TATA

To,

Joint Director (EZ)
Ministry of Environment, Forest & Climate Change
Eastern Regional Office
A/3- Chandrasekharpur
Bhubaneswar-751023

Ref. No.- TSL/PPA/ENV/47
Date: 29th May 2025

(**Sub**: Submission of Half yearly EC Compliance report for October'24 – March'25)

Ref. No.- : Environmental Clearance ref no.- J-13012/91/2008-IA. II (T) Dt.14.05.2010 in respect of M/s. Tata Steel Limited, Power Plant Athagarh (Erstwhile Bhubaneshwar Power Private Limited), Anantapur and extension of validity of EC Ref. no.- J-13012/91/2008-IA.II(T) Dt.14.08.2015 and amendment of EC Ref. no.- J-13012/91/2008-IA.II(T) Dt.15.006.2018 & 03.07.2019.

Dear Sir,

We are submitting herewith the half yearly compliance report of the EC conditions for Oct'24 – Mar'25 in respect of 135 (2 x 67.5) MW Captive Power Plant of M/s. Tata Steel Limited, Power Plant Athagarh.

Status of the EC compliance is being uploaded in the Ministry's Portal and sent through E-mail and the hard copies by person/ Speed post.

This is for your kind perusal.

Thanking you,

Yours faithfully.

For Tata Steel Limited
Power Plant Athagarh

Authorised Signatory
Debasish Pattnaik

TATA STEEL LIMITED ★ (POWER PLANT, ATHAGARH) ★

GOVT. OF INDIA
MoEF & CC Integrated R.O.
Bhubaneswar-751003
29 MAY 2025
RECEIVED

Encl : As above

Copy to:

i). Director, Ministry of Environment, Forest & Climate Change, Indira Paryavaran Bhavan, Jorbagh Road, New Delhi - 110 003
ii) Member Secretary, Central Pollution Control Board, Parivesh Bhawan, CBD cum Office Complex, East Arjun Nagar, Delhi- 110032
iii). Member Secretary, State Pollution Control Board, Paribesh Bhawan, A/118, Nilakantha Nagar, Unit-8, Bhubaneswar
iv). Regional Officer, State Pollution Control Board, 586, Surya Vihar, Link Road, Cuttack, Odisha

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Power Plant Athagarh

Debasish Pattnaik

Authorised Signatory
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TATA STEEL LIMITED (POWER PLANT, ATHAGARH)

No.... Dt....
RECEIVED
29 MAY 2025
S.P.C. BOARD
ODISHA
BHUBANESWAR

Encl : As above

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iv). Regional Officer, State Pollution Control Board, 586, Surya Vihar, Link Road, Cuttack, Odisha

To,

The Chief Environmental Engineer
State Pollution Control Board
Paribesh Bhawan
A/118, Nilakantha Nagar
Unit-8, Bhubaneswar

Ref. No.- TSL/PPA/ENV/46
Date: May 28, 2025

Sub: Non transmission of real time data from CEMS-I to RT-DAS Server of Board

Reference letter no.: CTO Special condition No.-3 (Air Pollution Control) vide no. 4547/IND-I-CON-6375, Dt.- 23.03.2023.

Dear Sir,

We invite your reference to the above letter. We have scheduled annual maintenance shutdown of our Boiler no.-I of our Power Plant from 01.06.2025 early morning and the maintenance activity will continue for next 60 days. During this period, we are unable to transmit the real time data from CEMS- I to the OSPCB Server.

This is for your kind perusal.

Thanking you,

Yours faithfully,
For Tata Steel Limited
Power Plant Athagarh

28/05/2025

Authorized Signatory
Debasish Pattnaik

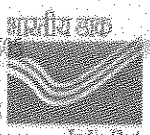
TATA STEEL LTD. * POWER PLANT ATHAGARH *

No.....Dt.....
RECEIVED
29 MAY 2025
S.P.C. BOARD
ODISHA
BHUBANESWAR

Encl: *As above*

Copy to: Regional Officer, State Pollution Control Board, 586, Surya Vihar, Link Road, Cuttack, Odisha

EU843706279IN IVR:697984370627
SP SAHEED NAGAR S.O <751007>
Counter No:1,30/05/2025,12:53
To:THE REGIONAL ,SPCB SURYA VI
PIN:753012, A D Market S.O
From:TATA STEEL LTD,IPICOL HOUSE
Wt:137gms
Amt:29.50,Tax:4.50,Amt.Paid:30.00(Cash)
<Track on www.indiapost.gov.in>
<Dial 18002666868><Wear mask -Stay safe>



EU843706303IN IVR:697984370630
SP SAHEED NAGAR S.O <751007>
Counter No:1,30/05/2025,12:53
To:THE DIRECTOR,MINISTRY OF ENVI
PIN:110003, Lodi Road HO
From:TATA STEEL LTD,IPICOL HOUSE
Wt:142gms
Amt:70.80,Tax:10.80,Amt.Paid:71.00(Cash)
<Track on www.indiapost.gov.in>
<Dial 18002666868><Wear mask -Stay safe>

EU843706296IN IVR:697984370629
SP SAHEED NAGAR S.O <751007>
Counter No:1,30/05/2025,12:53
To:THE MEMBER SECRETARY,CPCB
PIN:110032, Shahdara SO
From:TATA STEEL LTD,IPICOL HOUSE
Wt:143gms
Amt:70.80,Tax:10.80,Amt.Paid:71.00(Cash)
<Track on www.indiapost.gov.in>
<Dial 18002666868><Wear mask -Stay safe>

O/C

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Power Plant Athagarh

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iv). Regional Officer, State Pollution Control Board, 586, Surya Vihar, Link Road, Cuttack, Odisha

POWER PLANT ATHAGARH
TATA STEEL LIMITED
(Erstwhile Bhubaneshwar Power Private Limited)

135 (2 x 67.5) MW CAPTIVE THERMAL POWER PLANT

COMPLIANCE TO THE ENVIRONMENTAL CLEARANCE CONDITIONS

For the Period

October'2024 – March'2025

At- Anantapur, P.O- Dhurusia
Tehsil- Athagarh, Dist.- Cuttack, Odisha

Compliance report to the conditions imposed in the Environmental Clearance No. J-13012/91/2008-IA. II (T) Dt.14.05.2010 and Extension of validity upto 13.05.2017 which was recommended by EAC in their 36th meeting held during 19th &20th May 2015 vide No.- J-13012/91/2008-IA.II(T) Dt.14.08.2015.

Sl. No.	CONDITIONS	COMPLIANCE STATUS
A. SPECIFIC CONDITIONS		
i)	Environmental Clearance is subject to obtaining prior clearance from the National Board of Wildlife under the wildlife (Protection) Act. 1972	Clearance from the National Board of Wildlife obtained and submitted to MoEF vide letter ref. no.: BPPL/MoEF/F-001/01/189/2012-2013 Dt.18.09.2012.
ii)	Wildlife Conservation Plan prepared shall be implemented in consultation with the office of the Chief Wildlife warden and fund earmarked for the same shall not be diverted. The status of the implementation shall be submitted to the Regional office of the Ministry from time to time	Approval obtained for Wildlife Conservation Plan from Office of The Principal Chief Conservator of Forests (Wildlife) & Chief Wildlife Warden, Odisha vide no.6184/1WL-SSP-159/2015, Dt.14.07.2015. Rs.3.03 Crores has been deposited with the Principal Chief Conservator of Forests (Wildlife) Odisha for implementation of the plan as per approval.
iii)	Existing water bodies such as ponds shall not be disturbed and it shall be ensured that measures to regenerate water bodies in the area is undertaken and report submitted to the Regional office of the ministry and the competent Authority in the state government	No water bodies such as Ponds, ditches are existing within our plant premises; hence the clause is not applicable for our project.
iv)	COC of 5.0 shall be adopted. No ground water shall be extracted for use in operation of the power plant even in lean season. 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.	COC of 5.0 has been adopted in designing cooling water system. No Ground Water is being used. Construction water was drawn from Mahanadi River. No natural drainage system has disturbed.
v)	Detailed hydro-geological study shall be conducted from an institute / organization of repute to assess impact of surface water regime and submitted within six months. Specific mitigation measures shall be spelt out and action plan for implementation of the same shall be provided. It shall be ensured that the area drainage is not disturbed due to the proposed power plant. Hydro-geological study of the area shall be also reviewed annually and results submitted to the Ministry and concerned agency in the state Govt. In case adverse impact on ground water quantity and quality is observed at any stage, immediate mitigating steps to contain any adverse impact on ground water shall be undertaken.	A report on Hydro-geological study has been submitted to MoEF & CC vide letter ref. no. BPPL/MoEF/F-001/01/164/2010-2011 on Dt.10.11.2010. Regular monitoring of water quality is carried out and the results are found well within the norms and are being submitted to SPCB on 1st week of every month.
vi)	Source of water for meeting the requirement during lean season shall be specified and submitted to the Regional office of the Ministry within three months	Plan submitted to MoEF vide letter no. BPPL/MoEF/ F-001/ 01/147/2010-2011, Dt. 05.08.2010.
vii)	The treated effluent conforming to the prescribed standards only shall be recirculated and reused within the plant.	The plant is Engineered on "Zero Effluent Discharge concept" and is in operational stage. Storm water drainage system is separate from effluent system.

	There shall be no discharge outside the plant boundary except during monsoon. Arrangements 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 greenbelt / plantation	There is no mixing of effluent and storm water. Sewage Treatment Plant of capacity 16 KLD is in place for treatment of sewage. Treated sewage is being used for raising greenbelt/ plantation.
viii)	Regular monitoring of ground water levels 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.	Piezo meter installed. Ground water quality is being monitored and analyzed for the heavy metals particularly in monsoon seasons. The results are compared with the earlier data and are found well within the norms. Reports are submitted to Regional Office of MoEF along with the compliance report. Groundwater monitoring was carried out during the monsoon season; report / data was submitted in the previous report (i.e. Apr-Sept'24).
ix)	Monitoring of surface water quality shall be regularly conducted and records maintained. The monitored data shall be submitted to the ministry regularly. Further, monitoring points shall be located between the plant and drainage in the direction of flow of ground water and records maintained. Monitoring for heavy metals in ground water shall be undertaken.	Regular surface water quality test for River Mahanadi & Sapua are being conducted and test report are submitted to OSPCB on monthly basis. Samples collected from the test wells and analysed for the heavy metals like Hg, Cd, Zn, Cr^{+6}, As etc. and are found well within the norms. The reports (Oct'24-Mar'25) are enclosed as per **Annexure-I.**
x)	Additionally 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. Soil generated within the site has been used for leveling.
xi)	Provision for installation of FGD shall be made. High Efficiency Electrostatic Precipitators (ESPs) shall be installed to ensure that particulate emission does not exceed 50 mg / Nm3. Adequate dust extraction system such as cyclones/bag filters and water spray system in dusty areas such as in coal handling and ash handling points. Transfer areas and other vulnerable dusty areas shall be provided. A stack 130 mt with flue gas velocity of 22 m/s shall be installed.	Complied. ESPs with emission level of less than 50 mg/Nm^3, DE System with Bag filters, DS systems and Dry fog systems for CHP are installed, commissioned and are in operation. Presently these are running in good condition. 130 mt twin flue stack with flue gas exit velocity of not less than 22 m/sec is in place. Further we are planning to establish full proof system for SO2 reduction from the Stack emission by lime injection process. The Project is expected to be implemented within the stipulated time of compliance (i.e. by December'2028).
xii)	Utilization of 100% Fly ash generated shall be made from 4^{th} year of operation of the plant. Status of implementation shall be reported to the Regional Office of the Ministry from time to time.	Fly ash generated from the plant is supplied to the nearby brick manufacturing units from the date of its commercial operation for optimum utilization to meet the guidelines.

		As such we have utilized 46.3% during 1st year (FY 2016-17), 56.4% in 2nd year (FY 2017-18), 119.3 in 3rd year (FY 2018-19), 102% in 4th year (FY19-20), 139.1% in 5th year (FY 20-21), 100.45% in 6th year (FY 21-22), 115.74% in 7th year (FY22-23), 134.71% in 8th year (FY23-24) and 105.52% in 9th year (FY24-25), quantity includes utilization of Legacy Ash to comply the Fly Ash Gazette Notification-2021 released by MoEF & CC. Ash generation Vs Utilization data for April'24-March'25 is given as per the below Table.

