



पंजीकृत कार्यालय: एनटीपीसी भवन, कोर -7, स्कोप कॉम्प्लेक्स, इंस्टीटयूशनल एरिया, लोधी रोड, नई दिल्ली -110 003
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Unit: Meja Thermal Power Project, P.O.Kohdar, Tehsil-Meja, Distt.Prayagraj-212301
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ANNEXURE-A

ENVIRONMENT CLEARENCE COMPLIANCE REPORT (ECCR)
of
STAGE-I (2x660 MW), MEJA URJA NIGAM (P) LTD.
(A Joint Venture of NTPC Limited & U.P.R.V.U N. Ltd.)
For the period 1st October 2024 to 31st March 2025.



By
Environment Management Group
MEJA THERMAL POWER PROJECT
P.O- Kohdar, Tehsil- Meja , Distt-Prayagraj (UP)-212301

Name of the Project: Stage-I (2 x 660MW) Meja Thermal Power Plant

Project Code: F.No. IV/ENV/UP/TH-41/319/2010

Clearance Letter No.: J-13012/03/2008- IA II (T) dated 21.07.2011

Period of Compliance Report: 01st October 2024 to 31st March 2025

Specific conditions:

Sl.	Item Description	Status as on 31.03.2025			
i	Primary survey of flora and fauna in the study area shall be carried out and report submitted to the ministry within six months.	Primary survey of flora and fauna at MEJA TPP was carried through Centre for Social Forestry and Eco-Rehabilitation (ICFRE-Dehradun) Allahabad from November 2011 to April 2012. Complied.			
ii	A Wildlife conservation plan (especially with regard to Black buck) shall be prepared in consultation with the office of the chief wildlife concerned and reputed wildlife expert/ institute and submitted to the ministry within six months along with a road map for implementation. The plan shall specify budget earmarked for activities to be undertaken. The conservation planshall be implemented prior to the commissioning of the power plant and the status of implementation shall be submitted to the regional office of the ministry from time to time.	Wildlife conservation plan was prepared, and works are completed. Complied.			
iii	Land requirement shall be restricted to 1100 acres (445.15 Ha) (including ash pond)	During conceptualization of MEJA TPP in 2008, construction of both the stages was considered. Accordingly, Govt of Uttar Pradesh has allocated land to MUNPL for Stage-I and Stage-II. Some common facilities have been developed considering both Stage-I and Stage-II. Land breakup is given in table below: <table><tr><th>Description</th><th>Land area for Stage-I (Ha)</th><th>Land area for Stage-II already taken with Stage-I (Ha)</th></tr></table>	Description	Land area for Stage-I (Ha)	Land area for Stage-II already taken with Stage-I (Ha)
Description	Land area for Stage-I (Ha)	Land area for Stage-II already taken with Stage-I (Ha)			

Sl.	Item Description	Status as on 31.03.2025		
		Main Plant	144.2	183.8
		Ash Pond	262	Shared with Stage-I
		Township	85	Shared with Stage-I
		Railway Siding	171	Shared with Stage-I
		Reservoir	75	Shared with Stage-I
		Makeup water	5.22	Shared with Stage-I
		Existing Green belt (other area within Project Land)*	87	0
		<i>*In addition to the 87 Ha of existing greenbelt as mentioned above, an additional 76Ha. greenbelt has been already developed within main plant, township & railway siding area thus total greenbelt in existing plant is 163 Ha.</i>		
		Proposed Greenbelt (other area within Project Land)	0	186.42
		Miscellaneous**	95.36	Shared with Stage-I
		<i>**It includes public roads, vegetable market, parking, admin building, undulating land, drains, dry fly ash silo, outside area, open areas etc.</i>		
		Sub-Total (Ha)	924.78	370.22
		Total Stage-I and Stage-II Total (Ha)	1295	
		Existing Greenbelt details within the MUNPL premises is given in table below:		
		Sl no.	Description	Existing Greenbelt area in Ha
1	Plant area	10		
2	Ash Pond area	0		
3	Township area	22		
4	Railway Siding area	44		
5	Existing Greenbelt (other area within project Land)	87		

Sl.	Item Description	Status as on 31.03.2025								
		6	Proposed Greenbelt (other area within project land)	0						
		7	Total	163						
		Further, the clarification about the land under the possession was presented for consideration during Stage-II expansion and EC was granted by MoEF&CC for Stage-II expansion.								
iv	Provision for installing of FGD shall be provided for the future use.	As per the MoEF&CC notification dated 05.09.2022, MEJA Project falls in Category C. The cutoff timeline for compliance w.r.t. SO ₂ emission is 31 st December 2026. MEJA Stage-I, erection & commissioning works of both units of Flue Gas Desulphurization (FGD) are completed. Trail run done in January-February 2024. Unit#1 and Unit #2. Both the utilities are kept in service from 28.02.2025. Being Complied.								
v	High efficiency Electrostatic precipitators (ESPs) shall be installed to ensure that particulate emission does not exceed 50 mg/Nm ³ . Adequate dust extraction system such as cyclones/bag filters and water spray system in dusty areas such as coal handling and ash handling points, transfer areas and other vulnerable dusty areas shall be provided	Electrostatic precipitators (ESP) have been provided and are in operation. PM emission is maintained within 30 mg/Nm ³ . Adequate dust extraction system and water spray system have also been provided in CHP and ash handling areas to control fugitive emission. Being Complied.								
vi	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 MOEF for suitable amendments to environmental clearance condition wherever necessary.	<table><tr><th>Coal Sample</th><th>Concentration</th></tr><tr><td>Sulphur in Coal (%)</td><td>0.22 in % by wt</td></tr><tr><td>Ash (%)</td><td>23 to 40</td></tr></table> Noted for compliance.			Coal Sample	Concentration	Sulphur in Coal (%)	0.22 in % by wt	Ash (%)	23 to 40
Coal Sample	Concentration									
Sulphur in Coal (%)	0.22 in % by wt									
Ash (%)	23 to 40									
vii	Stack height of 275 m height shall be installed and provided with continuous online monitoring equipment for SO _x , NO _x and PM _{2.5} & PM ₁₀ . Exit velocity of flue gases shall not be less than 22 m/sec. Mercury emissions	275 meter high stack with continuous online monitoring for SO ₂ , NO _x , PM. Exit velocity of flue gas is being maintained more than 22m/sec and monitoring of Hg emission is carried out quarterly.								

Sl.	Item Description	Status as on 31.03.2025
	from stack may also be monitored on periodic basis.	Amendment regarding PM _{2.5} taken and mentioned in condition no. (iv) of EC Amendment dated 08.08.2019. Being Complied.
viii	Existing degenerated water bodies (if any) in the study area shall be regenerated at the project proponent's expenses in consultation with the state government.	1. Check dams were constructed through UP Jal Nigam on local nallahs in Jhariyahi, Isauta, Patai Dandi & Kohdar villages on demand of respective Gram Sabhas. 2. These check dams are of very small size (height approx 2-2.5m and length 5-7m). Value of each check dam is around Rs.16-19Lakh Check dams were constructed under the PURA (Provision of Urban Amenities in Rural Areas) scheme of the Government of India. Complied.
ix	Detailed hydro-geological study shall be conducted (including sustainability of water resource study) by an institute of repute and report submitted to regional office of the ministry. Further hydro-geological study shall be reviewed annually from an institute/organization of repute to assess the impact of the surface water and ground regime (especially around ash dyke). In case any deterioration is observed, specific mitigation measures shall be undertaken and reports /data of water quality monitored regularly and maintained shall be submitted to the RO of the ministry.	Hydro-geological study for sustainability of water resource has been carried out by MNIT, Prayagraj and report submitted. Presently hydro-geological study is being carried out by the National Institute of Hydrology, Roorkee to assess impact of surface water and ground regime. Ground water and surface water monitoring is being carried out by IIITR, Lucknow, a NABL Accredited laboratory. Reports being submitted to UPPCB on quarterly basis. The copy of latest report of ground water and surface water monitoring is attached as Annexure 1.
x	Source of water for meeting requirement during lean season shall be specified and submitted to RO of ministry within 3 months.	1. As per GoUP water allocation letter dated 10.01.2008, water storage for minimum 15 days plant requirement needs to be ensured, to maintain the minimum flow in the river during lean period. 2. MUNPL, Meja has a reservoir with a total capacity of
xi	No ground water shall be extracted for the use in operation of the power plant even in lean season.	

Sl.	Item Description	Status as on 31.03.2025
		approximate 29 lac cubic meter to cater water requirement of 30.5 days on 100% PLF for both the units. 3. The condition mentioned in the GoUP water allocation letter is being conformed. In lean season, Irrigation Dept, GoUP maintains minimum required environmental flow in Ganga River and MUNPL regulates its water drawl based on the directions of Irrigation Dept., GoUP
xii	No water bodies (including natural drainage system) in the area shall be disturbed due to activities associated with the setting up/ operation of the power plant.	No water body in the area disturbed. Being Complied.
xiii	Minimum required environmental flow suggested by the competent authority of state government shall be maintained in the channel/ river (as applicable) even in lean season.	1. As per GoUP water allocation letter dated 10.01.2008, water storage for minimum 15 days plant requirement needs to be ensured, to maintain the minimum flow in the river during lean period. 2. MUNPL, Meja has a reservoir with a total capacity of approximate 29 lac cubic meter to cater water requirement of 30.5 days on 100% PLF for both the units. 3. The condition mentioned in the GoUP water allocation letter is being conformed. In lean season, Irrigation Dept, GoUP maintains minimum required environmental flow in Ganga River and MUNPL regulates its water drawl based on the directions of Irrigation Dept., GoUP.
xiv	COC of 5.0 shall be adopted. The treated effluent conforming to the prescribed standards only shall be re-circulated and reused within the plant. There shall be no discharge outside the plant boundary except during monsoon. Arrangements	At MUNPL Meja, the chloride content in the makeup water drawn from River Ganga varies in the range of 27-100 ppm. With 5 Cycles of Concentration (COC), chloride contents in circulating water goes

Sl.	Item Description	Status as on 31.03.2025																					
	shall be made that effluents and storm water do not get mixed. A sewage Treatment plant shall be provided (as applicable) and the treated sewage shall be used for raising green belt and plantation.	up to 500 ppm. Permissible chloride limit in condenser is 200 ppm (Condenser tube material is SS-304). Suitable measure has been taken for use of Sodium Molybdate (Corrosion inhibitor) in circulating water system. Monthly average COC data for the period from October 2024 to March 2025 is given below <table border="1"> <thead> <tr> <th>Mon'Yr</th><th>Maximum</th><th>Average</th></tr> </thead> <tbody> <tr> <td>Oct'24</td><td>5.2</td><td>5.0</td></tr> <tr> <td>Nov'24</td><td>5.3</td><td>5.1</td></tr> <tr> <td>Dec'24</td><td>5.5</td><td>4.9</td></tr> <tr> <td>Jan'25</td><td>5.0</td><td>4.8</td></tr> <tr> <td>Feb'25</td><td>5.1</td><td>4.8</td></tr> <tr> <td>Mar'25</td><td>4.8</td><td>4.7</td></tr> </tbody> </table> The COC shall be maintained at 5.	Mon'Yr	Maximum	Average	Oct'24	5.2	5.0	Nov'24	5.3	5.1	Dec'24	5.5	4.9	Jan'25	5.0	4.8	Feb'25	5.1	4.8	Mar'25	4.8	4.7
Mon'Yr	Maximum	Average																					
Oct'24	5.2	5.0																					
Nov'24	5.3	5.1																					
Dec'24	5.5	4.9																					
Jan'25	5.0	4.8																					
Feb'25	5.1	4.8																					
Mar'25	4.8	4.7																					
xv	Additional soil for leveling of the proposed site shall be generated within the site (to the extent possible) so that natural drainage system of the area is protected and improved.	Complied.																					
xvi	Utilization of 100% fly ash generated shall be made from 4 th year of operation. Status of implementation shall be reported to the regional office of the ministry from time to time.	As per MoEF&CC notification dated 31.12.2021, for MUNPL the first ash compliance cycle (04 years) starts from 01.04.2022 to 31.03.2026 (since Ash Utilization is ranging between 60% to 80%). According to which MUNPL to comply 100% Ash Utilization by end of FY2025-26 ie 31.03.2026. Monthly ash generation and ash utilization report avenue wise is posted on ASHA portal and CPCB portal every month. The current ash utilization of MUNPL Stage-I for FY 2024-25 is 75.56%. The ash utilization status first ash compliance cycle ie from FY 2022 to 2026 is projected below:																					

Sl.	Item Description	Status as on 31.03.2025			
		Financial Year	Ash Production (LMT)	Total AU (LMT)	Total AU (%)
		FY 2022-23	15.73	9.82	62.39
		FY 2023-24	17.85	12.63	70.78
		FY 2024-25	20.17	15.24	75.56
		FY 25-26 (Projected)	20.17	37.00	183.40
		Total (In first compliance cycle of 4yrs)	73.93	74.69	101.03
		Monthly report of ash utilization shall be submitted to this office and statutory authority as per requirement & direction from time to time.			
xvii	Fly ash shall be collected in dry form and storage facility (silos) shall be provided. Unutilized fly ash shall be disposed off in the ash pond in the form of slurry form. Mercury and other heavy metals (As, Hg, Cr, Pb etc.) will be monitored in the bottom ash as also in the effluents emanating from the existing ash pond. No ash shall be disposed off in low lying area.	DAES with 04 nos. dry fly ash silo each of 1200MT capacity and 3 nos. HCSD silos each of 535MT capacity are in operation. Heavy metal analysis is being monitored in bottom ash. There is no discharge from ash pond and also ash is not disposed in low lying areas. Heavy metal analysis of ash decanted water is attached as Annexure 2. Being Complied.			
xviii	Ash pond shall be lined with HDP/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.	Bentonite layer has been applied in Bottom ash lagoons and HCSD slurry layering in other lagoons. Being Complied.			
xix	Disposal of Bottom Ash in abandoned mines (if proposed to be undertaken) it shall be ensured that the bottom and sides of the mined-out areas are adequately lined with clay before Bottom Ash is filled up. The project proponent shall inform the State Pollution Control Board well in advance	Currently not applicable for MUNPL. In case of disposal of bottom ash in abandoned mines in future, it shall be ensured and complied.			

