



**The Deputy Director General of Forests (C),  
Ministry of Environment, Forest and Climate Change,  
Integrated Regional Office, (IRO) – Ranchi  
2nd floor, Headquarter, Jharkhand State Housing Board Harmu Chowk,  
Harmu Housing Colony, Argora, Jharkhand – 834002.**

Ref No. - JMB/ENV/DIG/37/131 /2026  
May 25<sup>th</sup>, 2026

Ref.: Environmental Clearance letter No.-J-11015/372/2010-IA.II(M)dated-30<sup>th</sup> September 2013.

**SUB: Half Yearly Compliance Status Report of Environment Clearance conditions issued by MoEF&CC, New Delhi to Digwadih Colliery, Tata Steel Limited, Dhanbad for the period October-25 to March-2026.**

Dear Sir,

We are enclosing herewith compliance report for the period **October-25 to March-2026** for the EC granted vide letter no.- J-11015/372/2010-IA.II(M) dated- 30th September 2013 issued by Ministry of Environment, Forest and Climate Change, New Delhi.

We trust the information furnished is in line with your requirement.

Thanking you,

Yours faithfully,

**Head (Planning)  
Jharia Division, Tata Steel Ltd.**

Encl: As above.

Copy to: Member Secretary, CPCB, Eastern Zonal Office, Southend Conclave, 502, 5<sup>th</sup> Floor  
1582, Rajdanga Main Road, Kolkata -700107.

Copy to: Member Secretary, JSPCB, T.A. Division Building (Ground Floor),H.E.C, Dhurwa,  
Ranchi - 834004.

Copy to: Regional Officer, JSPCB, HIG -1 Sardar Patel Nagar, Housing Colony, Hirapur,  
Dhanbad

**TATA STEEL LIMITED**

Jharia Collieries Jamadoba 828 112 Dhanbad India

Tel 91 326 2320263/2320265/2320267 Fax 91 326 2320268

Regd. Office Bombay House 24 Homi Mody Street Fort Mumbai 400 001

Tel 91 22 66658282 Fax 91 22 66657724

Corporate Identity Number L27100MH1907PLC000260 Website www.tatasteel.com

**Your (Half Yearly Compliance Report) has been Submitted with following details**

<b>Proposal No</b>	IA/JH/CMIN/19215/2010
<b>Compliance ID</b>	1227623596
<b>Compliance Number(For Tracking)</b>	EC/M/COMPLIANCE/1227623596/2026
<b>Reporting Year</b>	2026
<b>Reporting Period</b>	01 Jun(01 Oct - 31 Mar)
<b>Submission Date</b>	27-05-2026
<b>RO/SRO Name</b>	Shri Senthil Kumar Sampath
<b>RO/SRO Email</b>	agmu156@ifs.nic.in
<b>State</b>	JHARKHAND
<b>RO/SRO Office Address</b>	Integrated Regional Offices, Ranchi

**Note:-** SMS and E-Mail has been sent to Shri Senthil Kumar Sampath, JHARKHAND with Notification to Project Proponent.

**Half Yearly Compliance Report  
2026  
01 Jun(01 Oct - 31 Mar)**

**Acknowledgement**

<b>Proposal Name</b>	Digwadih Colliery of M/s Tata Steel Ltd. for (Expansion from 0.38 MTPA to 0.6 MTPA in ML area 314.57 ha), dist. Dhanbad, Jharkhand		
<b>Name of Entity / Corporate Office</b>	Tata Steel Ltd.		
<b>Village(s)</b>	N/A		
<b>District</b>	DHANBAD		
<b>Proposal No.</b>	IA/JH/CMIN/19215/2010	<b>Category</b>	Coal Mining
<b>Plot / Survey / Khasra No.</b>	N/A	<b>Sub-District</b>	N/A
<b>State</b>	JHARKHAND	<b>Entity's PAN</b>	*****2803M
<b>MoEF File No.</b>	J-11015/372/2010-IA.II (M)	<b>Entity name as per PAN</b>	UTSAV KASHYAP

**Compliance Reporting Details**

<b>Reporting Year</b>	2026
<b>Remarks (if any)</b>	Half Yearly Compliance Submission for October 2025 to March 2026.
<b>Reporting Period</b>	01 Jun(01 Oct - 31 Mar)

**Details of Production and Project Area**

**Name of Entity / Corporate Office** Tata Steel Ltd.

	<b>Project Area as per EC Granted</b>	<b>Actual Project Area in Possession</b>
Private	300.918	300.918
Revenue Land	13.652	13.652
Forest	0	0
Others	N/A	N/A
<b>Total</b>	<b>314.57</b>	<b>314.57</b>

**Others Area**

Sr. no	Other Name	Area Granted	Area Actual
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**Production Capacity**

Sr. no	Product Name	units	Valid Upto	Capacity	Production last year	Capacity as per CTO
1	Raw Coal	Million Tons per Annum (MTPA)	31/03/2030	0.6	0	0.6

## Conditions

### Specific Conditions

Sr.No.	Condition Type	Condition Details
1	GREENBELT	High root density tree species shall be selected and planted over areas likely to be affected by subsidence.
<p><b>PPs Submission:</b> Complied Impact on land by subsidence has been found to be negligible as per the subsidence monitoring reports prepared by CIMFR, Dhanbad.</p>		Date: 14/05/2026
2	Statutory compliance	If subsidence is found exceeding the permitted limits, then the landowners shall be adequately compensated with mutual agreement of the landowners.
<p><b>PPs Submission:</b> Complied It will be strictly followed.</p>		Date: 14/05/2026
3	Statutory compliance	Mining shall be carried out as per statuette at a safe distance from the river/nallah flowing adjacent to the lease boundary.
<p><b>PPs Submission:</b> Complied Since this is an underground project, there is hardly any impact on the river/ nallah. The closest jore is at a distance of about 2kms from the mine office area. Therefore, no impact on the course of flow in the jore is anticipated.</p>		Date: 14/05/2026
4	Statutory compliance	The maximum production from the mines shall not exceed beyond that for which environmental clearance has been granted.
<p><b>PPs Submission:</b> Complied It is being strictly followed. The Production from the colliery has been discontinued from February 2021.</p>		Date: 14/05/2026
5	Statutory compliance	The impact on the Damodar river due to mining activity which is at a distance of 2 km be studied through a reputed 3rd Party and submitted to the SPCB and the regional office of the MoEF for monitoring.
<p><b>PPs Submission:</b> Complied The underground coal mines operated by Tata Steel Ltd are adjacent to the Damodar River. Other coal mines of BCCCL and SAIL are also in close proximity to the river basin. Major source of pollution of Damodar River is the flow of industrial effluents and untreated sewage water into the river. A number of OB dumps lie close to the river banks causing the flow of sediments into the river. As per the hydrology study conducted by Indian School of Mines, Dhanbad, the impact of the underground mines of Tata Steel Ltd is minimal. This is due to the following reasons The mining activity does not require any diversion of river/streams or natural drain. As land profile does not change appreciably in case of underground mines with backfilling of mined out areas, there is no change in surface drainage till date and unlikely to occur in future. Surface water quality also does not undergo any change, as there is no discharge to surface drainage in dry season. In Monsoon, the excess mine water discharged gets mixed with storm water. Large settling tanks are available for</p>		Date: 14/05/2026

<p>storage and sedimentation of mine water before its discharge to conform to the norms. The industrial wastewater generated during vehicle washing from the central workshop catering to all the mines is treated in oil and grease trap followed by recycling of water. The two coal washeries of Tata Steel are operating on Zero Liquid discharge (ZLD) principle. Sewage water generated from our townships is treated in STP. For Sijua group, one STP of 200 KLD and another STP of 50 KLD has been installed in Bhelatand Colonies, 10 KLD has been installed at Sijua canteen and Bhelatand canteen individually. For Jamadoba group, 10 KLD STP/ETP installed in washery, Canteen, Garage and Hospital individually, other than that 60 KLD and 30 KLD installed at Digwadih Colony, 50 KLD installed at Railway Colony.</p>		
6	Statutory compliance	Details of underground transportation of coal from mine to coal yard/ rail yard be submitted to the MoEF for record.
<p><b>PPs Submission:</b> Complied During mining operation, coal from the mine is sent to the captive Jamadoba coal washery for beneficiation purpose through a network of underground conveyor belts. The detailed diagram of transportation network has already been submitted in earlier compliance reports.</p>		Date: 26/05/2026
7	WASTE MANAGEMENT	Adequate care be taken to prevent sand spillages from the trucks/tippers.
<p><b>PPs Submission:</b> Complied Earlier, the trucks that are being used for the transportation of sand are properly covered using tarpaulin sheets. Larger trucks have been engaged to reduce no of cycles. To ensure the compliance, every vehicle is checked as per vehicle checklist on PUC, Tyre /body condition, emission check at every entry point. Quality checks are done on trucks to ensure its health.</p>		Date: 26/05/2026
8	WASTE MANAGEMENT	The test results of the study of leaching of heavy metals from bottom-ash be submitted to SPCB and the regional office of the MoEF for monitoring.
<p><b>PPs Submission:</b> Complied A study conducted in 2013, by Indian School of Mines, Dhanbad to assess the leachability characteristics of fly ash and bottom ash samples taken from us, has determined that the concentration of heavy metals in the leachates were invariably well below the permissible limits for discharge of effluents as per the Indian standards IS 2490 (1993). The test results have already been submitted in December-13 and also re-submitted in April-18.</p>		Date: 14/05/2026
9	Corporate Environmental Responsibility	The CSR activities shall be need based and detailed CSR plan be prepared for implementation.
<p><b>PPs Submission:</b> Complied The CSR plan for each financial year is prepared by TSF only after proper discussions to assess the needs have been held with the elected/ senior members of the communities where our CSR activities are to be undertaken.</p>		Date: 26/05/2026
10	Corporate Environmental Responsibility	The detailed breakup of funds during 2012-13 be submitted to the MoEF for record. A social audit to be got done annually by a reputed institute and uploaded on the company's website.
<p><b>PPs Submission:</b> Complied The detailed breakup has already been submitted to MOEF. The Corporate Sustainability Reports viz. Integrated Reports are made annually for the company which is certified by an assurance agency. It also includes the Social accountability of the company. All the reports are uploaded on the Tata Steel website. Further, an internal Social audit is also conducted once in five years.</p>		Date: 26/05/2026
11	WASTE MANAGEMENT	There should be no OB dumps at the end of the mining.