Month	Ash generation (Metric Tons)	Fresh Ash Utilization	Legacy Ash Utilization	Ash utilization (Metric Tons)	Utilization (%)
Apr-24	18621.0	18683.0	5844.0	24527.0	131.70
May-24	20823.0	20565.0	0.0	20593.0	98.90
Jun-24	30516.0	30296.0	0.0	30296.0	99.30
Jul-24	32454.0	33419.0	1120.0	34539.0	106.42
Aug-24	31012.0	31054.0	532.0	31586.0	101.85
Sept-24	21210.0	10928.0	0.0	10928.0	51.52
Oct-24	28657.0	28786.0	0.00	28786.0	100.45
Nov-24	25554.0	24470.0	1884.0	26354.0	103.13
Dec-24	24224.0	23953.0	9461.0	33414.0	137.94
Jan-25	26072.0	26136.0	3826.0	29898.0	114.7
Feb-25	26783.0	26573.0	2948.0	29521.0	110.2
Mar-25	25456.0	24942.0	3105.00	28129.4	110.50
Total	311382.0	299833.0	28720.0	328571.4	105.52
		Overall Utilization: 105.52%			

xiii)	The proponent shall upload the status of compliance of the stipulated EC 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, NOx (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.	EC compliance status along with the monitoring result is submitted to MoEF & CC, CPCB & OSPCB periodically. Online continuous stack monitoring system is in place for monitoring the parameters like PM, SO_2 & NOx. 4 nos. of Continuous Online Ambient Air Quality Monitoring Stations for the parameters like PM_{10}, $PM_{2.5}$, SO_2, NOx & CO are in place; uninterrupted real time data of CAAQMS & CEMS are being transmitted to the OSPCB & CPCB Servers. Monitoring of Ambient air quality, stack emission, water & effluent quality is being carried out regularly and analysis reports are submitted at OSPCB on monthly basis. Summarized monitoring data is being displayed at the main gate of the Plant.
xiv)	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 emanation from the existing ash pond. No ash shall be disposed off in low lying area.	Provision of dry collection system for bottom/fly ash through 3 nos. of dedicated ash Silos for further conveyance into tippers/ trucks/ Bulkers for utilizing in Brick/ Cement / RMC making and rest is disposed off within the Ash Dykes in moistened condition. Further same is being utilized in Brick plants in peak seasons. Periodic water sprinkling is being made over the ash dyke as a dust suppression measure.

xv)	Ash pond shall be lined with HDP/LDP 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.	Complied. Ash pond with 0.5 mm LDPE lining has been provided.
xvi)	For disposal of Bottom ash in abandoned in 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 before undertaking the activity.	Noted
xvii)	Rainwater harvesting should be adopted. Central groundwater Authority / Board shall be consulted for finalization of appropriate rainwater harvesting technology within a period of three months from the date of clearances and details shall be furnished.	Scheme has been prepared in consultation with Central Ground Water Authority. Details submitted to the Director, MoEF, New Delhi vide Ref. No.- BPPL/MoEF/F-001/01/ 154/2010-2011 Dt.28.08.2010. Rainwater harvesting system constructed with harvesting pond.
xviii)	Greenbelt consisting of 3 tiers of plantations of native species around plant and at least 100 m width shall be raised. Wherever 100 m width is not feasible a 50 m width 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 70%	We have planted 10,000 saplings (for FY 2015-16) with local species like Neem (*Azadirachta indica*), Karanj (*Pongamia pinnata*), Arjuna (*Terminalia arjuna*), Chatiana (*Alstonia scholaris*), Sishoo (*Dalbergia sissoo*), Spathodia (*Spathodea campanulata*), Bakul (*Mimusops elengi*), Mahagani (*Swietenia mahagoni*), Jamun (*Syzygium cumini*), Jack fruit (*Artocarpus heterophyllus*), Amla (*Phyllanthus emblica*), Kadamba (*Anthocephalus kadamba*) etc. and are being maintained with survival rate >70% (Survived 7735 nos.). Another 10000 plantation has been developed in 2nd year with a density of 2500 per Ha for FY 2016-17 and are being maintained for with survival rate >70% (Survived 9581 nos.). 7000 plantation has developed in 3rd year (FY 2017-18) and is being maintained for a better survival rate (Survived 6589 nos.). 8000 plantation has developed in 4th year (FY 2018-19) and is being maintained for a better survival rate (survived 7379). 4000 plantation has developed in 5th year (FY 2019-20) and is being maintained for a better survival rate (survived 3782). 3050 plantation has developed in 6th year (FY 2020-21) and is being maintained for a better survival rate (survived 3050). 8657 nos. plantation has been developed in 7th year (FY 2021-22) and is being maintained for a better survival rate (survived 8657).

		3054 nos. plantation has been developed in 8th year (FY 2022-23) and is being maintained for a better survival rate (survived 2977). 4224 nos. plantation has been developed in 9th year (FY 2023-24) and is being maintained for a better survival rate (survived 3902). More plantation activity is under progress. 3586 nos. plantation has been developed in 10th year (FY 2025-26) and is being maintained for a better survival rate. More plantation activity is under progress. Balance plantation is being carried out progressively in year wise manner to cover 33% of the total plant area with greenbelt.
xix)	Two nearest village shall be adopted and basic amenities like development of roads, drinking water supply, primary health centre, primary school etc. shall be developed in co-ordination with the district administration.	Power Plant Athagarh, M/s. Tata Steel Limited is dedicated to provide the basic amenities like development of roads, street lights, drinking water, education, supporting medical assistance in respect of providing medical equipment in the nearby Govt. Hospitals, tree plantation, imparting training to the villagers for income generation in coordination with Dist. Admistration. Tata Steel Foundation is closely associated towards these activities as CSR program.
xx)	Local employable youth shall be trained in skills relevant to the project for eventual employment in the project itself. The action taken report and details thereof to this effect shall be submitted to the Regional Office of the Ministry and the State Govt. concerned from time to time.	About 250 local people are employed after basic training during construction phase in different trades and are being used for commissioning and operation period.
xxi)	The project proponent shall also adequately contribute in the development of the neighboring villages. Special package with implementation schedule for providing fluoride free potable drinking water supply in the nearby villages and schools shall be undertaken in a time bound manner	It is being done in continuous process
xxii)	A good action plan for R&R (if applicable) with package for the project affected persons be submitted and implemented as per prevalent R&R policy within three months from the date of issue of this letter.	No displacement is involved. Hence R&R is not applicable.
xxiii)	An amount of Rs. 2.5 Crores shall be earmarked as one time capital cost for CSR programme. Subsequently a recurring expenditure of Rs. 0.5 crore per annum shall be earmarked as recurring expenditure for CSR activities. Details of the activities to be undertaken shall be submitted within one month along with road map for implementation	Provision is made and being complied. The details of CSR activities submitted to MoEF vide letter no. BPPL/MoEF/F-001/01/ 136/2010-2011, Dt.11.06.2010. CSR works are being taken up in a phased manner.

xxiv)	While identifying CSR programme the company shall conduct need based assessment for the nearby villages 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 besides development of fodder farm, fruit bearing orchards, vocational training etc can form a part of such programme. Company shall provide separate budget for community development activities and income generating programmes. This will be in addition to vocation al training for individuals imparted to take up self-employment and jobs.	Socio Economic Study has been completed. The suggestion of Socio-Economic Study is integrated with CSR programme and submitted to Dist. Administration for approval. For encouraging self-employment many job contract are given to local villagers.
xxv)	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.	CSR works are being taken up in a phased manner. The status of the implementation also being submitted time to time. We are also adhering the CSR Guidelines as per the Company Act-2014 and Company Act amendment 2020.
xxvi)	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.	Water spray system and fire hydrants are provided in Coal stock yard and are in operation. Deployment of Security all around the Clock at the coal yard site as precautionary Safety / Security measure. Copy of plant layout has already been submitted to the Regional office of Ministry of Environment & CC.
xxvii)	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 liquified fuel will not exceed 0.5. Disaster Management plan shall be prepared to meet any eventually in case of an accident taking place due to storage of oil.	For Storage of LDO Petroleum Class-C storage License has been obtained from Petroleum & Explosive Safety Organization (PESO), Nagpur vide ref. no. P/HQ/OR/15/1172 (P326589), Dt. 23.02.2015; and amended renewed License vide Letter no.- P/HQ/OR/15/1172 (P326589), Dt. 24.11.2023 and valid till Dt. 31.12.2033. Disaster Management plan is prepared and approved by Director of Factories, Govt. of Odisha.
xxviii)	First Aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.	Temporary facilities like rest shelter, toilets, First aid Center were developed during construction phase. Eventually permanent infrastructures like First Aid Center with adequate paramedical staff rounf the clock, adequate nos. of toilets, washrooms, restrooms with drinking water facility, parking area at 4 locations, Safety training Center etc. has been provided in operational period and are in use.

B. GENERAL CONDITIONS		
i)	Noise levels emanating from turbines shall be so controlled such that the noise in the work zone shall be limited to 75 dBA. For people working in the high noise area, requisite personal protective equipment like ear plugs/ ear muffs 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	Compressors and Emergency Diesel Set are installed with acoustic enclosure to limit the noise level within the prescribed limit. However, earplugs / ear-muffs are provided and ensured for its usage to the workers engaged at noisy areas. Periodic medical examination (PME) is being conducted to every worker in every year. Noise monitoring report is enclosed as per **Annexure-II.**
ii)	Regular monitoring of ground level concentration of SO_2, NOx, $PM_{2.5}$ & 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.	Monitoring of Ambient air quality wrt. PM_{10}, $PM_{2.5}$, SO_2, NOx & CO and Stack emission for the parameters like PM (Particulate Matter), SO_2, NOx & Hg is being carried out every month in consultation with SPCB. All the test results are found well within the norms. Monitoring reports are being submitted to SPCB every month and once in six months to the MoEF & CC along with the compliance report. Monitored result along with the Half yearly compliance reports are being uploaded in our company's website.
iii)	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 letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the State Pollution Board / Committee and may also be seen at Website of the Ministry of Environment and Forests at http://envfor.nic.in	Published in English daily (The Indian Express - 21.05.2010 Page no.5) and Odiya daily (The Samaya - 22.05.2010 Page no.7)
iv)	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.	Directive complied.
v)	A separate Environment Management Cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards	As a part of corporate responsibility and in order to manage the day-to-day environmental management practices, Power Plant Athagarh has developed a permanent organizational set up charged with the task of ensuring effective implementation of all identified Environmental pollution mitigation measures.

		Conscious to this, Plant has created an Environmental Management Cell (EMC) under the leadership of Sr. Manager-Environment, Safety & Stainability along with a subordinate and Horticulture staff to coordinate the activities concerned with the management and implementation of environmental pollution control measures. A well-documented system has also been developed to monitor and control environmental pollution.
vi)	The Project proponent shall also submit six monthly reports on the status of compliance of the stipulated environmental clearance conditions including results of monitored data (both in hard copies as well by e-mail) to the respective Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB.	Six monthly reports submitted regularly to Regional Office of MoEF & CC, CPCB, SPCB by E-mail and hard copy of the compliance by speed post. Updated compliance is also being uploaded in the web portal of MoEF & CC.
vii)	The Environment statement for each financial year ending 31st March in Form V is mandated to be submitted by the project proponent to the concerned State Pollution Board as prescribed under the Environment (Protection) Rules, 1986 as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of the ministry by e-mail.	Annual Environmental Statement (**Form-V**) for FY 2024-25 vide our letter no.- TSL/PPA/ENV/12, Dt. 02.09.2024 has been submitted at State Pollution Control Board, Odisha and Regional Office, MoEF & CC, Bhubaneswar is enclosed as per **Annexure- III.**
viii)	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 status of implementation is being submitted regularly to the Regional Office of MoEF & CC, CPCB, SPCB by E-mail and hard copies also being submitted through Speed-post. Compliance report is being uploaded in company's website. Updated compliance is also being uploaded in the web portal of MoEF & CC.
ix)	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 up-load the compliance status in their website and update the same from time to time at least six monthly basis. Criteria pollutants levels	A set of documents was submitted to Regional Office, Bhubaneswar and Status are being sent to Regional Office regularly. Compliance report of Half Yrly. Env. Clearance is uploaded in company's website. Criteria of Pollutants Level is displayed at main gate of the Plant.

	including NOx (From stack & ambient air) shall be displayed at the main gate of the power plant.	
x	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 measures shall not be diverted for other purposes and year-wise expenditure should be reported to the Ministry.	Total allocated amount of Rs. 64.97 Crores for environmental protection measures has been implemented. Annual operation & maintenance expenditure is estimated to be Rs. 70 Lacs per Annum.
xi)	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.	Submitted to MoEF & Regional Office vide letter ref.no. BPPL/F-01/01/297 Dt. 22.08.2013.
xii)	Full cooperation shall be extended to the Scientists / Officers / CPCB/ SPCB who would be monitoring the compliance of environmental status	Noted and strictly adhered to
xiii)	Provision shall be made for the housing of construction labour 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.	Project construction activity has been completed; hence the clause is not applicable now.
Extension of validity of EC No. J-13012/91/2008-IA.II(T) Dt.14.08.2015		
xxix)	As committed, the projects worth of Rs.2.5 cores (one time capital investment) to be taken up under the CSR activities will be finalised with the District Authorities and Rehabilitation & Peripheral Development Advisory Committee (RPDAC) and shall be implemented within the next one year.	CSR works are being taken up in a phased manner. The status of the implementation also being submitted time to time. We are also adhering the CSR Guidelines as per the Company Act-2014 and Company Act amendment 2020.
xxx)	As committed, the greenbelt development shall be taken up immediately and plant one lakh saplings within the next one year.	We have planted 10,000 saplings (for FY 2015-16) with local species like Neem (*Azadirachta indica*), Karanj (*Pongamia pinnata*), Arjuna (*Terminalia arjuna*), Chatiana (*Alstonia scholaris*), Sishoo (*Dalbergia sissoo*), Spathodia (*Spathodea campanulata*), Bakul (*Mimusops elengi*), Mahagani (*Swietenia mahagoni*), Jamun (*Syzygium cumini*), Jack fruit (*Artocarpus heterophyllus*), Amla (*Phyllanthus emblica*), Kadamba (*Anthocephalus kadamba*) etc. and are being maintained with survival rate >70% (Survived 7735 nos.). Another 10000 plantation has been developed in 2nd year with a density of 2500 per Ha for FY 2016-17 and

		are being maintained for with survival rate >70% (Survived 9581 nos.). 7000 plantation has developed in 3rd year (FY 2017-18) and is being maintained for a better survival rate (Survived 6589 nos.). 8000 plantation has developed in 4th year (FY 2018-19) and is being maintained for a better survival rate (survived 7379). 4000 plantation has developed in 5th year (FY 2019-20) and is being maintained for a better survival rate (survived 3782). 3050 plantation has developed in 6th year (FY 2020-21) and is being maintained for a better survival rate (survived 3050). 8657 nos. plantation has been developed in 7th year (FY 2021-22) and is being maintained for a better survival rate (survived 8657). 3054 nos. plantation has been developed in 8th year (FY 2022-23) and is being maintained for a better survival rate (survived 2977). More plantation activity is under progress. 4224 nos. plantation has been developed in 9th year (FY 2023-24) and is being maintained for a better survival rate (survived 3902). 3586 nos. plantation has been developed in 10th year (FY 2024-25) and is being maintained for a better survival rate. More plantation activity is under progress. Rest of the plantation is being carried out progressively in year wise to cover 33% of the total plant area with greenbelt.
xxxi)	Harnessing solar power within the premises of the plant particularly at available rooftops shall be carried out and status of implementation including actual generation of solar power shall be submitted along with half-yearly monitoring report.	We have installed Solar Power system on the roof top of our First Aid Centre and it has already been synchronized with existing GRID system and now in operation. Solar Power generation for Apr'24-Mar'25 is enclosed as per **Annexure-IV.** Additionally 50 KW Solar Power station is in the process of installation at the Plant Admn. Building.
xxxii)	A long-term study of radio activity and heavy metals contents on coal to be used shall be carried out through a reputed institute and results thereof analyzed every two year and reported along with monitoring reports. Thereafter mechanism for an in-built continuous monitoring for radio activity and heavy metals in coal and fly ash (including bottom ash) shall be put in place.	Sample collected and analysis reports are enclosed as per **Annexure-V**.