Sl.	Item Description	Status as on 31.03.2025
	before undertaking the activity.	
xx	Green Belt consisting of 3 tiers of plantations of native species around plant and at least 100 m width shall be raised. Wherever 100 width is not possible a 50 m shall be raised and adequate justification shall be submitted to the Ministry. Tree density shall not less than 2500 per ha with survival rate not less than 75%.	Greenbelt is developed in an area 163.1 Ha and planted more than 3,73,750 saplings with survival greater than 81%. Plantation is being carried out on continual basis.
xxi	The project proponent shall also adequately contribute in the development of the neighboring villages. Special package with implementation schedule for potable drinking water supply in the nearby villages and schools shall be undertaken in a time bound manner.	Being Complied. MUNPL, Meja is constantly engaged in providing safe drinking water facilities to the villages in the vicinity. Some of the activities under this domain are mentioned below: • More than 130 hand pumps have been installed in project affected villages. • Drinking water distribution system through pipe along with storage facility in overhead tank in 2 self-resettlement colonies in villages, New Basti Salaiya kala & New Basti Jhariyahi, has been made operational. • Drinking water has been supplied from time to time through tankers to all project affected villages and some nearby villages to provide relief during summer season. • Construction of one Blast Well completed in village Salaiya kala. In addition, Water Filters were distributed to Home Stead Oustees (HSOs) of village Salaiya Kala and other affected villages. • Solar powered RO water systems have been installed in 09 primary schools of the associated villages to ensure clean drinking water facility

Sl.	Item Description	Status as on 31.03.2025
		to the young students. Solar Powered Mini water scheme has been implemented at the neighboring villages. Out of the total 18 allocated units, 18 units have been made operational till date. 01 unit is expected to benefit around 25-30 families.
xxii	Further an amount of Rs 37.10 Crores shall be earmarked as one time capital cost for CSR programme as committed by the project's proponent. Subsequently a recurring expenditure of Rs 7.40 Crores per annum shall be earmarked as recurring expenditure for CSR activities. Details of the activities to be undertaken shall be submitted within six months along with roadmap for implementation.	For CD works, as per RAP I (main plant) and RAP II (supplementary RAP), Rs. 3672 lakhs were approved and till 31.03.2025, Rs. 3532.77 lakhs have been utilized for the various Community Developmental works at the associated villages. For FY 2024-25, proposals for need based CD activities have been approved for the balance amount of Rs. 148.23 lakhs (out of 3672 lakhs) and are in progress. Recurring expenditure condition, amended in amendment dated 08.08.2019 and mentioned in additional condition no. vii mentioned below in this compliance report. Being Complied.
xxiii	While identifying CSR activities it shall be ensured that need based assessment for the nearby Villages within study area shall be conducted to study economic measures with action plan which can help in upliftment of poor section of society. Income generating 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 programmes. Company shall provide separate budget for community development activities and income generating programmes. Vocational training programmes for possible self-employment and jobs shall be imparted to identify villagers free of cost.	• Need based assessment survey along with Social Economic survey and Socio Impact Evaluation Study were undertaken in the year 2022. Based on the reports submitted by the external agency, CD/CSR plans are devised. • Under the approved CD Budget as well as annual CSR budget, CSR/CD activities had been undertaken focusing on infrastructure building, increasing employability & to overall uplift the standard of living of the villages in the vicinity. Some of the activities undertaken under CD/CSR phase are as follows:

Sl.	Item Description	Status as on 31.03.2025
		1. Boundary wall constructed at Primary School, Mai Kala, Salaiya Khurd and Jhariyahi. 2. Tools/ Equipment/ Furniture worth 30 Lakhs provided to Govt ITI, Naini. Electrification work of self-resettlement areas of Jhariyahi New Basti and Salaiya Kala New Basti facilitated. One 100KVA and one 20KVA DG sets provided at Govt ITI, Naini. Internal/ approach roads constructed at Govt. ITI, Naini and World Bank ITI, Katra. 5 classrooms and 5 workshops have been constructed at Govt. ITI, Naini. 3. 05 numbers of community centers have been constructed in Salaiya Khurd, Salaiya Kala, Jhariyahi, Kohdar and Bijaura villages. 4. approximately 15 km construction of approach/ internal roads is being undertaken in project surrounding villages. 5. Distribution of saplings of fruit bearing trees is being carried out regularly. To improve the water retention in villages, three nos. of check dams have been constructed. 6. 06 nos. of rain- sheds have been constructed. 02 nos. of ponds have been restored and deepened. 7. Through MOU with the state Govt. of UP, 20 % seats in 8 trades have been reserved for PAPs/ their wards at Govt. ITI, Naini since session 2010-11. Income generating activities like deployment of vehicle with the company on hire basis have been provided to PAPs.

Sl.	Item Description	Status as on 31.03.2025
		8. Welfare activities like Medical Camps, Cataract operation camps, Veterinary camps, Distribution of relief material to people affected by natural calamities like flood, fire etc. are being taken up regularly. 150 solar lighting provided in nearby and associated villages. 9. Skill development trainings for youth (males and females) of the nearby villages have been conducted on: a. Mobile repairing, b. Assembly of CFL lights, c. Training on LED lighting & solar electrical system d. Plumbing, e. Repairing of automobiles (two-wheelers) f. Basic Beauty & Hairdressing, g. Jute bag designing, h. Tailoring and stitching, i. Machine operator plastic processing training to 25 youths with 100% placement. 10. Distribution of Artificial limbs to the 08 nos. for specially abled individuals of the associated villages of MUNPL. Distribution of Aids and assistive devices like hearing aids, walking sticks, crutches to 18 nos. needy individuals of the associated villages. 11. Conducted 'GIRL EMPOWERMENT MISSION-RESIDENTIAL WORKSHOP-2022, 2023 & 2024 & 2025 for total 157 girls studying in the primary schools of the associated villages. This 04 weeks Residential Workshop is conducted annually and focuses on overall personality development/ empowerment of the girls. 12. Distributed 500 benches in Rural schools. 13. Implementation of 2 smart classes

Sl.	Item Description	Status as on 31.03.2025
		in rural schools. 14.Chain fencing of Goushalas in 2 locations. Being Complied

xxiv	It shall be ensured that 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.	A separate department (R&R) headed by an executive at the level of SM is monitoring R&R works. R&R works are further reviewed and monitored at different levels of Management, periodically. First Socio Economic Survey (SES study was conducted in 2009. First social audit of surrounding villages was completed, and report already submitted. Second social audit by GB Pant Social Science Institute, Jhunsi (GBPSSI) for the period Nov-12 to Mar-14 has also been completed and final report has been submitted. Third Social Audit for activities undertaken during April 2014-Mar 2016 has been completed and final report has been submitted by GBPSSI. Fourth social audit by GB Pant Social Science Institute, Jhunsi (GBPSSI) for the period Mar-14 to April – 2025 has also been completed and draft report has been submitted by GBPSSI. Social Impact Evaluation Study (SIES) has been undertaken by M/s GBPSSI, Jhunsi for the period of July-19 to Mar-21 & report has been submitted. Being Complied
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General Conditions:

Sl.	Item Description	Status as on 31.03.2025
i	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	Water Reservoir is spread over an area of 75Ha and has a rainwater harvesting potential of 6865Lakh.Ltrs/annum. In addition, there are two Rainwater water harvesting pit and two rainwater

	technology/ design within a period of three months from the date of this clearance and details shall be furnished.	recharge pits. NIH Roorkee carried out study and recommended construction of 4 nos. of pond. Work is under progress. Being Complied
ii	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.	Garland of water sprinklers is installed to quench spontaneous fires in coal yard especially during summer season. Being Complied.
iii	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.	MUNPL-MEJA has obtained PESO license vide letter no: P/HQ/UP/15/5031 (P394555) dated 07.03.20217 and P/HQ/UP/15/5032 (P382629) dated 15.05.20217 is renewed upto 31.12.2034. Disaster management plan has been prepared. Being Complied.
iv	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.	Groundwater level study report is attached as Annexure 3 . Analysis of heavy metals in groundwater is enclosed as Annexure 1 . Being Complied.
v	Monitoring surface water quantity and quality 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 the ground water shall be undertaken.	Regular monitoring of surface water is being conducted by CSIR-IITR and its reports are being submitted to regulatory authorities regularly. Being Complied.

vi	First Aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.	MUNPL Meja has a dedicated inhouse hospital with 15 beds. First aid centre running in plant. Being Complied.
vii	Noise levels emanating from turbines shall be so controlled such that the noise in the work zone shall be limited to 75 dB. For people working in the high noise area, requisite personal protective equipment like earplugs/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.	Workers engaged in noisy areas are provided with earplugs/earmuffs. For such workers, periodical audiometric examination is carried. Being Complied.
viii	Regular monitoring of ambient air ground level concentration of SO ₂ , NO _x , PM _{2.5} & PM ₁₀ and Hg shall be carried out in the impact zone and records maintained. If at any stage these levels are found to exceed the prescribed limits, necessary control measures shall be provided immediately. The location of the monitoring stations and frequency of monitoring shall be decided in consultation with SPCB. Periodic reports shall be submitted to the Regional Office of this Ministry. The data shall also be put on the website of the company.	4 Nos. AAQMS stations have been commissioned and online data is being transmitted to CPCB. Third party regular monitoring of ambient air for SO ₂ , NO _x , PM _{2.5} & PM ₁₀ and Hg is being carried out and report is submitted to regulatory authorities regularly. A copy of report is attached as Annexure 4. If at any stage these levels are found to exceed the prescribed limits, necessary control measures like cleaning of roads, water sprinkling along the road and other preventive measures are provided immediately. Being Complied.
ix	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, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	The project is under operation and at this stage the condition is Not Applicable.
x	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	Complied. It was published in United Bharat, Amar Ujala, Dainik Jagran newspaper on 18.1.2011 and Times of India on

	letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the State Pollution Control Board /Committee and may also be seen at Website of the Ministry of Environment and Forests at http://envfor.nic.in .	15.01.2011.
xi	A copy of the clearance letter shall be sent by the proponent to concerned panchayat, Zila parishad/ Municipal Corporation, urban local body and the local NGO if any from whom suggestions/ representations, if any received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.	Complied.
xii	An Environmental Cell shall be created at the project site itself and shall be headed by an officer of appropriate seniority and qualification. It shall be ensured that the head of the Cell shall directly report to the head of the organization	Environment Cell within the project with qualified personnel with laboratory facilities provided. Being Complied.
xiii	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 pollutant levels namely, SPM, RSPM (PM _{2.5} & PM ₁₀), SO ₂ , NO _x (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.	Six monthly compliance reports are submitted to MoEF&CC IRO office-Lucknow and are displayed on company website https://munpl.co.in/environment-management . Real time data of CEMS and CAAQMS is being displayed in LED screen at plant gate. Being complied
xiv	The environment statement for each financial year ending 31st 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	Environmental Statement compliance report are on company website https://munpl.co.in/environment-management . Being Complied.

	Regional Offices of the Ministry by e-mail.							
xv	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 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 and Forests.	Six monthly reports are submitted to MoEF&CC IRO office-Lucknow, Central Pollution Control Board and State Pollution Control Board. The status of compliance of environment clearance condition has been uploaded in company website of https://munpl.co.in/environment-management. Being Complied.						
xvi	Regional Office of the Ministry of Environment & Forests will monitor the implementation of the stipulated conditions. A complete 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 upload the compliance status in their website and update the same from time to time at least six monthly basis. Criteria pollutants levels including NOx (from stack & ambient air) shall be displayed at the main gate of the power plant.	Environment clearance compliance report are being submitted on every six months. The compliance report is being uploaded in website of the company (www.munpl.co.in). Real time data of CEMS and CAAQMS is being displayed near plant gate. Being Complied						
xvii	Separate funds shall be allocated for implementation of environmental protection measures along with item-wise break-up. These cost shall be included as part of the project cost. The funds earmarked for the environment protection measure shall not be diverted for other purposes and year wise expenditure shall be reported to ministry.	During the conceptualization of the project, all Environmental Protection Measures are installed. Description <table border="1"> <tr> <td>Issues Raised</td><td>Action Plan Proposed</td><td>Compliance Status</td></tr> <tr> <td></td><td></td><td></td></tr> </table>	Issues Raised	Action Plan Proposed	Compliance Status			
Issues Raised	Action Plan Proposed	Compliance Status						

		Proper compensation be paid for land acquisition for the project and resettlement of displaced families to be fully ensured. proposed	Compensation for land is decided by State Govt. For displaced families, R&R Plan is being prepared by the project proponent in consultation with State Govt. and representative of the displaced persons. Cost provision as decided by State government	Total R&R package + CD sanctioned is Rs.5181.37 lakhs and Expenditure is Rs. 4831.69 lakhs. Budget utilization for Resettlement Grant is 100% Rs.158.72 lakhs and Rehabilitation Grant is 84.59% (Rs. 1142.53 lakhs). <i>RG is not paid due to family dispute.</i> Utilized percentage of Community Development is 95.96% (Rs.3523.77 of Rs.3672 lakhs) and balance shall be completed in financial year 25-26.
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		Proposal on Greenbelt on 33% of total area to be developed	100 meters wide greenbelt shall be provided all around the main plant area, except switchyard side. In addition, plantation shall be undertaken at all available spaces in plant and Township. Cost Provision: Rs. 2 Crores	The approximate length of the total plant boundary is 10 KM. As per action plan proposed the total greenbelt area all around the plant is 10 Ha (10 KM x 100 meters) and the total number of tree plantation to be carried out considering 2500 saplings per Ha comes to 2,50,000. Till date greenbelt is developed in 163.1 Ha of land and total number of 3,73,750 plantations were carried out. Further plantation shall be carried out continuously in a phased manner. Cost incurred till date: 5 Crores approximate
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		Setting up of high efficiency ESP for control of air pollution as per proposal within a maximum emission of 100 mg per cum of SPM.	High efficiency ESP to control the emission of particulate matter to 100 mg/Nm ³ have already been initiated. The same has been provided. Cost provision: Rs.220.9 Crore.	Electrostatic Precipitator (ESP's) have been provided and made operational to control the PM emission within 30mg/Nm ³ Cost incurred: Rs.233.23 Crore
		construction of 275 meter high chimney to control gaseous emissions in the project	275 meter high chimney has already been envisaged. The same shall be provided. Cost provision: Rs.60.4 Crore	275 meters chimney has been installed and is in service. Total expenditure made in the installation of chimney is Rs.100 Crores FGD chimney is also installed. Total cost incurred is Rs.70 Crore
		Provision of adequate sprinklers at the ash pond to control fugitive emissions and water generated from ash	Ash Pond shall be provided with the water cover and the entire area to prevent emission of fugitive dust. The ash	Lagoon I, II, III- are constructed for disposable of ash generated. Ash dust suppression measures in Lagoon II

		ponds should be reused in ash handling and should not be discharged in Ganga and its tributary rivers.	water shall be recycled. Further used in ash handling within the plant. Cost provision Rs.322.8 Crores	and III are water covered. Water sprinklers of 50 numbers are made available in Lagoon I. In addition to the above measures a portable HDPE pipeline is also available to suppress fugitive dust emissions in ash pond. All lagoons are in operation. Decanted ash water from the lagoon is pumped back to the plant and reuse for ash disposal through a dedicated Ash Water Recirculation System (AWRS) Total cost incurred is Rs. 322 Crores (Rs. 125 Cr for Ash Pond and AWRS, Balance is land cost for Ash Pond.)
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		Effluent Treatment Plant for control of water pollution and Sewage Treatment Plant for domestic wastewater should be set up. Treated water to be used in development of proposed Greenbelt. Facilities for reuse of treated effluent to the extent possible be developed.	Effluent Treatment Plant and Sewage Treatment Plant have been envisaged and the same shall be provided. As far as possible treated water shall be used in development of greenbelt. Cost provision: Rs 10 Crore	Plant effluent are treated in ETP and treated ETP water is reused in the plant process. Sewage effluent is treated in STP and treated STP water is reused for the development of horticulture and green cover areas. Total cost incurred: Rs. 8 Crores
		At present project is in operation with all these protection measures. For FY2024-25 the recurring expenditure on environment conservation, protection and pollution control measures is Rs. 6012.29 Lakhs. Complied.		
xviii	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.	Shall Comply.		
xix	Full cooperation shall 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	Shall always be complied with.		