<p><b>PPs Submission:</b> Complied Since this is an underground mine, it is not applicable.</p>		<p>Date: 14/05/2026</p>
12	MISCELLANEOUS	<p>Regular monitoring of subsidence movement on the surface over and around the working area and impact on natural drainage pattern, water bodies, vegetation, structure, roads, and surroundings shall be continued till movement ceases completely. In case of observation of any high rate of subsidence movement, appropriate effective corrective measures shall be taken to avoid loss of life and material. Cracks shall be effectively plugged with ballast and clayey soil/suitable material.</p>
<p><b>PPs Submission:</b> Complied Regular monitoring of subsidence is done by Central Institute for Mining and Fuel Research, Dhanbad. According to the subsidence reports, the impact of subsidence is negligible since the underground mine workings are now at great depth and proper filling of voids through sand stowing is being done.</p>		<p>Date: 14/05/2026</p>
13	Statutory compliance	<p>Coal extraction shall also be optimized in areas where agricultural production is continuing. Some pillars shall be left below the agricultural land. No depillaring &amp; coal extraction should be carried out below habitation, H.T. Lines &amp; beneath road, water bodies.</p>
<p><b>PPs Submission:</b> Complied It will be strictly followed.</p>		<p>Date: 14/05/2026</p>
14	Statutory compliance	<p>Subsidence shall be monitored closely and if subsidence is found exceeding the permitted limits, then the landowners shall be adequately compensated with mutual agreement with the landowners.</p>
<p><b>PPs Submission:</b> Complied Regular monitoring of subsidence is being done by CIMFR, Dhanbad.</p>		<p>Date: 14/05/2026</p>
15	GREENBELT	<p>3-tier plantation should be developed 2 km stretch of road from the mine using native species.</p>
<p><b>PPs Submission:</b> Complied Plantation along stretches of road has been done. 3-tier plantation is not feasible due to presence of private land around the periphery of colliery. However, plantation has been done on vacant plots and areas</p>		<p>Date: 14/05/2026</p>
16	WATER QUALITY MONITORING AND PRESERVATION	<p>Garland drains (size, gradient and length) around the safety areas such as mine shaft and low lying areas and sump capacity shall be designed keeping 50% safety margin over and above the peak sudden rainfall and maximum discharge in the area adjoining the mine sites. Sump capacity shall also provide adequate retention period to allow proper settling of silt material.</p>
<p><b>PPs Submission:</b> Complied Garland drains of adequate size and gradient already exist around the colliery area to channelize the surface runoff. The details of size of garland drain mapped in surface plan has been submitted earlier in April-18.</p>		<p>Date: 14/05/2026</p>
17	AIR QUALITY MONITORING AND PRESERVATION	<p>The locations of monitoring stations in the Jharia Coalfields should be finalized in consultation with the Jharkhand State Pollution Control Board. The smoke/dust emission varies from source to source (fuel wood, coal, flyash from TPPs, silica from natural dust, etc). Mineralogical composition study should be undertaken on the</p>

		composition of the suspended particulate matter (PM10 and PM2.5) in Jharia Coalfields and also quantified. These studies would help ascertain source and extent of the air pollution, based on which appropriate mitigative measures could be taken.
<p><b>PPs Submission:</b> Complied</p> <p>The locations of monitoring stations for our colliery have already been finalized in consultation with JSPCB, Dhanbad. The mineralogical composition study has been carried out by an independent laboratory (recognized by JSPCB and NABL) and the results are provided in Annexure II</p>		<p>Date: 26/05/2026</p>
18	AIR QUALITY MONITORING AND PRESERVATION	Water sprinkling system shall be provided to check fugitive emissions from loading operations, conveyor system, haulage roads, transfer points, etc. Major approach roads shall be black topped and properly maintained.
<p><b>PPs Submission:</b> Complied</p> <p>The mining operation and production from the colliery has been discontinued from February 2021. Earlier, the water spraying arrangement was present in the underground mines at all transfer points. Water spraying via tankers was also done on sand transportation routes. Major approach roads have been black-topped and maintained regularly.</p>		<p>Date: 26/05/2026</p>
19	AIR QUALITY MONITORING AND PRESERVATION	Transportation of coal from the mine to railway siding should be by 20T mechanically covered trucks.
<p><b>PPs Submission:</b> Complied</p> <p>Not applicable due to transportation of coal via underground belt conveyor network system directly to washery.</p>		<p>Date: 14/05/2026</p>
20	GREENBELT	A progressive afforestation plan shall be prepared and implemented over the mine lease area acquired and shall include areas under green belt development, areas along roads, infrastructure, along ML boundary and township etc, by planting native species in consultation with the local DFO/Agriculture Department.
<p><b>PPs Submission:</b> Complied</p> <p>Tree plantation activities are carried out every year on the barren/ degraded areas, areas along road-side, infrastructure, etc of the colliery leasehold. Apart from these, fruit plants are distributed to employees and also to villagers, schools, institutions, etc. The environment department is responsible for implementing the afforestation plan which is prepared along with the mine management. High root density trees of native species are planted under annual plantation program and around 7818 Nos of saplings were planted in the FY26 Annexure I</p>		<p>Date: 21/05/2026</p>
21	WATER QUALITY MONITORING AND PRESERVATION	Regular monitoring of groundwater level and quality shall be carried out by establishing a network of existing wells and construction of new piezometers. The monitoring for quantity shall be done four times a year in pre-monsoon (May), monsoon (August), post-monsoon (November) and winter (January) seasons and for quality in May. Data thus collected shall be submitted to the MoEF&CC and to the CPCB quarterly within one month of monitoring.
<p><b>PPs Submission:</b> Complied</p> <p>The regular monitoring of groundwater level and quality is done as per the requirement. The groundwater quality report and groundwater level reports are provided in Annexure II.</p>		<p>Date: 26/05/2026</p>
22	WATER QUALITY MONITORING AND PRESERVATION	Acid Water Treatment Plant, volume of water to be treated and disposal of brine should be provided.

<p><b>PPs Submission:</b> Complied Not applicable.</p>		<p>Date: 14/05/2026</p>
23	<p>WATER QUALITY MONITORING AND PRESERVATION</p>	<p>Mine discharge water outside the ML shall be monitored, particularly for TDS and treated to conform to prescribed levels before discharge into the natural environment.</p>
<p><b>PPs Submission:</b> Complied There is one mine-water outlet point in the colliery which is regularly monitored by the Environmental Laboratory.</p>		<p>Date: 14/05/2026</p>
24	<p>WATER QUALITY MONITORING AND PRESERVATION</p>	<p>The Company shall put up artificial groundwater recharge measures for augmentation of groundwater resource, in case water table shows a declining trend. The project authorities shall meet water requirement of nearby village(s) in case the village wells go dry due to dewatering of mine.</p>
<p><b>PPs Submission:</b> Complied Most of the water pumped out during underground mining activity was re-circulated back into the mine for the purpose of stowing. Backfilling of mine voids by stowing was done using sand which is having the porosity to hold the underground water thus helping aquifer to retain the underground water. Further, there are a number of ponds existing on the surface of the mining lease which act as natural reservoirs for recharging ground water. These ponds/ tanks are regularly cleaned and maintained by our CSR department. As per the hydro-geological report, the variation in the ground water level is only seasonal. The water requirement of the nearby villages is being met by the company already. Now piped drinking water is being provided.</p>		<p>Date: 26/05/2026</p>
25	<p>Human Health Environment</p>	<p>Besides carrying out regular periodic health checkup of their workers, 10% of the workers identified from workforce engaged in active mining operations shall be subjected to health checkup for occupational diseases and hearing impairment, if any, through an agency such as NIOH, Ahmedabad within a period of one year and the results reported to this Ministry and to DGMS.</p>
<p><b>PPs Submission:</b> Complied The periodic health checkup of the workers is done regularly by our Occupational Health Department, Tata Central Hospital, Jamadoba. We have a PME (Periodic Medical Examination) Centre approved by DGMS where 20 percentage of the workers identified from workforce engaged in active mining operations are subjected to full medical checkup including hearing impairment checkup, etc. These results are regularly submitted to DGMS as per mines rules. Some sample reports and as well as past records have been submitted in previous compliance reports.</p>		<p>Date: 14/05/2026</p>
26	<p>Statutory compliance</p>	<p>The mining in the existing mines would be phased out after expiry of the current mining lease and after reclamation of mined over area. The operating mines may be analyzed and monitored for compliance of conditions, having bearing with movement of wild life until such time they are closed/ phased out.</p>
<p><b>PPs Submission:</b> Complied It is not applicable in our case.</p>		<p>Date: 14/05/2026</p>
27	<p>Corporate Environmental Responsibility</p>	<p>Project specific CSR for an amount of Rs 5/Tonne of coal production should be provided for the activities under CSR undertaken for the neighboring villages shall be for not less than Rs 10 per tonne of coal and the progress made thereon shall be uploaded by the company annually on the company website. Monitoring of the impacts of activities under CSR shall be carried out periodically.</p>

<p><b>PPs Submission: Complied</b> All the CSR measures are carried out by the CSR wing of the company under the banner of Tata Steel Foundation. During FY 26 (Oct-2025 to March-2026), the company has spent around Rs. 9.67 Crore on the strengthening of social welfare infrastructure of the Jharia region. The progress report is being uploaded every year on the company website. Internal social audits are carried out regularly to assess the impact of CSR activities.</p>		<p>Date: 26/05/2026</p>
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28	Statutory compliance	A Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment & Forests 5 years in advance of final mine closure for approval.
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<p><b>PPs Submission: Complied</b> Mine Closure Plan has been approved by Ministry of Coal, New Delhi. Details on deposition of closure cost in escrow account along with expenditure incurred for progressive closure is regularly submitted to Office of Coal controller. Final mine closure along with details of corpus fund will be submitted to MoEFCC 5 years in advance.</p>		<p>Date: 14/05/2026</p>
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29	Corporate Environmental Responsibility	<p>Corporate Environment Responsibility: a)The Company shall have a well laid down Environment Policy approved by the Board of Directors. b)The Environment Policy shall prescribe for standard operating process/procedures to bring into focus any infringements/deviation/violation of the environmental or forest norms/conditions. c)The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions shall be furnished. d) To have proper checks and balances, the company shall have a well laid down system of reporting of non-compliances/violations of environmental norms to the Board of Directors of the company and/or shareholders or stakeholders at large.</p>
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<p><b>PPs Submission: Complied</b> The Company already has an Environment Policy approved by the Managing Director and it addresses all the issues mentioned. The status of adherence to the policy and compliance to Environmental laws and regulations is regularly discussed at higher levels. Any non-compliance noticed is corrected at divisional level. If any issue is beyond our control, it is brought to the notice of higher management. Moreover, Digwadih Colliery is IMS (Integrated Management System: Quality Management System, Environment Management System and OHSAS) certified unit addressing all environment aspects, impacts and needs and expectation of interested parties with respect to environment protection.</p>		<p>Date: 14/05/2026</p>
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## General Conditions

Sr.No.	Condition Type	Condition Details
1	MISCELLANEOUS	No change in technology and scope of working shall be made without prior approval of the MoEF.