xxxiii)	Fugitive emissions shall be controlled to prevent impact on agricultural or non-agricultural land. In case of any proven damage to agricultural land/crop, necessary compensation shall be paid by the PP.	Fugitive emission is being taken care of. Adequate nos. of dust suppression, Dry fog, fixed type water sprinklers and dust extraction system has been provided at coal yard, Ash dyke, CHP, Ash Silo, Haul road and Junction houses. Regular water sprinkling is being carried out along the internal roads to suppress the road dust emission. Also we have installed 2 nos. of mechanized wheel washing systems at entry/ exit gate of coal yard and along the Haul road near Silo to washout the accumulated coal / ash dust over the wheels of the trucks/ Bulkers exiting from the Plant; which prevent further carryover of dust, due to vehicle movement along the haul road. We have installed 2 nos. of mist canon at the coal stackyard by replacing with the fixed type water sprinklers for effective & efficient dust suppression and optimizing water usage.
xxxiv)	Greenbelt shall also be developed around the Ash Pond over and above the Greenbelt around the plant boundary.	Greenbelt has been developed around the ash dykes and vacant area available along the Plant boundary for abatement of pollution.
xxxv)	An Environmental Cell comprising of at least one expert in environmental science/engineering, ecology, occupational health and social science, shall be created preferably at the project site itself and shall be headed by an officer of appropriate superiority and qualification. It shall be ensured that the Head of the Cell shall directly report to the Head of the Plant who would be accountable for implementation of environmental regulations and social impact improvement/mitigation measures.	Environment cell has been created at the site assigned with the charge of Head-Environment & Sustainability, who is directly report to Plant Head to accomplish his job smoothly.
xxxvi)	For proper and periodic monitoring of CSR activities, a CSR committee or a Social Audit committee or a suitable credible external agency shall be appointed. CSR activities shall also be evaluated by an independent external agency. This evaluation shall be both concurrent and final.	CSR activities are being implemented by the District Authority and the same is being regularly reviewed by the Collector, Cuttack. Power Plant Athagarh has undertaken different CSR activities in collaboration with Tata Steel Foundation in financial year 2024-25 under different sectors as per the Companies Act 2013. CSR activities are being implemented by the Company and regularly reviewed, monitored by the District Authority, Cuttack. The Company has its CSR Committee constituted at Board level who oversees and supervises the CSR activities as approved. Further BPPL has amalgamated into and with Tata Steel Limited (TSL) from 1st July, 2024 and now BPPL as a separate entity does not exist. While saying this, this division has become a part of Tata Steel Group and the

		CSR requirement of whole TSL group is being undertaken through Tata Steel Foundation. Last review meeting was conducted on Dt. **28.01.2025.** Tata Steel Foundation is working for the projects like 1. Rural development CSR project 2. Education 3. CSR project through Tata Steel Foundation 4. Healthcare 5. Climate Resilient Agriculture & Water management projects 6. Infrastructure development 7. Donation to PM Care In addition to the above CSR projects, the Company has planned to undertake different CSR activities under the empaneled sectors under Companies Act 2013. We are also adhering the CSR Guidelines as per the Company Act-2013 and Companies (Corporate Social Responsibility) Rules, 2014 and Company Act amendment 2020.
xxxvii)	The project proponent shall formulate a well laid Corporate Environment Policy and identify and designate responsible officers at all levels of its hierarchy for ensuring adherence to the policy and compliance with the conditions stipulated in this clearance letter and other applicable environmental laws and regulations.	Corporate Environment Policy has been formulated and in implementation. All the statutory compliances are being addressed as per the Industrial standard and are being monitored, reviewed and documented time to time. Maximum efforts are being taken for conservation of natural resources and better performance for environmental practices.
Amendment of EC No.J-13012/91/2008-IA.II(T) Dt.23.12.2015		
xxxviii).	Prior requisite approvals from the the concerned State Authorities especially the PWD; shall be obtained.	We have obtained necessary approvals for coal transportation by road from PWD.
xxxix).	Adequate road safety measures shall be provided for pedestrians and specially for students near Schools. This should be done in consultation and approval of authorities concerned.	Adequate road safety measure are being taken all the time by engaging Security personnel at all the junctions and road crossings as a traffic control measure. About 74 nos. of streetlights were installed for better illumination. No entry timings are being followed during the busy hours like School timing hours. this is done in consultation and with prior approval from the local Dist. Administration.
xl).	Monitoring of Air Pollution and noise shall be carried out at least once in a month and submitted to Ministry's R.O and SPCB.	Air quality monitoring is being carried out at 3 different locations along the Coal transportation road at least in every month and reports are being submitted to SPCB every month. Acknowledgement of the letter is attached herewith as per **Annexure-VI.**
xli).	The transportation by road shall be through mechanically covered trucks to the extent possible, else through trucks covered by tarpaulin.	Always ensured to make all our material transportation is carried out through the tarpaulin covered trucks. Proper surveillance is carried out by us all the time.
xlii).	Explore the possibility of upgrading road shoulders into pukka road in consultation with State Government.	We are maintaining the coal transportation road on regular basis; and deposited Rupees 3.50 Crores with State Govt. for upgrading into pucca road. Also we take care of regular maintenance of the road to a greater possible extent on a priority basis.

xliii).	Periodic maintenance of the road shall be done by the project proponent at its own expenses and shall also facilitate the traffic control on the road in consultation with the State Govt.	We are regularly inspecting and monitoring the road condition and traffic management by posting the Security personnel at the road crossing areas to control the traffic. Regular maintenance of the road is being carried out; and repairing of the same is done on a priority basis. For any major road repair requisite amount is deposited with the State Govt. for repair/ construction.
xliv).	Avenue Plantation of 2/3 rows all along the road shall be carried out by the project proponent at its own expenses in consultation with State Government.	Avenue plantation of 2300 trees (with 2 rows) along the Coal transportation road has been developed. Additionally, we are planning for planting more 2000 greenbelt along the coal transportation route in FY 26 as an avenue plantation measure.
xlv).	The Project proponent shall advertise in the local leading newspapers and place on the website, the temporary permission so accorded by the Ministry for public information.	We have released advertisement in local newspapers both in Odia and English for grant of permission for coal transportation by road for a temporary permission accorded from Ministry of Environment Forest and Climate Change.
Amendment of EC No.J-13012/91/2008-IA.II(T) Dt.15.06.2018		
5.i	Local plant species shall be planted as a part of greenbelt development	Plantation is being carried out with predominant local species in consultation with Forest Department, Govt. of Odisha
ii	Avenue plantation and regular water sprinkling shall be made along the road as coal is transported by road	Avenue plantation of 2300 trees (with 2 rows) along the Coal transportation road has been developed. Additionally, we are planning for planting more 2000 greenbelt along the coal transportation route in FY 25-26 as an avenue plantation measure. Regular water sprinkling along the road is being carried out as a dust suppression measure.
iii	Revised emission norms dated 07.12.2015 and amendments issued time to time shall be achieved.	Complied; and strictly adhered to.
Amendment of EC No. J-13012/91/2008-IA. II(T) Dt.03.07.2019		
9.i	The soft copy of traffic impact assessment study report is to be uploaded on the Ministry's website as well as Company's website	Soft copy of the Traffic impact study has been uploaded on the website of MoEF & CC on Dt. 06.06.2019.
ii	The conditions stipulated in Ministry's Show cause withdrawal letter dated 16.04.2019 shall be complied with: 1. Avenue plantation along the total length of the route (Talcher-97 km) shall be developed in consultation with Social Forestry Department and the custodian of the road (NHAI/ PWD). The expenses for plantation, protection and maintenance for five years shall be borne by the M/s. Bhubaneshwar Power Pvt. Ltd. For the selection of the species, number of species in a specific length, technical guidance for maintenance, Social Forestry Department shall be consulted.	A survey was conducted by Power Plant Athagarh along the coal transportation route of 97km from Plant to MCL, Talcher. At present 4 laning of the road construction work i.e. soil cutting, filling, laying WBM & concreting is going on at several patches; almost 95 % of the stretch has been completed and is in use. Remaining work is under progress. We had a discussion with PCCF, Govt. of Odisha regarding the action plan for implementation of greenbelt development as directed by MoFF & CC. In this context, Additional PCCF, had directed to DFO, Angul to find out the availability of land along the coal transportation route for developing avenue plantation; since the plantation along the newly constructed NH-55 is coming under the purview of NHAI Project.

	2. An action plan indicating number and type of saplings, time schedule, budgetary allocation for development and maintenance shall be prepared by the Social Forestry Department.	DFO, Angul had requested to NHAI Authorities to provide, land details for creating avenue plantation. Accordingly, NHAI Authority clarified with their Letter Dt. 25.11.2020 that the scope of plantation along the NH-55 (70 km) is under the purview of EPC Contractor, which shall be executed after completion of road construction project. We are waiting for further communication from DFO, Angul in this regard. Avenue plantation of 2300 trees (with 2 rows) along the Coal transportation road has been developed in a stretch of 10 km from Power Plant along the PWD road connecting to NH-55. Additionally, we are planning for planting more 2000 greenbelt along the PWD road of coal transportation route in FY 25-26 as an avenue plantation measure.
iii	The detailed progress of the construction of railway siding, balance work, expenditure spent, estimated time required for completion etc. is to be submitted to the Ministry and its Regional Office for monitoring	We are adhering to the clarification published by MoEF & CC Gazette Notification vide S.O. 156 (E), Dt. 21.05.2020 & their Office Memorandum Dt. 29.10.2020 and the Letter Dt. 17.11.2020 (addressed to BPPL) for coal transportation by road in tarpaulin covered trucks till the railway conveyor system of the TPP is established. However, we are in the process of acquiring the balance land required for Railway siding Project. Discussions are going on the implementation of own Railway siding. DPR has been prepared and the same has been approved by East Coast railways.
iv	The quantity of coal transportation from various routes/ sources including rail shall be submitted month-wise, daily average, minimum and maximum for six month period April- September, October-March as part of compliance report.	Details of route wise coal transportation to Power Plant Athagarh for the period Oct'24- Mar'25 is enclosed as per **Annexure-VII.**
v	The preparedness and readiness of the power plant to install additional pollution control measures to achieve the revised flue gas emission standards dated 07.12.2015 shall be submitted to the Ministry. A copy of extension of timelines given by the CPCB, if any to install the pollution control measures such as ESP upgradation for meeting PM emission, FGD for SO_2 reduction, NOx control measures etc. is to be submitted to the Ministry.	Both the Units of our Power Plant were commissioned during June' 2016 and we are maintaining the emission parameters and specific water consumption within the stipulated standard prescribed as per the MoEF & CC Gazette Notification dt. 07.12.2015. No upgradation of the Pollution control equipment is envisaged, as Tata Steel has established its new Power plant and commercial operation started from June'2016. However, we are in process of implementing lime injection process for reduction in SO2 level in Stack emission to be completed within stipulated timeline i.e. by Dec'2028.

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ANNEXURE-1

Visiontek Consultancy Services Pvt. Ltd.