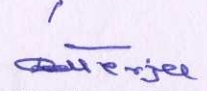
	environmental status.	
Additional EC conditions added in EC amendments:		
	EC conditions added vide letter dt 21.07.2017	
xxv	Air and water quality equipment shall be set up for periodic environment monitoring	There are 4 Ambient air monitoring station and 01 Effluent quality stations are installed and online data are being transmitted to pollution control board. Being Complied.
xxvi	Global Positioning System GPS positioning system to be installed on all the truck carrying coal	Presently coal is being transported through railway rakes. At-this moment, this condition is Not Applicable.
xxvii	MOEF&CC notification S.O. 3305(E) dated 7.12.2015 and subsequent notification issued time to time shall be implemented with respect to specific water consumption zero liquid discharge and emission standards.	Electrostatic precipitators (ESP) have been provided and made operational. PM emission is maintained within 30 mg/Nm ³ . MEJA Stage-I, erection & commissioning works of both units of Flue Gas Desulphurization (FGD) are completed. Both these utilities are kept in regular services from 28.02.2025. Low NOx burner are installed and in operation. Specific water consumption for FY 24-25 is 2.56 (Std. 3.0 m ³ /KwHr). All effluents are treated & recycled for further reuse. There is no discharge from plant premises except during monsoon period. Being Complied.
xxviii	Trucks shall be covered with tarpaulin and properly stamped to ensure that tarpaulin is property tied with help of rope and truck is fully covered so that there is no slippage of coal and/or emission of dust during transportation.	Presently coal is being transported through railway rakes. At-this moment, this condition is Not Applicable.
xxix	Water sprinkling to be carried through out the route for control of fugitive dust emissions.	Presently coal is being transported through railway rakes. At-this moment, this condition is Not Applicable.
xxx	Railway siding shall be constructed before the expiry of validity of EC that is before 09.01.2018	Complied. Amendment in this EC condition was granted vide 21.07.2017 and further extended in 24.09.2018 till 31.03.2019. Railway side was completed within the timelines provided.

		Being Complied.
xxxi	Treated sewage water shall be used if there are any sewage treatment plants located within 50-kilometre distance from this project	In Naini there are 2 STP's (42MLD & 80MLD) which are located within 50 km radius of Meja TPP. As per preliminary study conducted for use of treated sewage water of Naini STP in Meja TPS, Ministry of Power in the office memorandum dated 10.01.2023 recommended that "Meja TPS may be exempted from linking with the STP" based on the fact that Naini STP water would be used in Bara TPS which is located closer to Naini STP than Meja and further Meja TPS is located across the river from Naini STP. Whereas Bara TPS and Naini STP are on same side of the River. The copy of Office Memorandum of meeting chaired by Secretary (Power) is attached as Annexure 5. Exempted by Ministry of Power.
EC Amendment dated 08.01.2018		
i.	Once the units will achieve COD the revised emission standards as per ministry is notification date 07.12.2015 and subsequent amendment notified from time to time shall be complied in case plant is ready for commissioning and not meeting revision revised emission norms operation shall be stopped.	Electrostatic precipitators (ESP) have been provided and made operational. PM emission is maintained within 30 Mg/NM³. MEJA Stage-I, erection & commissioning works of both units of Flue Gas Desulphurization (FGD) are completed. Both these utilities are put in regular services. Low NOx burner are installed and in use.
EC Amendment dated 28.03.2019		
i.	Regular sweeping and water sprinkling is to be carried out by the project proponent. The cost of these activities shall be borne by the project proponent.	Presently coal is being transported through railway rakes. At-this moment, this condition is Not Applicable.

ii.	Ambient air quality and Noise monitoring at project site Rampur and Naini villages is to be carried out once in a month to assess the incremental impacts due to transportation, if any.	Presently coal is being transported through railway rakes. At-this moment, this condition is Not Applicable.
iii.	The trucks used for transportation of coal shall be in compliance with the latest vehicular emission norms.	Coal are being transported through railway rakes. At-this moment, this condition is not applicable.
	EC Amendment dated 08.08.2019	
i	The extension of environment clearance is only for continuing the construction activities of the unit 2. however, the operation of both units shall be started only when new pollution control equipment is installed and made ready to meet the revised emission norms issued vide dated 7.12.2015. Otherwise, an extension from the CPCB shall be obtained and submitted to the Ministry	New pollution control equipment's are installed to meet the revised emission norms. Electrostatic precipitators (ESP) have been provided and made operational. PM emission is maintained within 30 Mg/NM3. MEJA Stage-I, erection & commissioning works of both units of Flue Gas Desulphurization (FGD) are completed. Unit#1 and Unit #2 are kept in regular service. Being Complied.
ii	The average weekly emissions of flue gas for PM SO2 and NOx shall be submitted as a part of the compliance report. Further the mercury emission report shall also be submitted.	Average emission of flue gas is attached as Annexure 6 . Being Complied.
iii.	The progress of the installation of FGD, De-Nox systems along with financial expenditure shall be submitted along with six monthly compliance report.	MEJA Stage-I, erection & commissioning works of both units of Flue Gas Desulphurization (FGD) are completed. Both these utilities are kept in regular services. Total financial expenditure of amount Rs.579Cr made till date for installation of FGD system. Low NOx burner are installed and in use. Being Complied.
iv	Specific condition no. (xii): Bi-flue stack of 275 m height with flue gas velocity not less than 22 meter per second shall be installed and provided with continuous online monitoring equipment for Sox, Nox and PM.	275m height stack is provided with continuous online monitoring for SO₂, NOx, PM. Exit velocity of flue gas shall be maintained more than 22m/sec. Being Complied.

v	While commissioning the proposed unit the compliance of revised emission norms issued wide notification dated 07.12.2015 shall be achieved along with specific water consumption as per notification dated 28.06.2018. The FGD system and NOx control measures such as SCR/SCNR/De-Nox burner shall be installed to achieve the revised emission norms.	Electrostatic Precipitators (ESP) have been provided and made operational. PM emission is maintained within 30 mg/Nm³. MEJA Stage-I, erection & commissioning works of both units of Flue Gas Desulphurization (FGD) are completed. Both these utilities are put in regular services. Low Nox burner are installed and in use. Specific water consumption for FY 24-25 is 2.75 m³/KwHr (Std. 3.0 m³/KwHr). All effluents are treated & recycled for further reuse. Being Complied.
Vi	As per 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 source from surface water bodies. The detail of sewage treatment plants located within 50 kilometres along with the capacities shall be submitted.	As mentioned in General Condition XXXI. In Naini there are 2 STP's (42MLD & 80MLD) which are located within 50 km radius of Meja TPP. As per preliminary study conducted for use of treated sewage water of Naini STP in Meja TPS, Ministry of Power in the office memorandum dated 10.01.2023 recommended that "Meja TPS may be exempted from linking with the STP" based on the fact that Naini STP water would be used in Bara TPS which is located closer to Naini STP than Meja and further Meja TPS is located across the river from Naini STP. Whereas Bara TPS and Naini STP are on same side of the River. Exempted by Ministry of Power.
vii	With respect to the capital expenditure on CER/CSR activities as one time amount should be in-line with the ministry circular dated 01.05 2018 or the amount stipulated in	Under CSR-Community Development (CD), 95.96% budget is utilized. As per RAP I (Main Plant) and RAP II (supplementary RAP), Rs. 36.72 Crores

	the EC whichever is higher project proponent has to submit the revised/latest project cost, calculate the one-time CER expenditure based on the revised project cost compare with the stipulated in the EC and adopt the highest amount. The detail in this regard along with an undertaking to adopt the highest amount shall be submitted within three months.	were approved and till 31.03.2025, Rs. 35.23 Crores have been utilized for the various Community Developmental works in the associated villages. Proposals worth for the balance amount of Rs. 1.48 Crores (out of Rs.36.72 Crores) are already approved and work is under progress. Being Complied.												
viii	with respect to the recurring CSR expenditure any condition stipulating the recurring amount per annum in the EC may be made redundant. The recurring amount shall be in line with section 135 of companies act, 2013 which states that companies shall spend (in every financial year) at least 2% of the average net profit of the company made during the 3 immediately preceding financial years, in pursuance of its corporate social responsibility policy	In compliance with Section 135 of Companies Act, 2013, the total amount allocated for CSR for FY 2024-25 is Rs. 4.94 crores (2% of the average net profit of 03 preceding FYs). Implementation of the activities planned is under progress. Being Complied.												
ix	The details of average net profit made during the last 3 years to be submitted including the amount earmarked for CSR activities at least 2 %) from this project and the detail of various activities undertaken along with expenditure, extent of village covered, benefitted population, the proximity to the project area etc. as a part of EC compliance report (October to March on 1 st June and April to September on 1 st Dec) on the Ministry and its regional office.	<table><tr><th>Year</th><th>Net profit (In Lakh)</th></tr><tr><td>2021-22</td><td>27901.46</td></tr><tr><td>2022-23</td><td>9181.18</td></tr><tr><td>2023-24</td><td>32400.00</td></tr><tr><td>2024-25</td><td>126241.55</td></tr><tr><td>CSR Budget (2% avg of the 03 FY)</td><td>494</td></tr></table> Details of the CSR activities- Attached as Annexure 7 . Being Complied.	Year	Net profit (In Lakh)	2021-22	27901.46	2022-23	9181.18	2023-24	32400.00	2024-25	126241.55	CSR Budget (2% avg of the 03 FY)	494
Year	Net profit (In Lakh)													
2021-22	27901.46													
2022-23	9181.18													
2023-24	32400.00													
2024-25	126241.55													
CSR Budget (2% avg of the 03 FY)	494													


 Avijit Chatterjee 25/06/25
 CGM/TS.
 CGM (Technical Services)

ANNEXURES

Annexure - 1

CSIR-Indian Institute of Toxicology Research
LUCKNOW-226 001

ANALYTICAL REPORT ON SURFACE WATER QUALITY

Name of Industry : Meja Thermal Power Project, Meja, Prayagraj
Study Code No. : SSP-481
Date of Sample Collection : 21th October, 2024 to 26th October, 2024
Method of Analysis : As per APHA/AWWA; 22rd Edition
Date of sample received : 26-10-2024
Date of completion of testing : 22-11-2024
Season & Weather : Winter & Clear Day
Test Results:

Physico-chemical Analysis

Sl.No.	Parameters	Unit	SW-1	SW-2	SW-3
1.	pH	-	6.9	7.2	7.4
2.	Conductivity	µmhos/cm	358	350	488
3.	Temperature	°C	29	31	30
4.	TSS	mg/l	68	82	89
5.	TDS	mg/l	136	152	241
6.	Dissolve Phosphate	mg/l	0.24	0.21	0.25
7.	Oil & Grease	mg/l	1.8	1.2	2.0
8.	D. O.	mg/l	5.2	5.8	6.2
9.	BOD at 20°C	mg/l	3.2	3.8	4.6
10.	COD	mg/l	24	32	28
11.	Total hardness	mg/l	76	78	87

Metal Concentration

Sl. No.	Parameters	Unit	SW-1	SW-2	SW-3	Detection Limit
1.	Iron as Fe	mg/l	0.343	0.519	0.408	0.020
2.	Zinc as Zn	mg/l	0.059	0.094	0.128	0.025
3.	Copper as Cu	mg/l	<0.025	<0.025	<0.025	0.025
4.	Lead as Pb	mg/l	<0.025	<0.025	<0.025	0.025
5.	Total Chromium as Cr	mg/l	<0.025	<0.025	<0.025	0.025
6.	Cadmium as Cd	mg/l	<0.020	<0.020	<0.020	0.020
7.	Arsenic as As	mg/l	<0.005	<0.005	<0.005	0.005
8.	Mercury as Hg	mg/l	<0.001	<0.001	<0.001	0.001

SW-1 → Tons River (Upstream), SW-2 → Tons River (Downstream)

SW-3 → Ganga River (Intake Point)

ANALYTICAL REPORT ON SURFACE WATER QUALITY

Name of Industry : Meja Thermal Power Project, Meja, Prayagraj
Study Code No. : SSP-481
Date of Sample Collection : 21th October, 2024 to 26th October, 2024
Method of Analysis : As per APHA/AWWA; 22nd Edition
Date of sample received : 26-10-2024
Date of completion of testing : 22-11-2024
Season & Weather : Winter & Clear Day

Test Results:

Physico-chemical Analysis

Sl.No.	Parameters	Unit	SW-4	SW-5	SW-6
1.	pH	-	7.5	7.2	7.5
2.	Conductivity	µmhos/cm	311	277	336
3.	Temperature	°C	29	30	28
4.	TSS	mg/l	67	59	83
5.	TDS	mg/l	149	178	285
6.	Dissolve Phosphate	mg/l	0.12	0.18	0.10
7.	Oil & Grease	mg/l	1.2	1.7	1.4
8.	D. O.	mg/l	6.0	5.7	4.9
9.	BOD at 20°C	mg/l	7.1	6.2	4.2
10.	COD	mg/l	28	24	36
11.	Total hardness	mg/l	46	65	113