<p><b>PPs Submission: Complied</b> It has been strictly followed. Board and Pillar method was used for mining.</p>		<p>Date: 26/05/2026</p>
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2	MISCELLANEOUS	No change in the calendar plan including quantum of mineral coal and waste being produced shall be made.
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<p><b>PPs Submission: Complied</b> It will be strictly followed.</p>		<p>Date: 14/05/2026</p>
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3	AIR QUALITY	Four ambient air quality monitoring stations shall be established in
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	MONITORING AND PRESERVATION	the core zone as well as in the buffer zone for monitoring PM10, PM2.5, SO2 and NOx. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, in RSPM etc. shall be carried out at least once in six months.
<p><b>PPs Submission:</b> Complied</p> <p>The Air quality monitoring stations are: (i)Jamadoba Group Office (Core Zone) (ii)New Village Colony, Jamadoba (Buffer Zone) (iii)Digwadih 12 No. Colony (Buffer Zone) (iv)6 and 7 Pits Kalimandir area (Buffer Zone) Monitoring of heavy metals in ambient air is being performed by an independent laboratory (recognized by JSPCB, NABL) on quarterly basis. The results are enclosed as Annexure II.</p>		Date: 26/05/2026
4	AIR QUALITY MONITORING AND PRESERVATION	Data on ambient air quality (PM10, PM2.5, SO2 and NOx and heavy metals such as Hg, As, Ni, Cr, etc) and other monitoring data shall be regularly submitted to the Ministry including its Regional Office at Bhubaneswar and to the SPCB and the CPCB once in six months. Random verification of samples through analysis from independent laboratories recognised under the EP Rules, 1986 shall be furnished as part of the compliance report.
<p><b>PPs Submission:</b> Complied</p> <p>Ambient air quality report (PM10, PM 2.5, SO2 and NOx) for the period from Oct-25 to March-26 is attached as Annexure II. Additionally, third party monitoring is being done through a JSPCB and NABL recognized Laboratory for PM10, PM 2.5, SO2, NOx, CO, NH3, O3 and heavy metals (As, Ni, Cd and Cr). The results are enclosed as Annexure II.</p>		Date: 26/05/2026
5	Noise Monitoring & Prevention	Adequate measures shall be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with ear plugs/muffs.
<p><b>PPs Submission:</b> Complied</p> <p>Earlier, regular noise survey is being conducted in the underground work environment. Workers have been provided with ear-plugs/ muffs in high noise areas.</p>		Date: 26/05/2026
6	WATER QUALITY MONITORING AND PRESERVATION	Industrial wastewater (workshop and wastewater from the mine) shall be properly collected, and treated so as to conform to the standards including for heavy metals before discharge prescribed under GSR 422 (E) dated 19th May 1993 and 31st December 1993 or as amended from time to time. Oil and grease trap shall be installed before discharge of workshop effluents.
<p><b>PPs Submission:</b> Complied</p> <p>No industrial wastewater is generated in Digwadih Colliery premises. There is a central workshop and garage in Jamadoba where Effluent Treatment Plant having oil and grease trap facility has been provided.</p>		Date: 14/05/2026
7	AIR QUALITY MONITORING AND PRESERVATION	Vehicular emissions shall be kept under control and regularly monitored. Vehicles used for transportation of the mineral shall be covered with tarpaulins and optimally loaded.
<p><b>PPs Submission:</b> Complied</p> <p>Only the vehicles having valid PUC certificates were allowed to operate for sand transportation. Coal transportation was done through underground belt network. Only sand transportation has been done through trucks which are covered with tarpaulins as well as optimally loaded.</p>		Date: 26/05/2026
8	Statutory compliance	Monitoring of environmental quality parameters shall be carried out

		through establishment of adequate number and type of pollution monitoring and analysis equipment in consultation with SPCB and data got analysed through a laboratory recognised under EP Rules, 1986.
<p><b>PPs Submission:</b> Complied</p> <p>We have a fully equipped Environment Cell Laboratory with qualified personnel. The monitoring and analysis is also done at regular intervals by a JSPCB and NABL accredited laboratory We have also installed a Continuous Ambient Air Quality Monitoring Station at Jamadoba for real time monitoring.</p>		<p>Date: 14/05/2026</p>
9	Statutory compliance	Monitoring of outlet points should be carried out and records of same should be maintained and submitted to the Regional Office of the MOEF as part of the Compliance Report.
<p><b>PPs Submission:</b> Complied</p> <p>There is one mine-water outlet point in the colliery which is regularly monitored by the Environmental Laboratory. The analysis results have been provided as Annexure II.</p>		<p>Date: 26/05/2026</p>
10	Human Health Environment	Personnel working in dusty areas shall wear protective respiratory devices and they shall also be provided with adequate training and information on safety and health aspects. Occupational health surveillance programme of the workers shall be undertaken periodically to observe any contractions due to exposure to dust and to take corrective measures, if needed.
<p><b>PPs Submission:</b> Complied</p> <p>Earlier, persons working in dusty areas have been provided with dust masks and have been given awareness training on safety and health aspects. Regular PME (Periodic Medical Examinations) has been done.</p>		<p>Date: 26/05/2026</p>
11	MISCELLANEOUS	A separate environmental management cell with suitable qualified personnel shall be set up under the control of a Senior Executive, who will report directly to the Head of the company.
<p><b>PPs Submission:</b> Complied</p> <p>We have a separate Environmental Management Cell with qualified personnel . The reporting of Environmental Cell is directly to General Manager of the Division. Environment policy has been attached as Annexure IV</p>		<p>Date: 14/05/2026</p>
12	Corporate Environmental Responsibility	The funds earmarked for environmental protection measures shall be kept in separate account and shall not be diverted for other purpose. Year-wise expenditure shall be reported to this Ministry and its Regional Office at Bhubaneswar.
<p><b>PPs Submission:</b> Complied</p> <p>The Environment Cell has a separate fund for Environmental protection measures and for complying with legal requirements. The annual environmental expenditure for the financial year 2024-2025 is Rs. 147.80 lakhs.</p>		<p>Date: 14/05/2026</p>
13	MISCELLANEOUS	The Project authorities shall advertise at least in two local newspapers widely circulated around the project, one of which shall be in the vernacular language of the locality concerned within seven days of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution control Board and may also be seen at the website of the ministry of Environment & Forests at <a href="http://envfor.nic.in">http://envfor.nic.in</a> .

<p><b>PPs Submission:</b> Complied It has been complied with. Attached as Annexure III</p>		<p>Date: 14/05/2026</p>
14	Statutory compliance	<p>A copy of the environmental clearance letter shall be marked to concerned Panchayat/Zila Parishad, Municipal Corporation or Urban Local Body and local NGO, if any, from whom any suggestion/representation has been received while processing the proposal. A copy of the clearance letter shall also be displayed on the company's website.</p>
<p><b>PPs Submission:</b> Complied It has been complied with. Attached as Annexure V</p>		<p>Date: 27/05/2026</p>
15	Statutory compliance	<p>A copy of the clearance letter shall be displayed on the website of the concerned State Pollution Control Board. The EC letter shall also be displayed at the Regional Office, District Industry Centre and Collector's Office/Tehsildar's Office for 30 days.</p>
<p><b>PPs Submission:</b> Complied It has been complied with.</p>		<p>Date: 14/05/2026</p>
16	Statutory compliance	<p>The clearance letter shall be uploaded on the company's website. The compliance status of the stipulated EC conditions shall also be uploaded by the project authorities on their website and updated at least once every six months so as to bring the same in the public domain. The monitoring data of environmental quality parameters (air, water, noise and soil) and critical pollutants such as PM10, PM2.5, SO2 and NOx (ambient and stack if any) and critical sectoral parameters shall also be displayed at the entrance of the project premises and mines office and in corporate office and on the company's website.</p>
<p><b>PPs Submission:</b> Complied The clearance letter has been uploaded on the companies website. The compliance status (as Half-yearly compliance report) is being uploaded in companies website. The display of information near the mines office has been done.</p>		<p>Date: 14/05/2026</p>
17	Statutory compliance	<p>The project proponent shall submit six monthly reports on the status of compliance of the stipulated environmental clearance conditions (both in hard copy and in e-mail) to the respective Regional Office of the MOEF, the respective Zonal offices of CPCB and the SPCB.</p>
<p><b>PPs Submission:</b> Complied It is being complied</p>		<p>Date: 14/05/2026</p>
18	Statutory compliance	<p>The Regional Office of this Ministry located at Bhopal shall monitor compliance of the stipulated conditions. The Project authorities shall extend full cooperation to the office(s) of the Regional Office by furnishing the requisite data/information/monitoring reports.</p>
<p><b>PPs Submission:</b> Complied It will be complied with.</p>		<p>Date: 14/05/2026</p>
19	Statutory compliance	<p>The environmental statement for each financial year ending 31st March in Form-V is mandated to be submitted by the project proponent tot the concerned State Pollution Control Board as</p>

prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be uploaded on the company's website along with the status of compliance of EC conditions and shall be sent to the respective Regional Offices of the MOEF by E-mail.