(Committed For Better Environment)

ISO 9001:2015, ISO 14001:2015, ISO 45001:2018 (OH&S), ISO/IEC 17025:2017 Certified

Ref : Envlab/24-25/TR-11226 **Date : 02.11.2024**

SURFACE WATER QUALITY ANALYSIS REPORT FOR OCT- 2024

1. Name of Industry : M/s Power Plant Athagarh, TATA Steel.
2. Sampling Location : SW-1: Mahanadi River
SW-II: SapuaNadi
3. Date of sampling : 18.10.2024
4. Date of analysis : 19.10.2024 TO 25.10.2024
5. Sample collected by : VCSPL Representative

Sl. No.	Parameter	Unit	Standards as per IS-2296:1992 Class –'C'	Analysis Results	
				SW-I	SW-II
1	Colour (max)	Hazen	300	25	35
2	pH Value (at 25°C)	--	6.0-9.0	7.08	6.83
3	Suspended solids	mg/l	-	87	98
4	Dissolved Oxygen (minimum)	mg/l	4.0	5.2	5.5
5	Turbidity	NTU	--	26.3	31.2
6	Chloride (max)	mg/l	600	27.5	45.0
7	Total Dissolved Solids	mg/l	1500	329	345
8	BOD (3) days at 27°C (max)	mg/l	3.0	2.1	2.2
9	Arsenic as As	mg/l	0.2	<0.004	<0.004
10	Lead as Pb(max)	mg/l	0.1	<0.02	<0.02
11	Cadmium as Cd (max)	mg/l	0.01	<0.03	<0.03
12	Hexavalent Chromium as Cr^{+6}	mg/l	0.05	<0.01	<0.01
13	Copper as Cu (max)	mg/l	1.5	<0.05	<0.05
14	Zinc as Zn(max)	mg/l	15	<0.03	<0.03
15	Selenium as Se (max)	mg/l	0.05	<0.001	<0.001
16	Cyanide as CN (max)	mg/l	0.05	<0.01	<0.01
17	Fluoride as F (max)	mg/l	1.5	0.33	0.36
18	Sulphates (SO_4) (max)	mg/l	400	20.8	16.9
19	Phenolic Compounds as C_6H_5OH (max)	mg/l	0.005	<0.05	<0.05
20	Iron as Fe (max)	mg/l	0.5	0.43	0.45
21	Nitrate as NO_3 (max)	mg/l	50	1.28	2.35
22	Anionic Detergents (max)	mg/l	1.0	<0.2	<0.2
23	Total Coli form	MPN/ 100 ml	5000	540	700

Note- Turbidity & Suspended solids are analyzed which is not a scheduled parameter under IS-2296, Class-C.
ND-Not detectable.
BDL-(Below detection limit) Values- (Cu<0.05 mg/l, C_6H_5OH<0.001 mg/l, Cd<0.03 mg/l, Se<0.001 mg/l,As<0.004 mg/l, Pb<0.02 mg/l, Zn<0.03 mg/l, Cr^{+6}<0.01 mg/l)

Reviewed By

Verified By

Ref : Envlab/24-25/TR-12986 **Date : 03.12.2024**

SURFACE WATER QUALITY ANALYSIS REPORT FOR NOV- 2024

1. Name of Industry : M/s Power Plant, Athagarh, TATA Steel.
2. Sampling Location : SW-1: Mahanadi River
SW-II: Sapua Nadi
3. Date of sampling : 12.11.2024
4. Date of analysis : 13.11.2024 TO 18.11.2024
5. Sample collected by : VCSPL Representative

Sl. No.	Parameter	Unit	Standards as per IS-2296:1992 Class –'C'	Analysis Results	
				SW-I	SW-II
1	Colour (max)	Hazen	300	20	30
2	pH Value (at 25°C)	--	6.0-9.0	7.11	6.70
3	Suspended solids	mg/l	-	51	72
4	Dissolved Oxygen (minimum)	mg/l	4.0	5.0	5.4
5	Turbidity	NTU	--	22.8	30.5
6	Chloride (max)	mg/l	600	22.5	40.0
7	Total Dissolved Solids	mg/l	1500	340	359
8	BOD (3) days at 27^0C (max)	mg/l	3.0	2.3	2.5
9	Arsenic as As	mg/l	0.2	<0.004	<0.004
10	Lead as Pb(max)	mg/l	0.1	<0.02	<0.02
11	Cadmium as Cd (max)	mg/l	0.01	<0.03	<0.03
12	Hexavalent Chromium as Cr^{+6}	mg/l	0.05	<0.01	<0.01
13	Copper as Cu (max)	mg/l	1.5	<0.05	<0.05
14	Zinc as Zn(max)	mg/l	15	<0.03	<0.03
15	Selenium as Se (max)	mg/l	0.05	<0.001	<0.001
16	Cyanide as CN (max)	mg/l	0.05	<0.01	<0.01
17	Fluoride as F (max)	mg/l	1.5	0.40	0.42
18	Sulphates (SO_4) (max)	mg/l	400	19.5	18.6
19	Phenolic Compounds as C_6H_5OH (max)	mg/l	0.005	<0.05	<0.05
20	Iron as Fe (max)	mg/l	0.5	0.41	0.45
21	Nitrate as NO_3 (max)	mg/l	50	1.37	2.4
22	Anionic Detergents (max)	mg/l	1.0	<0.2	<0.2
23	Total Coli form	MPN/ 100 ml	5000	560	840

Note- Turbidity & Suspended solids are analyzed which is not a scheduled parameter under IS-2296, Class-C.

ND-Not detectable.

BDL-(Below detection limit) Values- (Cu<0.05 mg/l, C_6H_5OH<0.001 mg/l, Cd<0.03 mg/l, Se<0.001 mg/l,As<0.004 mg/l, Pb<0.02 mg/l, Zn<0.03 mg/l, Cr^{+6}<0.01 mg/l)

Reviewed By

Verified By

Ref : Envlab/24-25/TR- 1436 **Date : 02.01.2025**

SURFACE WATER QUALITY ANALYSIS REPORT FOR DEC- 2024

1. Name of Industry : M/s Power Plant, Athagarh, TATA Steel.
2. Sampling Location : SW-1: Mahanadi River
SW-II: Sapua Nadi
3. Date of sampling : 18.12.2024
4. Date of analysis : 19.12.2024 TO 25.12.2024
5. Sample collected by : VCSPL Representative

Sl. No.	Parameter	Unit	Standards as per IS-2296:1992 Class –'C'	Analysis Results	
				SW-I	SW-II
1	Colour (max)	Hazen	300	23	32
2	pH Value (at 25°C)	--	6.0-9.0	7.08	6.81
3	Suspended solids	mg/l	-	54	70
4	Dissolved Oxygen (minimum)	mg/l	4.0	4.7	5.2
5	Turbidity	NTU	--	22.8	30.5
6	Chloride (max)	mg/l	600	22.0	35.0
7	Total Dissolved Solids	mg/l	1500	329	348
8	BOD (3) days at 27^{0}C (max)	mg/l	3.0	2.2	2.4
9	Arsenic as As	mg/l	0.2	<0.004	<0.004
10	Lead as Pb(max)	mg/l	0.1	<0.02	<0.02
11	Cadmium as Cd (max)	mg/l	0.01	<0.03	<0.03
12	Hexavalent Chromium as Cr^{+6}	mg/l	0.05	<0.01	<0.01
13	Copper as Cu (max)	mg/l	1.5	<0.05	<0.05
14	Zinc as Zn(max)	mg/l	15	<0.03	<0.03
15	Selenium as Se (max)	mg/l	0.05	<0.001	<0.001
16	Cyanide as CN (max)	mg/l	0.05	<0.01	<0.01
17	Fluoride as F (max)	mg/l	1.5	0.38	0.40
18	Sulphates (SO_4) (max)	mg/l	400	18.8	17.9
19	Phenolic Compounds as C_6H_5OH (max)	mg/l	0.005	<0.05	<0.05
20	Iron as Fe (max)	mg/l	0.5	0.44	0.46
21	Nitrate as NO_3 (max)	mg/l	50	1.28	2.29
22	Anionic Detergents (max)	mg/l	1.0	<0.2	<0.2
23	Total Coli form	MPN/ 100 ml	5000	540	790

Note- Turbidity & Suspended solids are analyzed which is not a scheduled parameter under IS-2296, Class-C.

ND-Not detectable.

BDL-(Below detection limit) Values- (Cu<0.05 mg/l, C_6H_5OH<0.001 mg/l, Cd<0.03 mg/l, Se<0.001 mg/l,As<0.004 mg/l, Pb<0.02 mg/l, Zn<0.03 mg/l, Cr^{+6}<0.01 mg/l)

Reviewed By

Verified By

Visiontek Consultancy Services Pvt. Ltd.

(Committed For Better Environment)

ISO 9001:2015, ISO 14001:2015, ISO 45001:2018 (OH&S), ISO/IEC 17025:2017 Certified

Ref : Envlab/24-25/TR-15579 **Date : 03.02.2025**

SURFACE WATER QUALITY ANALYSIS REPORT FOR JAN- 2025

1. Name of Industry : M/s Power Plant, Athagarh, TATA Steel.
2. Sampling Location : SW-1: Mahanadi River
SW-II: Sapua Nadi
3. Date of sampling : 15.01.2025
4. Date of analysis : 16.01.2025 TO 22.01.2025
5. Sample collected by : VCSPL Representative

Sl. No.	Parameter	Unit	Standards as per IS-2296:1992 Class –'C'	Analysis Results	
				SW-I	SW-II
1	Colour (max)	Hazen	300	28	36
2	pH Value (at 25°C)	--	6.0-9.0	7.13	6.92
3	Suspended solids	mg/l	-	58	76
4	Dissolved Oxygen (minimum)	mg/l	4.0	4.5	5.0
5	Turbidity	NTU	--	20.4	27.2
6	Chloride (max)	mg/l	600	20.0	32.5
7	Total Dissolved Solids	mg/l	1500	306	332
8	BOD (3) days at 27^0C (max)	mg/l	3.0	2.3	2.5
9	Arsenic as As	mg/l	0.2	<0.004	<0.004
10	Lead as Pb(max)	mg/l	0.1	<0.02	<0.02
11	Cadmium as Cd (max)	mg/l	0.01	<0.03	<0.03
12	Hexavalent Chromium as Cr^{+6}	mg/l	0.05	<0.01	<0.01
13	Copper as Cu (max)	mg/l	1.5	<0.05	<0.05
14	Zinc as Zn(max)	mg/l	15	<0.03	<0.03
15	Selenium as Se (max)	mg/l	0.05	<0.001	<0.001
16	Cyanide as CN (max)	mg/l	0.05	<0.01	<0.01
17	Fluoride as F (max)	mg/l	1.5	0.40	0.43
18	Sulphates (SO_4) (max)	mg/l	400	16.9	18.2
19	Phenolic Compounds as C_6H_5OH (max)	mg/l	0.005	<0.05	<0.05
20	Iron as Fe (max)	mg/l	0.5	0.42	0.46
21	Nitrate as NO_3 (max)	mg/l	50	1.36	2.12
22	Anionic Detergents (max)	mg/l	1.0	<0.2	<0.2
23	Total Coli form	MPN/ 100 ml	5000	510	840

Note- Turbidity & Suspended solids are analyzed which is not a scheduled parameter under IS-2296, Class-C.

ND-Not detectable.

BDL-(Below detection limit) Values- (Cu<0.05 mg/l, C_6H_5OH<0.001 mg/l, Cd<0.03 mg/l, Se<0.001 mg/l,As<0.004 mg/l, Pb<0.02 mg/l, Zn<0.03 mg/l, Cr^{+6}<0.01 mg/l)

Reviewed By

Verified By

Visiontek Consultancy Services Pvt. Ltd.

(Committed For Better Environment)

ISO 9001:2015, ISO 14001:2015, ISO 45001:2018 (OH&S), ISO/IEC 17025:2017 Certified

Ref : Envlab/24-25/TR- 16884 **Date : 01.03.2025**

SURFACE WATER QUALITY ANALYSIS REPORT FOR FEB-2025

1. Name of Industry : M/s Power Plant, Athagarh, TATA Steel.
2. Sampling Location : SW-1: Mahanadi River
SW-II: Sapua Nadi
3. Date of sampling : 05.02.2025
4. Date of analysis : 06.02.2025 TO 12.02.2025
5. Sample collected by : VCSPL Representative

Sl. No.	Parameter	Unit	Standards as per IS-2296:1992 Class –'C'	Analysis Results	
				SW-I	SW-II
1	Colour (max)	Hazen	300	25	30
2	pH Value (at 25°C)	--	6.0-9.0	7.05	6.90
3	Suspended solids	mg/l	-	66	85
4	Dissolved Oxygen (minimum)	mg/l	4.0	4.4	4.8
5	Turbidity	NTU	--	18.5	25.1
6	Chloride (max)	mg/l	600	27.5	35.0
7	Total Dissolved Solids	mg/l	1500	311	342
8	BOD (3) days at 27^0C (max)	mg/l	3.0	2.4	2.8
9	Arsenic as As	mg/l	0.2	<0.004	<0.004
10	Lead as Pb(max)	mg/l	0.1	<0.02	<0.02
11	Cadmium as Cd (max)	mg/l	0.01	<0.03	<0.03
12	Hexavalent Chromium as Cr^{+6}	mg/l	0.05	<0.01	<0.01
13	Copper as Cu (max)	mg/l	1.5	<0.05	<0.05
14	Zinc as Zn(max)	mg/l	15	<0.03	<0.03
15	Selenium as Se (max)	mg/l	0.05	<0.001	<0.001
16	Cyanide as CN (max)	mg/l	0.05	<0.01	<0.01
17	Fluoride as F (max)	mg/l	1.5	0.43	0.48
18	Sulphates (SO_4) (max)	mg/l	400	18.6	20.4
19	Phenolic Compounds as C_6H_5OH (max)	mg/l	0.005	<0.05	<0.05
20	Iron as Fe (max)	mg/l	0.5	0.45	0.47
21	Nitrate as NO_3 (max)	mg/l	50	1.29	2.30
22	Anionic Detergents (max)	mg/l	1.0	<0.2	<0.2
23	Total Coli form	MPN/ 100 ml	5000	430	700

Note- Turbidity & Suspended solids are analyzed which is not a scheduled parameter under IS-2296, Class-C.

ND-Not detectable.