Metal Concentration

Sl. No.	Parameters	Unit	SW-4	SW-5	SW-6	Detection Limit
1.	Iron as Fe	mg/l	0.402	0.347	0.126	0.020
2.	Zinc as Zn	mg/l	0.061	0.048	0.038	0.025
3.	Copper as Cu	mg/l	<0.025	<0.025	<0.025	0.025
4.	Lead as Pb	mg/l	<0.025	<0.025	<0.025	0.025
5.	Total Chromium as Cr	mg/l	<0.025	<0.025	<0.025	0.025
6.	Cadmium as Cd	mg/l	<0.020	<0.020	<0.020	0.020
7.	Arsenic as As	mg/l	<0.005	<0.005	<0.005	0.005
8.	Mercury as Hg	mg/l	<0.001	<0.001	<0.001	0.001

SW-4 → Reservoir-1, SW-5 → Reservoir-2, SW-6 → Natural Drain (Near Ash Dyke)

ANALYTICAL REPORT ON SURFACE WATER QUALITY

Name of Industry : Meja Thermal Power Project, Meja, Prayagraj
Study Code No. : SSP-481
Date of Sample Collection : 14th January, 2025 to 15th January, 2025
Method of Analysis : As per APHA/AWWA; 22rd Edition
Date of sample received : 16-01-2025
Date of completion of testing : 04-02-2025
Season & Weather : Winter and cloudy

Test Results:

Physico-chemical Analysis

Sl.No.	Parameters	Unit	SW-1	SW-2	SW-3
1.	pH	-	6.9	6.8	6.8
2.	Conductivity	µmhos/cm	262	292	545
3.	Temperature	°C	18	18	16
4.	TSS	mg/l	38	42	96
5.	TDS	mg/l	140	155	294
6.	Dissolve Phosphate	mg/l	0.45	0.72	0.89
7.	Oil & Grease	mg/l	2.4	2.8	2.2
8.	D. O.	mg/l	8.1	7.3	6.0
9.	BOD at 20°C	mg/l	3.7	1.8	4.2
10.	COD	mg/l	35	42	51
11.	Total hardness	mg/l	84	82	86

Metal Concentration

Sl. No.	Parameters	Unit	SW-1	SW-2	SW-3	Detection Limit
1.	Iron as Fe	mg/l	0.295	0.485	0.545	0.020
2.	Zinc as Zn	mg/l	0.085	0.300	0.031	0.025
3.	Copper as Cu	mg/l	<0.025	<0.025	0.043	0.025
4.	Lead as Pb	mg/l	<0.025	<0.025	<0.025	0.025
5.	Total Chromium as Cr	mg/l	0.042	0.040	0.037	0.025
6.	Cadmium as Cd	mg/l	<0.020	<0.020	<0.020	0.020
7.	Arsenic as As	mg/l	<0.005	<0.005	<0.005	0.005
8.	Mercury as Hg	mg/l	<0.001	<0.001	<0.001	0.001

SW-1 → Tons River (Upstream), SW-2 → Tons River (Downstream), SW-3 → Ganga River (Intake Point)

ANALYTICAL REPORT ON SURFACE WATER QUALITY

Name of Industry : Meja Thermal Power Project, Meja, Prayagraj
Study Code No. : SSP-481
Date of Sample Collection : 14th January, 2025 to 15th January, 2025
Method of Analysis : As per APHA/AWWA; 22rd Edition
Date of sample received : 16-01-2025
Date of completion of testing : 04-02-2025
Season & Weather : Winter and cloudy
Test Results:

Physico-chemical Analysis

Sl.No.	Parameters	Unit	SW-4	SW-5	SW-6
1.	pH	-	6.7	6.9	6.8
2.	Conductivity	µmhos/cm	403	435	440
3.	Temperature	°C	17.5	17.5	19
4.	TSS	mg/l	58	50	65
5.	TDS	mg/l	268	260	352
6.	Dissolve Phosphate	mg/l	0.61	0.51	0.43
7.	Oil & Grease	mg/l	1.8	1.8	2.2
8.	D. O.	mg/l	5.0	4.7	4.2
9.	BOD at 20°C	mg/l	3.9	3.5	3.0
10.	COD	mg/l	23	35	30
11.	Total hardness	mg/l	180	194	228

Metal Concentration

Sl. No.	Parameters	Unit	SW-4	SW-5	SW-6	Detection Limit
1.	Iron as Fe	mg/l	0.224	0.268	0.545	0.020
2.	Zinc as Zn	mg/l	0.034	0.030	0.143	0.025
3.	Copper as Cu	mg/l	<0.025	<0.025	<0.025	0.025
4.	Lead as Pb	mg/l	<0.025	<0.025	<0.025	0.025
5.	Total Chromium as Cr	mg/l	0.044	0.041	0.063	0.025
6.	Cadmium as Cd	mg/l	<0.020	<0.020	<0.020	0.020
7.	Arsenic as As	mg/l	<0.005	<0.005	<0.005	0.005
8.	Mercury as Hg	mg/l	<0.001	<0.001	<0.001	0.001

SW-4 → Reservoir-1, SW-5 → Reservoir-2, SW-6 → Natural Drain (Near Ash Dyke)

ANALYTICAL REPORT ON GROUND WATER QUALITY

Name of Industry : Meja Thermal Power Project, Meja, Prayagraj
Study Code No. : SSP-481
Date of Sample Collection : 21th October, 2024 to 26th October, 2024
Method of Analysis : As per APHA/AWWA; 22rd Edition
Date of sample received : 26-10-2024
Date of completion of testing : 22-11-2024
Season & Weather : Winter & Clear Day

Test Results:

Physico-chemical Analysis

Sl.No.	Parameters	Unit	GW-1	GW-2	GW-3	GW-4
1.	pH	-	7.1	7.6	7.9	7.3
2.	Conductivity	µmhos/cm	812	997	567	791
3.	Temperature	°C	28	28	29	30
4.	TSS	mg/l	26	30	23	32
5.	TDS	mg/l	457	532	571	723
6.	Dissolve Phosphate	mg/l	0.04	0.09	0.07	0.06
7.	D. O.	mg/l	1.8	1.7	1.5	2.0
8.	BOD at 20°C	mg/l	1.2	1.0	1.4	1.8
9.	COD	mg/l	9.2	8.0	17	16
10.	Total hardness	mg/l	162	136	148	116
11.	Total Coliform MPN	Coliform/ 100 ml	<1.8	<1.8	<1.8	<1.8

Metal Concentration

Sl. No.	Parameters	Unit	GW-1	GW-2	GW-3	GW-4	Detection Limit
1.	Iron as Fe	mg/l	0.251	0.173	0.281	0.194	0.020
2.	Zinc as Zn	mg/l	0.057	0.081	0.106	0.068	0.025
3.	Copper as Cu	mg/l	<0.025	<0.025	<0.025	<0.025	0.025
4.	Lead as Pb	mg/l	<0.025	<0.025	<0.025	<0.025	0.025
5.	Total Chromium as Cr	mg/l	<0.025	<0.025	<0.025	<0.025	0.025
6.	Cadmium as Cd	mg/l	<0.020	<0.020	<0.020	<0.020	0.020
7.	Arsenic as As	mg/l	<0.005	<0.005	<0.005	<0.005	0.005
8.	Mercury as Hg	mg/l	<0.001	<0.001	<0.001	<0.001	0.001

GW-1→Kohdar Village, GW-2→Sonbarsi Village, GW-3→Maikalan Village
GW-4→Esauta Village

ANALYTICAL REPORT ON GROUND WATER QUALITY

Name of Industry : Meja Thermal Power Project, Meja, Prayagraj
Study Code No. : SSP-481
Date of Sample Collection : 21th October, 2024 to 26th October, 2024
Method of Analysis : As per APHA/AWWA; 22rd Edition
Date of sample received : 26-10-2024
Date of completion of testing : 22-11-2024
Season & Weather : Winter & Clear Day

Test Results:

Physico-chemical Analysis

Sl.No.	Parameters	Unit	GW-5	GW-6	GW-7	GW-8
1.	pH	-	7.6	8.0	7.3	6.9
2.	Conductivity	µmhos/cm	277	684	479	593
3.	Temperature	°C	27	30	31	29
4.	TSS	mg/l	19	32	22	26
5.	TDS	mg/l	146	363	327	291
6.	Dissolve Phosphate	mg/l	0.06	0.10	0.07	0.11
7.	D. O.	mg/l	2.2	1.4	1.8	2.4
8.	BOD at 20°C	mg/l	1.6	1.2	1.0	1.8
9.	COD	mg/l	8.4	12	10	24
10.	Total hardness	mg/l	89	124	138	108
11.	Total Coliform MPN	Coliform/ 100 ml	<1.8	<1.8	<1.8	<1.8

Metal Concentration

Sl. No.	Parameters	Unit	GW-5	GW-6	GW-7	GW-8	Detection Limit
1.	Iron as Fe	mg/l	0.641	1.937	1.068	0.928	0.020
2.	Zinc as Zn	mg/l	<0.025	1.774	0.725	0.410	0.025
3.	Copper as Cu	mg/l	<0.025	<0.025	<0.025	<0.025	0.025
4.	Lead as Pb	mg/l	<0.025	<0.025	<0.025	<0.025	0.025
5.	Total Chromium as Cr	mg/l	<0.025	<0.025	<0.025	<0.025	0.025
6.	Cadmium as Cd	mg/l	<0.020	<0.020	<0.020	<0.020	0.020
7.	Arsenic as As	mg/l	<0.005	<0.005	<0.005	<0.005	0.005
8.	Mercury as Hg	mg/l	<0.001	<0.001	<0.001	<0.001	0.001

GW-5→Township, GW-6→Near Ash Dyke-I, GW-7→ Near Ash Dyke-II
GW-8→ Near Ash Dyke-III

ANALYTICAL REPORT ON GROUND WATER QUALITY

Name of Industry : Meja Thermal Power Project, Meja, Prayagraj
Study Code No. : SSP-481
Date of Sample Collection : 14th January, 2025 to 15th January, 2025
Method of Analysis : As per APHA/AWWA; 22rd Edition
Date of sample received : 16-01-2025
Date of completion of testing : 04-02-2025
Season & Weather : Winter and cloudy
Test Results:

Physico-chemical Analysis

Sl.No.	Parameters	Unit	GW-1	GW-2	GW-3	GW-4
1.	pH	-	6.8	6.8	6.9	6.9
2.	Conductivity	µmhos/cm	968	992	886	953
3.	Temperature	°C	18	29	27	28
4.	TSS	mg/l	12	20	23	18
5.	TDS	mg/l	474	500	483	468
6.	Dissolve Phosphate	mg/l	0.03	0.07	0.09	0.04
7.	D. O.	mg/l	1.4	1.8	2.0	1.6
8.	BOD at 20°C	mg/l	1.2	1.4	1.7	1.5
9.	COD	mg/l	14	12	18	16
10.	Total hardness	mg/l	240	280	283	150
11.	Total Coliform MPN	Coliform/ 100 ml	<1.8	<1.8	<1.8	<1.8

Metal Concentration

Sl. No.	Parameters	Unit	GW-1	GW-2	GW-3	GW-4	Detection Limit
1.	Iron as Fe	mg/l	0.524	0.831	1.274	1.479	0.020
2.	Zinc as Zn	mg/l	0.050	0.107	0.401	0.047	0.025
3.	Copper as Cu	mg/l	<0.025	<0.025	<0.025	<0.025	0.025
4.	Lead as Pb	mg/l	<0.025	<0.025	<0.025	<0.025	0.025
5.	Total Chromium as Cr	mg/l	<0.025	<0.025	<0.025	<0.025	0.025
6.	Cadmium as Cd	mg/l	<0.020	<0.020	<0.020	<0.020	0.020
7.	Arsenic as As	mg/l	<0.005	<0.005	<0.005	<0.005	0.005
8.	Mercury as Hg	mg/l	<0.001	<0.001	<0.001	<0.001	0.001

GW-1→Kohdar Village, GW-2→Sonbarsi Village, GW-3→Maikalan Village
GW-4→Esauta Village

ANALYTICAL REPORT ON GROUND WATER QUALITY

Name of Industry : Meja Thermal Power Project, Meja, Prayagraj
Study Code No. : SSP-481
Date of Sample Collection : 14th January, 2025 to 15th January, 2025
Method of Analysis : As per APHA/AWWA; 22rd Edition
Date of sample received : 16-01-2025
Date of completion of testing : 04-02-2025
Season & Weather : Winter and cloudy

Test Results:

Physico-chemical Analysis

Sl.No.	Parameters	Unit	GW-5	GW-6	GW-7	GW-8
1.	pH	-	6.8	7.0	6.9	6.8
2.	Conductivity	µmhos/cm	408	543	553	605
3.	Temperature	°C	27	28	28	29
4.	TSS	mg/l	20	24	19	27
5.	TDS	mg/l	217	303	296	305
6.	Dissolve Phosphate	mg/l	0.06	0.11	0.08	0.10
7.	D. O.	mg/l	1.9	1.5	1.7	1.3
8.	BOD at 20°C	mg/l	1.4	1.3	1.4	1.0
9.	COD	mg/l	25	20	18	21
10.	Total hardness	mg/l	142	246	242	322
11.	Total Coliform MPN	Coliform/ 100 ml	<1.8	<1.8	<1.8	<1.8

Metal Concentration

Sl. No.	Parameters	Unit	GW-5	GW-6	GW-7	GW-8	Detection Limit
1.	Iron as Fe	mg/l	0.315	0.391	0.179	3.557	0.020
2.	Zinc as Zn	mg/l	0.029	0.027	<0.025	0.046	0.025
3.	Copper as Cu	mg/l	<0.025	<0.025	<0.025	<0.025	0.025
4.	Lead as Pb	mg/l	<0.025	0.029	<0.025	<0.025	0.025
5.	Total Chromium as Cr	mg/l	<0.025	<0.025	<0.025	<0.025	0.025
6.	Cadmium as Cd	mg/l	<0.020	<0.020	<0.020	<0.020	0.020
7.	Arsenic as As	mg/l	<0.005	<0.005	<0.005	<0.005	0.005
8.	Mercury as Hg	mg/l	<0.001	<0.001	<0.001	<0.001	0.001

GW-5→Township, GW-6→Near Ash Dyke-I, GW-7→ Near Ash Dyke-II GW-8→ Near Ash Dyke-III

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ANALYTICAL REPORT ON EFFLUENT WATER QUALITY

Name of Industry : Meja Thermal Power Project, Meja, Prayagraj
Study Code No. : SSP-481
Date of Sample Collection : 21st October, 2024 to 26th October, 2024
Method of Analysis : As per APHA/AWWA; 22rd Edition
Date of sample received : 26-10-2024
Date of completion of testing : 22-11-2024
Season & Weather : Winter & Clear Day

