date of Analysis	16.03.2022		
Weather Condition		Sunny	Sampling Duration	45 min		
Environmental Condition		Temperature: 25 ± 5 °C	Sample ID Code	ECO/LAB/0660/03/2022		
		Humidity: 30 - 80 % RH				
Instrument Name & Lab ID		Stack Kit				
instrument Name & Li	1010	Flue Gas Analyzer				

Stack Details			
I) Above the Ground Level(m)	120	Ambient Temperature (°C)	28.5
II)Above the Platform(m)	-		
Material of Stack	MS	Stack Temperature (°C)	123.0
Stack Attached	Unit- 5 (Pass-A & Pass-B)	Inside Diameter of Stack at sampling port (m)	2.413 x 2.642
Capacity of Stack (MW)	660	Cross Sectional Area of Stack (M <sup>2</sup> )	6.37
Shape of Stack	Rectangular	Velocity of Flue Gas (m/sec.)	21.4
Type of Fuel Used	Coal	Flow Rate of Flue Gas (Nm <sup>3</sup> /sec.)	400852
Load (MW)	655	Pollution Control Unit	ESP

SI. No.	TEST PARAMETERS	Unit	PROTOCOL	Detection Range	RESULTS	Standards as per CPCB
1.	Particulate Matter (PM) at 6% O2	mg/Nm <sup>3</sup>	IS 11255:Part 1:1985(Reaff. : 2019 )	10-1000	26.2	30.0
2.	Sulphur Dioxide (SO2) at 6% O2	mg/Nm <sup>3</sup>	IS 11255:Part 2:1985 (Reaff. : 2019 )	5 - 1000	577.0	0,50
3.	Nitrogen Oxides (NOx) at 6% O2	mg/Nm <sup>3</sup>	IS 11255:Part 7:2005 (Reaff. : 2017 )	5 - 1000	288.0	1.00
4.	Carbon Monoxide (CO)	%	IS 13270::1992 (Reaff. : 2009)	0.2-90	11.7	
5.	Carbon Dioxide (CO2)	%	By Fuel Gas Analyzer	0.2-90	12.1	
б.	Oxygen (O2)	%	By Fuel Gas Analyzer	0.2-90	6.4	-
7.	Mercury (Hg)	(mg/Nm <sup>3</sup> )	USEPA-0060	-	<0.01	

Opinion/Observation: Analyzed parameters in above tested sample are within standard limit as per MolEF/cc Guidelines.

Verified By

Technical Manager

----End of Report----

Authorized By Quality Manager

Ecomen Laboratories Pvt. Ltd. Second Floor Hall, House No. 5-18, Sector-H, Aligani, Luctaure-226024

### **Stack Emission 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 : 09AAACE6076H1ZI

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

#### TEST REPORT

NAME &	NTPC Limited	I Tanda Thermal Power Project	ULR No.	TC 953922000000662F			
ADDRESS OF P.O. Vidyut Nagar CUSTOMER Ambedkar Nagar-		igar,	Test Report No.	ECOLAB/AS/0101/0662/03/2022			
		gar-224 238 (U.P.)	Issue Date of Test Report	04.03.2022			
Type of Sample		Stack Emission	Stack Emission				
Sample Registration No.		101	Name of Location	Unit-6 (Pass-A & Pass-B)			
Sampling Method		IS: 11255	Sample Collected By	ELPL Representative			
Date of Sample Collection		14.03.2022	Time of Sample Collection	10:40 AM			
Date of Sample Receipt		16.03.2022	Time of Sample Receipt	10.30 AM			
Start Date of Analy	ysis	16.03.2022	End Date of Analysis	16.03.2022			
Weather Condition	1	Sunny	Sampling Duration	45 min			
Environmental Condition		Temperature: 25 ± 5 °C	Sample ID Code	ECO/LAB/0662/03/2022			
		Humidity: 30 - 80 % RH					
Instrument Name & Lab ID		Stack Kit					
		Flue Gas Analyzer					

Stack Details				
I) Above the Ground Level(m)	120	Ambient Temperature (°C)	30.0	
II)Above the Platform(m)	-			
Material of Stack	MS	Stack Temperature (°C)	128.0	
Stack Attached	Unit-6 (Pass-A & Pass-B)	Inside Diameter of Stack at sampling port (m)	7.65	
Capacity of Stack (MW)	660	Cross Sectional Area of Stack (M <sup>2</sup> )	45.9	
Shape of Stack	Rectangular	Velocity of Flue Gas (m/sec.)	19.3	
Type of Fuel Used	Coal	Flow Rate of Flue Gas (Nm <sup>3</sup> /sec.)	231369	
Load (MW)	605	Pollution Control Unit	ESP	

SI. No.	TEST PARAMETERS	Unit	PROTOCOL	Detection Range	RESULTS	Standards as per CPCB
I,	Particulate Matter (PM) at 6% O2	mg/Nm <sup>3</sup>	IS 11255:Part 1:1985(Reaff. : 2019 )	10-1000	25.1	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	591.0	
3.	Nitrogen Oxides (NOx) at 6% O2	mg/Nm <sup>3</sup>	IS E1255:Part 7:2005 (Reaff. : 2017 )	5 - 1000	314.0	-
4.	Carbon Monoxide (CO)	%	IS 13270::1992 (Reaff. : 2009)	0.2-90	9.89	
5.	Carbon Dioxide (CO2)	%	By Fuel Gas Analyzer	0.2-90	11.6	-
6.	Oxygen (O2)	%	By Fuel Gas Analyzer	0.2-90	5.22	-
7.	Mercury (Hg)	(mg/Nm <sup>3</sup> )	USEPA-0060	-	<0.01	

Opinion/Observation: Analyzed parameters in above tested sample are within standard limit as per MOEF/cc Guidelines.