**PPs Submission:** Complied

The environmental statement for financial year 2024-25 has been submitted to JSPCB vide letter no. JMB/ENV/ESSA/05/450/2025 on 30th September 2025 and it is also uploaded on the company website. The soft copy of Environment Statement is also sent to MOEF by email at ro.ranchi-mefgov.in.

Date:  
14/05/2026

**Visit Remarks**

**Last Site Visit Report Date:**

N/A

**Additional Remarks:**

**Note:** This acknowledgement is as per the details submitted by project proponent. In no way is this document to be considered as conclusion on any action on the compliance of the project. This is strictly for the project proponent's reference purpose.

**HALF YEARLY COMPLIANCE REPORT**  
**(PERIOD: OCTOBER 2025 - MARCH 2026)**

**DIGWADIH COLLIERY**  
**(CAPACITY: EXPANSION FROM 0.38 TO 0.6 MTPA RAW COAL)**  
**TEHSIL: JHARIA, DIST: DHANBAD, JHARKHAND**



**TATA STEEL LIMITED, JHARIA DIVISION**

**P.O. - JAMADOBA, DIST. - DHANBAD,  
STATE- JHARKHAND, PIN CODE – 828112**

**ENVIRONMENTAL CLEARANCE GRANTED VIDE LETTER NO. - J-  
11015/372/2010-IA.II(M) DATED- 30.09.2013 ISSUED BY GOVT. OF INDIA,  
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE, NEW  
DELHI.**

**Compliance status of Digwadih Colliery of M/s Tata Steel Ltd. for (Expansion from 0.38 MTPA to 0.6 MTPA in ML area 314.57 ha), dist. Dhanbad, Jharkhand vide MoEFCC Letter no J-11015/372/2010-IA.II (M) dated September 30, 2013**

S. No.	Condition	Compliance Status
<b>Specific Condition</b>		
(i)	The maximum production from the mines shall not exceed beyond that for which environmental clearance has been granted.	It is being strictly followed. The mining operation & production from the colliery has been discontinued from February 2021.
(ii)	The impact on the Damodar river due to mining activity which is at a distance of 2 km be studied through a reputed 3 <sup>rd</sup> Party and submitted to the SPCB and the regional office of the MoEF for monitoring.	<p>The underground coal mines operated by Tata Steel Ltd are adjacent to the Damodar River. Other coal mines of BCCL &amp; SAIL are also in close proximity to the river basin. Major source of pollution of Damodar River is the flow of industrial effluents and untreated sewage water into the river. A number of OB dumps lie close to the riverbanks causing the flow of sediments into the river.</p> <p>As per the hydrology study conducted by Indian School of Mines, Dhanbad, the impact of the underground mines of Tata Steel Ltd is minimal. This is due to the following reasons</p> <ul style="list-style-type: none"> <li>• The mining activity does not require any diversion of river/streams or natural drain. As land profile does not change appreciably in case of underground mines with backfilling of mined out areas, there is no change in surface drainage till date and unlikely to occur in future.</li> <li>• Surface water quality also does not undergo any change, as there is no discharge to surface drainage in dry season. In Monsoon, the excess mine water discharged gets mixed with storm water.</li> <li>• Large settling tanks are available for storage and sedimentation of mine water before its discharge to conform to the norms. The industrial wastewater generated during vehicle washing from the central workshop catering to all the mines is treated in oil and grease trap followed by recycling of water.</li> <li>• The two coal washeries of Tata Steel are operating on Zero Liquid discharge (ZLD) principle.</li> <li>• Sewage water generated from our townships is treated in STP. For Sijua group, one STP of 200 KLD and</li> </ul>

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		another STP of 50 KLD has been installed in Bhelatand Colonies, 10 KLD has been installed at Sijua canteen and Bhelatand canteen individually. For Jamadoba group, 10 KLD STP/ETP installed in washery, Canteen, Garage and Hospital individually, other than that 60 KLD and 30 KLD installed at Digwadih Colony, 50 KLD installed at Railway Colony.
(iii)	Details of underground transportation of coal from mine to coal yard/ rail yard be submitted to the MoEF for record.	During mining operation, coal from the mine is sent to the captive Jamadoba coal washery for beneficiation purpose through a network of underground conveyor belts. The detailed diagram of transportation network has already been submitted in earlier compliance reports.
(iv)	Adequate care be taken to prevent sand spillages from the trucks/tippers.	Earlier, the trucks that are being used for the transportation of sand are properly covered using tarpaulin sheets. Larger trucks have been engaged to reduce no of cycles. To ensure the compliance, every vehicle is checked as per vehicle checklist on PUC, Tyre /body condition, emission check at every entry point. Quality checks are done on trucks to ensure its health.
(v)	The test results of the study of leaching of heavy metals from bottom-ash be submitted to SPCB and the regional office of the MoEF for monitoring.	A study conducted in 2013, by Indian School of Mines, Dhanbad to assess the leachability characteristics of fly ash and bottom ash samples taken from us, has determined that the concentration of heavy metals in the leachates were invariably well below the permissible limits for discharge of effluents as per the Indian standards IS 2490 (1993). The test results have already been submitted in December'13 and also re-submitted in April'18.
(vi)	The CSR activities shall be need based and detailed CSR plan be prepared for implementation.	The CSR plan for each financial year is prepared by TSF only after proper discussions to assess the needs have been held with the elected/ senior members of the communities where our CSR activities are to be undertaken.
(vii)	The detailed breakup of funds during 2012-13 be submitted to the MoEF for record. A social audit to be done annually by a reputed institute and uploaded on the company's website.	The detailed breakup has already been submitted to MOEF. The Corporate Sustainability Reports viz. Integrated Reports are made annually for the company which is certified by an assurance agency. It also includes the Social

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		accountability of the company. All the reports are uploaded on the Tata Steel website. Further, an internal Social audit is also conducted once in five years.
(viii)	There should be no OB dumps at the end of the mining.	Since this is an underground mine, it is not applicable.
(ix)	Regular monitoring of subsidence movement on the surface over and around the working area and impact on natural drainage pattern, water bodies, vegetation, structure, roads, and surroundings shall be continued till movement ceases completely. In case of observation of any high rate of subsidence movement, appropriate effective corrective measures shall be taken to avoid loss of life and material. Cracks shall be effectively plugged with ballast and clayey soil/suitable material.	Regular monitoring of subsidence is done by Central Institute for Mining and Fuel Research, Dhanbad. According to the subsidence reports, the impact of subsidence is negligible since the underground mine workings are now at great depth and proper filling of voids through sand stowing is being done.
(x)	If subsidence is found exceeding the permitted limits, then the landowners shall be adequately compensated with mutual agreement of the landowners.	It is strictly followed.
(xi)	Mining shall be carried out as per statuette at a safe distance from the river/nallah flowing adjacent to the lease boundary.	Since this is an underground project, there is hardly any impact on the river/ nallah. The closest nallah is at a distance of about 2kms from the mine office area. Therefore, no impact on the course of flow in the nalla is anticipated.
(xii)	High root density tree species shall be selected and planted over areas likely to be affected by subsidence.	Impact on land by subsidence has been found to be negligible as per the subsidence monitoring reports prepared by CIMFR, Dhanbad. Nevertheless, High root density trees of native species are planted under annual plantation program.
(xiii)	Coal extraction shall also be optimized in areas where agricultural production is continuing. Some pillars shall be left below the agricultural land. No depillaring & coal extraction should be carried out below habitation, H.T. Lines & beneath road, water bodies.	It was strictly followed.
(xiv)	Subsidence shall be monitored closely and if subsidence is found exceeding the permitted limits, then the landowners shall be adequately compensated with mutual agreement with the landowners.	Regular monitoring of subsidence is being done by CIMFR, Dhanbad.

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(xv)	3-tier plantation should be developed 2 km stretch of road from the mine using native species.	Plantation along stretches of road has been done. 3-tier plantation is not feasible due to presence of private land around the periphery of colliery. However, plantation has been done on vacant plots and areas
(xvi)	Garland drains (size, gradient and length) around the safety areas such as mine shaft and low lying areas and sump capacity shall be designed keeping 50% safety margin over and above the peak sudden rainfall and maximum discharge in the area adjoining the mine sites. Sump capacity shall also provide adequate retention period to allow proper settling of silt material.	Garland drains of adequate size and gradient already exist around the colliery area to channelize the surface runoff.
(xvii)	Specific mitigative measures identified for the Jharia Coalfields in the Environmental Action Plan prepared for Dhanbad as a critically polluted area and relevant for Digwadih colliery shall be implemented.	The mining operation & production from the colliery has been discontinued from February 2021. Agreed and shall be implemented.
(xviii)	The locations of monitoring stations in the Jharia Coalfields should be finalized in consultation with the Jharkhand State Pollution Control Board. The smoke/dust emission varies from source to source (fuel wood, coal, flyash from TPPs, silica from natural dust, etc). Mineralogical composition study should be undertaken on the composition of the suspended particulate matter (PM10 and PM2.5) in Jharia Coalfields and also quantified. These studies would help ascertain source and extent of the air pollution, based on which appropriate mitigative measures could be taken.	The locations of monitoring stations for our colliery have already been finalized in consultation with JSPCB, Dhanbad. The mineralogical composition study has been carried out by an independent laboratory (recognized by JSPCB and NABL) and the results are provided in <b>Annexure II</b>
(xix)	Water sprinkling system shall be provided to check fugitive emissions from loading operations, conveyor system, haulage roads, transfer points, etc. Major approach roads shall be black topped and properly maintained.	The mining operation & production from the colliery has been discontinued from February 2021. Earlier, the water spraying arrangement was present in the underground mines at all transfer points. Water spraying via tankers was also done on sand transportation routes. Major approach roads have been black-topped and maintained regularly.
(xx)	Transportation of coal from the mine to railway siding should be by 20T mechanically covered trucks.	Not applicable due to transportation of coal via underground belt conveyor network system directly to washery.