BDL-(Below detection limit) Values- (Cu<0.05 mg/l, C_6H_5OH<0.001 mg/l, Cd<0.03 mg/l, Se<0.001 mg/l,As<0.004 mg/l, Pb<0.02 mg/l, Zn<0.03 mg/l, Cr^{+6}<0.01 mg/l)

Reviewed By

VISIONTEK CONSULTANCY SERVICES PVT. BBSR

Verified By

Ref : Envlab/25-26/TR-00045 **Date : 01.04.2025**

SURFACE WATER QUALITY ANALYSIS REPORT FOR MARCH-2025

1. Name of Industry : M/s Power Plant, Athagarh, TATA Steel.
2. Sampling Location : SW-1: Mahanadi River
   SW-II: Sapua Nadi
3. Date of sampling : 12.03.2025
4. Date of analysis : 13.03.2025 TO 20.03.2025
5. Sample collected by : VCSPL Representative

Sl. No.	Parameter	Unit	Standards as per IS-2296:1992 Class –'C'	Analysis Results	
				SW-I	SW-II
1	Colour (max)	Hazen	300	20	25
2	pH Value (at 25°C)	--	6.0-9.0	7.12	6.96
3	Suspended solids	mg/l	-	63	78
4	Dissolved Oxygen (minimum)	mg/l	4.0	4.2	4.5
5	Turbidity	NTU	--	16.6	23.4
6	Chloride (max)	mg/l	600	22.5	37.5
7	Total Dissolved Solids	mg/l	1500	323	340
8	BOD (3) days at 27^0C (max)	mg/l	3.0	2.6	2.8
9	Arsenic as As	mg/l	0.2	<0.004	<0.004
10	Lead as Pb(max)	mg/l	0.1	<0.02	<0.02
11	Cadmium as Cd (max)	mg/l	0.01	<0.03	<0.03
12	Hexavalent Chromium as Cr^{+6}	mg/l	0.05	<0.01	<0.01
13	Copper as Cu (max)	mg/l	1.5	<0.05	<0.05
14	Zinc as Zn(max)	mg/l	15	<0.03	<0.03
15	Selenium as Se (max)	mg/l	0.05	<0.001	<0.001
16	Cyanide as CN (max)	mg/l	0.05	<0.01	<0.01
17	Fluoride as F (max)	mg/l	1.5	0.47	0.50
18	Sulphates (SO_4) (max)	mg/l	400	17.4	20.2
19	Phenolic Compounds as C_6H_5OH (max)	mg/l	0.005	<0.05	<0.05
20	Iron as Fe (max)	mg/l	0.5	0.43	0.46
21	Nitrate as NO_3 (max)	mg/l	50	1.20	2.15
22	Anionic Detergents (max)	mg/l	1.0	<0.2	<0.2
23	Total Coli form	MPN/ 100 ml	5000	370	630

Note- Turbidity & Suspended solids are analyzed which is not a scheduled parameter under IS-2296, Class-C.
ND-Not detectable.
BDL-(Below detection limit) Values- (Cu<0.05 mg/l, C_6H_5OH<0.001 mg/l, Cd<0.03 mg/l, Se<0.001 mg/l,As<0.004 mg/l, Pb<0.02 mg/l, Zn<0.03 mg/l, Cr^{+6}<0.01 mg/l)

VISIONTEK CONSULTANCY SERVICES PVT. LTD. BBSR

Reviewed By

VISIONTEK CONSULTANCY SERVICES PVT. LTD. BBSR

Verified By

ANNEXURE-II

Visiontek Consultancy Services Pvt. Ltd.

(Committed For Better Environment)

ISO 9001:2015, ISO 14001:2015, ISO 45001:2018 (OH&S), ISO/IEC 17025:2017 Certified

Ref : Envlab/24-25/TR-1439 **Date :02.01.2025**

NOISE MONITORING REPORT FOR DEC-2024

1. **Name of Industry** : **M/s Power Plant Athagarh, TATA Steel.**
2. **Date of Sampling** : **23.12.2024**
3. **Name of Sampling Instrument : SLM 100**
4. **Sample Collected By** : **VCSPL Representative**

Sl. No.	Location	Noise level in dB(A) Day time	Remarks
1	At Plant Gate	55.6	Vehicle movement was there
2	Near Security Barrack	51.4	Vehicle movement was there
3	At Weigh Bridge	61.7	Vehicle movement was there
4	Near Canteen	66.4	Vehicle movement was there
5	At OPTCL Control Room	60.0	--
6	132 KV Switch yard area	58.4	--
7	At New Admin Building	61.4	During Plant operation
8	At LDO Tank area	63.5	Vehicle movement was there
9	At Silo area	71.3	During ash loading to vehicles
10	At Main Ash Dyke area	72.1	Vehicle movement was there
11	At Mini Ash Dyke area	76.1	Vehicle movement was there
12	At CHP Primary Crusher	76.6	During Plant operation
13	At CHP Secondary Crusher	70.5	During Plant operation
14	At Ground Hopper	69.8	Measured at 1 mt distance while loading to Hopper
15	At Coal yard area North side	73.4	Measured during coal was unloaded from trucks
16	At Coal yard area South side	70.5	Measured during coal was unloaded from trucks
17	At coal runoff pit	75.5	Vehicle movement was there
18	At Boiler-I (Ground Floor)	83.3	During Plant operation
19	At Boiler -I (Bunker Floor)	79.3	During Plant operation
20	At Boiler -I (Burner Floor)	85.6	During Plant operation
21	At Boiler-II (Ground Floor)	77.7	During Plant operation
22	At Boiler -II (Bunker Floor)	75.5	During Plant operation
23	At Boiler –II (Burner Floor)	83.0	During Plant operation
24	At ESP-I area	83.4	During Plant operation
25	At ESP-II area	87.8	During Plant operation
26	At Chimney Area	81.4	ID fans were in operation
27	At Main water Reservoir	59.1	During Plant operation
28	At DM Plant area	74.3	Pumps were in operation
29	At Clariflocculator	64.1	During plant operation
30	Near Cooling Tower-I	73.4	During Plant operation
31	Near Cooling Tower-II	78.8	During Plant operation
32	TG Building Ground Floor (South side)	75.6	Pumps were in operation
33	TG Building Ground Floor (North side)	71.4	During Plant operation
34	At TG-I	68.9	TG was in operation (measured at 1mt distance)
35	At TG-II	65.3	TG was in operation (measured at 1mt distance)
36	At Control Room	69.4	During Plant operation
37	AHP Compressor room	78.3	Compressors were in operation
38	Plant Compressor house	83.9	Compressors were in operation
39	At Emergency DG Set	87.1	DG was not in operation
40	At Store yard area	66.3	Minor work was carried out
41	At Rest Room	59.1	--
42	Nuasasan village	62.0	Vehicle movement was there
43	Berhampur village	61.1	Vehicle movement was there

***Note**: The instrument was auto-calibrated before use*

VISIONTEK CONSULTANCY SERVICES PVT. LTD.

Prepared By

VISIONTEK CONSULTANCY SERVICES PVT. LTD.

Verified By

Ref : Envlab/24-25/TR -1440 **Date :02.01.2025**

NOISE MONITORING REPORT (DAY & NIGHT) FOR DEC-2024

1. **Name of Industry** : **M/s Power Plant Athagarh, TATA Steel.**
2. **Date of Sampling** : **23.12.2024**
3. **Name of Sampling Instrument** : **SLM 100**
4. **Noise measured by** : **VCSPL Representative**

Sl. No.	Location	Noise level in dB(A) Day time	Noise level in dB(A) Night time	Remarks
1	At Plant Gate	67.2	52.9	Vehicle movement was there
2	At Weigh Bridge	65.9	50.7	Vehicle movement was there
3	At Silo area	74.3	46.2	No ash loading to vehicles
4	At CHP Primary Crusher	68.1	63.9	During Plant operation
5	At Coal yard area	68.8	60.1	Measured during coal was unloaded from trucks
6	At Boiler-I (Ground Floor)	71.2	65.6	During Plant operation
7	At DM Plant area	67.2	54.1	Pumps were in operation
8	At TG-I	74.3	66.9	TG was in operation (measured at 1mt distance)
9	At Switch yard Area	56.3	44.9	--

Note: The instrument was auto-calibrated before use

VISIONTEK CONSULTANCY SERVICES PVT. LTD. BBSR

Prepared By

VISIONTEK CONSULTANCY SERVICES PVT. LTD. BBSR

Verified By

Ref : Envlab/24-25/TR- 1441 **Date : 02.01.2025**

DG SET NOISE MONITORING REPORT FOR DEC-2024

1. **Name of Industry** : **M/s Power Plant Athagarh, TATA Steel.**
2. **Date of Sampling** : **23.12.2024**
3. **Name of Sampling Instrument** : **SLM 100**
4. **Noise measure by** : **VCSPL Representative**
5. **Location** : **1 mt away from the DG Set, CUMINS make (1010 KVA) (Measured while in operation mode)**

Sl. No.	Location	Noise level in dB(A) Day time	Noise level in dB(A) Night time	Remarks
1	At DG Set South side	74.3	54.1	DG in Operation
2	At DG Set North side	75.9	53.0	DG in Operation
3	At DG Set East side	76.2	54.8	DG in Operation
4	At DG Set West side	77.9	54.0	DG in Operation

Note: The instrument was auto-calibrated before use

VISIONTEK CONSULTANCY SERVICES PVT. LTD. Prepared By

VISIONTEK CONSULTANCY SERVICES PVT. LTD. BBSR Verified By

Ref : Envlab/25-26/TR- 00048 **Date : 01.04.2025**

NOISE MONITORING REPORT FOR MARCH-2025

1. **Name of Industry : M/s Power Plant Athagarh, TATA Steel.**
2. **Date of Sampling : 28.03.2025**
3. **Name of Sampling Instrument : SLM 100**
4. **Sample Collected By : VCSPL Representative**

Sl. No.	Location	Noise level in dB(A) Day time	Remarks
1	At Plant Gate	58.3	Vehicle movement was there
2	Near Security Barrack	59.7	Vehicle movement was there
3	At Weigh Bridge	55.6	Vehicle movement was there
4	Near Canteen	51.2	Vehicle movement was there
5	At OPTCL Control Room	59.5	--
6	132 KV Switch yard area	76.5	--
7	At New Admin Building	66.4	During Plant operation
8	At LDO Tank area	64.8	Vehicle movement was there
9	At Silo area	87.3	During ash loading to vehicles
10	At Main Ash Dyke area	72.2	Vehicle movement was there
11	At Mini Ash Dyke area	75.8	Vehicle movement was there
12	At CHP Primary Crusher	73.9	During Plant operation
13	At CHP Secondary Crusher	71.6	During Plant operation
14	At Ground Hopper	61.9	Measured at 1 mt distance while loading to Hopper
15	At Coal yard area North side	58.7	Measured during coal was unloaded from trucks
16	At Coal yard area South side	67.9	Measured during coal was unloaded from trucks
17	At coal runoff pit	75.2	Vehicle movement was there
18	At Boiler-I (Ground Floor)	86.1	During Plant operation
19	At Boiler -I (Bunker Floor)	80.8	During Plant operation
20	At Boiler -I (Burner Floor)	86.1	During Plant operation
21	At Boiler-II (Ground Floor)	78.6	During Plant operation
22	At Boiler -II (Bunker Floor)	79.2	During Plant operation
23	At Boiler --II (Burner Floor)	86.5	During Plant operation
24	At ESP-I area	83.4	During Plant operation
25	At ESP-II area	84.5	During Plant operation
26	At Chimney Area	86.1	ID fans were in operation
27	At Main water Reservoir	58.6	During Plant operation
28	At DM Plant area	85.1	Pumps were in operation
29	At Clariflocculator	60.8	During plant operation
30	Near Cooling Tower-I	79.5	During Plant operation
31	Near Cooling Tower-II	84.5	During Plant operation
32	TG Building Ground Floor (South side)	75.0	Pumps were in operation
33	TG Building Ground Floor (North side)	72.3	During Plant operation
34	At TG-I	86.7	TG was in operation (measured at 1mt distance)
35	At TG-II	69.6	TG was in operation (measured at 1mt distance)
36	At Control Room	69.0	During Plant operation
37	AHP Compressor room	85.7	Compressors were in operation
38	Plant Compressor house	84.5	Compressors were in operation
39	At Emergency DG Set	75.6	DG was not in operation
40	At Store yard area	55.6	Minor work was carried out
41	At Rest Room	58.4	--
42	Nuasasan village	59.6	Vehicle movement was there
43	Berhampur village	64.3	Vehicle movement was there

***Note**: The instrument was auto-calibrated before use*

VISIONTEK CONSULTANCY SERVICES PVT. LTD. BBSR

Prepared By

VISIONTEK CONSULTANCY SERVICES PVT. LTD. BBSR

Verified By

Ref : Envlab/25-26/TR - 00049 **Date : 01.04.2025**

NOISE MONITORING REPORT (DAY & NIGHT) FOR MARCH-2025

1. **Name of Industry** : **M/s Power Plant Athagarh, TATA Steel.**
2. **Date of Sampling** : **28.03.2025**
3. **Name of Sampling Instrument** : **SLM 100**
4. **Noise measured by** : **VCSPL Representative**

Sl. No.	Location	Noise level in dB(A) Day time	Noise level in dB(A) Night time	Remarks
1	At Plant Gate	66.8	53.4	Vehicle movement was there
2	At Weigh Bridge	67.1	51.2	Vehicle movement was there
3	At Silo area	75.2	47.9	No ash loading to vehicles
4	At CHP Primary Crusher	67.9	60.4	During Plant operation
5	At Coal yard area	69.2	61.2	Measured during coal was unloaded from trucks
6	At Boiler-I (Ground Floor)	70.6	63.8	During Plant operation
7	At DM Plant area	66.3	55.1	Pumps were in operation
8	At TG-I	74.2	63.9	TG was in operation (measured at 1mt distance)
9	At Switch yard Area	55.8	44.2	--

Note: The instrument was auto-calibrated before use

Prepared By **Verified By**

Ref : Envlab/25-26/TR-00050 **Date : 01.04.2025**

DG SET NOISE MONITORING REPORT FOR MARCH-2025

1. **Name of Industry** : **M/s Power Plant Athagarh, TATA Steel.**
2. **Date of Sampling** : **28.03.2025**
3. **Name of Sampling Instrument** : **SLM 100**
4. **Noise measure by** : **VCSPL Representative**
5. **Location** : **1 mt away from the DG Set, CUMINS make (1010 KVA) (Measured while in operation mode)**

Sl. No.	Location	Noise level in dB(A) Day time	Noise level in dB(A) Night time	Remarks
1	At DG Set South side	74.0	53.9	DG in Operation
2	At DG Set North side	74.8	52.8	DG in Operation
3	At DG Set East side	76.6	54.5	DG in Operation
4	At DG Set West side	77.8	54.4	DG in Operation

Note: The instrument was auto-calibrated before use

Prepared By

Verified By

ANNEXURE-III

TATA

The Member Secretary
State Pollution Control Board
Paribesh Bhawan
A/118, Nilakantha Nagar
Unit-8, Bhubaneswar

Ref. No.- TSL/PPA/ENV/12
Date: 2nd September 2024

(Sub: Submission of annual Env. Statement for 2023-24)

Ref: 1. Special Condition no. F (2) – 19 of CTO Order vide No.- 4547/ IND-I-CON-6375, Dt.- 23.03.2023.