Verified By

Technicat Manager

----End of Report----

Authorized By Quality Manager

Ecomen Laboratories Pvt. 194. Second Floor Hall, House No. o- 1/8, Sector-H, Aligenj, Lucimore-225024

### Ash Pond Effluent Quality Monitoring

# ECOMEN LABORATORIES PVT. LTD.

eco/Men 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 : 09AAACE6076H1ZI 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 NTPC Limited Tanda Thermal Power UL-R No. TC 953922000000640F OF CUSTOMER: Project Vidyut Nagar, Tanda, Uttar Pradesh 224238 Test Report No. ECOLAB/WW/0100/0640/03/2022 Issue Date of Test Report 25.03.2022 Type of Sample Waste Water Sample Registration No. 100 Name of Location Ash Pond Effluent Sampling Method As per Reference Method Sample Collected By Ecomen Lab Team Date of Sample Collection 15.03.2022 Time of Sample Collection 12:10 PM Date of Sample Receipt 16.03.2022 Time of Sample Receipt 5:45 PM Start Date of Analysis 16.03.2022 End Date of Analysis 25.03.2022 Temperature: 25 ± 5 °C Sample Quantity 1.0 liters Laboratory Environmental Condition Humidity: 30 - 80 % RH ECO/LAB/0640/03/2022 Sample ID Code

SI. No.	Tests	Unit	Derived.	Limits of	Result	G.S.R 422(E)	
		Unit	Protocol	Detection		Desirable Limit	
L.	Temperature	чС	APHA, 23rd Ed. 2017, 2550A+B	10-100	27.3	Shall not exceed 5°C	
2.	pH		APHA, 23rd Ed. 2017,4500 H* A+B	2-12	7.58	5.5-9.0	
3.	Electrical Conductivity	us/cm	APHA 23rd Ed. 2017, 2510, A+B	2-2000	622.0		
4.	Total Suspended Solid as TSS	mg/l	APHA, 23rdEd. 2017, 2540D	5-5000	46.9	100.0	
5.	Total Dissolved Solids as TDS	mg/l	APHA, 23rd Ed. 2017,2540-C	10-10000	377.0	-	
6.	Oil & Grease as O & G	mg/l	APHA, 23rd Ed. 2017, 5520 A+D	5-600	BDL	10.0	
7.	Biochemical Oxygen Demand as BOD 3days at 27°C	mg/l	APHA, 23rd Ed. 2017, 5210 A+B	5-10000	5.0	30.0	
8.	Chemical Oxygen Demand as COD	mg/l	APHA, 23rd Ed. 2017, 5220 A+C	5-50000	18.0	250.0	
9.	Iron as Fe	mg/l	APHA, 23rd Ed. 2017, 3500 Fe B	0.02-100	0.23	3.0	
10.	Copper as Cu	mg/l	APHA, 23rd Ed. 2017, 3111-A+ B	0.05-5	BDL	2.0	
П.	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	0.10	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. Note: - BDL- Below Detection Limit

Verified By

Technical Manager

---- End of Report----

Quality Manager

Authorized By

Ecomon Laboratories Pvt. Ltd. Second Floor Hall, House Na. 8-10, Sector-H, Aliganj, Lucknos-225024

### Ash Pond Effluent 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 : 09AAACE6076H1ZI

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

#### TEST REPORT

		IESI KE.		FORMAT NO. ECO/QS/FORMAT/07
NAME &	NTPC Limited T	anda Thermal Power Project	ULR No.	TC 953922000000640P
ADDRESS OF	Vidyut Nagar, Ta	nda, Uttar Pradesh 224238	Test Report No.	ECOLAB/WW/0100/0640/03/2022
CUSTOMER:	USTOMER:		Issue Date of Test Report	25.03.2022
Type of Sample		Waste Water		
Sample Registratio	n No.	100	Name of Location	Ash Pond Effluent
Sampling Method		As per Reference Method	Sample Collected By	Ecomen Lab Team
Date of Sample Co	llection	15.03.2022	Time of Sample Collection	12:10 PM
Date of Sample Res	ceipt	16.03.2022	Time of Sample Receipt	5:45 PM
Start Date of Analy	vsis	16.03.2022	End Date of Analysis	25.03.2022
Laboratory Environmental Condition		Temperature: 25 ± 5 °C	Sample Quantity	1.0 liters
		Humidity: 30 - 80 % RH	Sample ID Code	ECO/LAB/0640/03/2022

SI. No.	TESTS	Unit	PROTOCOL DETECTION RANGE RESULT	ROTOCOL DETECTION	DESULT	G.S.R 422(É)
		Cuit		RANGE	RESULT	Desirable Limit
1.	Mercury as Hg	ing/l	APHA, 23rd Ed. : 2017, 3112 A+B	0.001-1	BDL	0.01
2.	Lead as Pb	mg/l	APHA, 23rd Ed. : 2017, 3111 A+B	0.01-1	BDL	0.1
3.	Cadmium as Cd	mg/l	APHA, 23rd Ed. : 2017, 3111 A+B	0.002-2	BDL	2.0
4.	Arsenic as As	mgil	APHA, 23rd 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. Note: - BDL- Below Detection Limit Authorized By

Verified By

Technical Manager

Quality Manager

Ecomen Laboratories Pvt. Ltd.