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(xxi)	A progressive afforestation plan shall be prepared and implemented over the mine lease area acquired and shall include areas under green belt development, areas along roads, infrastructure, along ML boundary and township etc, by planting native species in consultation with the local DFO/Agriculture Department.	Tree plantation activities are carried out every year on the barren/ degraded areas, areas along road-side, infrastructure, etc of the colliery leasehold. Apart from these, fruit plants are distributed to employees and also to villagers, schools, institutions, etc. High root density trees of native species are planted under annual plantation program and around 7818 Nos of saplings were planted in the FY26. <b>Annexure I</b>
(xxii)	Regular monitoring of groundwater level and quality shall be carried out by establishing a network of existing wells and construction of new piezometers. The monitoring for quantity shall be done four times a year in pre-monsoon (May), monsoon (August), post-monsoon (November) and winter (January) seasons and for quality in May. Data thus collected shall be submitted to the MoEF&CC and to the CPCB quarterly within one month of monitoring.	The regular monitoring of groundwater level and quality is done as per the requirement. The groundwater quality report & groundwater level reports are provided in <b>Annexure II.</b>
(xxiii)	Acid Water Treatment Plant, volume of water to be treated and disposal of brine should be provided.	Not applicable.
(xxiv)	Mine discharge water outside the ML shall be monitored, particularly for TDS and treated to conform to prescribed levels before discharge into the natural environment.	There is one mine-water outlet point in the colliery which is regularly monitored by the Environmental Laboratory.
(xxv)	The Company shall put up artificial groundwater recharge measures for augmentation of groundwater resource, in case water table shows a declining trend. The project authorities shall meet water requirement of nearby village(s) in case the village wells go dry due to dewatering of mine.	Most of the water pumped out during underground mining activity was re-circulated back into the mine for the purpose of stowing. Backfilling of mine voids by stowing was done using sand which is having the porosity to hold the underground water thus helping aquifer to retain the underground water. Further, there are a number of ponds existing on the surface of the mining lease which act as natural reservoirs for recharging ground water. These ponds/ tanks are regularly cleaned and maintained by our CSR department. As per the hydro-geological report, the variation in the ground water level is only seasonal.

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		The water requirement of the nearby villages is being met by the company already. Now piped drinking water is being provided.
(xxvi)	Besides carrying out regular periodic health checkup of their workers, 10% of the workers identified from workforce engaged in active mining operations shall be subjected to health checkup for occupational diseases and hearing impairment, if any, through an agency such as NIOH, Ahmedabad within a period of one year and the results reported to this Ministry and to DGMS.	The periodic health checkup of the workers is done regularly by our Occupational Health Department, Tata Central Hospital, Jamadoba. We have a PME (Periodic Medical Examination) Centre approved by DGMS, where 20 % of the workers identified from workforce engaged in active mining operations are subjected to full medical checkup including hearing impairment checkup, etc. These results are regularly submitted to DGMS as per mines rules.
(xxvii)	The mining in the existing mines would be phased out after expiry of the current mining lease and after reclamation of mined over area. The operating mines may be analyzed and monitored for compliance of conditions, having bearing with movement of wild life until such time they are closed/ phased out.	It is not applicable in our case.
(xxviii)	Project specific CSR for an amount of Rs 5/Tonne of coal production should be provided for the activities under CSR undertaken for the neighboring villages shall be for not less than Rs 10 per tonne of coal and the progress made thereon shall be uploaded by the company annually on the company website. Monitoring of the impacts of activities under CSR shall be carried out periodically.	All the CSR measures are carried out by the CSR wing of the company under the banner of Tata Steel Foundation. During FY 26 (Oct'2025 to March'2026), the company has spent around Rs. 9.67 Crore on the strengthening of social welfare infrastructure of the Jharia region. The progress report is being uploaded every year on the company website. Internal social audits are carried out regularly to assess the impact of CSR activities.
(xxix)	A Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment & Forests 5 years in advance of final mine closure for approval.	Mine Closure Plan has been approved by Ministry of Coal, New Delhi. Details on deposition of closure cost in escrow account along with expenditure incurred for progressive closure is regularly submitted to Office of Coal controller. Final mine closure along with details of corpus fund will be submitted to MoEF&CC 5 years in advance.
(xxx)	Corporate Environment Responsibility: a)The Company shall have a well laid down Environment Policy approved by the Board of Directors. b)The Environment Policy shall prescribe for standard operating	The Company already has an Environment Policy approved by the Managing Director and it addresses all the issues mentioned.  The status of adherence to the policy and compliance to Environmental laws and regulations is regularly discussed at higher levels. Any non-compliance noticed is

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<p>process/procedures to bring into focus any infringements/deviation/violation of the environmental or forest norms/conditions.</p> <p>c)The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions shall be furnished.</p> <p>d) To have proper checks and balances, the company shall have a well laid down system of reporting of non-compliances/violations of environmental norms to the Board of Directors of the company and/or shareholders or stakeholders at large.</p>	<p>corrected at divisional level. If any issue is beyond our control, it is brought to the notice of higher management.</p> <p>Moreover, Digwadih Colliery is IMS (Integrated Management System: Quality Management System, Environment Management System and OHSAS) certified unit addressing all environment aspects, impacts and needs and expectation of interested parties with respect to environment protection.</p>
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<b>B.</b>	<b>GENERAL CONDITIONS</b>	
<b>(i)</b>	No change in technology and scope of working shall be made without prior approval of the MoEF.	It has been strictly followed. Board and Pillar method was used for mining.
<b>(ii)</b>	No change in the calendar plan including quantum of mineral coal and waste being produced shall be made.	It is strictly followed.
<b>(iii)</b>	Four ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for monitoring PM10, PM2.5, SO2 and NOx. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, in RSPM etc. shall be carried out at least once in six months.	<p>The Air quality monitoring stations are:</p> <p>(i)Jamadoba Group Office (Core Zone)  (ii)New Village Colony, Jamadoba (Buffer Zone)  (iii)Digwadih 12 No. Colony (Buffer Zone)  (iv)6&amp;7 Pits Kalimandir area (Buffer Zone)</p> <p>Monitoring of heavy metals in ambient air is being performed by an independent laboratory (recognized by JSPCB &amp; NABL) on quarterly basis. The results are enclosed as <b>Annexure II</b>.</p>
<b>(iv)</b>	Data on ambient air quality (PM10, PM2.5, SO2 and NOx and heavy metals such as Hg, As, Ni, Cr, etc) and other monitoring data shall be regularly submitted to the Ministry including its	Ambient air quality report (PM10, PM 2.5, SO2 and NOx) for the period from Oct'25 to March'26 is attached as <b>Annexure II</b> . Additionally, third party monitoring is being done through a JSPCB and NABL recognized

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	Regional Office at Bhubaneswar and to the SPCB and the CPCB once in six months. Random verification of samples through analysis from independent laboratories recognised under the EP Rules, 1986 shall be furnished as part of the compliance report.	Laboratory for PM10, PM 2.5, SO2, NOx, CO, NH3, O3 and heavy metals (As, Ni, Cd and Cr). The results are enclosed as <b>Annexure II</b> .
(v)	Adequate measures shall be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with ear plugs/muffs.	Earlier, regular noise survey is being conducted in the underground work environment. Workers have been provided with ear-plugs/ muffs in high noise areas.
(vi)	Industrial wastewater (workshop and wastewater from the mine) shall be properly collected, and treated so as to conform to the standards including for heavy metals before discharge prescribed under GSR 422 (E) dated 19th May 1993 and 31st December 1993 or as amended from time to time. Oil and grease trap shall be installed before discharge of workshop effluents.	No industrial wastewater is generated in Digwadih Colliery premises. There is a central workshop and garage in Jamadoba where Effluent Treatment Plant having oil and grease trap facility has been provided.
(vii)	Vehicular emissions shall be kept under control and regularly monitored. Vehicles used for transportation of the mineral shall be covered with tarpaulins and optimally loaded.	Only the vehicles having valid PUC certificates were allowed to operate for sand transportation. Coal transportation was done through underground belt network. Only sand transportation has been done through trucks which are covered with tarpaulins as well as optimally loaded.
(viii)	Monitoring of environmental quality parameters shall be carried out through establishment of adequate number and type of pollution monitoring and analysis equipment in consultation with SPCB and data got analysed through a laboratory recognised under EP Rules, 1986.	We have a fully equipped Environment Cell Laboratory with qualified personnel. The monitoring and analysis is also done at regular intervals by a JSPCB & NABL accredited laboratory. We have also installed a Continuous Ambient Air Quality Monitoring Station at Jamadoba for real time monitoring.
(ix)	Monitoring of outlet points should be carried out and records of same should be maintained and submitted to the Regional Office of the MOEF as part of the Compliance Report.	There is one mine-water outlet point in the colliery which is regularly monitored by the Environmental Laboratory. The analysis results have been provided as <b>Annexure II</b> .
(x)	Personnel working in dusty areas shall wear protective respiratory devices and they shall also be provided with	Earlier, persons working in dusty areas have been provided with dust masks & have been given awareness training on safety & health

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	adequate training and information on safety and health aspects. Occupational health surveillance programme of the workers shall be undertaken periodically to observe any contractions due to exposure to dust and to take corrective measures, if needed.	aspects. Regular PME (Periodic Medical Examinations) has been done.
(xi)	A separate environmental management cell with suitable qualified personnel shall be set up under the control of a Senior Executive, who will report directly to the Head of the company.	We have a separate Environmental Management Cell with qualified personnel. The reporting of Environmental Cell is directly to General Manager of the Division. Environment policy has been attached as <b>Annexure IV</b>
(xii)	The funds earmarked for environmental protection measures shall be kept in separate account and shall not be diverted for other purpose. Year-wise expenditure shall be reported to this Ministry and its Regional Office at Bhubaneswar.	The Environment Cell has a separate fund for Environmental protection measures and for complying with legal requirements. The annual environmental expenditure for the financial year 2024-2025 is Rs. 147.80 lakhs.
(xiii)	The Project authorities shall advertise at least in two local newspapers widely circulated around the project, one of which shall be in the vernacular language of the locality concerned within seven days of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution control Board and may also be seen at the website of the ministry of Environment & Forests at <a href="http://envfor.nic.in">http://envfor.nic.in</a> .	It has been complied with. Attached as <b>Annexure III</b>
(xiv)	A copy of the environmental clearance letter shall be marked to concerned Panchayat/Zila Parishad, Municipal Corporation or Urban Local Body and local NGO, if any, from whom any suggestion/representation has been received while processing the proposal. A copy of the clearance letter shall also be displayed on the company's website.	It has been complied with. Attached as <b>Annexure V</b>
(xv)	A copy of the clearance letter shall be displayed on the website of the concerned State Pollution Control Board. The EC letter shall also be displayed at the Regional Office,	It has been complied with.