2. General Condition No (vii) of Environmental Clearance issued to BPPL by MoEF & CC vide No. J -13012/ 91/2008-IA. II (T) Dt. 14.05.2010.

Dear Sir,

We are submitting herewith the Annual Environmental Statement (Form-V) for FY 2023-24 in respect of 135 (2 x 67.5) MW Captive Power Plant of M/s. Bhubaneshwar Power Private Limited, Anantapur.

Further we would like to appraise you, Bhubaneshwar Power Private Limited has already been amalgamated into and with Tata Steel Limited w.e.f 1st July, 2024.

This is for your kind perusal.

Thanking you,

Yours faithfully,
For Tata Steel Limited
Power Plant Athagarh

Debasish Pattnaik
Authorised Signatory
Debasish Pattnaik

3/9/24

(Encl: Form–V for FY 2023-24 containing 6 pages)

Copy to:

1. Regional Director (EZ), MoEF & CC, A/3, Chandrasekharpur, Bhubaneswar-751023
2. Regional Officer, State Pollution Control Board, 586, Surya Vihar, Link Road, Cuttack, Odisha

TATA STEEL LIMITED

Power Plant Athagarh Anantapur Dhurusia Cuttack 754027
Registered Office Bombay House 24 Homi Mody Street Fort Mumbai 400 001 India
Tel 91 22 6665 7371 Website www.tatasteel.com
Corporate Identification Number L27100MH1907PLC000260

TATA

The Member Secretary
State Pollution Control Board
Paribesh Bhawan
A/118, Nilakantha Nagar
Unit-8, Bhubaneswar

Ref. No.- TSL/PPA/ENV/12
Date: 2nd September 2024

(Sub: Submission of annual Env. Statement for 2023-24)

Ref: 1. Special Condition no. F (2) – 19 of CTO Order vide No.- 4547/ IND-I-CON-6375, Dt.- 23.03.2023.

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This is for your kind perusal.

Thanking you,

Yours faithfully,
For Tata Steel Limited
Power Plant Athagarh

Debasish Pattnaik

Authorised Signatory
Debasish Pattnaik

(Encl: Form–V for FY 2023-24 containing 6 pages)

Copy to:

1. Regional Director (EZ), MoEF & CC, A/3, Chandrasekharpur, Bhubaneswar-751023
2. Regional Officer, State Pollution Control Board, 586, Surya Vihar, Link Road, Cuttack, Odisha

GOVT. OF INDIA
MoEF & CC Integrated R.O.
Bhubaneswar-751023
03 OCT 2024
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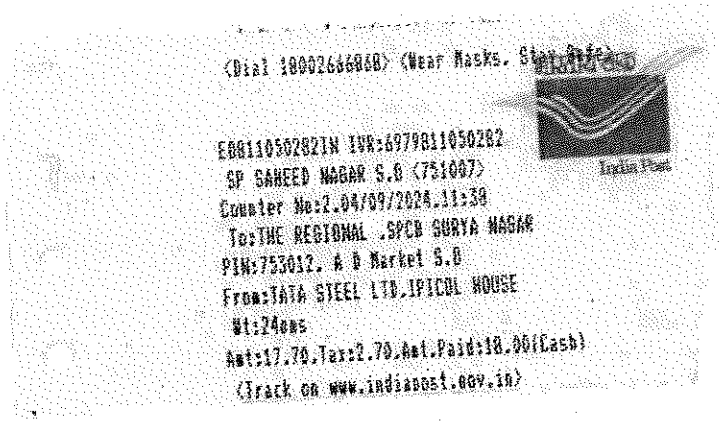

(Dial 18002666868) (Wear Masks. Stay Safe)

EE011050282IN INR:6979811050282
SP SAHEED NAGAR S.O (751007)
Counter No:2 04/09/2024 11:39
To:THE REGIONAL .SPCB SURYA NAGAR
PIN:751012, A D Market S.O
From:TATA STEEL LTD.IPICOL HOUSE
Wt:24gms
Amt:17.70,Tax:2.70,Amt.Paid:18.00(Cash)
(Track on www.indiapost.gov.in)

ENVIRONMENTAL STATEMENT FORM-V

(See Rule – 14)

Environmental statement for the financial year ending with 31st March' 2024.

PART-A

General:

i	Name and address of the owner/ occupier of the industry	**Mr. S SAHA** BHUBANESHWAR POWER PRIVATE LIMITED Village- Anantapur P.O- Dhurusia Tehsil- Athagarh Dist.- Cuttack, Odisha PIN- 754027
ii	Industry category	Red-A (Thermal Power generation)
iii	Production capacity	135 (2 x 67.5) MW
iv	Year of establishment	Dt. 01.06.2016
v	Date of last Environmental statement submitted	Dt. 03.07.2023

PART-B

Water and Raw material consumption

i. Water consumption (m^3/day)
Process : 590.44
Cooling : 6703.22
Domestic : 15.70

Name of Products	Process water consumption per unit of products	
	During the previous financial year	During the current financial Year
Thermal Power	0.1775 (m^3/MWH)	0.218 (m^3/MWH)

ii. *Raw material consumption*

Name of raw materials*	Name of Products	Consumption of raw material per unit of Output	
		During the previous financial year	During the current financial year
Coal	Thermal Power	0.863005 MT/MWH	0.83691 MT/MWH
LDO		0.10443 Ltr/ MWH	0.162955 Ltr/ MWH

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

PART-C

Pollution discharged to environment/unit of output
(Parameter as specified in the consent issued)

Pollutants	Quantity of Pollutants discharged (mass/day)	Concentration of Pollutants discharged (mass/volume)	Percentage of variation from prescribed standards with reasons.
(a) Water	Wastewater generated from the process including sewage is treated in ETP and STP. Treated wastewater is being re-used for ash conditioning, dust suppression and gardening purposes		
(b) Air	< 50 mg/Nm^3	< 50 mg/Nm^3	Ambient air quality & Stack emission monitoring reports are submitted regularly to SPCB / MoEF; monitored values are found well within the prescribed limits.

PART-D

HAZARDOUS WASTES

(as specified under Hazardous Wastes (Management & Handling Rules,1989).

Hazardous Wastes	Total Quantity (Kg)	
	During the previous financial year	During the current financial year
1. From Process	1.10 KL (Used Oil) 0.0 KL (Waste containing Oil)	2.074 KL (Used Oil) 0.0 KL (Waste containing Oil)
2. From Pollution Control Facilities	--	--

PART - E

SOLID WASTES:

Solid Wastes		**Total Quantity (Tons)**	
		During the previous financial year	During the current financial year
a. From process		65205.5 (Bottom Ash)	67954.0 (Bottom Ash)
b. From Pollution Control Facility		281688.3 (Fly Ash)	271820.0 (Fly Ash)
c. Quantity recycled or re-utilized within the unit.			
1. **Ash utilization**			
i.	Supply to Brick Plants for Brick making	336872.9	342713.0
ii.	Supply to Cement Plant for Cement making	4461.3	6211.0
iii.	Disposal in ash dykes	--	--
iv.	Quarry reclamation	20497.4	55499.0
v.	Road making	39651.3	53286.0

The scrap (metal pieces, insulation waste, packing plastics, wooden planks etc.) generated from activities are collected, stored in scrap yard and sold to outside vendors.

PART-F

Please specify the characteristics (in terms of concentration and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

Hazardous Waste

Hazardous Waste generated from the process includes used oil (drained from machineries/ equipment) and oil-soaked cotton waste. Authorization obtained from OSPCB for generation, handling collection, storage and disposal of Hazardous Waste vide letter No.- IND-IV- HW -1202/7312 on Dt. 06.05.2023; Valid Date: 31.03.2026. Hazardous waste (Used oil) is stored in hazardous waste storage area & is being auctioned to the SPCB/CPCB authorized re-processors. While oil-soaked cotton waste is incinerated in the Boiler.

SOLID WASTE

For the collection of dry fly ash, 3 Nos. of dedicated silos are in place with pneumatic conveying system for further disposal.

PART-G

Impact of the pollution control measures taken on conservation of natural resources and consequently on the cost of production.

The following practices are adapted for the pollution control & conservation of natural resources:

1. Twin-flue stack with height of 130 meter are provided as per the CPCB guidelines for better dispersion of emissions and keep the concentrations within SPCB/CPCB specified standards.
2. High efficient Electrostatic Precipitators (ESPs) of 12 fields in each are provided for the control of dust emissions in flue gas.
3. Installation of Dust Extraction system along with 6 Nos. of Bag Filters at CHP & 3 nos. of Bag Filter at Ash Silos to arrest the fugitive emissions
4. Roof sheeting and side cladding in conveyor galleries to control fugitive dust
5. Installation of Dust Suppression System in identified areas in CHP
6. Installation of 24 nos. of Dry Fog systems nozzles at transfer points of CHP
7. Installation of 2 nos. of high efficient mist canons at coal yard and 24 nos. of water sprinklers along the Haul road as an effective dust suppression measure.
8. Specific water consumption has been maintained < 3.5 m^3/MWH & cooling water system is designed at 5.0 COC; and is maintained at 5.9- 6.0 COC.
9. Installation of 2 nos. of water monitors in the ash dyke area for controlling the fugitive emissions, if any.
10. Effluent Treatment Plant (ETP) and Sewage Treatment Plant (STP) are in place to control water pollution. Treated water is completely reused for ash conditioning, greenbelt development, dust suppression etc.
11. Rainwater harvesting is being practiced in the plant premises.
12. Good housekeeping is maintained within the plant premises.

13. Total 57,985 nos. Greenbelt has been developed in & around the plant periphery and maintained with >92.0 % survival rate to control the dispersal of dust particles and attenuate the noise generated from plant operation.

14. Utilization of 134.71 % of ash for Fly ash Brick making and Cement making in 8th year of plant operation; and efforts are being taken for 100% utilization in the subsequent years.

15. Installation and put in use of mechanized waste converter & Vermicomposting system.

16. Installation of IP Surveillance Camera to visualize the Stack/ Fugitive emission, if any and the video footage is connected to SPCB Server.

17. 2 nos. mechanized wheel washing system has been installed for wheel washing of coal / ash trucks exited from the plant to control the fugitive emission in the haul road.

18. Installation Electronic digital display board at the Plant gate for displaying the environmental monitoring parameters and EHS awareness propaganda.

19. Conducted Energy Audit by engaging BEE Certified Energy Auditor.

20. Conducted performance evaluation study of all pollution control equipment.

21. Installation of 2 nos. high efficient Mist Canons at coal yard and 27 nos. of water sprinklers along the Haul road as an effective dust suppression measure.

22. Engaging vehicle mounted Road Sweeping machine as a part of Housekeeping activity for Control of Fugitive emission along the haul road and internal road network.

23. Installed 5KW **Solar** Power system on the roof top of our First Aid Centre and is synchronized with existing GRID system and in operation.

24. Established Energy Management System for Pollution Control Equipment and Energy consumption data has been stored in a Centralized platform

PART-H

Additional measures/investment proposal for environmental protection including abatement of pollution.

Bhubaneshwar Power Private Limited (**BPPL**) is regularly monitoring of ambient air quality, stack emission, noise level and water quality in and around the plant premises. Monitoring parameters are meeting the permissible limits prescribed by MoEF & CC/ CPCB / SPCB. Further we have installed 4 nos. of CAAQMS, 2 nos. CEMS & 1 no. of EQMS for continuous monitoring of ambient air quality, stack emission and water quality parameters; and are being transmitted to SPCB/CPCB servers.

PART-I

MISCELLANEOUS:

Any other particulars in respect of environmental protection and abatement of pollution.

The part – I of any Environmental Statement report is perhaps the best scale to measure various parameters of the plans, target, achievements and **BPPL** has made sincere efforts to visualize the general environmental scenario and implemented plan for the associated improvements. Some highlights are mentioned as below:

1. Four (04) nos. of Continuous Ambient Air Quality Monitoring Stations (CAAQMS), Two (02) Continuous Emission Monitoring System (CEMS) in flues of two stacks and 1 EQMS (Effluent Quality monitoring Station) are installed; online data from CAAQMS, CEMS & EQMS are being transmitted to SPCB/ CPCB servers.
2. A laboratory has been established at Plant site for regular sampling and analysis of required operational parameters.

List of pollution control equipment/ facilities available at **BPPL** are as follows:

Sl. No.	Plant activities	Pollution control measures
1	Coal yard	Installation of 2 nos. of high efficient mist canons
2	Coal yard	Provision of Concreted Garland drain
3	Coal handling system	Installation of Dust suppression system at Ground Hopper
4	Coal handling area	Coal settling pit/ Coal run off system
5	Coal bunker/ secondary crusher house	Dust extraction system (3 nos.) with Bag filter
6	Dry Fog System	24 nos. of DFS Nozzles are provided in CHP transfer points
7	Boilers (Dust control)	2 nos. of Electrostatic Precipitator of 12 fields in each
8	Boilers (Emission dispersion)	130 mt high stack
9	DM Plant	Neutralization pit
10	Cooling tower blow down & regeneration waste	Effluent Treatment Plant (ETP)/ Oil water separator / Guard pond
11	Domestic Effluent	Sewage Treatment Plant (STP)
12	Ash storage Silos	Bag Filters and Conditioners in each Silo
13	Fly ash & Bottom ash disposal	Ash Dyke, Road making, Brick & Cement making
14	Vehicle movement along the roads	27 nos. of water sprinklers
15	Coal & Ash transportation on Haul road	02 nos. Mechanized wheel washing system
16	Ash Dyke	02 nos. of high pressure water monitors

MISCELLANEOUS

Any other particulars in respect of environmental protection and abatement of pollution.