Second Floor Hall, House No. B-19, Sector-H, Aliganj, Lucknes-225024

----End of Report----

### **STP Effluent 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 : 09AAACE6076H1ZI

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	NTPC Limited	Tanda Thermal Power	ULR No.	TC 95392200000643F	
OF CUSTOMER:	Project Vidyut		Test Report No.	ECOLAB/WW/0100/0643/03/2022	
	Uttar Pradesh	2210038	Issue Date of Test Report	25.03.2022	
Type of Sample	-	Waste Water			
Sample Registration N	0.	100	Name of Location	STP Outlet	
Sampling Method		As per Reference Method	Sample Collected By	Ecomen Lab Team	
Date of Sample Collect	ion	15.03.2022	Time of Sample Collection	12:30 PM	
Date of Sample Receip	t	16.03.2022	Time of Sample Receipt	5:45 PM	
Start Date of Analysis		16.03.2022	End Date of Analysis	25.03.2022	
Laboratory Environmental Condition		Temperature: 25 ± 5 °C	Sample Quantity	1.0 liters	
		y Environmental Condition Humidity: 30 - 80 % RH Sample ID Code		ECO/LAB/0643/03/2022	

SI. No.	Tests	Unit	Protocol	Limits of Detection	Result	G.S.R 1002(E) Desirable Limit
1.	pH	-	APHA, 23rd Ed. 2017,4500 H+ A+B	2-12	8.41	5.5-9.0
2.	Total Suspended Solid as TSS	mg/l	APHA, 23rdEd. 2017, 2540D	5-5000	19.5	100.0
3.	Total Dissolved Solids as TDS	mg/l	APHA, 23rd Ed. 2017,2540-C	10-10000	412.0	
4.	Biochemical Oxygen Demand as BOD 3days at 27°C	mg/l	APHA, 23rd Ed. 2017, 5210 A.+B	5-10000	BDL	30.0
5.	Chemical Oxygen Demand as COD	mg/l	APHA, 23rd Ed. 2017, 5220 A+C	5-50000	16.0	250.0
6.	Total Nitrogen as N2	mg/l	APHA, 23rd Ed. : 2017, 4500 Norg A+C	5-100	6.34	100.0
7.	Total Phosphorous as P	mg/l	APHA, 23rd Ed. : 2017, 4500-PD	0.5-100	3.23	5.0
8.	Fecal Coliform	MPN/100 ml	APHA, 23rd Ed. 2017, 9221 A+C	•	120.0	

Statement of Conformity: The above tested parameters confirm as per GSR-1002(E) limits for above tested parameters and the results are related to the sample tested. Note: - BDL- Below Detection Limit

Verified By

Technical Manager

Authorized By

Quality Manager

Ecomen Laboratories Pvt. Ltd. Second Floor Hall, House No. 8-19, Sector-H, Aligani, Luckane 225024

----End of Report----

### **Plant Effluent 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 : 09AAACE6076H1ZI

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 NTPC Limited		Tanda Thermal Power	ULR No.	TC 953922000000638F	
OF CUSTOMER:	Project Vidyut		Test Report No.	ECOLAB/WW/0100/0638/03/2022	
	Uttar Pradesh 2	210038	Issue Date of Test Report	25.03.2022	
Type of Sample		Waste Water			
Sample Registration No.		100	Name of Location	Main Plant Effluent Stage-II (Pit-1)	
Sampling Method		As per Reference Method	Sample Collected By	Ecomen Lab Team	
Date of Sample Collect	ion	14.03.2022	Time of Sample Collection	12:10 PM	
Date of Sample Receipt	1	16.03.2022	Time of Sample Receipt	5:45 PM	
Start Date of Analysis		16.03.2022	End Date of Analysis	25.03.2022	
Laboratory Environmental Condition		Temperature: 2.5 ± 5 °C	Sample Quantity	1.0 liters	
		Humidity: 30 - 80 % RH	Sample ID Code	ECO/LAB/0638/03/2022	

SI. 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	26.3	shall not exceed 5°C
3.	pH		APH.A, 23rd Ed. 2017,4500 H* A+B	2-12	7.25	5.5-9.0
4.	Electrical Conductivity	us/cm	APH A 23rd Ed. 2017, 2510, A+B	2-2000	680.0	-
5.	Total Suspended Solid as TSS	mg/l	APHA, 23rdEd. 2017, 2540D	5-5000	42.05	100.0
6.	Total Dissolved Solids as TDS	mg/l	APH A, 23rd Ed. 2017,2540-C	10-10000	417.0	-
7.	Oil & Grease as O & G	mg/l	APHA, 23rd Ed. 2017, 5520 A+D	5-600	BDL	10.0
8.	Biochemical Oxygen Demand as BOD 3days at 27°C	mg/l	APHA, 23rd Ed. 2017, 5210 A+B	5-10000	6.0	30.0
9.	Chemical Oxygen Demand as COD	mg/l	APHA, 23rd Ed. 2017, 5220 A+C	5-50000	38.0	250.0
10.	Dissolved Oxygen as DO	mg/l	APHA, 23rd Ed. : 2017, 4500 A+C	1-15	4.8	
11.	Sulfate as SO4	mg/l	APHA,23rd Ed.2017 ,4500 -SO100' E	1.0-250	20.1	
12.	Ammonical Nitrogen as NH3-N	mg/l	APHA, 23rd Ed. 2017, 4500 NO3- B	5-100	BDL	50.0
13.	Iron as Fe	mg/l	APHA, 23rd Ed. 2017, 3500 Fe B	0.02-100	0.26	3.0
14.	Dissolved Phosphate as PO4	mg/l	APHA, 23rd Ed. 2017, 4500 - PD	0.5-100	0.10	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+6	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	0.15	5.0
19.	Phenolic Compounds as CaHsOH	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 and the results are related to the sample tested. Note: - BDL- Below Detection Limit

Verified By

Technical Manager

---- End of Report----

Authorized By

Quality Manager

Ecomen Laboratories Pvt. Ltd. Second Floor Hall, House No. B- 18, Sector-H, Aliganj, Lucknow-226024

### **Plant Effluent 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 : 09AAACE6076H1ZI 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 &	NTPC Limited	Fanda Thermal Power	ULR No.	TC 953922000000638P	
ADDRESS OF		agar, Tanda, Uttar	Test Report No.	ECOLAB/WW/0100/0638/03/2022	
CUSTOMER:	Pradesh 2210038		Issue Date of Test Report	25.03.2022	
Type of Sample		Waste Water			
Sample Registratio	n No.	100	Name of Location	Main Plant Effluent Stage-II (Pit-1)	
Sampling Method		As per Reference Method	per Reference Method Sample Collected By Ecomen La		
Date of Sample Col	llection	14.03.2022	Time of Sample Collection	12:10 PM	
Date of Sample Ree	reipt	16.03.2022	Time of Sample Receipt	5:45 PM	
Start Date of Analysis		16.03.2022	End Date of Analysis	25.03.2022	
Laboratory Environmental Condition		Temperature: 25 ± 5 °C	Sample Quantity	1.0 liters ECO/LAB/0638/03/2022	
		Humidity: 30 - 80 % RH	Sample ID Code		