Test Results:

Physico-chemical Analysis

Sl.No.	Parameters	Unit	EW-1	EW-2	STP-1
1.	pH	-	7.8	7.9	7.2
2.	Conductivity	µmhos/cm	912	1104	559
3.	Temperature	°C	32	30	31
4.	TSS	mg/l	39	48	31
5.	TDS	mg/l	488	588	297
6.	Dissolve Phosphate	mg/l	*	0.12	0.09
7.	Oil & Grease	mg/l	1.9	1.8	3.6
8.	D. O.	mg/l	4.2	3.9	4.8
9.	BOD at 20°C	mg/l	9.2	8.4	10.6
10.	COD	mg/l	36	32	48

Metal Concentration

Sl. No.	Parameters	Unit	EW-1	EW-2	STP-1	Detection Limit
1.	Iron as Fe	mg/l	1.427	1.517	1.031	0.020
2.	Zinc as Zn	mg/l	0.124	0.087	0.062	0.025
3.	Copper as Cu	mg/l	<0.025	<0.025	<0.025	0.025
4.	Lead as Pb	mg/l	<0.025	<0.025	<0.025	0.025
5.	Total Chromium as Cr	mg/l	<0.025	<0.025	<0.025	0.025
6.	Cadmium as Cd	mg/l	<0.020	<0.020	<0.020	0.020
7.	Arsenic as As	mg/l	<0.005	<0.005	<0.005	0.005
8.	Mercury as Hg	mg/l	<0.001	<0.001	<0.001	0.001

EW-1 → Plant Effluent, EW-2 → Ash Pond Effluent, STP-1 → Township Sewage Water

*Not in work scope

(Dr. Abhay Raj)

Principal Scientist

Environmental Monitoring Laboratory

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ANALYTICAL REPORT ON EFFLUENT WATER QUALITY

Name of Industry : Meja Thermal Power Project, Meja, Prayagraj
Study Code No. : SSP-481
Date of Sample Collection : 14th January, 2025 to 15th January, 2025
Method of Analysis : As per APHA/AWWA; 22rd Edition
Date of sample received : 16-01-2025
Date of completion of testing : 04-02-2025
Season & Weather : Winter and Clear Sky

Test Results:

Physico-chemical Analysis

Sl.No.	Parameters	Unit	EW-1	EW-2	STP
1.	pH	-	6.9	7.0	6.8
2.	Conductivity	µmhos/cm	1240	1350	764
3.	Temperature	°C	26	27	27
4.	TSS	mg/l	53	39	43
5.	TDS	mg/l	535	495	407
6.	Dissolve Phosphate	mg/l	*	0.15	0.22
7.	Oil & Grease	mg/l	6.5	5.6	8.1
8.	D. O.	mg/l	4.2	4.5	5.3
9.	BOD at 20°C	mg/l	18.7	17.8	12.8
10.	COD	mg/l	45	50	52

Metal Concentration

Sl. No.	Parameters	Unit	EW-1	EW-2	STP	Detection Limit
1.	Iron as Fe	mg/l	0.326	0.279	0.120	0.020
2.	Zinc as Zn	mg/l	0.046	0.042	0.037	0.025
3.	Copper as Cu	mg/l	<0.025	<0.025	<0.025	0.025
4.	Lead as Pb	mg/l	<0.025	<0.025	<0.025	0.025
5.	Total Chromium as Cr	mg/l	0.033	0.045	<0.025	0.025
6.	Cadmium as Cd	mg/l	<0.020	<0.020	<0.020	0.020
7.	Arsenic as As	mg/l	<0.005	<0.005	<0.005	0.005
8.	Mercury as Hg	mg/l	<0.001	<0.001	<0.001	0.001

EW-1 → Plant Effluent, EW-2 → Ash Pond Effluent, STP-1 → Township Sewage Water

*Not in work scope

(Dr. Abhay Raj)

Principal Scientist
Environmental Monitoring Laboratory

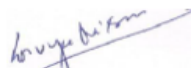
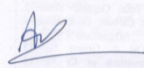
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Annexure - 3

STUDY REPORT
ON
GROUND WATER LEVEL IN 10 KM RADIUS
OF
M/S MEJA URJA NIGAM PRIVATE LIMITED (MUNPL)
AT MEJA TEHSIL IN PRAYAGRAJ DISTRICT, UTTAR
PRADESH
(PRE- MONSOON 2025)



Duration of Monitoring	18-19, Jan 2025	
Monitoring Done By:	Mr. Asheesh & Mr. Umakant	
Report Prepared By :	Dr. Divya Misra Managing Director	
	Dr. Anant Prasad Dubey Vice President (Lab)	



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Table of Content:

	Particular	Page No
1.0	Introduction	3-4
2.0	Objective of Work	4
3.0	Scope of Study	5
4.0	Site Selection	5-7
5.0	Period of Study	7
6.0	Methodology of Water Level Monitoring	7
7.0	Monitoring Data	9-14
8.0	Results & Discussion	14
9.0	References	15
10.0	Photographs Of Ground Water Level Monitoring	16-30
List of Figures		
Fig 1:	Cross-section of a typical groundwater flow system	4
Fig 2:	Flow Chart of Scope of Study	5
Fig 3:	Google Map Showing Monitoring location in 10 Km radius of MUNPL	8
Fig 4:	Monitoring of Water level in the well using Ruler Tape Piezometer	9
List of Tables		
Table1:	Monitoring Data	10-11
Table2:	Village wise Sampling Location and Status of Ground water Level	12
List of Graphs		
1(a):	Graphical Presentation Ground Water Level at different Monitored Locations	13
1(b):	Graphical Presentation Ground Water Level at different Monitored Locations	13
2(a):	Village Wise Comparative Status of Ground Water Level	14
2(b):	Village Wise Comparative Status of Ground	14

1.0 INTRODUCTION:

Groundwater on account of its universal availability, dependability and low capital cost, is the major source of water to meet the requirement of various sector in India. However, with a rapid growth of population and all-round development, there is incessant pressure on the ground water withdrawal resulting in compulsive awakening in terms of both the quality and quantity. Ground water has an important role in meeting the water requirements of agriculture, industrial and domestic sectors in the State. About 78% percent of irrigation requirements in the Uttar Pradesh state are being met from ground water resources. If the present trend of the increasing demand remains incontrollable, the resource may become as strategic as are the minerals resources. Though in contrast to this, the groundwater resource as a part of hydrologic cycle is replenish able.

The State of Uttar Pradesh is covered with rich fertile soil and underlain by a large thickness of alluvium making it one of the richest ground water repositories of the world. The State being the most populous in the country with a population density of 649 persons per sq. km and a high rate of population growth (26%), its demand for water is soaring. Also due to industrialization, urbanization and modern farming practices, its quality is also at stake. To meet this high irrigational requirement, water resources are being increasingly developed. Ground water contributes to about 71% of the irrigation needs of the State. The indiscriminate development of ground water has resulted in depletion of groundwater storage and lowering of water levels in certain areas on one hand. On other side, the surface water canals in areas having shallow water level has resulted in water logging and soil salinization.

Measurement of periodic ground water level is the primary step to understand the variation over time, hydrologic stresses on recharge, discharge and storage, to develop groundwater models and to suggest the management practices (Harun and Kamaruddin 2016). Usually, long term data are necessary to systematically assess the hydrological condition of the aquifers. The importance of ground water level monitoring has been appreciated, and several studies have performed in this direction. Ground water level can be measured from the selected wells in the monitoring network using conventional measurements tapes, electronic water level indicators, air line pressure methods, acoustic method and automatic recording methods.

Increased uses of geographical information system in the water resources managements are found to be very effective, especially in the spatial data interpretation and visualization.

The aim of this study is to understand the ground water level fluctuation surrounding the MUNPL MEJA Power Plant. The seasonal variation ground water level fluctuation will be carried in future for critically analysis. This is a preliminary study of this kind and will be useful for ground water management in the future.

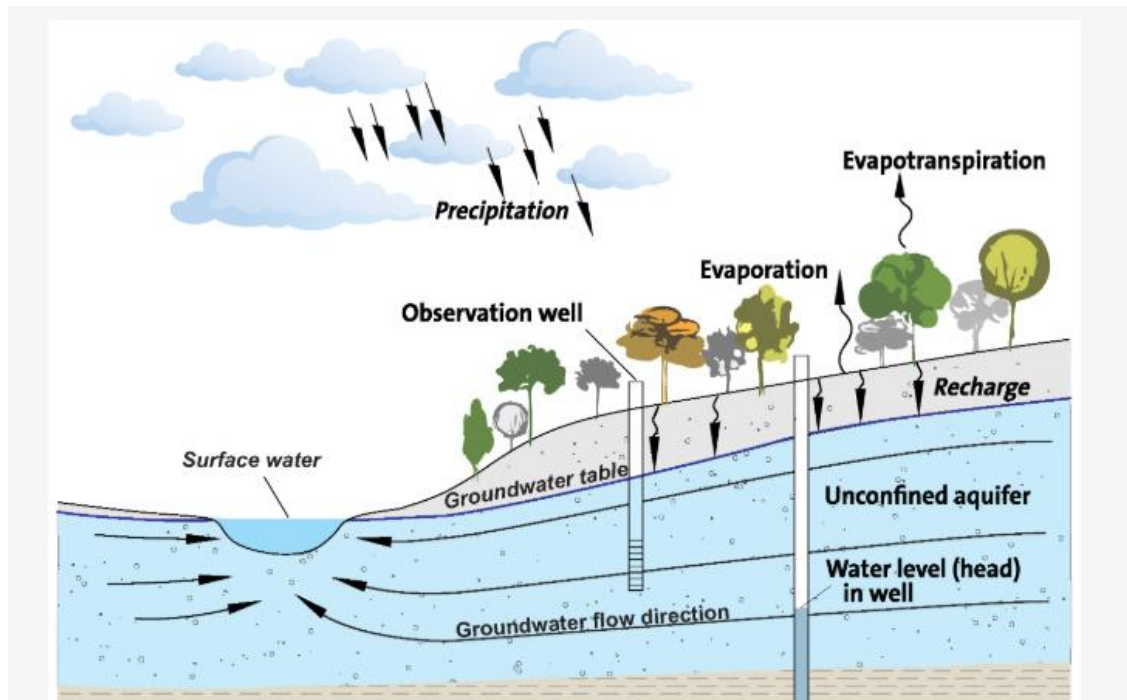


Figure 1: Cross-section of a typical groundwater flow system

2.0 OBJECTIVE OF WORK:

Generation of scientific databases for recording groundwater fluctuation at a fixed location will assist in understand the variations in groundwater levels across different seasons. This could be achieved only after careful monitoring of various inputs of hydrological system. These temporal variations in the ground water levels will further support to study in a scientific manner using various interpretation tools.

The main objective of this study to monitor the water level surrounding to the Power Plant to understand the ground water level. Further capturing seasonal variation in ground water level will assist in better understand the dynamic behavior of groundwater system throughout different seasons and conditions.

3.0 SCOPE OF STUDY:

- ❖ Identification of open wells in surrounding to the Power Plant.
- ❖ Information about the use of the water of identified open wells (drinking, irrigation etc).
- ❖ Information about various water recharge sources.
- ❖ Measurement of water level in identified source (open well).
- ❖ Preparation of compiled report of ground water level.
- ❖ The overall scope of study is prepared in the form of flow chart.

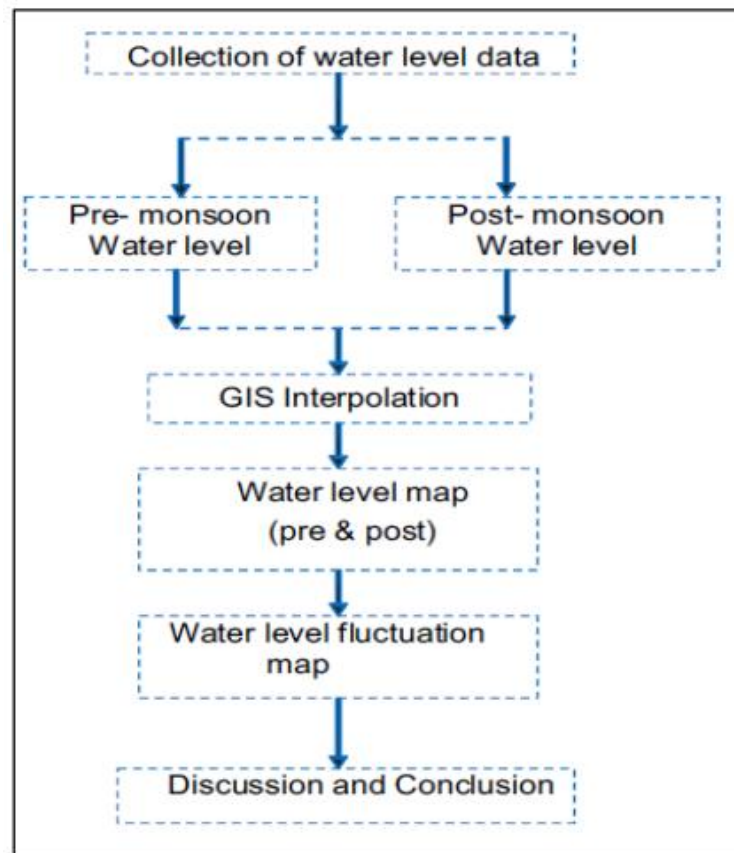


Figure 2: Flow Chart of Scope of Study

4.0 SITE SELECTION:

M/s Meja Urja Nigam Private Limited (MUNPL) is located in Meja Tehsil in Prayagraj district, Uttar Pradesh. Geographically, Prayagraj is located at 25.45°N 81.84°E in the southern part of the Uttar Pradesh.