The programs like World Environment Day, World Ozone Day & Van Mahotsav was celebrated at **BPPL** with great enthusiasm to create awareness among the Employees. Approx. 57985 plantation has been carried out till 31st March 2024 over an area of 67 acres. Rest of the greenbelt are being developed progressively.

Celebration of 51st World Environment Day

Celebration of Van Mahotsav-2023

Celebration of World Ozone Day-2023

* * * * *

TATA

POWER PLANT ATHAGARH, M/s. TATA STEEL LIMITED

Annexure-IV

SOLAR POWER GENERATION DATA FOR April'2024 – March'2025.

Sl. No.	Month	Solar Power Generation (KWH)
1	April 24	305
2	May 24	466
3	June 24	395
4	July 24	281
5	August 24	274
6	September 24	342
7	Oct'24	356
8	Nov'24	283
9	Dec'24	268
10	Jan,25	263
11	Feb'25	352
12	Mar'25	400
Total		**3985**

TATA STEEL LIMITED ★ POWER PLANT, ATHAGARH ★

For Power Plant Athagarh
Tata Steel Limited

Annexure-V

Mitra S. K. Private Limited

Plot No-687/2428, Ekamra Villa Square,
Jaydev Vihar, 1st Floor, IRC Village,
Bhubaneswar, Khordha, Odisha-751015
[CIN: U51909WB1956PTC023037]

T :(0674) 2360917, 9777450189
F : (0674) 2362918

MSK TESTING • INSPECTION

TEST REPORT

Name & Address of the Customer :
Bhubaneswar Power Private Limited.
AT : Anantapur, PO : Dhurusia
DIST : Cuttack, Odisha - 754027

Report No. : MSKGL/ED/2023-24/000021
Date : 19.05.2023
Sample No. : MSKGL/ED/2023-24/04/01033

Ref No. & Date : BPPL/WO/23-24/ENV/01
Dated. 18.04.2023

We hereby certify that the following sample drawn by us has been analyzed with the following results:

1.	Description of sample *(As declared by customer)*	Coal
2.	Sample Mark *(if any, given by the customer)*	Coal
3.	Date of sampling	21.04.2023
4.	Place of sampling	Coal
5.	Environmental conditions during sampling	Maintained
6.	Sampling Plan & Procedures used	EPA

Report No. : MSKGL/ED/2023-24/000021 **Sample No. :** MSKGL/ED/2023-24/04/01033

RESULTS

Sl. No	Name of Pollutants	UOM	Test Method	Result
1.	Antimony (as Sb)	%	EPA 6010D	<0.0001
2.	Arsenic	%	EPA 6010D	<0.0002
3.	Cadmium (as Cd)	%	EPA 6010D	<0.0001
4.	Lead (as Pb)	%	EPA 6010D	0.0014
5.	Mercury (as Hg)	%	EPA 6010D (O)	<0.0001
6.	Nickel (as Ni)	%	USEPA 245.5	0.0011
7.	Tin (as Sn)	%	EPA 6010 D (ICP-OES)	<0.0005

Report Prepared By:

For Mitra S. K. Private Limited
Authorized Signatory

MITRA S.K. PRIVATE LIMITED BBSR

Mitra S. K. Private Limited

Plot No-687/2428, Ekamra Villa Square,
Jaydev Vihar, 1st Floor, IRC Village,
Bhubaneswar, Khordha, Odisha-751015
[CIN: U51909WB1956PTC023037]

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MSK TESTING • INSPECTION

TEST REPORT

Name & Address of the Customer :
Bhubaneswar Power Private Limited.
AT : Anantapur, PO : Dhurusia
DIST : Cuttack, Odisha - 754027

Report No. : MSKGL/ED/2023-24/000022
Date : 19.05.2023
Sample No. : MSKGL/ED/2023-24/04/01034

Ref No. & Date : BPPL/WO/23-24/ENV/01
Dated. 18.04.2023

We hereby certify that the following sample drawn by us has been analyzed with the following results:

1.	Description of sample *(As declared by customer)*	Bottom Ash
2.	Sample Mark *(if any, given by the customer)*	Bottom Ash
3.	Date of sampling	21.04.2023
4.	Place of sampling	Bottom Ash
5.	Environmental conditions during sampling	Maintained
6.	Sampling Plan & Procedures used	EPA

Report No. : MSKGL/ED/2023-24/000022 **Sample No. :** MSKGL/ED/2023-24/04/01034

RESULTS

Sl. No	Name of Pollutants	UOM	Test Method	Result
1.	Antimony (as Sb)	%	EPA 6010D	<0.0001
2.	Arsenic	%	EPA 6010D	<0.0002
3.	Cadmium (as Cd)	%	EPA 6010D	<0.0001
4.	Lead (as Pb)	%	EPA 6010D	0.0006
5.	Mercury (as Hg)	%	EPA 6010D (O)	<0.0001
6.	Nickel (as Ni)	%	USEPA 245.5	0.0007
7.	Tin (as Sn)	%	EPA 6010 D (ICP-OES)	<0.0005

Report Prepared By:

MITRA S.K. PRIVATE LIMITED BBSR

For Mitra S. K. Private Limited

Authorized Signatory

Mitra S. K. Private Limited

Plot No-687/2428, Ekamra Villa Square,
Jaydev Vihar, 1st Floor, IRC Village,
Bhubaneswar, Khordha, Odisha-751015
[CIN: U51909WB1956PTC023037]

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MSK TESTING • INSPECTION

TEST REPORT

Name & Address of the Customer :
Bhubaneswar Power Private Limited.
AT : Anantapur, PO : Dhurusia
DIST : Cuttack, Odisha - 754027

Report No. : MSKGL/ED/2023-24/000023
Date : 19.05.2023
Sample No. : MSKGL/ED/2023-24/04/01035

Ref No. & Date : BPPL/WO/23-24/ENV/01
Dated. 18.04.2023

We hereby certify that the following sample drawn by us has been analyzed with the following results:

1.	Description of sample *(As declared by customer)*	Fly Ash
2.	Sample Mark *(if any, given by the customer)*	Fly Ash
3.	Date of sampling	21.04.2023
4.	Place of sampling	Fly Ash
5.	Environmental conditions during sampling	Maintained
6.	Sampling Plan & Procedures used	EPA

Report No. : MSKGL/ED/2023-24/000023 **Sample No. :** MSKGL/ED/2023-24/04/01035

RESULTS

Sl. No	Name of Pollutants	UOM	Test Method	Result
1.	Antimony (as Sb)	%	EPA 6010D	<0.0001
2.	Arsenic	%	EPA 6010D	<0.0002
3.	Cadmium (as Cd)	%	EPA 6010D	<0.0001
4.	Lead (as Pb)	%	EPA 6010D	0.0005
5.	Mercury (as Hg)	%	EPA 6010D (O)	<0.0001
6.	Nickel (as Ni)	%	USEPA 245.5	0.0009
7.	Tin (as Sn)	%	EPA 6010 D (ICP-OES)	<0.0005

Report Prepared By:

MITRA S.K. PRIVATE LIMITED BBSR

For Mitra S. K. Private Limited
Authorized Signatory

Mitra S. K. Private Limited

Plot No-687/2428, Ekamra Villa Square,
Jaydev Vihar, 1st Floor, IRC Village,
Bhubaneswar, Khordha, Odisha-751015
[CIN: U51909WB1956PTC023037]

T :(0674) 2360917, 9777450189
F : (0674) 2362918

MSK TESTING • INSPECTION

TEST REPORT

Name & Address of the Customer :
Bhubaneswar Power Private Limited.
AT : Anantapur, PO : Dhurusia
DIST : Cuttack, Odisha - 754027

Report No. : MSKGL/ED/2023-24/000021
Date : 19.05.2023
Sample No. : MSKGL/ED/2023-24/04/00203
Sample Description : Coal
Date of sampling : 21.04.2023

ANALYSIS REPORT OF RADIOACTIVE MATERIALS

Sl No	Test Parameters	Result
1	Uranium	(99.476 ±22.574) Bq. Kg^{-1}
2	Thorium	(34.748 ±18.253) Bq. Kg^{-1}
3	Radium	(46.990 ±11.295) Bq. Kg^{-1}
4	Strontium	BDL

N.B :- BDL is below detection limit
The Minimum Detectable Limit for Strontium is 0.114 Bq. Kg^{-1}

Remarks: Analysis Done By :-
Modern Test Centre
Office: Gandhi Nagar, 5th line Extn. East, Berhampur, Ganjam, Odisha. Pin-760001
Lab: Neelanchal Nagar. 3rd lane, Berhampur – 760010, Dist-Ganjam, Odisha

Report Prepared By:

MITRA S.K. PRIVATE LIMITED BBSR

For Mitra S. K. Private Limited

Authorized Signatory

Mitra S. K. Private Limited

Plot No-687/2428, Ekamra Villa Square,
Jaydev Vihar, 1st Floor, IRC Village,
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[CIN: U51909WB1956PTC023037]

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MSK TESTING • INSPECTION

TEST REPORT

Name & Address of the Customer :
Bhubaneswar Power Private Limited.
AT : Anantapur, PO : Dhurusia
DIST : Cuttack, Odisha - 754027

Report No. : MSKGL/ED/2023-24/000022
Date : 19.05.2023
Sample No. : MSKGL/ED/2023-24/04/00204
Sample Description : Bottom Ash
Date of sampling : 21.04.2023

ANALYSIS REPORT OF RADIOACTIVE MATERIALS

Sl No	Test Parameters	Result
1	Uranium	(59.404 ±14.662) Bq. Kg^{-1}
2	Thorium	(42.104 ±10.875) Bq. Kg^{-1}
3	Radium	(76.390 ±7.799) Bq. Kg^{-1}
4	Strontium	BDL

N.B :- BDL is below detection limit
The Minimum Detectable Limit for Strontium is 0.114 Bq. Kg^{-1}

Remarks: Analysis Done By :-
Modern Test Centre
Office: Gandhi Nagar, 5th line Extn. East, Berhampur, Ganjam, Odisha. Pin-760001
Lab: Neelanchal Nagar. 3rd lane, Berhampur – 760010, Dist-Ganjam, Odisha

Report Prepared By:

MITRA S.K. PRIVATE LIMITED BBSR

For Mitra S. K. Private Limited

Authorized Signatory

Mitra S. K. Private Limited

Plot No-687/2428, Ekamra Villa Square,
Jaydev Vihar, 1st Floor, IRC Village,
Bhubaneswar, Khordha, Odisha-751015
[CIN: U51909WB1956PTC023037]

T :(0674) 2360917, 9777450189
F : (0674) 2362918

MSK TESTING • INSPECTION

TEST REPORT

Name & Address of the Customer :
Bhubaneswar Power Private Limited.
AT : Anantapur, PO : Dhurusia
DIST : Cuttack, Odisha - 754027

Report No. : MSKGL/ED/2023-24/000023
Date : 19.05.2023
Sample No. : MSKGL/ED/2023-24/04/00205
Sample Description : Fly Ash
Date of sampling : 21.04.2023

ANALYSIS REPORT OF RADIOACTIVE MATERIALS

Sl No	Test Parameters	Result
1	Uranium	(91.798 ±22.440) Bq. Kg^{-1}
2	Thorium	(107.113 ±19.623) Bq. Kg^{-1}
3	Radium	(80.965 ±11.615) Bq. Kg^{-1}
4	Strontium	BDL

N.B :- BDL is below detection limit
The Minimum Detectable Limit for Strontium is 0.114 Bq. Kg^{-1}

Remarks: Analysis Done By :-
Modern Test Centre
Office: Gandhi Nagar, 5th line Extn. East, Berhampur, Ganjam, Odisha. Pin-760001
Lab: Neelanchal Nagar. 3rd lane, Berhampur – 760010, Dist-Ganjam, Odisha

Report Prepared By:

MITRA S.K. PRIVATE LIMITED BBSR

For Mitra S. K. Private Limited

Authorized Signatory

ANNEXURE-VI

Visiontek Consultancy Services Pvt. Ltd.