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	District Industry Centre and Collector's Office/Tehsildar's Office for 30 days.	
(xvi)	The clearance letter shall be uploaded on the company's website. The compliance status of the stipulated EC conditions shall also be uploaded by the project authorities on their website and updated at least once every six months so as to bring the same in the public domain. The monitoring data of environmental quality parameters (air, water, noise and soil) and critical pollutants such as PM10, PM2.5, SO2 and NOx (ambient and stack if any) and critical sectoral parameters shall also be displayed at the entrance of the project premises and mines office and in corporate office and on the company's website.	The clearance letter has been uploaded on the company's website. The compliance status (as Half-yearly compliance report) is being uploaded in company's website. The display of information near the mine's office has been done.
(xvii)	The project proponent shall submit six monthly reports on the status of compliance of the stipulated environmental clearance conditions (both in hard copy and in e-mail) to the respective Regional Office of the MOEF, the respective Zonal offices of CPCB and the SPCB.	It is being complied
(xviii)	The Regional Office of this Ministry located at Bhopal shall monitor compliance of the stipulated conditions. The Project authorities shall extend full cooperation to the office(s) of the Regional Office by furnishing the requisite data/information/monitoring reports.	It will be complied with.
(xix)	The environmental 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 Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be uploaded on the company's website along with the status of compliance of EC conditions and shall be sent to the respective Regional Offices of the MOEF by E-mail.	The environmental statement for financial year 2024-25 has been submitted to JSPCB vide letter no. JMB/ENV/ESSA/05/450/2025 on 30 <sup>th</sup> September 2025 and it is also uploaded on the company website. The soft copy of Environment Statement is also sent to MOEF by email at ro.ranchi-mef@gov.in.

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### Statement showing measures taken for increasing tree and forest cover

Plantation activities are carried out in the barren land of the colliery leasehold area to increase the green cover as well as in the washery premises. Care is taken to plant only the native species so that native ecosystem is preserved. Following are the details of mass plantation in our leasehold area of Jharia Division for greenery development.

Year	No. of trees planted
FY14	10195
FY15	15800
FY16	10000
FY17	10900
FY18	8500
FY19	10000
FY20	50235
FY21	3000
FY22	10005
FY23	25117
FY24	12452
FY25	12313
FY26	7818

Glimpses of plantation activities for FY26:





Before

After



Before

After



Before







After


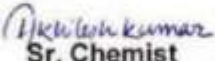








Before



After

	<b>ADITI R&amp;D SERVICES</b> <b>Testing Laboratory</b> <b>NABL ACCREDITED</b> <b>(A Constituent Board of Quality Council of India)</b> <b>ISO/IEC 17025:2017, ISO 9001:2015, ISO (OHSAS) 45001:2018 Certified</b>	Plot No. - I-B-17 (P) Sindri, Industrial Area, P.O. - Domgarh, Dist. - Dhanbad Jharkhand - 828107 Email ID: sindriaditi@gmail.com Website: aditimsd.com Phone: 0326-2952377 (O), Fax: 0326-2952377 Mobile: 09471358492, 09431512608		
Ref. No.: - ARDS/25-26/AAQ/1	Date: 24/11/2025			
<b><u>TEST REPORT OF AMBIENT AIR QUALITY</u></b>				
<ul style="list-style-type: none"><li>Name of the industry : M/S TATA STEEL, JAMADOBA, TATA STEEL LIMITED, JAMADOBA GROUP PLANT, DIST. - DHANBAD (JHARKHAND)</li><li>Work Order Ref. NO.: : 4700126557/932 Date:- 29/05/2024</li><li>Date of Sample Collection : 18/11/2025 To 19/11/2025</li><li>Date of Testing : 20/11/2025 To 24/11/2025</li><li>Test Procedure : As per IS-5182</li></ul>				
<b><u>TEST RESULTS</u></b>				
<b>LOCATION – 6 &amp; 7 PITS COLLIERY OFFICE</b>				
	Avg. Ambient Temperature	22°C	Avg. Humidity	36%
SI No.	Particulars	Value	NAAQ - CPCB STANDARD	
1.	Particulate Matter (PM <sub>10</sub> ), µg/m <sup>3</sup>	93.4	100 µg/m <sup>3</sup>	
2.	Particulate Matter (PM <sub>2.5</sub> ), µg/m <sup>3</sup>	57.9	60 µg/m <sup>3</sup>	
3.	SO <sub>2</sub> , µg/m <sup>3</sup>	20.59	80 µg/m <sup>3</sup>	
4.	NO <sub>2</sub> , µg/m <sup>3</sup>	21.53	80 µg/m <sup>3</sup>	
5.	Ozone, µg/m <sup>3</sup>	14.46	180 µg/m <sup>3</sup>	
6.	NH <sub>3</sub> , µg/m <sup>3</sup>	13.78	400 µg/m <sup>3</sup>	
7.	CO, mg/m <sup>3</sup>	0.68	4 mg/m <sup>3</sup>	
8.	Pb, µg/m <sup>3</sup>	BDL	1 µg/m <sup>3</sup>	
9.	As, ng/m <sup>3</sup>	BDL	6 ng/m <sup>3</sup>	
10.	Ni, ng/m <sup>3</sup>	BDL	20 ng/m <sup>3</sup>	
11.	Benzene, µg/m <sup>3</sup>	BDL	5 µg/m <sup>3</sup>	
12.	Benzoapyrene ng/m <sup>3</sup>	BDL	1 ng/m <sup>3</sup>	
NOTE: BDL - Below Detection Limit				
 Sr. Chemist Aditi R&D Services		 Quality Manager Aditi R&D Services, Sindri		
<b>Statements :</b>				
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ADITI R&D SERVICES		Testing Laboratory		NABL ACCREDITED																																																																							
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LOCATION – Officer' Colony, 12 No Digwadih																																																																											
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# ADITI R&D SERVICES

Testing Laboratory

NABL ACCREDITED

(A Constituent Board of Quality Council of India)

ISO/IEC 17025:2017, ISO 9001:2015, ISO (OHSAS) 45001:2018 Certified

Plot No. - I-B-17 (P)  
Sindri, Industrial Area,  
P.O. - Domgarh, Dist. - Dhanbad  
Jharkhand - 828107  
Email ID: sindriaditi@gmail.com  
Website: aditirdservices.com  
Phone: 0326-2952377 (O),  
Fax: 0326-2952377  
Mobile: 09471358492, 09431512608

Ref. No.: - ARDS/25-26/ AAQ/4

Date: 24/11/2025

## TEST REPORT OF AMBIENT AIR QUALITY

- Name of the industry : M/S TATA STEEL, JAMADOBA,  
TATA STEEL LIMITED  
JAMADOBA GROUP PLANT,  
DIST. - DHANBAD (JHARKHAND)
- Work Order Ref. NO.: : 4700126557/932 Date:- 29/05/2024
- Date of Sample Collection : 17/11/2025 To 18/11/2025
- Date of Testing : 19/11/2025 to 24/11/2025
- Test Procedure : As per IS-5182

### TEST RESULTS

#### LOCATION - TATA MAIN HOSPITAL

SI No.	Particulars	Value	NAAQ - CPCB STANDARD
	Avg. Ambient Temperature	22 <sup>0</sup> C	Avg. Humidity 36%
1.	Particulate Matter (PM <sub>10</sub> ), µg/m <sup>3</sup>	88.7	100 µg/m <sup>3</sup>
2.	Particulate Matter (PM <sub>2.5</sub> ), µg/m <sup>3</sup>	52.1	60 µg/m <sup>3</sup>
3.	SO <sub>2</sub> , µg/m <sup>3</sup>	18.80	80 µg/m <sup>3</sup>
4.	NO <sub>2</sub> , µg/m <sup>3</sup>	18.00	80 µg/m <sup>3</sup>
5.	Ozone, µg/m <sup>3</sup>	14.38	180 µg/m <sup>3</sup>
6.	NH <sub>3</sub> , µg/m <sup>3</sup>	13.66	400 µg/m <sup>3</sup>
7.	CO, mg/m <sup>3</sup>	0.82	4 mg/m <sup>3</sup>
8.	Pb, µg/m <sup>3</sup>	BDL	1 µg/m <sup>3</sup>
9.	As, ng/m <sup>3</sup>	BDL	6 ng/m <sup>3</sup>
10.	Ni, ng/m <sup>3</sup>	BDL	20 ng/m <sup>3</sup>
11.	Benzene, µg/m <sup>3</sup>	BDL	5 µg/m <sup>3</sup>
12.	Benzoapyrene ng/m <sup>3</sup>	BDL	1 ng/m <sup>3</sup>

NOTE: BDL - Below Detection Limit

*Devi Lakshmi*  
Sr. Chemist  
Aditi R&D Services



*[Signature]*  
Quality Manager  
Aditi R&D Services, Sindri

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**TEST REPORT OF NOISE (AMBIENT) LEVEL MONITORING**

<b>Ref. No. &amp; Date</b>	<b>NAME AND ADDRESS OF THE CLIENT</b>			
ARSD/25-26/NOISE/1Date: 24/11/2025	M/S TATA STEEL, JAMADOBA, TATA STEEL LIMITED, JAMADOBA GROUP PLANT, DIST. - DHANBAD (JHARKHAND)			
<b>Date of Monitoring</b>				
17/11/2025 To 20/11/2025	Avg. Ambient Temperature (°C)	Average Humidity (%)	Weather Condition	Status of the plant
Work Order 4700126557/932 Date:- 29/05/2024	22	36	Clear	Running