In the present study 27 wells in 14 villages surrounding the Power Plant are identified based on Hydrogeology map of the area. Efforts are taken to choose wells to get the maximum spatial representation of the areas. Handheld GPS was used to mark the latitude and longitude of the study area. Measurement has been taken in pre monsoon 2025 and will be carried in future to capture seasonal data for water levels fluctuations. The details of identified locations/monitoring points are mentioned in the table below:

Sr. No	Monitoring Location Code	Village	Aerial Distance from Plant Boundary (Km)	Direction from MUNPL plant	GPS Coordinates
1.	GW1	Salaiya	0.58	South	25.118381° N , 81.941683° E
2.	GW2	Khurd	0.40	South	25.112283N , 81.922936 E
3.	GW3	Salaiyakalan	1.38	South	25.116705 N,81.904545 E
4.	GW4		1.77	South	25.116580 N, 81.900057 E
5.	GW5	Piparau	1.99	West	25.125707 N , 81.899168 E
6.	GW6	Dhaduva	3.77	West	25.14538 N , 81.885893 E
7.	GW7		3.95	North-West	25.148555 N , 81.885606 E
8.	GW8	Dausati	1.55	South	25.09861 N ,81.930257 E
9.	GW9		1.50	South	25.098632 N, 81.930301 E
10.	GW10	Son Barsi	2.50	East	25.114370 N , 81.968590 E
11.	GW11	Mudpela	2.88	East	25.137505 N , 81.004956 E
12.	GW12		2.85	East	25.137027 N, 82.004686 E
13.	GW13		3.44	East	25.134194 N , 82.010186 E
14.	GW14	Kohdar	1.41	East	25.145214 N , 81.990865 E
15.	GW15		0.90	East	25.141577 N , 81.986094 E
16.	GW16		0.40	North	25.145942 N, 81.977733 E
17.	GW17	Isawta	1.53	North-East	25.162681 N , 81.957853 E
18.	GW18	Patai Dandi	1.67	North	25.165064 N , 81.954321 E
19.	GW19		1.11	North	25.157283 N ,81.950313 E
20.	GW20	Mai kala	1.58	East	25.155437 N, 81.943611E
21.	GW21		2.46	East	25.158336 N, 81.935622 E

22.	GW22	Mai khurdh	0.59	East	25.15835 N, 81.935641 E
23.	GW23		0.87	West	25.157204 N, 81.929852 E
24.	GW24	Jhadiyahi	0.77	West	25.14866 N, 81.916363 E
25.	GW25		0.48	West	25.146556 N, 81.918122 E
26.	GW26	Kulhawa	1.40	West	25.155271 N, 81.915991 E
27.	GW27		1.38	West	25.154884 N, 81.91601 E



Figure 4: Monitoring of Water level in the well using Ruler Tape Piezometer

7.0 MONITORING DATA:

Total 27 wells in 14 villages in radius of 10 Km of Power Plant was surveyed and selected for current and future studies. The water levels were measured using Ruler Tape Piezometers. The Monitoring results are depicted in table 1 & 2, graph 1 & 2.

Table 1: Monitoring Data

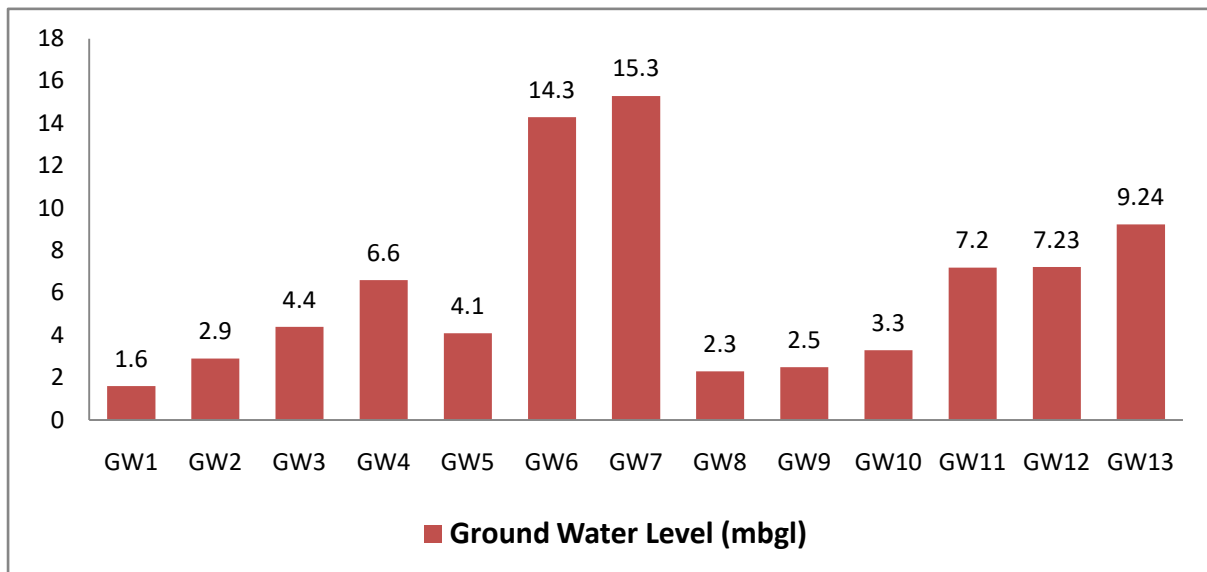
Monitoring Location Code	Inner dia on top of well (meter)	Use of water from well	Type of well	Source of water recharge	Landmark of well	Ground water level (mbgl)
GW1	5.6	Domestic/Irrigation	Open well	Natural/Canal which is 700 m away	Left side of triveni road	1.6
GW2	6.0	Domestic/Irrigation	Open well	Natural/Canal which is 200 m away	Right side of triveni road	2.9
GW3	4.7	Domestic/Irrigation	Open well	Natural	Salaiyakalan bus stand/near gram pradhan house	4.4
GW4	5.2	Domestic/Irrigation	Open well	Natural/canal which is 60 m away	Triveni road/Near Musahar Basti	6.6
GW5	5.12	Irrigation	Open well	Natural	In front of Piparau primary school /Shivkumar house	4.1
GW6	2.25	Domestic/Irrigation	Open well	Natural/Tons which is 700 m away	In front of Kaluram Prajapati house	14.30
GW7	2.0	No use	Open well	Natural/Tons river which is 200 m away	Near of Bholaramprajapati house	15.30
GW8	2.85	Domestic/Irrigation	Open well	Natural	Behind CHC hospital Dasauti(Laltara)/Ramsagivan Prajapati land	2.30
GW9	3.2	Domestic/Irrigation	Open well	Natural	Near Munnilal Prajapati house/Kohadarkhiri road	2.5
GW10	2.25	Domestic/Irrigation	Open well	Natural/sidhauli canal	Backside of Shyamraj house	3.3
GW11	2.0	Domestic/Irrigation	Open well	Natural	Infront of Shiv Temple (Shreenath Kushwaha house)	7.20
GW12	3.0	Domestic/Irrigation	Open well	Natural	Infront of Arvind Kushwaha house/Ramsumer Kushwaha	7.23
GW13	1.67	Domestic/Irrigation	Open well	Natural	In front of Rishu Kushwaha house/Pahadhadgad road	9.24
GW14	3.65	Domestic/Irrigation	Open well	Natural	In front of Kallan house/Kohdarberi road	11.38
GW15	1.95	Domestic/Irrigation	Open well	Natural	In fron of Jain Mandir/NTPC solar water booth	11.90

GW16	2.13	Irrigation	Open well	Natural	Near Santlal Nishad house/isawta road	6.60
GW17	1.9	Irrigation	Open well	Natural	In front Odkamla Shankar Mishra house/NTPC solar water booth	14.40
GW18	1.78	Domestic/ Irrigation	Open well	Natural/Tons river which is 250 m away	Near Kamla Shankar Dwivedi house/Shiv mandir	17.22
GW19	1.68	Domestic/ Irrigation	Open well	Natural	In front of Dilip Kumar house/road side	10.40
GW20	1.83	Domestic/ Irrigation	Open well	Natural	In front of Bhaiyaram house/left side road	9.25
GW21	1.93	Domestic/ Irrigation	Open well	Natural/Nagranalah which is 200 m away	In front of Ramesh Chand Sukla house/right side of main road	8.47
GW22	1.78	Domestic/ Irrigation	Open well	Natural	In front of Sankatmochan Hanumanmandir/Rajprataptiwari house(pradhan)	15.15
GW23	1.77	No use	Open well	Natural	Infront of Gajraj Singh house	13.80
GW24	1.78	Domestic/ Irrigation	Open well	Natural/Tons River which is 500 m away	Infront of Mahadev Temple/Rajnarayan Nishad house	18.40
GW25	2.13	Domestic/ Irrigation	Open well	Natural/Tons River which is 500 m away	Infront of Lalla Nishad house	16.15
GW26	1.51	No use	Open well	Natural/Tons which is 500 m away	Infront of Vindhyavasini Mishra house/Shiv Mandir	15.0
GW27	1.87	No use	Open well	Natural/Tons River which is 500 m away	Infront of Lalmohan Pandey/road side	14.60

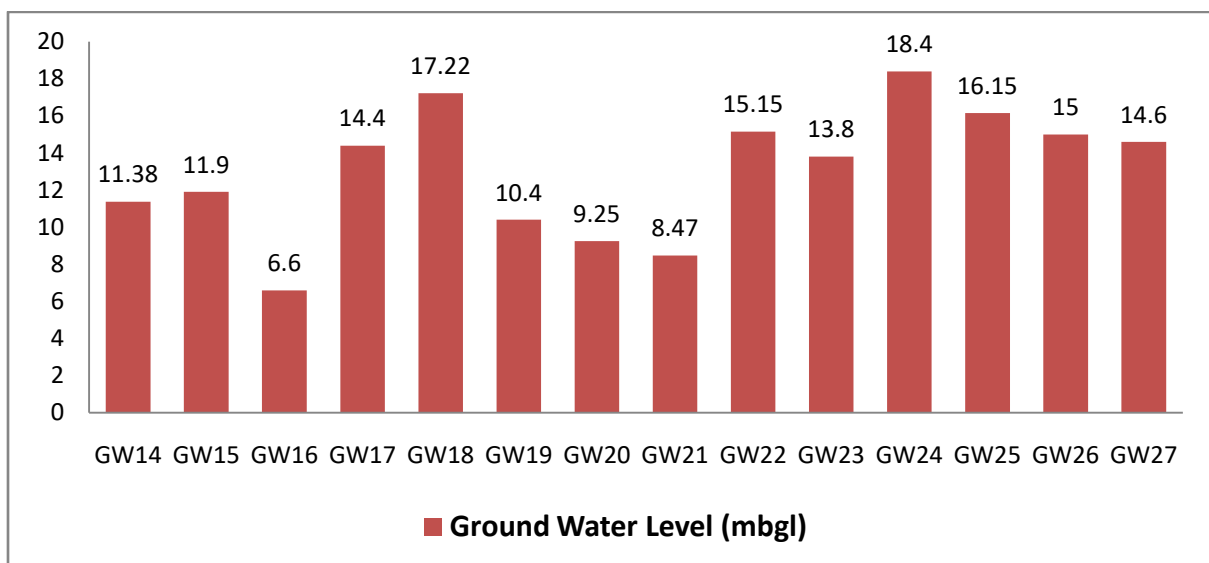
Table 2: Village wise Sampling Location and Status of Ground water Level

Sl. No.	Name of Village	Monitoring Location Code	Ground Water Level (mbgl)
1.	Salaiya Khurd	GW1	1.6
		GW2	2.9
2.	Salaiyakalan	GW3	4.4
		GW4	6.6
3.	Piparau	GW5	4.1
4.	Dhaduva	GW6	14.30
		GW7	15.30
5.	Dausati	GW8	2.30
		GW9	2.5
6.	Son Barsi	GW10	3.3
7.	Mudpela	GW11	7.20
		GW12	7.23
		GW13	9.24
8.	Kohdar	GW14	11.38
		GW15	11.90
		GW16	6.60
9.	Isawta	GW17	14.40
10.	Patai Dandi	GW18	17.22
		GW19	10.40
11.	Mai kala	GW20	9.25
		GW21	8.47
12.	Mai khurdh	GW22	15.15
		GW23	13.80
13.	Jhadiyahi	GW24	18.40
		GW25	16.15
14.	Kulhawa	GW26	15.0
		GW27	14.60

GRAPHICAL PRESENTATION OF GROUND WATER LEVEL AT DIFFERENT MONITORED LOCATIONS:

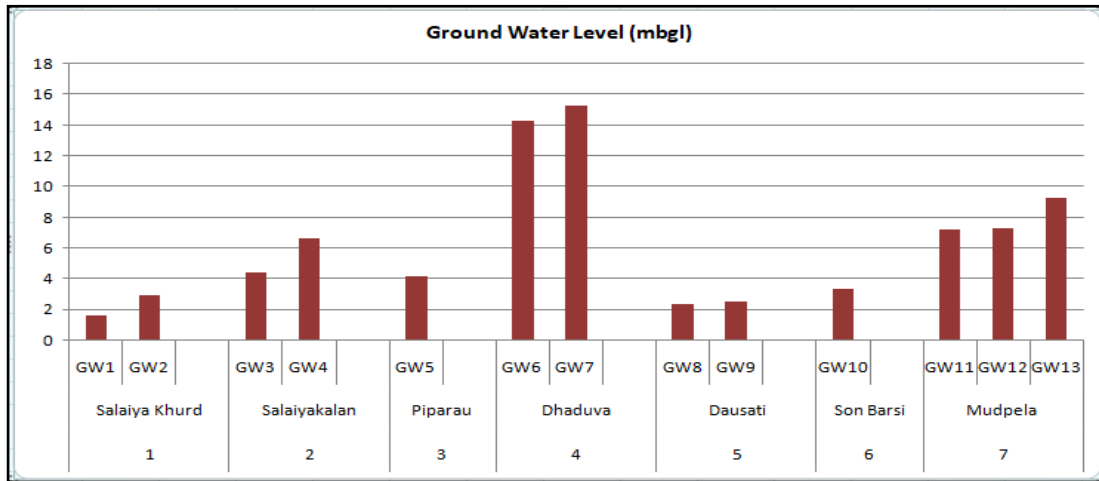


Graph 1(a): Graphical Presentation Ground Water Level at different Monitored Locations

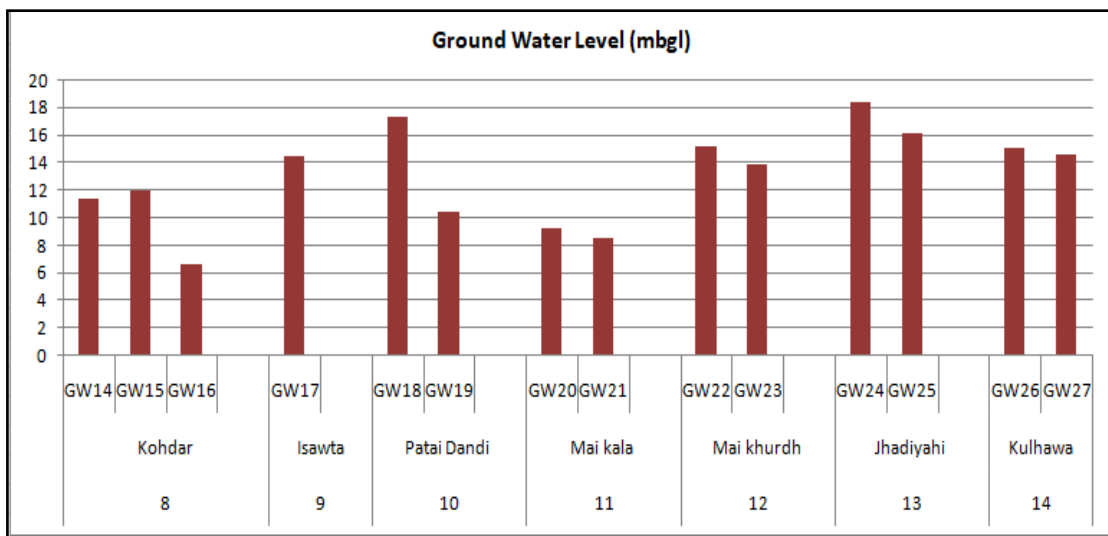


Graph 1(b): Graphical Presentation Ground Water Level at different Monitored Locations

7.0 (i) Village Wise Comparative Status of Ground Water Level:



Graph 2(a): Village Wise Comparative Status of Ground Water Level



Graph 2(b): Village Wise Comparative Status of Ground

8.0 RESULT & DISCUSSION:

- ❖ A total 27 Wells in 14 villages around the buffer zone of 10 Km area around the Power Plant were surveyed and selected for current and future studies. The locations were selected to get the maximum spatial representation of the area.
- ❖ Water Levels were measured manually using Ruler Tape Piezometer.
- ❖ Out of 27 measured wells, the ground water level ranged from 1.6 mbgl to 18.40 mbgl. Minimum value of water level 1.6 mbgl is found at Salaiya Khurd and maximum value of water level is found 18.40 mbgl at Jhadiyahi. Details are depicted in table 1 & 2.
- ❖ The depth to Water level from 1-10 mbgl is found in 14 wells (52 %) and 10 -18.40 mbgl is found in 13 wells (48%).