61 N	TESTS	Unit	PROTOCOL	DETECTION RANGE	RESULT	G.S.R 1002 (E)
SI. No.		Unit				Desirable Limit
1.	Selenium as Se	mg1	APHA, 23rd Ed.: 2017, 3500 Se A+C	0.02-10	BDL	0.05
2.	Mercury as Hg	mgil	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	mgil	APHA, 23rd Ed.: 2017, 3111 A+B	0.002-2	BDL	0.01
5.	Arsenic as As	ngi	APHA, 23rd Ed.: 2017, 3111 A+B	0.01-2	BDL	0.2
6.	Cyanide as CN	ligm	APHA, 23rd Ed.: 2017, 4500 CN- A+B		BDL	-

----End of Report----

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

parameters and the results are related to the sample tested.Note: - BDL- Below Detection Limit Authorized By

Verified By Technical Manager

Quality Manager

Ecomen Laboratories Pvt. Ltd. Second Floor Hall, House No. B-19, Sector-H, Aligani, Lucknow-225024

### **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 : 09AAACE6076H1ZI

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

#### TEST REPORT

		ILSI KE		
		anda Thermal Power Project	ULR No.	FORMAT NO. ECO/QS/FORMAT/07 TC 9539220000000652F
ADDRESS OF	Vidyut Nagar, Ta	nda, Uttar Pradesh 224238	Test Report No.	ECOLAB/WW/0100/0652/03/2022
CUSTOMER:			Issue Date of Test Report	25.03.2022
Type of Sample		Surface Water		
Sample Registratio	n No.	100	Name of Location	Surface Water Upstream
Sampling Method		As per Reference Method	Sample Collected By	Ecomen Lab Team
Date of Sample Co	llection	15.03.2022	Time of Sample Collection	10:50 AM
Date of Sample Re-	ceipt	16.03.2022	Time of Sample Receipt	5:45 PM
Start Date of Analy	sis	16.03.2022	End Date of Analysis	25.03.2022
Laboratory Environmental Condition		Temperature: 25 ± 5 °C	Sample Quantity	1.0 liters
		Humidity: 30 - 80 % RH	Sample ID Code	ECO/LAB/0652/03/2022

SI. No.	TESTS	Unit	PROTOCOL	DETECTION RANGE	RESULT	INDIAN STANDAR DS as IS- 2296(C)
1.	Colour	Hazen	APHA, 23rd Ed. : 2017, 2120 B	5-100	<5.0	300
2.	Temperature	°C	APHA, 23rd Ed. : 2017, 2550 A+B	5.00 - 80	24.4	
3.	pH		APHA, 23rd Ed. : 2017, 4500H+A+B	2 - 12	7.65	8.5
4.	Conductivity	us/cm	APHA, 23rd Ed. : 2017, 2510-A + B	1-2000	312.0	
5.	Total Dissolved Solids as TDS	mg/l	APHA, 23rd Ed. : 2017, 2540-C	5 - 5000	198.0	1500
6.	Total Suspended Solids as TSS	mg/l	APHA, 23rd Ed. : 2017, 2540-D	5-5000	28.5	
7.	Chemical Oxygen Demand as COD	mg()	APHA, 23rd Ed. : 2017, 5220 A+C	2-1000	56.0	
8.	Biochemical Oxygen Demand as BOD	mg4	APHA, 23rd Ed. : 2017, 5210 A+B	1-1000	6.0	3.0
9.	Oil & Grease as O&G	mg/i	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	7.8	4
11.	Alkalinity as CaOO3	mg/l	APHA, 23rd Ed. : 2017, 2320 A+ B	5-1500	72.0	
12.	Total Hardness as CaCO3	mgi	APHA, 23rd Ed. : 2017, 2340 A+C	5-1500	80.0	
13.	Calcium as Ca	mgf	APHA, 23rd Ed. : 2017,3500 Ca A+B	5 - 1000	22.4	
14.	Magnesium as Mg	mgi	APHA, 23rd Ed. : 2017, 3500 Mg A+B	5-1000	5.83	
15.	Potassium as K	mg/l	APHA, 23rd Ed. : 2017, 3500 K, A+B	1 - 100	1.11	
16.	Sodium as Na	mg/l	APHA, 23ed Ed. : 2017, 3500 Na, A+B	1 - 100	9.68	
17.	Chloride as Cl	mgil	APHA, 23rd Ed. : 2017, 4500 C1 A+B	5 - 1000	14.0	600
18.	Sulphate as SO4	ing/	APHA, 23rd Ed. : 2017, 4500-SO42- E	1-250	16.9	400
19.	Nitrate Nitrogen as NO3	mg/l	APHA, 23rd Ed. : 2017, 4500-NO3 2- E	5 - 100	6.6	50
20.	Fluoride as F	mg/	APHA, 23rd Ed. : 2017, 4500-C	0.05-10	0.30	1.5
21.	Iron as Fe	mg/l	APHA, 23rd Ed. : 2017, 3500 Fe B	0.02-50	0.21	50.0
22.	Arsenic as As	mgil	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	ngi	APHA, 23rd Ed. : 2017,3111 A+B	0.05-20	BDL	0.05
25.	Phosphate as PO4	nışl	APHA, 23rd Ed. : 2017, 4500-P, A+B+D	0.100 - 50	0.10	
26.	Copper as Cu	Fgm	APHA, 23rd Ed. : 2017, 3111 A+B	0.05-5	BDL	1.5
27.	Phenolic Compound as C6H5OH	Ingil	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 and the results are related to the sample tested. Note: - BDL- Below Detection Limit