**MONITORING RESULTS**

Sl. No	Place of Monitoring	Day Time (6 AM to 10 PM) Avg. dB(A)			Night Time (10 PM to 6 AM) Avg. dB(A)			Noise level (Ambient standard) for Industrial Area as per CPCB Noise Pollution (Regulation and Control) (Amendment) Rules , 2000 notified vide S.O. 1046(E) Dt. 22.11.2020 Limit in dB(A) Leq	
		MAX	MIN	AVG. dB(A) Leq	MAX	MIN	AVERAGE dB(A) Leq	Day Time	Night Time
<b>LOCATION</b>								<b>Industrial Area</b>	<b>Industrial Area</b>
<b>JAMADOBA GROUP</b>									
1.	Central Workshop Area	74.2	59.2	71.32	65.6	48.0	62.66	75	70
2.	6 & 7 Pits Colliery Office	57.4	44.8	54.62	49.7	44.8	47.91		
								<b>Residential Area</b>	<b>Residential Area</b>
3.	Officer Colony 12 No. Digwadiah	44.3	43.2	43.78	38.7	30.2	36.26	65	55
								<b>Silence Zone</b>	<b>Silence Zone</b>
4.	Tata Main Hospital	49.6	43.1	47.47	37.6	38.8	38.24	50	40





*Dikshu Kumar*  
**Sr. Chemist**  
 Aditi R&D Services



*[Signature]*  
**Quality Manager**  
 Aditi R&D Services, Sindri

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Ref. No.: - ARDS/25-26/MINER./1	Date: 24/11/2025																							
<b><u>TEST REPORT OF MINERALOGICAL COMPOSITION</u></b> <b><u>OF PARTICULATE MATTER</u></b>																								
<ul style="list-style-type: none"><li>Name of the industry : M/S TATA STEEL, JAMADOBA, TATA STEEL LIMITED JAMADOBA GROUP PLANT, DIST. - DHANBAD (JHARKHAND)</li><li>Work Order Ref. NO. : 4700126557/932 Date:- 29/05/2024</li><li>Date of Sample Collection : 18/11/2025 and 19/11/2025</li><li>Date of Testing : 20/11/2025 To 25/11/2025</li></ul>																								
<b><u>TEST RESULTS</u></b>																								
<table border="1"><thead><tr><th rowspan="2">Sl No.</th><th rowspan="2">Particulars</th><th colspan="4">Mineralogical Composition (%)</th></tr><tr><th>SiO<sub>2</sub></th><th>FeO</th><th>Al<sub>2</sub>O<sub>3</sub></th><th>CaO</th></tr></thead><tbody><tr><td>1.</td><td>Central Workshop Area, Jamadoba</td><td>1.84</td><td>0.124</td><td>1.41</td><td>2.96</td></tr><tr><td>2.</td><td>Officer' Colony, 12 No Digwadih</td><td>1.86</td><td>0.103</td><td>1.28</td><td>2.72</td></tr></tbody></table>			Sl No.	Particulars	Mineralogical Composition (%)				SiO <sub>2</sub>	FeO	Al <sub>2</sub> O <sub>3</sub>	CaO	1.	Central Workshop Area, Jamadoba	1.84	0.124	1.41	2.96	2.	Officer' Colony, 12 No Digwadih	1.86	0.103	1.28	2.72
Sl No.	Particulars	Mineralogical Composition (%)																						
		SiO <sub>2</sub>	FeO	Al <sub>2</sub> O <sub>3</sub>	CaO																			
1.	Central Workshop Area, Jamadoba	1.84	0.124	1.41	2.96																			
2.	Officer' Colony, 12 No Digwadih	1.86	0.103	1.28	2.72																			
 Sr. Chemist Aditi R&D Services		 Quality Manager Aditi R&D Services, Sindri																						
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Ref. No.: - ARDS/25-26/SW/1

Date: 24/11/2025

## TEST REPORT OF SURFACE WATER

- Name of the industry : M/S TATA STEEL, JAMADOBA,  
TATA STEEL LIMITED  
JAMADOBA GROUP PLANT,  
DIST. - DHANBAD (JHARKHAND)
- Work Order Ref. NO.: : 4700126557/932 Date:- 29/05/2024
- Sample Code : 1. Damodar River Up Stream  
2. Damodar River Down Stream
- Date of Sample Collection: 18/11/2025
- Date of Testing : 19/11/2025 To 23/11/2025
- Test : pH, TDS, Turbidity, DO, BOD, Cl, F, SO<sub>4</sub>

### TEST RESULT

Sl. No.	PARAMETERS OF TEST	VALUE		Limit as per IS 2296 Class - C	Test Method
		Damodar River Up Stream	Damodar River Dn Stream		
1.	pH	8.16	8.31	6.5 -8.5	IS-3025 (P-11): 1983
2.	Total Dissolved Solids, mg/l	430	451	1500	IS-3025 (P-16): 1984
3.	Turbidity, NTU	1.5	1.2	-	IS-3025 (P-10):1984
4.	Dissolved Oxygen, mg/l	6.2	6.4	4.0 (Min)	IS-3025 (P-38):1989
5.	Bio chemical Oxygen Demand, mg/l	1.3	1.6	3.0	IS-3025 (P-44):1994
6.	Chloride as Cl, mg/l	34.9	32.97	600 (Max.)	IS-3025 (P-32):1988
7.	Fluoride as F, mg/l	0.6	0.3	1.5	IS-3025 (P-60):2008
8.	Sulphate as SO <sub>4</sub> , mg/l	112.32	96.32	400	IS-3025 (P-24):1986

*Dikshita kumar*  
Sr. Chemist  
Aditi R&D Services



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Quality Manager  
Aditi R&D Services, Sindri

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Ref. No.: - ARDS/25-26/MWD/1

Date: 24/11/2025

### TEST REPORT OF MINE WATER DISCHARGE

- Name of the industry : M/S TATA STEEL, JAMADOBA, TATA STEEL LIMITED JAMADOBA GROUP PLANT, DIST. - DHANBAD (JHARKHAND)
- Work Order Ref. NO.: : 4700126557/932 Date:- 29/05/2024
- Sample Code :
  1. 2 Pit Jamadoba Colliery
  2. 3 Pit Jamadoba Colliery
  3. 6 & 7 Pits Colliery
  4. Digwadih Colliery
- Date of Sample Collection: 17/11/2025 To 18/11/2025
- Date of Testing : 19/11/2025 To 23/11/2025
- Test : pH, TDS, TSS, BOD, COD, OIL & GREASE.

### TEST RESULT

Sl. No.	PARAMETERS OF TEST	VALUE				Limit as per IS-2296 Class B (For Bathing)	Test Method
		2 Pit Jamadoba Colliery	3 Pit Jamadoba Colliery	6 & 7 Pits Colliery	Digwadih Colliery		
1.	pH,	7.61	7.5	7.6	8.03	6.5-8.5	IS-3025 (P-11): 1983
2.	Total Dissolved Solids, mg/l	812	320	815	911	-	IS-3025 (P-16): 1984
3.	Total Suspended Solids, mg/l	18	10.1	25	12.2	-	IS-3025(P-17) : 1984
4.	Bio chemical Oxygen Demand, mg/l	2.8	2.4	2.1	3.1	3	IS-3025 (P-44):1994
5.	Chemical Oxygen Demand, mg/l	115	26	113	81	-	IS-3025 (P-58):2006
6.	Oil & Grease, mg/l	3.1	2.3	2.7	3.1	-	IS-3025 (P-39):2021



*Dikesh Kumar*  
**Sr. Chemist**  
 Aditi R&D Services



*[Signature]*  
**Quality Manager**  
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Ref. No.: - ARDS/25-26/STP/1		Date: 24/11/2025						
<b>TEST REPORT OF SEWAGE</b>								
<ul style="list-style-type: none"> <li>• Name of the industry : M/S TATA STEEL, JAMADOBA, TATA STEEL LIMITED, JAMADOBA GROUP PLANT, DIST. - DHANBAD (JHARKHAND)</li> <li>• Work Order Ref. NO.: : 4700126557/932 Date:- 29/05/2024</li> <li>• Sample Code : 1. STP Outlet- Railway Colony 2. STP Outlet -Digwadih 12 No Officers Colony 3. STP Outlet -Digwadih 12 No. Supervisor flat 4. STP Outlet- Jmb. Canteen 5. STP Outlet- JCPP Canteen</li> <li>• Date of Sample Collection: 17/11/2025 To 18/11/2025</li> <li>• Date of Testing : 19/11/2025 To 23/11/2025</li> <li>• Test : pH, TDS, TSS, BOD, COD, OIL &amp; GREASE, and Fecal Coliform, Total Nitrogen, Total Phosphorous.</li> </ul>								
<b>TEST RESULT</b>								
Sl. No	PARAMETERS OF TEST	VALUE					As per MoEF&CC Notification for Sewage Treatment Plant	Test Method
		STP Outlet Railway Colony	STP Outlet Digwadih 12 No Officers Colony	STP Outlet Digwadih 12 No. Supervisor or flat	STP Outlet Jmb. Canteen	STP Outlet- JCPP Canteen		
1.	pH,	7.89	8.5	7.8	8.1	8.12	5.5-9.0	IS-3025(P-11):1983
2.	Total Dissolved Solids, mg/l	975	597	840	1120	1174	-	IS-3025(P-16):1984
3.	Total Suspended Solids, mg/l	29	28	32	36	38	20	IS-3025(P-17):1984
4.	Bio chemical Oxygen Demand, mg/l	4.3	3.7	3.9	4.7	4.3	10	IS-3025(P-44):1994
5.	Chemical Oxygen Demand, mg/l	48	40	38.8	48	42	50	IS-3025(P-58):2006
6.	Oil & Grease, mg/l	2.6	2.7	2.2	2.8	3.2	-	IS-3025(P-39):2021
7.	Fecal Coliform (FC) (MPN/100ml)	140/100	142/100	138/100	136/100	142/100	Desirable 100 & Permissible 230	IS - 1622
8.	Total Nitrogen as N, mg/l	7.3	6.9	6.2	6.2	7.1	10	IS - 3025 (P-34):1988
9.	Total Phosphorus as P, mg/l	0.76	0.77	0.68	0.72	0.73	1.0	IS - 3025 (P-31):1988
Dr. Kishor Kumar Sr. Chemist Aditi R&D Services				Quality Manager Aditi R&D Services, Sindri				

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Ref. No.: - ARDS/25-26/ETP/1

Date: 24/11/2025

**TEST REPORT OF EFFLUENT**

- Name of the industry : M/S TATA STEEL, JAMADOBA,  
TATA STEEL LIMITED  
JAMADOBA GROUP PLANT,  
DIST. - DHANBAD (JHARKHAND)
- Work Order Ref. NO.: : 4700126557/932 Date:- 29/05/2024
- Sample Code : 1. E.T.P. Outlet T.C.H.  
2. E.T.P. Outlet Garage
- Date of Sample Collection: 17/11/2025
- Date of Testing : 19/11/2025 To 23/11/2025
- Test : pH, TDS, TSS, BOD, COD, OIL & GREASE.