(Committed For Better Environment)

ISO 9001:2015, ISO 14001:2015, ISO 45001:2018 (OH&S), ISO/IEC 17025:2017 Certified

Ref : Envlab/24-25/TR-11223 **Date : 02.11.2024**

AAQ MONITORING REPORT FOR OCTOBER -2024

1. **Name of Industry** : M/s Power Plant Athagarh, TATA Steel.
2. **Sampling Location** : AAQ Monitoring Station ID: Bhuniburai Village
3. **Monitoring Instruments** : RDS(APM 460 BL), FPS(APM 550) Envirotech, CO Monitor, VOC Sampler
4. **Sample Collected By** : VCSPL representative

Date	PARAMETERS											
	PM_{10} ($\mu g/m^3$)	$PM_{2.5}$ ($\mu g/m^3$)	SO_2 ($\mu g/m^3$)	NO_x ($\mu g/m^3$)	O_3 ($\mu g/m^3$)	CO (mg/m^3)	NH_3 ($\mu g/m^3$)	C_6H_6 ($\mu g/m^3$)	BaP (ng/m^3)	Ni (ng/m^3)	Pb ($\mu g/m^3$)	As (ng/m^3)
18.10.2024	34.8	17.9	11.9	15.3	6.8	0.68	20.9	BDL	BDL	BDL	BDL	BDL
Testing method	IS 5182: Part 23	EPA CFR-40 (pt 50) Appendix-1	IS 5182 (Part-2) RA2006	IS 5182 (Part-6) RA2006	Chemical Method	IS 5182 (P-10)	Indo phenol blue method	Absorption & Desorption followed by GC analysis	Solvent extraction followed by Gas Chromatography analysis	AAS method after sampling on EPM 2000 or Equivalent filter Paper		
NAAQ Standard	100/24Hr	60/24 Hr	80/24 Hr	80/24 Hr	100/8 Hr	02/8 Hr	400/24 Hr	05/Annual	01/Annual	20/Annual	1/24 Hr	06/Annual

BDL Values: SO_2< 4 $\mu g/m^3$, NO_X< 6 $\mu g/m^3$, O_3<4 $\mu g/m^3$, NH_3< 20 $\mu g/m^3$, Ni<0.01 ng/m^3, As < 0.001 ng/m^3, C_6H_6<0.001 $\mu g/m^3$, BaP<0.002 ng/m^3, Pb<0.001 $\mu g/m^3$, CO-<0.1 mg/m^3

Reviewed By

Verified By

Ref : Envlab/24-25/TR- 12981 **Date : 03.12.2024**

AAQ MONITORING REPORT FOR NOVEMBER -2024

1. **Name of Industry** : M/s Power Plant Athagarh, TATA Steel.
2. **Sampling Location** : AAQ Monitoring Station ID: Berhanpur Village
3. **Monitoring Instruments** : RDS(APM 460 BL), FPS(APM 550) Envirotech, CO Monitor, VOC Sampler
4. **Sample collected by** : VCSPL Representative

Date	PARAMETERS											
	PM_{10} ($\mu g/m^3$)	$PM_{2.5}$ ($\mu g/m^3$)	SO_2 ($\mu g/m^3$)	NO_x ($\mu g/m^3$)	O_3 ($\mu g/m^3$)	CO (mg/m^3)	NH_3 ($\mu g/m^3$)	C_6H_6 ($\mu g/m^3$)	BaP (ng/m^3)	Ni (ng/m^3)	Pb ($\mu g/m^3$)	As (ng/m^3)
19.11.2024	76.0	38.9	18.8	20.6	7.4	0.95	20.9	BDL	BDL	BDL	BDL	BDL
Testing method	IS 5182: Part 23	EPA CFR-40 (pt 50) Appendix-1	IS 5182 (Part-2) RA2006	IS 5182 (Part-6) RA2006	Chemical Method	IS 5182 (P-10)	Indo phenol blue method	Absorption & Desorption followed by GC analysis	Solvent extraction followed by Gas Chromatography analysis	AAS method after sampling on EPM 2000 or Equivalent filter Paper		
NAAQ Standard	100/24Hr	60/24 Hr	80/24 Hr	80/24 Hr	100/8 Hr	02/8 Hr	400/24 Hr	05/Annual	01/Annual	20/Annual	1/24 Hr	06/Annual

BDL Values: SO_2< 4 $\mu g/m^3$, NO_x< 6 $\mu g/m^3$, O_3<4 $\mu g/m^3$, NH_3< 20 $\mu g/m^3$, Ni<0.01 ng/m^3, As < 0.001 ng/m^3, C_6H_6<0.001 $\mu g/m^3$, BaP<0.002 ng/m^3, Pb<0.001 $\mu g/m^3$, CO-<0.1 mg/m^3

Reviewed By

Verified By

Ref : Envlab/24-25/TR- 1433 **Date :02.01.2025**

AAQ MONITORING REPORT FOR DECEMBER -2024

1. **Name of Industry** : **M/s Power Plant Athagarh, TATA Steel.**
2. **Sampling Location** : **AAQ Monitoring Station ID: Bhuniburai Village**
3. **Monitoring Instruments** : **RDS(APM 460 BL), FPS(APM 550) Envirotech, CO Monitor, VOC Sampler**
4. **Sample Collected By** : **VCSPL representative**

Date	PARAMETERS											
	PM_{10} ($\mu g/m^3$)	$PM_{2.5}$ ($\mu g/m^3$)	SO_2 ($\mu g/m^3$)	NO_x ($\mu g/m^3$)	O_3 ($\mu g/m^3$)	CO (mg/m^3)	NH_3 ($\mu g/m^3$)	C_6H_6 ($\mu g/m^3$)	BaP (ng/m^3)	Ni (ng/m^3)	Pb ($\mu g/m^3$)	As (ng/m^3)
24.12.2024	51.3	23.6	8.1	11.3	6.7	0.70	20.2	BDL	BDL	BDL	BDL	BDL
Testing method	IS 5182: Part 23	EPA CFR-40 (pt 50) Appendix-1	IS 5182 (Part-2) RA2006	IS 5182 (Part-6) RA2006	Chemical Method	IS 5182 (P-10)	Indo phenol blue method	Absorption & Desorption followed by GC analysis	Solvent extraction followed by Gas Chromatography analysis	AAS method after sampling on EPM 2000 or Equivalent filter Paper		
NAAQ Standard	100/24Hr	60/24 Hr	80/24 Hr	80/24 Hr	100/8 Hr	02/8 Hr	400/24 Hr	05/Annual	01/Annual	20/Annual	1/24 Hr	06/Annual

BDL Values: SO_2< 4 $\mu g/m^3$, NO_X< 6 $\mu g/m^3$, O_3<4 $\mu g/m^3$, NH_3< 20 $\mu g/m^3$, Ni<0.01 ng/m^3, As < 0.001 ng/m^3, C_6H_6<0.001 $\mu g/m^3$, BaP<0.002 ng/m^3, Pb<0.001 $\mu g/m^3$, CO-<0.1 mg/ m^3

Reviewed By

Verified By

Ref : Envlab/24-25/TR-15574 **Date : 03.02.2025**

AAQ MONITORING REPORT FOR JANUARY -2025

1. **Name of Industry** : **M/s Power Plant Athagarh, TATA Steel.**
2. **Sampling Location** : **AAQ Monitoring Station ID: Berhanpur Village**
3. **Monitoring Instruments** : **RDS(APM 460 BL), FPS(APM 550) Envirotech, CO Monitor, VOC Sampler**
4. **Sample collected by** : **VCSPL Representative**

Date	PARAMETERS											
	PM_{10} ($\mu g/m^3$)	$PM_{2.5}$ ($\mu g/m^3$)	SO_2 ($\mu g/m^3$)	NO_x ($\mu g/m^3$)	O_3 ($\mu g/m^3$)	CO (mg/m^3)	NH_3 ($\mu g/m^3$)	C_6H_6 ($\mu g/m^3$)	BaP (ng/m^3)	Ni (ng/m^3)	Pb ($\mu g/m^3$)	As (ng/m^3)
16.01.2025	70.1	42.2	14.2	20.3	7.8	0.89	21.5	BDL	BDL	BDL	BDL	BDL
Testing method	IS 5182: Part 23	EPA CFR-40 (pt 50) Appendix-1	IS 5182 (Part-2) RA2006	IS 5182 (Part-6) RA2006	Chemical Method	IS 5182 (P-10)	Indo phenol blue method	Absorption & Desorption followed by GC analysis	Solvent extraction followed by Gas Chromatography analysis	AAS method after sampling on EPM 2000 or Equivalent filter Paper		
NAAQ Standard	100/24Hr	60/24 Hr	80/24 Hr	80/24 Hr	100/8 Hr	02/8 Hr	400/24 Hr	05/Annual	01/Annual	20/Annual	1/24 Hr	06/Annual

BDL Values: SO_2< 4 $\mu g/m^3$, NO_X< 6 $\mu g/m^3$, O_3<4 $\mu g/m^3$, NH_3< 20 $\mu g/m^3$, Ni<0.01 ng/m^3, As < 0.001 ng/m^3, C_6H_6<0.001 $\mu g/m^3$, BaP<0.002 ng/m^3, Pb<0.001 $\mu g/m^3$, CO-<0.1 mg/m^3

Reviewed By

Verified By

Visiontek Consultancy Services Pvt. Ltd.

(Committed For Better Environment)

ISO 9001:2015, ISO 14001:2015, ISO 45001:2018 (OH&S), ISO/IEC 17025:2017 Certified

Ref : Envlab/24-25/TR-16881 **Date : 01.03.2025**

AAQ MONITORING REPORT FOR FEBRUARY 2025

1. **Name of Industry** : **M/s Power Plant Athagarh, TATA Steel.**
2. **Sampling Location** : **AAQ Monitoring Station ID: Bhuniburai Village**
3. **Monitoring Instruments** : **RDS(APM 460 BL), FPS(APM 550) Envirotech, CO Monitor, VOC Sampler**
4. **Sample Collected By** : **VCSPL representative**

Date	PARAMETERS											
	PM_{10} ($\mu g/m^3$)	$PM_{2.5}$ ($\mu g/m^3$)	SO_2 ($\mu g/m^3$)	NO_x ($\mu g/m^3$)	O_3 ($\mu g/m^3$)	CO (mg/m^3)	NH_3 ($\mu g/m^3$)	C_6H_6 ($\mu g/m^3$)	BaP (ng/m^3)	Ni (ng/m^3)	Pb ($\mu g/m^3$)	As (ng/m^3)
06.02.2025	53.8	28.2	15.0	18.2	6.9	0.77	20.5	BDL	BDL	BDL	BDL	BDL
Testing method	IS 5182: Part 23	EPA CFR-40 (pt 50) Appendix-1	IS 5182 (Part-2) RA2006	IS 5182 (Part-6) RA2006	Chemical Method	IS 5182 (P-10)	Indo phenol blue method	Absorption & Desorption followed by GC analysis	Solvent extraction followed by Gas Chromatography analysis	AAS method after sampling on EPM 2000 or Equivalent filter Paper		
NAAQ Standard	100/24Hr	60/24 Hr	80/24 Hr	80/24 Hr	100/8 Hr	02/8 Hr	400/24 Hr	05/Annual	01/Annual	20/Annual	1/24 Hr	06/Annual

BDL Values: SO_2< 4 µg/m³, NO_X< 6 µg/m³, O_3<4 µg/m³, NH_3< 20 µg/m³, Ni<0.01 ng/m³, As < 0.001 ng/m³, C_6H_6<0.001 µg/m³, BaP<0.002 ng/m³, Pb<0.001 µg/m³, CO-<0.1 mg/ m³

Reviewed By

Verified By

Plot No.- M-22 & 23, Chandaka Industrial Estate, Patia, Bhubaneswar, Khordha, Odisha-751024, India Tel.: 0674-3511721
E-mail: visiontek@visiontek.org, visiontekin@gmail.com
Visit us at: www.visiontek.org

Ref : Envlab/25-26/TR- 00040 **Date : 01.04.2025**

AAQ MONITORING REPORT FOR MARCH 2025

1. **Name of Industry** : **M/s Power Plant Athagarh, TATA Steel.**
2. **Sampling Location** : **AAQ Monitoring Station ID: Ghantikhal Village**
3. **Monitoring Instruments** : **RDS(APM 460 BL), FPS(APM 550) Envirotech, CO Monitor, VOC Sampler**
4. **Sample collected by** : **VCSPL Representative**

Date	PARAMETERS											
	PM_{10} ($\mu g/m^3$)	$PM_{2.5}$ ($\mu g/m^3$)	SO_2 ($\mu g/m^3$)	NO_x ($\mu g/m^3$)	O_3 ($\mu g/m^3$)	CO (mg/m^3)	NH_3 ($\mu g/m^3$)	C_6H_6 ($\mu g/m^3$)	BaP (ng/m^3)	Ni (ng/m^3)	Pb ($\mu g/m^3$)	As (ng/m^3)
17.03.2025	82.0	47.2	22.2	23.4	7.5	0.98	20.9	BDL	BDL	BDL	BDL	BDL
Testing method	IS 5182: Part 23	EPA CFR-40 (pt 50) Appendix-1	IS 5182 (Part-2) RA2006	IS 5182 (Part-6) RA2006	Chemical Method	IS 5182 (P-10)	Indo phenol blue method	Absorption & Desorption followed by GC analysis	Solvent extraction followed by Gas Chromatography analysis	AAS method after sampling on EPM 2000 or Equivalent filter Paper		
NAAQ Standard	100/24Hr	60/24 Hr	80/24 Hr	80/24 Hr	100/8 Hr	02/8 Hr	400/24 Hr	05/Annual	01/Annual	20/Annual	1/24 Hr	06/Annual

BDL Values: SO_2< 4 $\mu g/m^3$, NO_x< 6 $\mu g/m^3$, O_3<4 $\mu g/m^3$, NH_3< 20 $\mu g/m^3$, Ni<0.01 ng/m^3, As < 0.001 ng/m^3, C_6H_6<0.001 $\mu g/m^3$, BaP<0.002 ng/m^3, Pb<0.001 $\mu g/m^3$, CO-<0.1 mg/m^3

VISIONTEK CONSULTANCY SERVICES PVT. LTD. BBSR

Reviewed By

VISIONTEK CONSULTANCY SERVICES PVT. LTD. BBSR

Verified By

Annexure-VII

Quantity of coal transportation from various routes/ sources is as follows: (Period: Oct'24-Mar'25)

Mode of Transport	By Road								By Rail			
Month	MCL Talcher area mines		Open market		Imported coal from Paradeep port		Washery Coal Rejects Talcher area		MCL Talcher area mines to RJGR Rly siding		Washery Rejects coal from ALPS Mining via RJGR Rly Siding	
	No of Trucks	Dispatch qty in MT	No of Trucks	Dispatch qty in MT	No of Trucks	Dispatch qty in MT	No of Trucks	Dispatch qty in MT	No of Trucks	Dispatch qty in MT	No of Trucks	Dispatch qty in MT
Oct-24	2102	60094.95	32.77						360	7,725.57		
Nov-24	2080	59352.16	9967.23									
Dec-24	2232	64,751.21										
Jan-25	2041	58,771.02										
Feb-25	1897	55,313.26										
Mar-25	1960	7,552.84	8,206.54									

TATA STEEL LIMITED (POWER PLANT, ATHAGARH)

for Power Plant Athagarh
Tata Steel Limited