Verified By

Technical Manager

----End of Report----

Authorized By Quality Manager

Ecomen Laboratories Pvt. Ltd. Second Floor Hall, House No. 8-Sector-H, Aligani, Lucknow 225024

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### **Surface Water Quality Monitoring**



FORMUT NO ECONOFIEORMUTINS

# 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 : 09AAACE6076H1ZI

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

#### TEST REPORT

NAME &	NTPC Limited 1	fanda Thermal Power	ULR No.	TC 953922000000284P		
ADDRESS OF Project Vidyut Na CUSTOMER: Uttar Pradesh 224			Test Report No.	ECOLAB/WW/0100/0652/03/2022 25.03.2022		
		4238	Issue Date of Test Report			
Type of Sample		Surface Water				
Sample Registration No.		100	Name of Location	Surface water Up Stream		
Sampling Method		As per Reference Method	Sample Collected By	Ecomen Lab Team		
Date of Sample Collection		15.03.2022	Time of Sample Collection	10:50 AM		
Date of Sample Receipt		16.03.2022	Time of Sample Receipt	5:45 PM		
Start Date of Analysis		16.03.2022	End Date of Analysis	25.03.2022		
Laboratory Environmental Condition		Temperature: 25 ± 5 °C	Sample Quantity	1.0 liters		
		Humidity: 30 - 80 % RH	Sample ID Code	ECO/LAB/0652/03/2022		

SI. No.	TESIS	Unit	PROTOCOL	DETECTION RANGE	RESULT	INDIAN STANDAE DS 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	mg1	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:	mg1	APHA, 23rd Ed.: 2017, 4500 SiO2 A+B	1-50	12.33	-
6.	Total coliform	MPN/100 ml	APHA, 23rd Ed. : 2017, 9221 A+B	1.8	Absent	5000

parameters and the results are related to the sample tested. Note: - BDL- Below Detection Limit

Verified By

Authorized By Quality Manager

----End of Report----

Ecomen Laboratories Pvt. Ltd. Second Floor Hall, House No. 8-18, Sector-H, Aliganj, Lucknow-226024

### **Ground 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 : 09AAACE6076H1ZI

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

#### TEST REPORT

		IESI KE	PORT	FORMAT NO. ECO/OS/FORMAT/07		
NAME & NTPC Limited Tanda ADDRESS OF Project Vidyut Nagar, T CUSTOMER: Uttar Pradesh 22010038		Fanda Thermal Power	ULR No.	TC 953922000000647F ECOLAB/WW/0100/0647/03/2022		
			Test Report No.			
		010038	138 Issue Date of Test Report			
Type of Sample		Ground Water				
Sample Registration No.		0100	Name of Location	Plant Near Fire Station Pump House No.1		
Sampling Method		As per Reference Method	Sample Collected By	Ecomen Lab Team		
Date of Sample Collection		14.03.2022	Time of Sample Collection	11:55 AM		
Date of Sample Receipt		16.03.2022	Time of Sample Receipt	5:45 PM		
Start Date of Analysis		16.03.2022	End Date of Analysis	25.03.2022		
Laboratory Environmental Condition		Temperature: 25 ± 5 °C	Sample Quantity	1.0 liters		
		Humidity: 30 - 80 % R.H	Sample ID Code	ECO/LAB/0647/03/2022		

SI. 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	0C	APHA, 23rd Ed. : 2017, 2550 A+B	5.00 to 80	25.4		
3.	pH		APHA, 23rd Ed. : 2017, 4500H+A+B	2 - 12	7.40	6.5-8.5	No Relax
4.	Conductivity	us/cm	APHA, 23rd Ed. : 2017, 2510-A + B	1-2000	655.0		
5.	Total Dissolved Solids as TDS	ngf	APHA, 23rd Ed. : 2017, 2540-C	5 - 5000	422.0	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	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	5-600	BDL		
10.	Dissolved Oxygen as DO	mg/l	APHA, 23rd Ed. : 2017, 4500 A+C	1-15	6.2	-	040
11.	Hexavalent Chromium as Cr+6	mg/l	APHA, 23rd Ed. : 2017,3111 A+B	0.05-20	BDL		
12.	Alkalinity as CaCO3	mg/l	APHA, 23rd Ed. : 2017, 2320 A+ B	5-1500	176.0	200	600
13.	Total Hardness as CaCO3	mg/l	APHA, 23rd Ed. : 20117, 2340 A+C	5 - 1500	192.0	200	600
14.	Calcium as Ca	ingil	APHA, 23rd Ed. : 2017,3500 Ca A+B	5 - 1000	44.8	75	200
15.	Magnesium as Mg	mg/l	APHA, 23rd Ed. : 2017, 3500 Mg A+B	5 - 1000	19.44	30	100
16,	Potassium as K	mgil	APHA, 23rd Ed. : 2017, 3500 K, A+B	1 - 100	1.22		
17.	Sodium as Na	ingil	APHA, 23rd Ed. : 20117, 3500 Na, A+B	1 - 100	16.9	-	-
18.	Chloride as Cl	mg/l	APHA, 23rd Ed. : 2017, 4500 CI A+B	5 - 1000	26.0	250	1000
19.	Sulphate as SO4	mg/l	APHA, 23rd Ed. : 2017, 4500-SO0100- E	1 - 250	23.4	200	400
20.	Nitrate Nitrogen as NO3	mg/l	APHA, 23rd Ed. : 2017, 4500-NO3 2- E	5 - 100	7.12	45	No Relax
21.	Fluoride as F	mpfi	APHA, 23rd Ed. : 2017, 4500-C	0.05-10	0.38	1	1.5
22.	Iron as Fe	ing/li	APHA, 23rd Ed. : 2017, 3500 Fe B	0.02-50	0.20	0.05	No Relax
23.	Total Chromium as T. Cr.	mgil	APHA, 23rd Ed. : 2017, 3111 A+B	0.05-10	BDL	-	
24.	Phosphate as PO4	ing/l	APHA, 23rd Ed. : 2017, 4500-P+A+B+D	0.100-50	BDL		
25.	Silica as SiO2	ing/l	APHA, 23rd Ed. : 2017, 4500 SIO2 A+B	1-50	1.02	•	
26.	Phenolic Compound as C6H5OH	mg/l	APHA, 23rd Ed. : 2017, 5530 A+C	0.05 - 10	BDL	0.001	0.002
27.	Copper as Cu	fam	APHA, 23rd Ed. : 2017, 3111 A+B	0.05-5	BDL	0.05	1.5