- ❖ Variations in the depth to the water level is found in different wells in the same village (table 1 & 2, graph 1 & 2).
- ❖ This is a preliminary study in pre-monsoon season of 2025, the seasonal variations ground water level fluctuations will be carried out in consecutive years.

9.0 REFERENCES

- ❖ Ground Water Year Book Uttar Pradesh (2021 -2022) September, 2022.
- ❖ GIS-based mapping of water-level fluctuations (WLF) and its impact on groundwater in an Agrarian District in Tamil Nadu, India Published: 16 June 2021 Volume 24, pages 994–1009, (2022)

10.0 PHOTOGRAPHS OF GROUND WATER LEVEL MONITORING:



Photo 1: Salaiya Khurd



Photo 2: Salaiya Khurd



Photo 3: Salaiya Kalan



Photo 4: Salaiya Kalan



Photo 5 : Piparau



Photo 6 : Piparau



Photo 7: Dhaduva



Photo 8: Dhaduva



Photo 9: Dausati



Photo 10: Dausati



Photo 11: Son Barsi



Photo 12: Son Barsi



Photo 13: Mudpela



Photo 14: Mudpela



Photo 15:Kohdar



Photo 16:Kohdar



Photo 17: Isawta



Photo 18: Isawta



Photo 19: Patai Dandi



Photo 20: Patai Dandi

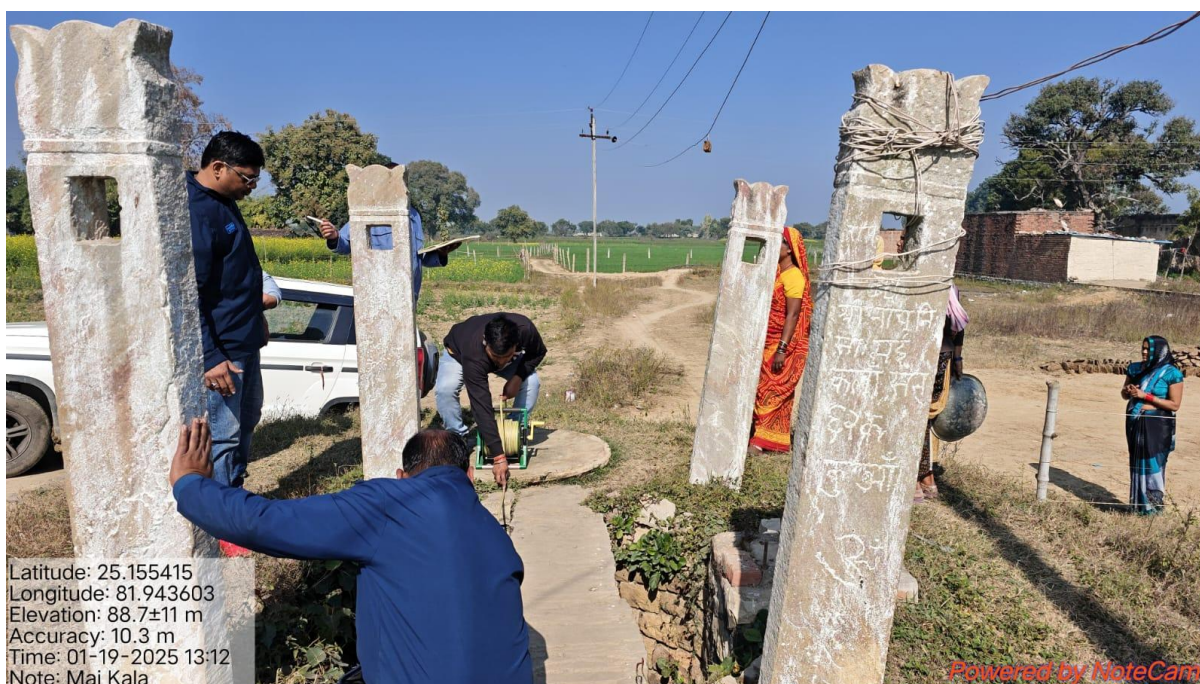


Photo 21: Mai Kala



Photo 22: Mai Kala



Photo 23: Mai khurdh



Photo 24: Mai khurdh



Photo 25:Jhadiyahi



Photo 26:Jhadiyahi



Photo 27: Kulhawa



Photo 28: Kulhawa



Photo 29 Piparau

CSIR-Indian Institute of Toxicology Research
LUCKNOW-226 001

TEST REPORT ON AMBIENT AIR QUALITY

Name of Industry : Meja Thermal Power Project, Meja, Prayagraj
Study Code No. : SSP-481
Date of Sample Collection : 21st October, 2024 to 25th October, 2024
Type of Sampling : 24 hourly basis
Date of sample received : 26-10-2024
Date of completion of testing : 22-11-2024
Season & Weather : Winter & Clear Day

Test Results:

S. No.	Location and Date	Code	Parameter	Concentration ($\mu\text{g}/\text{m}^3$)
1.	Kohdar Village 23 rd October 2024	AQ-1	PM _{2.5}	52.9
			PM ₁₀	81.3
			SPM	158.1
			SO ₂	7.4
			NO ₂	13.4
2.	Sonbarsi Village 24 th October 2024	AQ-2	PM _{2.5}	41.0
			PM ₁₀	69.5
			SPM	145.0
			SO ₂	6.1
			NO ₂	12.8
3.	Maikalan Village 25 th October 2024	AQ-3	PM _{2.5}	48.2
			PM ₁₀	67.8
			SPM	181.5
			SO ₂	6.3
			NO ₂	14.3
4.	Township 21 st October 2024	AQ-4	PM _{2.5}	39.7
			PM ₁₀	62.3
			SPM	119.1
			SO ₂	7.1
			NO ₂	13.3
5.	Plant Area 22 nd October 2024	AQ-5	PM _{2.5}	54.8
			PM ₁₀	89.0
			SPM	181.0
			SO ₂	10.3
			NO ₂	17.4

(Dr. Abhay Raj)
Principal Scientist

Environmental Monitoring Laboratory

Notes:

- (i) The above results relate only to the tests requested by sponsorer.
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- (iii) This report shall not be used for any purpose other than environmental management related activities of the plant/ site by the sponsorer. "CSIR-IITR is not regulatory and certifying agency hence no part of this report should be used for legal purposes under any circumstances".

TEST REPORT ON AMBIENT AIR QUALITY

Name of Industry : Meja Thermal Power Project, Meja, Prayagraj
Study Code No. : SSP-481
Date of Sample Collection : 11th January 2025 to 17th January 2025
Type of Sampling : 24 hourly basis
Date of sample received : 16-01-2025
Date of completion of testing : 04-02-2025
Season & Weather : Winter and cloudy

Test Results:

S. No.	Location and Date	Code	Parameter	Concentration ($\mu\text{g}/\text{m}^3$)
1.	Kohdar Village 14 th January 2025	AQ-1	PM _{2.5}	62.5
			PM ₁₀	92.5
			SPM	162.0
			SO ₂	7.3
			NO ₂	15.4
2.	Sonbarsi Village 12 th January 2025	AQ-2	PM _{2.5}	48.6
			PM ₁₀	88.5
			SPM	142.2
			SO ₂	5.0
			NO ₂	15.8
3.	Maikalan Village 15 th January 2025	AQ-3	PM _{2.5}	42.4
			PM ₁₀	72.5
			SPM	116
			SO ₂	6.8
			NO ₂	14.2
4.	Township 11 th January 2025	AQ-4	PM _{2.5}	42.2
			PM ₁₀	96.5
			SPM	146.7
			SO ₂	5.3
			NO ₂	18.6
5.	Plant Area 13 th January 2025	AQ-5	PM _{2.5}	52.9
			PM ₁₀	75.3
			SPM	182.6
			SO ₂	8.0
			NO ₂	26.3

Amid
6/10/21/2025

(Dr. Abhay Raj)
Principal Scientist

Environmental Monitoring Laboratory

Notes:

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- (ii) The report shall not be reproduced in fragments without the written approval of Director, CSIR- IITR, Lucknow.
- (iii) This report shall not be used for any purpose other than environmental management related activities of the plant/ site by the sponsorer. "CSIR-IITR is not regulatory and certifying agency hence no part of this report should be used for legal purposes under any circumstances".



No. 11/24/2022-Th.II
Government of India
Ministry of Power

Shram Shakti Bhawan, Rafi Marg,
New Delhi, dated 10th January, 2023

OFFICE MEMORANDUM

Subject: Minutes of Meeting chaired by Secretary (Power) on 28.12.2022 at 11:00 AM in Shram Shakti Bhawan, Ministry of Power in Hybrid mode on use of STP water in Thermal Power Plants -reg

The undersigned is directed to forward herewith Minutes of Meeting held under the Chairmanship of Secretary, Ministry of Power on 28.12.2022 at 11:00 AM to discuss the use of Sewage Treated Water by Thermal Power Plants for information and further necessary action.

J. Misra
10/1/23

(J. Misra)

Under Secretary to Govt. of India
Tele: 23063746

To,

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3. DG, NMCG [dg@nmcg.nic.in]
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21. CMD, UPRUVNL, UP [cmd@upruvnl.org]
22. CMD, NUPPL, UP (For Ghatampur TPP) [cmd@nlc.india.in,
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39. CEO, KMDA [ceokmda@gmail.com]
40. Chief Engineer, PHED, Haryana [eicphed@phedharyana.gov.in]

Copy to:

Sr. PPS to Secretary (Power)/ PS to JS (Thermal)/ DS (DVC/Th.)



Minutes of Meeting chaired by Secretary (Power) on 28.12.2022 at 11:00 AM in Shram Shakti Bhawan, Ministry of Power in Hybrid mode on use of STP water in Thermal Power Plants

List of participants is **annexed**.

2. Secretary (Power) welcomed the participants. At the outset, Secretary (Power) mentioned that as per National Tariff Policy, all Thermal Power Plants were mandated to use STP water if located within 50 KM radius of STP. Any exemption could be considered only on the basis of technical constraint or exorbitantly high cost making tariff unsustainable. He further emphasized that Clean Ganga is a National Mission and Thermal Power Plants should actively play their part in making river Ganga cleaner. He also briefed that the Hon'ble Prime Minister shall be reviewing the progress on the matter on 30th December 2022.

3. Sewage Treatment Plant (STP) and Thermal Power Station (TPS)-wise discussions were held as follows:

i) **Name of TPS:** Barh TPS St-II (NTPC Ltd)

Name of STP: Barh STP

Status and Recommendation:

It was informed that STP was being renovated by BUIDCO to increase the capacity from present 4MLD to 8 MLD (Cap 11MLD after 15 years) to meet NGT guidelines. BUIDCO prepared and submitted the DPR to link STP and TPP to NTPC. NTPC had some observations on DPR w.r.t. Opex.

Secretary (P) directed NTPC to use the available water from STP. Further, it was directed that senior officials of NTPC must visit BUIDCO and **finalize the DPR and sign MoU by 15th Jan 2023**. NTPC can then make payment to BUIDCO to initiate construction activities for the 4 km linkage between STP and TPP. **Targeted work completion date is 1st April 2025**.

BUIDCO mentioned that there were two more STPs within 50 km at Mokama and Bakhtiyarpur which could also be linked with Barh. Secretary(P) directed to examine their feasibility separately.

ii) **Name of TPS:** Prayagraj Bara TPS (Tata Power-JV)

Name of STP: Naini STP

Status and Recommendation:

It was informed that PFR prepared by UP Jal Nigam was sent to Genco and pending for approval of Genco. Secretary (P) advised Genco to approve the PFR by 1st week of Jan 23 and then Discom to give consent by end of Jan 23.