Statement of Conformity: The above tested parameters confirm as per IS-10500-2012 (Reaff.-2018) limits for above tested parameters and the results are related to the sample tested. Note: - BDL- Below Detection Limit

Verified By

----End of Report----

Authorized By Quality Manager

E tomen Laboratories Pvt. Ltd. Sector-H, Aligani, Lucinas 22004

### **Ground 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 : 09AAACE6076H1ZI

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

#### TEST REPORT

	nda Thermal Power Project ida, Uttar Pradesh 22010038	ULR No. Test Report No.	TC 95392200000647P ECOL A B/WW/0100/0647/03/2022			
Nagar, Tan	nda, Uttar Pradesh 22010038	Test Report No.	ECOLAB/WW/0100/0647/03/2022			
			ECOLAB/WW/0100/0647/03/2022			
	STOMER:		ort 25.03.2022			
Type of Sample		Ground Water				
	0100	Name of Location	Plant Near Fire Station Pump			
		Name of Location	House No.1			
	As per Reference Method	Sample Collected By	Ecomen Lab Team			
	14.03.2022	Time of Sample Collection	11:55 AM			
	16.03.2022	Time of Sample Receipt	5:45 PM			
	16.03.2022	End Date of Analysis	25.03.2022			
11.1	Temperature: 25 ± 5 °C	Sample Quantity	1.0 liters			
ndition	Humidity: 30 - 80 % RH	Sample ID Code	ECO/LAB/0647/03/2022			
	ndition	0100 As per Reference Method 14.03.2022 16.03.2022 16.03.2022 Temperature: 25 ± 5 °C	0100         Name of Location           As per Reference Method         Sample Collected By           14.03.2022         Time of Sample Collection           16.03.2022         Time of Sample Receipt           16.03.2022         End Date of Analysis           Temperature: 25 ± 5 °C         Sample Quantity			

SL No.	TESTS	Unit	PROTOCOL	DETECTION RANGE	RESULT	INDIAN STANDARDS as per IS 10500:2012 (Reaff:2018)	
		1				Desirable	Permissible
I	Selenium as Se	mg/l	APHA, 23rd Ed. : 2017, 3500 Se A+C	0.02-10	BDL	0.01	No Relax
2.	Mercury as Hg	mg/l	APHA, 23rd Ed.: 2017, 3112 A+B	0.001-1	BDL	0.001	No Relax
3.	Lead as Pb	ing9	APHA, 23rd Ed. : 2017, 3111 A+B	0.01-1	BDL	0.01	No Relax
4.	Cadmium as Cd	mg/l	APHA, 23rd Ed.: 2017, 3111 A+B	0.002-2	BDL	0.003	No Relax
5.	Arsenic as As	mg/l	APHA, 23rd Ed.: 2017, 3111 A+B	0.01-2	BDL	0.01	0.05
6.	Total colliform	MPN/100 ml	APHA, 23rd Ed. : 2017, 9221 A+B	1.8x10 <sup>6</sup>	Absent	-	,

Statement of Conformity: The above tested parameters confirm as per IS-10500-2012 (Reaff.-2018) limits for above tested parameters and the results are related to the sample tested. Note: - BDL- Below Detection Limit

Verified By Technical Manager

----End of Report----

Authorized By Quality Manager men Laboratories PvL Ltd.

and Floor Hall, House No. Sector-H, Aligani, Luch

### Annexure-IV

### Rain Water Harvesting & Piezzometer



(Rain Water Harvesting Systems)



(Piezzometer monitoring)

Annexure-V

**Fugitive Emission Control Systems** 



(Dust Extraction Dust Suppression at Crusher House)



(Dry Fog Dust Suppression System at Wagon Tippler)



(Sprinkler at Coal Stack Yard)

# Annexure-VI

**Continuous Monitoring Systems** 



**Continuous Emission Monitoring System** 



**Continuous Ambient Air Quality Monitoring Station**
## **Annexure-VII**

### CSR & CD Works and Expenditure Details

### CSR Activities (FY 2021-22)

S. No.	Work Area	Activity	Expenditure (Rs. Lakhs)	Beneficiary
1	Education	Installation of 300 solar lights at	64.849	District Level
		Gorakhpur		(6,94,889)
		Providing various assets in nearby	10.511	10 SCHOOLS
		government schools - equipment/ Furniture		(2,000)
		Support to Vivekanand Shishu Kunj	2.64	20
		Subtotal	78	
2	Health	Making primary health care accessible, a	ffordable and in	clusive -
		Conducting health camps in nearby villag	es	
		Maternal and Child Health Clinic	27	17,135
		Homeopathic doctor	6.6	17,135
		Health camp	1.770	894
		Distribution of hand- wash soap,	6.50	17,135
		facemask and Sanitizer for the		
		prevention of third wave of Covid-19		
		Face Mask and Soaps COVID-19	6.210	17,135
		Subtotal	48.08	
3	Sanitation	Conducting Swachhata Awareness Campaigns	2.00	
		Vending Machine	0.818	3 Schools & 2
			0.818	Villages (767)
		Sanitisation in Villages	0.525	17,135
		Awareness campaigns	3.650	17,135
		Subtotal	6.993	
4	Water	Implementation of Solar Based Water	0	Proposal
		Supply in Schools, Public Places, Village		approved. Work
		and Construction of Platform etc.		to be awarded
		Subtotal	0	
5	Renewable	Augmenting rural infrastructure- Installa	ation of Solar St	reet Lights
	Energy	Installation of Solar Street Light in	8.996	17,135
		nearby Villages		-
		300 Solar Street lights	1	
	Const	Subtotal	9.996	
6	Sports	Support for rural and national sports - tal	-	•
		infrastructure, sports equipment, leagues		
		District and divisional sports competition and educational function	5	2,000
		Support for Sansad Green marathon	1	2,500
		Subtotal	6	2,000
		Sustatu	5	

7	Vocational Training	Providing vocational training to youth to Enterprising, and entrepreneurial	o make them Em	ployable,		
	manning	Vocational training for Assistant Electrician	8.410	30		
		Procurement of E-riksha Battery	0.270	1		
		Subtotal	8.680			
8	Physically Challenged Persons	Mainstreaming of specially-abled persons (Divyang) by providing them with aids/ appliances and education/ Support of Sri Ram Awadh Andha Vidyalaya)				
	(Others)	Supply of wax to NFNDRC for candle making	0.240	5		
		Ration Supply to Andh Gyan Vidyalay	2.54	20		
		Food items, masks and other daily utility items for children with special needs	1.18	31		
		Subtotal	3.96			
9	Animal	Support local community for sustainable	e livestock farmi	ng		
	Health	Veterinary camp	2	694		
		Subtotal	2			
10	NAS/SIE	Conducting Social impact Evaluation (SIE)				
		Conducting Social impact Evaluation (SIE)	8.83	17,135		
		Subtotal	8.83			
11	Communica	Communication				
	tion	Capacity Building/Communication	2			
		Branding of Handpump	.02			
		Subtotal	2.02	25,000		
12	Miscellene	Miscellaneous CSR Activity	<u> </u>			
	ous	Solar panels at Hanumangarhi	3.599	51,000		
		Support for Sansad Khel Mahakumbh	2	9,000		
		CSR film	2.20	25,000		
		Solar light at Gorakhpur	5.40	6,94,889		
		Blanket Distribution Old Age home	0.20	50		
		Vocation training / Branding	0.65	30		
		Misc. Expenditure on Electrician Training	1.39	30		
		Subtotal	15.44			

	Strategic CS	R Activities				
1	Education	Education Activity for improving learning levels in Government Schools in the vicinity of the station				
		Film Based Teaching in nearby three Govt. Schools (Kataria, Maheripur and Makhdoom nagar)	19.09	300		
		Subtotal	19.09			
2	Health	Activity for Maternal and Child Health in the vicinity of the station				
		Maternal and Child Health Clinic	20	17,135		
		Subtotal	20			
3	Water	Activity for providing potable drinking water to community in the vicinity of the station	0	Proposal approved. Work to be awarded		
		Subtotal	0			

# Community Development Works (FY 2021-22)

SI. No.	Name of village	Name of work	Expenditure, Rs.
1	Husainpur Sudhana	Repair and painting work of J.H. School & Primary -I & II.	593785.81
2	Mahripur	Construction of ANM Center	4343399.49
3	Makhdoomnagar	Construction of ANM Center	2095557.87
4	Basti & Ambedkar Nagar.	Procurement of One Ambulance and Two Mortuary Van	5929887.64
5	District Hospital Ambedkarngar	Procurement, Installation & Commissioning of 01 (one) no. PSA Oxygen Plant of 5 Nm3/hr capacity & 01 (one) no. of PSA oxygen plant of 36Nm3/hr capacity.	10880200.26
6	Mahripur-Keotahiya	Construction of CC road from Keotahiya Gopal's shop to River side. <b>Part-I</b> (From <b>CH-0</b> <b>m to CH-500m</b> )	1517020.75
7	Mahripur-Keotahiya	Construction of CC road from Keotahiya Gopal's shop to River side. <b>Part-II</b> (From <b>CH- 501 m to CH-1000 m</b> )	818270.61
8	Samhariya	Construction of <b>Nalah drain</b> (from Pannalal's house to Dr. Furkhan shop at Makhdoomnagar).	791173.87
9	Hakimpur	Construction of CC road from Kali Chauraha to Pokhara.	360241.00
10	Hakimpur	Construction of CC road from Baruajalaki to Primary School chauraha <b>Part-2</b> (From <b>CH-0</b> <b>m to CH-400 m).</b>	171887.20
11	Hussainpur sudhana	Construction of CC road from Ramneval's house to Canal and from Gangaram's house to Govind Ram house.	840314.38
12	Hussainpur sudhana	Construction of CC road from Sadanand house to Western side Railway line and from Railway colony to Nandlal's house.	818504.59
13	Hakimpur	Construction of CC road from Baruajalaki to primary school Chauraha Part-III (From CH- 801 m to CH-1100 m).	473990.53
14	Mahripur	Construction of CC road from Kesavpur Pachpokhara Minor Canal to Highway Part-I (From CH-0 m to CH-500 m)	444404.27
15	Mahripur	Construction of CC road from Kesavpur Pachpokhara Minor Canal to Highway Part- II (From CH-500 m to CH-900 m)	1611528.58
16	Mahripur	Construction of CC road from Ramleela stage to Raipur Village boundary wall.	650496.63