Construction activities to start by Apr '23 and usage of STP water to start by Apr '25.

iii) **Name of TPS:** Meja TPS (NTPC-Jv)

Name of STP: Naini STP

Status and Recommendation:

- It emerged that available water from Naini STP would be used in Bara TPS which is located closer to STP than Meja. Further, Meja TPS is located across the river from STP whereas, Bara and STP are in same side of the river. Taking into consideration these facts, it was recommended that **Meja TPS may be exempted from linking with the STP.**

iv) **Name of TPS:** DCR Yamunanagar TPS (HPGCL)

Name of STP: Parwalo & Badi Majra STPs

Status and Recommendation:

- It was informed that GoHR has mandated all TPSs in Haryana to use STP water and asked PHED to supply STP water at TPS door step.
- PHED informed that DPR preparation is under progress and is expected by June '23.
- It was clarified that prior approval of SERC is not required.
- **Work completion of linking STPs with TPS at Yamuna Nagar by December 2025.**

v) **Name of TPS:** Panipat TPS

Name of STP: Panipat STP

- Secretary (P) advised PHED to examine feasibility in Panipat TPS as the unit residual time was less than 10yrs.

vi) **Name of TPS:** CLP Jhajjar- Aprava TPS

Name of STP: Chakri Dadri STP

- It was observed that approximate available STP water was very less (3.5 MLD against requirement of 100 MLD). Therefore, it was recommended that **CLP-Jhajjar may be exempted from linking with the STP.**

vii) **Name of TPS:** Indira Gandhi- NTPC JV Jhajjar TPS

Name of STP: Kosli STP

- It was informed that water availability is only 3.5% of requirement. Therefore **NTPC Jhajjar may be exempted from linking with the STP.**
- **Secretary (P) further directed Thermal div. to write a letter to CERC, informing that no permission was required to be given by CERC to TPSs for tariff revision on account of costs borne by TPS for STP linkage as this was already mandated in Tariff Policy.**

viii) **Name of TPS:** Panki TPS (UPRVUNL)

Name of STP: Bingawan STP

Status and Recommendation:

- STP is operational and TTP is expected to be available by March 2023.
- COD for the TPS is expected in July, 2023. **Therefore, use of STP water is expected by July 2023.**

ix) **Name of TPS:** Korba TPS (NTPC Ltd)

Name of STP: Korba STP

Status and Recommendation:

- Commissioner, Korba informed that the DPR was approved and has been sent for State Govt approval. MoU with NTPC is expected to be signed within 1st week of Jan 2023, work order issue by Aug'23 and **expected completion of work by 1st April 2025.**

x) **Name of TPS:** Ghatampur TPP (NUPPL)

Name of STP: Bingawan STP

Status and Recommendation:

- Due to river crossing, **Ghatampur TPP may be exempted from linking with STP.**

xi) **Name of TPS:** Kahalgaon TPS (NTPC Ltd)

Name of STP: Bhagalpur STP

Status and Recommendation:

- It was informed that existing STP was being dismantled and new STP would be constructed. NTPC mentioned that as per estimates, tariff may rise by 20.20 paise/Kwh as land acquisition would be involved. Further, highway/Rail/city crossings are involved.





- **Secretary (P) opined that decision on this may be taken after PFR is available in April 2023.**

xii) Name of TPS: Khurja TPS (THDC Ltd)

Name of STP: Bulandshahar STP

Status and Recommendation:

- 20 MLD available from STP (Cap: 40MLD)
- **Secretary (P) instructed Khurja TPS to sign MoU and make payment to UP Jal Board for DPR preparation by 7th Jan 2023.**
- **DPR is to be prepared by March 2023 and project completion by 1st July 2025.**

xiii) Name of TPS: Harduaganj TPS (UPRVUNL)

Name of STP: Aligarh STP

Status and Recommendation:

- UP Jal Nigam informed that the 1st STP of 40 MLD will be completed by March 2023. Approval for 2nd STP is with NMCG
- Secretary (P) advised NMCG to fast-track the 2nd STP approval. The revised DPR by Jal Nigam may include both the STPs and TTPs to be implemented in a phased manner. **Target date for completion is June 2025.**

xiv) Name of TPS: Budge-Budge TPS (CESC)

Name of STP: Maheshthala STP

Status and Recommendation:

- KMDA informed that route from STP to TPS is very congested due to lines from other utilities.
- 2 units have completed 25 years.
- Due to path congestion and huge RoW issue, it was recommended that **Budge-Budge TPS may be exempted from linking with the STP.**

xv) Name of TPS: Kota TPS (RVUNL)

Name of STP: Sajidhera STP



Status and Recommendation:

- As the TPS is on the other side of the river, **therefore Kota TPS may be exempted from linking with the STP.**

xvi) Name of TPS: Dadri TPS (NTPC)

Name of STP: NOIDA STP

Status and Recommendation:

- It was informed that laying pipeline would disproportionately increase cost as one river crossing, 2 Highway crossings, Rail crossing and densely populated area would be involved. Cost increase is expected to be 30 P/Kwh. Considering all factors, it was recommended that **Dadri TPS may be exempted from linking with the STP.**

xvii) Name of TPS: Bokaro B TPS (DVC)

Name of STP: BOKARO STP

Status and Recommendation:

- It was informed that linking with nearest STP involves hilly terrain of 56KM which also includes crossing Damodar river. As a result, cost increase would be 27p/Kwh.
- It was recommended that **Bokaro TPS may be exempted from linking with the STP.**

xviii) Name of TPS: Rosa TPS (Reliance Power)

Name of STP: Shahjahanpur STP

Status and Recommendation:

- UP Jal Nigam shared that the STP was under construction and is expected to be operational by March 2023.
- Secretary (P) advised that **PFR may be submitted by 31st March 2023 to TPS by Jal Nigam.**

xix) Name of TPS: Mahadev Prasad TPS (Adhunik Power)

Name of STP: Adityapur STP

Status and Recommendation:



STP is located at 20 km distance from the TPS and expected to be ready by June 2024.

Secretary (P) advised JUIDCO to undertake feasibility study and share it with TPS by March '23.

xx) Name of TPS: Sagardighi TPS (WBDCL)

Name of STP: Berhampore STP

Status and Recommendation:

- As the TPS is on the other side of the river, **therefore Sagardighi TPS may be exempted from linking with the STP.**

xxi) Name of TPS: Bandel TPS (WBDCL)

Name of STP: Bhatpara STP

As the units are more than 30 years old, it was recommended to exempt Bandel TPS.

xxii) Name of TPS: Kolaghat TPS (WBDCL)

Name of STP: Howrah STP

WBDCL informed that units are more than 30 years old. Further, river crossing is involved. Considering the above, it was recommended to exempt Kolaghat TPS.

xxiii) Name of TPS: Southern Repl TPS (CESC)

Name of STP: Garden Reach STP

As units are more than 30 years old, it was recommended to exempt this TPS.

4. Further, UP Jal Nigam submitted that Jawaharpur TPS (UPRVUNL) and Unchachar TPS (NTPC) have been approached by them for linkage from Etah STP and Raibareilly STP respectively. TPSs have not reverted. Secretary (P) advised NMCG to take note and co-ordinate with the agencies. He further advised that NMCG may consider taking into account all the STPs which are operational or under construction in Ganga basin, irrespective of who is funding it so that all information is available at a single place which could be used to map TPSs within 50 KM and share the information with MoP for further action.

Meeting ended with the Vote of Thanks to Chair.



Annexure

List of Participants

1. Shri Alok Kumar, Secretary (Power), MoP.....In chair
2. Shri Piyush Singh, Joint Secretary (Thermal), MoP
3. Shri Suman Majumdar, Deputy Secretary, MoP
4. Shri Ghanshyam Prasad, Chairperson, CEA
5. Shri Praveen Gupta, Member (Thermal), CEA
6. Shri U K Bhattacharya, Director (Projects), NTPC
7. Shri Madhava Kumar R, Economic and Financial Advisor, NMCG
8. Sh. Mohammed Shayin, MD, HPGCL, Haryana
9. Shri Kumar Sharad, CGM, THDC
10. Shri P Guruprasad, MD, UPRUVNL
11. Shri Santosh C S, CEO, NUPPL
12. Shri Avijit Hazra, CESC
13. Shri Prabhakar Pandey, Commissioner, Korba
14. Shri Rajan Tiwari, Aprava-CLP
15. Shri Virendra Singh, RVUNL, Rajasthan
16. Shri R N Singh, Chairman, DVC, Kolkata
17. Shri Sourav Nayak, WBPDC
18. Shri Rakesh Kumar Bansal, Director (Electrical), SJVNL
19. Shri Sanjay Bhargava, Tata Power
20. Shri Anil Kumar, MD, Uttar Pradesh Jal Nigam
21. Shri Pankaj Ranjan Jha, Uttar Pradesh Jal Nigam
22. Shri Dharmendra Singh, MD, BUIDCO, Bihar
23. Shri Alok Kumar Mandal, DGM, JUIDCO
24. Shri Prantik Ray, CE (Gas Sector), KMDA
25. Shri Rakesh Kumar, Chief Engineer, PHED, Haryana
26. Shri I C Thakur, Engineer In Chief, WRD, Bihar
27. Shri Ashok Kumar Khewaria, EE, UP Jal Nigam

✓

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Annexure-6

STACK EMISSION (UNIT WISE)													
Month: Oct'24													
UNIT_NO	Installed Capacity (MW)	PM (mg/Nm³)			SO₂ (mg/Nm³)			NOx (mg/Nm³)			Mercury (Hg) Emission(mg/Nm³)		
		Applicable Norm *	Actual Value		Applicable Norm *	Actual Value		Applicable Norm *	Actual Value		Applicable Norm *	Actual Value	
			Average Value for the month	Max. Value for the month		Average Value for the month	Max. Value for the month		Average Value for the month	Max. Value for the month			
1	660	30	20.26	25.16	100	1142.05	1329.78	100	356.25	470.77	0.03	0.000345**	
2	660	30	13.42	26.18	100	787.39	1222.03	100	246.5	365.76	0.03	0.000332**	
Month: Nov'24													
UNIT_NO	Installed Capacity (MW)	PM (mg/Nm³)			SO₂ (mg/Nm³)			NOx (mg/Nm³)			Mercury (Hg) Emission(mg/Nm³)		
		Applicable Norm *	Actual Value		Applicable Norm *	Actual Value		Applicable Norm *	Actual Value		Applicable Norm *	Actual Value	
			Average Value for the month	Max. Value for the month		Average Value for the month	Max. Value for the month		Average Value for the month	Max. Value for the month			
1	660	30	22.4	23.8	100	1271.2	1486.8	100	387.3	475	0.03	0.000257**	
2	660	30	15.4	29.5	100	668.1	838.8	100	249.9	337.6	0.03	0.000283**	
Month: Dec'24													
UNIT_NO	Installed Capacity (MW)	PM (mg/Nm³)			SO₂ (mg/Nm³)			NOx (mg/Nm³)			Mercury (Hg) Emission(mg/Nm³)		
		Applicable Norm *	Actual Value		Applicable Norm *	Actual Value		Applicable Norm *	Actual Value		Applicable Norm *	Actual Value	
			Average Value for the month	Max. Value for the month		Average Value for the month	Max. Value for the month		Average Value for the month	Max. Value for the month			
1	660	30	17.3	29	100	776.4	1352.1	100	280.1	1305.99	0.03	0.000257**	
2	660	30	14.0	29	100	986.2	1458.5	100	309.8	1488.3	0.03	0.000283**	
Month: Jan'25													
UNIT_NO	Installed Capacity (MW)	PM (mg/Nm³)			SO₂ (mg/Nm³)			NOx (mg/Nm³)			Mercury (Hg) Emission(mg/Nm³)		
		Applicable Norm *	Actual Value		Applicable Norm *	Actual Value		Applicable Norm *	Actual Value		Applicable Norm *	Actual Value	
			Average Value for the month	Max. Value for the month		Average Value for the month	Max. Value for the month		Average Value for the month	Max. Value for the month			
1	660	30	19.3	26	100	405***	908.0	100	285	328.0	0.03	0.000257**	
2	660	30	22.0	30.1	100	507***	911	100	296	337.0	0.03	0.000283**	
*** Unit-1 FGD was declared commercial from 16/01/2025. Unit-2 FGD was in service from 07/01/2025 to 21/01/2025 for trial operation.													
Month: Feb'25													
UNIT_NO	Installed Capacity (MW)	PM (mg/Nm³)			SO₂ (mg/Nm³)			NOx (mg/Nm³)			Mercury (Hg) Emission(mg/Nm³)		
		Applicable Norm *	Actual Value		Applicable Norm *	Actual Value		Applicable Norm *	Actual Value		Applicable Norm *	Actual Value	
			Average Value for the month	Max. Value for the month		Average Value for the month	Max. Value for the month		Average Value for the month	Max. Value for the month			
1	660	30	16.0	21.3	100	1186.7	1501.3	100	230.7	438.2	0.03	0.00039**	
2	660	30	9.5	21.9	100	795.9	957.7	100	507.0	619.8	0.03	0.000321**	
Month: Mar'25													
UNIT_NO	Installed Capacity (MW)	PM (mg/Nm³)			SO₂ (mg/Nm³)			NOx (mg/Nm³)			Mercury (Hg) Emission(mg/Nm³)		
		Applicable Norm *	Actual Value		Applicable Norm *	Actual Value		Applicable Norm *	Actual Value		Applicable Norm *	Actual Value	
			Average Value for the month	Max. Value for the month		Average Value for the month	Max. Value for the month		Average Value for the month	Max. Value for the month			
1	660	30	18.96	23.65	100	44.6	402	100	286.53	470.98	0.03	0.00039**	
2	660#	30	0	0	100	0	0	100	0	0	0.03	0	

Unit-2 was under shut down in March-2025 for overhauling.

**Based on the report of third party testing.

Annexure 7

Details of number of beneficiary under CSR Work with number of beneficiary for FY 2024-25

1. Scholarship Abhilasha and GEM Girls (School Fees) - 19 Girls
2. 40 Girls under Girl Empowerment Mission (GEM) for 04 weeks residential workshop
3. Distribution of 40 bicycles to 40 Girls under Girl Empowerment Mission (GEM) girls
4. Skill development training to 130 youth along with placement through CIPET, CIDC and CRISP
5. Infra Support to BMGS NGO for a Computer Training Program for poor and needy women: 50 PCs, 50 tables, 50 chairs, 50 UPS, and 2 Printers
6. Distribution of 5961 woollen blankets during peak winter in nearby village and Maha Kumbh Mela -2025
7. Distribution of 8000 Jute Bags for promotion of plastic free ghats-Maha Kumbh Mela-2025 & in nearby villages.
8. Distribution of 15000 Nos. bio-degradable bags for promotion of plastic free ghats-Maha Kumbh Mela-2025.
9. Distribution of 06 Battery Operated Tricycles to divyang people.
10. Distribution of 1500 Stationery Kits and Umbrella in Govt. Schools. MUNPL nearby village.
11. Organizing free cataract operation camps. Total: 51 Beneficiaries
12. 5000 Sqft. Bala Painting in the Govt. Schools' premises to engage and enhance the learning environment for children.
13. Installation of 2 Nos. Computer in Govt. Inter collage (Sirsa & Piprav)
14. Installation of 01 Water Purifier-Atal Awasiye School
15. Installation of 2 Nos. Smart Classes in Govt. Schools. (Manda & Mai Kala)
16. Installation of 200 Nos. Solar Street Lights in the nearby villages
17. Installation of 20 Nos. Solar High Mast in the nearby villages
18. Construction of 278 Mtr. Interlocking Road – at Mai Kala and Kohdar