SI. No.	Name of village	Name of work	Expenditure, Rs.
17	Mahripur	Construction of CC road from Ramchandra House to Mithai lal House.	1047331.69
18	Samhariya	Construction of CC Road at Samhariya village (from Ramjit Verma's tubewell to Chhotelal verma's house via Ajay Verma's house)	616600.38
19	Asopur	Construction of CC road at Ashopur village (From Tanda-Maya road to Keshavraj Yadav house).	709300.92
20	Kateriya to Bahadurpur	Widening of main road between NTPC-Tanda Township to Main Plant on deposite work basis by M/s PWD Ambedkarnagar	12487258.62
21	Project Affected villages	Cleaning of drain from Canal siphon to Sarayu River.	488116.44
22	Karimpatti	Construction of Boundary Wall in Kanya Junior High School.	480879.97
23	Kateriya	Construction of Ghat on river front (Work in progress)	2963197.31
24	Tehsil Tanda	Construction of boundary wall, toilet and vehicle parking shed in Tehsil Tanda.	1105521.65
25	Husainpur Sudhana	Construction of Mosque.	2423656.98
26	Kakrahi	Construction of <b>05-seated toilet</b> complex at Kakrahi village under CD-CSR works.	962968.04
27	Samhariya	Construction of <b>05-seated toilet</b> complet at Jyotjaina/Samhariya village under CD-CSR works.	748750.9
28	Hakimpur	Construction of toilet in Primary school	489989.49
29	Project Affected villages	Payment release to District Olympic Association	500000.00
30	Mahripur	Training for Oyster Mushroom cultivation	458784.00
31	Ashopur	Construction of Meeting Room and Toilet Thana Aliganj campus.	1687039.13
32	Block-Tanda	Misc. civil work for public utility purposes at BRC Bhavan of Block Education Office, Tanda	317269.17
		Total Rs.	59827328.17

Detail of work carried out under CD - Community Development					
Year SI. No. Name of village Name of work		Name of work			
FY 2013-14	1	Affected 09 Villages	AC/Refrigerator Training		
FY 2014-15	1	Affected 09 Villages	Electrical Training		
FT 2014-15	2	Affected 09 Villages	Welding Training		
FY2015-16	1	Salahpur Rajour	Construction of Toilets in vill- Salahpur Rajour& Hasimpur		
	2	Affected 09 Villages	Plumbing Training		
	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		
FY 2016-17	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	SI. No.	Name of village	Name of work
	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.
FY 2017-18	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
	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.
EV 2018 10	5	Kakrahi	Construction of road & drains.
FY 2018-19	6	Purabaxsarai	Construction of Toilets & Boundary wall for Primary School.
	7	Tehsil Tanda	Construction o f 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 near by 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.

Year	SI.No.	Name of village	Name of work
	1	NTPC Township	Construction of civil works in basic primary School
	2	Affected09 Villages	Installation of solar LED street light 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 10Set 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.
FY 2019- 20	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 street light 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	SI. No.	CSR Activities		
	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		
FY	8	Distribution of PPE Kit to District Hospital via DM Ambedkarnagar		
2020-21	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		

### **Records of CSR & CD Activities Review Meeting**

स्तरीवे	ही योजना एवं प्रणासी विभाग		NTPC LTD		
P&S Department					
		Deptt/Package	Date: 22.02.2022		
	Record note of BUH(T) Review Meeting	CSR/CD Progress & Budget Review	Time: 15:30 Hrs		
SI No	Action point identified	Target Date	Action By		
Comm	unity Development Activities				
1	MOU Target for FY 2021-22- Rs 5 Crores utilisation of Budget for Community development activities (FY 2021-22 Till 21 Feb'22: Utilisation- Rs.4.14 Crores). Phasing of expenditure to be planned. Moreover, it is a commitment given under Enviornment clearance of Stage-II that CSR/CD related activities target to be achieved. Therefore, following are the identified action Plan:				
•	Completed Contracts:- All final Technical deviation to be processed for release of final payment & contract closure as per commitments. Processing of deviations/time extensions & release of payments to be done as per commitments. (Cases- 37 Nos). Cases pertaining to the year 2019 and 2020 have to be closed on priority. Any contract is to be closed withinn 2 months of work completion. 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 by March 22. Legal opinion is to be taken in the cases where contractor has expired and settlement is to be done by March 22.	As per Annexure-I 15 cases to be processed by March 22	сср		
ь	Running Contract (Balance Value- Approx Rs 8.71 Crores ):- Works to be expedited & deviations to be taken for release of Bills within FY to meet Targets. (Total- 09 under progress) *The contract for 03 nos. works mentioned in Annexure II is to be closed on priority. * Further, CCD reported delay in 3-4 works due to Land/Local issues- It was decided that R&R will take up with District Administration as well as Village Pradhan for early resolution. In case of conflict, if no alternate solution is available then work may be stopped after taking requisite approvals.	As per Annexure-II	CCD/ R&R		
c	Balance Work of Road widening & repair work to be expedited with PWD.	Immediate	R&R/CCD		
	- · · ·		Kak/CCD		
d	New works to be identified with help of Gram Pradhans & relevant approvals to be initiated after preliminary report from Standing Committee	Immediate	R&R		
e	It is to be ensured that internal Electrification is included in all future and existing proposals.	Immediate	R&R/CCD		
f	It is to be ensured that CCD/R&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.	Immediate	All Concerned		
CSR R	elated activities				
2	MOU Target for FY 2021-22- Presently, approved for an amount of <i>Rs. 282.60</i> <i>lakhs</i> . Moreover, commitment given under Enviornment clearance of Stage-II for CSR/CD related activities to be achieved. Therefore, following are the identified action Plan:				
a	CSR Budget - Regular Activities - Various activities have been planned in consultation with Gram Pradhans to utilise the complete Budget	As per Annexure-IV	HR-CSR		
ь	Completed Contracts of Spill over budget (Balance Value- Approx Rs 19.90 lakhs) :- All final Technical deviation to be processed for release of final payment & contract closure as per commitments. Processing of deviations/ time extensions & release of payments to be done as per commitments. (Cases- 2 Nos)	As per Annexure-V	HR-CSR		
Distrib	ution:- All present	Se	Rishabh Jayaswa nior Manager (P&S)		

Annexure-IX

**Effluent Treatment System** 



(Waste Service Water Sump with Oil Skimmer)



(Tube Settler and Neutralization Pit)



(Central Monitoring Basin)

(Sewage Treatment Plant at Township)

Annexure-X

Flue Gas Desulphurization Installation



(Absorber and Chimney)



(Storage and Process Water Tanks)

(Electrical Building)