**TEST RESULT**

Sl. No.	PARAMETERS OF TEST	VALUE		General Standard for discharge of Environmental Pollutants , Inland Surface water by the MoEF&C	Test Method
		E.T.P. Outlet T.C.H.	E.T.P. Outlet Garage		
1.	pH,	9.21	8.22	5.5-9.0	IS-3025 (P-11): 1983
2.	Total Dissolved Solids, mg/l	794	624	-	IS-3025 (P-16): 1984
3.	Total Suspended Solids, mg/l	88	81	100	IS-3025(P-17) : 1984
4.	Bio chemical Oxygen Demand, mg/l	11.5	8.4	30	IS-3025 (P-44):1994
5.	Chemical Oxygen Demand, mg/l	98	66	250	IS-3025 (P-58):2006
6.	Oil & Grease, mg/l	3.4	3.5	10	IS-3025 (P-39):2021

Note : BDL - Below Detection Limit

*(Signature)*  
Sr. Chemist  
Aditi R&D Services



*(Signature)*  
Quality Manager  
Aditi R&D Services, Sindri

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Ref. No.: - ARDS/25-26/DW/1

Date: 24/11/2025

**TEST REPORT OF DRINKING WATER**

- Name of the industry : M/S TATA STEEL, JAMADOBA, TATA STEEL LIMITED, JAMADOBA GROUP PLANT, DIST. - DHANBAD (JHARKHAND)
- Work Order Ref. NO.: : 4700126557/932 Date:- 29/05/2024
- Sample Code :
  - 1. Canteen- Jamadoba Colliery
  - 2. Canteen- Jamadoba Washery
  - 3. Canteen- Digwadih Colliery
  - 4. Canteen- 6&7 Pits Colliery
- Date of Sample Collection: 18/11/2025
- Date of Testing : 19/11/2025 To 23/11/2025
- Test :  
 Colour, Odour, Taste, Turbidity, pH, Total Hardness, Iron, Chloride, Res. Free chlorine, Total Dissolved Solids, Calcium, Copper, Manganese, Sulphate, Nitrate, Fluoride, Phenolic Compound, Mercury, Cadmium, Arsenic, Cyanide, Lead, Zinc, Total Coliform, Total Chromium, Mineral Oil, Alkalinity, Aluminium & Boron.

**TEST RESULT**

Sl. No	PARAMETERS OF TEST	VALUE				IS as per IS 10500:2012		Test Method
		Canteen-Jamadoba Colliery	Canteen-Jamadoba Washery	Canteen Digwadih Colliery	Canteen-6&7 Pits Colliery	Desirable	Permissible	
1.	Colour, (Hazen Unit)	1	1	1	1	5.00	15.0	IS 3025 (P-4):2021
2.	Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	IS 3025 (P-5):2018
3.	Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	IS 3025 (P-7):2017
4.	Turbidity, NTU	0.7	0.8	0.5	0.8	1.0	5.0	IS 3025 (P-10):1984
5.	pH	7.9	7.4	8.4	8.3	6.5-8.5	No. Relax.	IS-3025 (P-11):1983
6.	Total Hardness as CaCO <sub>3</sub> , mg/l	636	440	652	348.0	200	600	IS 3025 (P-21):2009
7.	Chloride as Cl, mg/l	106	68	86	69	250	1000	IS 3025 (P-32):1988
8.	Res. Free chlorine as Cl <sub>2</sub> mg/l	0.124	0.321	0.141	0.123	0.20	1.0	IS 3025 (P-26):2021
9.	Total Dissolved Solids, mg/l	735	540	729	310	500	2000	IS 3025 (P-16):1984
10.	Calcium as Ca, mg/l	48	40	52.8	48.0	75	200	IS 3025 (P-40):1991
11.	Copper as Cu, mg/l	0.072	0.082	0.087	0.093	0.05	1.5	IS 3025 (P-42):1992

Continued on Page 2

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- 2 -

SI. No.	PARAMETERS OF TEST	VALUE				IS as per IS 10500:1991		Test Method
		Canteen-Jamadoba Colliery	Canteen Jamadoba Washery	Canteen Digwadih Colliery	Canteen- 6&7 Pits Colliery	Desirable	Permissible	
12.	Manganese as Mn, mg/l	0.24	0.26	0.21	0.28	0.10	0.30	IS 3025 (P-59):2006
13.	Sulphate as SO <sub>4</sub> , mg/l	118.2	102.4	119.9	75.5	200	400	IS 3025 (P-24):1986
14.	Nitrate as NO <sub>3</sub> , mg/l	6.3	5.8	6.0	6.8	45	No. Relax	IS 3025 (P-34):1988
15.	Fluoride as F, mg/l	0.6	0.5	0.6	0.4	1.0	1.5	IS 3025 (P-60):2008
16.	Phenolic Compound as (C <sub>6</sub> H <sub>5</sub> OH) mg/l	BDL	BDL	BDL	BDL	0.001	0.002	IS 3025 (P-43):1992
17.	Mercury as Hg, mg/l	BDL	BDL	BDL	BDL	0.001	No. Relax	IS 3025 (P-48):1994
18.	Cadmium as Cd, mg/l	BDL	BDL	BDL	BDL	0.003	No. Relax	IS 3025 (P-41):1992
19.	Arsenic as As, mg/l	BDL	BDL	BDL	BDL	0.01	No. Relax	IS 3025 (P-37):1988
20.	Cyanide as CN, mg/l	BDL	BDL	BDL	BDL	0.05	No. Relax	IS 3025 (P-27):1986
21.	Lead as Pb, mg/l	N.T.	N.T.	N.T.	N.T.	0.01	No. Relax	IS 3025 (P-47):1994
22.	Zinc as Zn, mg/l,	2.4	2.2	2.5	2.6	5	15	IS 3025 (P-42):1992
23.	Total Coliform, No./100ml	Absent	Absent	Absent	Absent	Absent	Absent	IS 3025 (P-49):1994
24.	Total Chromium as Cr, mg/l	0.12	0.013	0.012	0.014	0.05	No. Relax	IS 3025 (P-52):2003
25.	Mineral Oil, mg/l	BDL	BDL	BDL	BDL	0.5	No. Relax	IS 3025 (P-39):1989
26.	Alkalinity as CaCO <sub>3</sub> , mg/l,	578.8	556.4	559.5	210.2	200	600	IS 3025 (P-23):1983
27.	Aluminium as Al, mg/l	BDL	BDL	BDL	BDL	0.03	0.2	IS 3025 (P-55):2003
28.	Boron as B, mg/l	BDL	BDL	BDL	BDL	0.5	1.0	IS 3025 (P-57):2005

NOTE: BDL - Below Detection Limit

*Akhil Kumar*  
Sr. Chemist  
Aditi R&D Services



*[Signature]*  
Quality Manager  
Aditi R&D Services, Sindri

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Ref. No.: - ARDS/25-26/GW/1

Date: 24/11/2025

**TEST REPORT OF GROUND WATER**

- Name of the industry : M/S TATA STEEL, JAMADOBA, TATA STEEL LIMITED, JAMADOBA GROUP PLANT, DIST. - DHANBAD (JHARKHAND)
- Work Order Ref. NO. : 4700126557/932 Date:- 29/05/2024
- Sample Code :
  1. Purnadih (Jorapokhar)
  2. Digwadih 10 No F&J.
  3. Kalimela Kalimandir.
  4. Upper Dungari
  5. Kenduadih Basti.
  6. 6 & 7 Pits (Auodhya Nagri)
- Date of Sample Collection : 18/11/2025 to 19/11/2025
- Date of Testing : 20/11/2025 to 24/11/2025
- Test : Colour, Odour, Taste, Turbidity, pH, Total Hardness, Iron, Chloride, Res. Free chlorine, Total Dissolved Solids, Calcium, Copper, Manganese, Sulphate, Nitrate, Fluoride, Phenolic Compound, Mercury, Cadmium, Arsenic, Cyanide, Lead, Zinc, Total Coliform, Chromium, Mineral Oil, Alkalinity, Aluminium & Boron.

**TEST RESULT**

Sl. No	PARAMETERS OF TEST	VALUE						IS as per IS 10500:1991		Test Method
		Purnadih (Jorapokhar)	Digwadih 10 No F&J.	Kalimela Kalimandir.	Upper Dungari	Kenduadih Basti.	6 & 7 Pits (Auodhya Nagri)	Desirable	Permissible	
1.	Colour, (Hazen Unit)	1	1	1	1	1	1	5	15	IS 3025 (P-4):2021
2.	Temperature °C	25	24	20	25	22	22	-	-	-
3.	Electrical Conductivity, µmhos/cm	1210	1850	1570	1400	850	1350	-	-	-
4.	Total Dissolved Solids, mg/l	712	1081	978.4	897.2	537.5	842	500	2000	IS 3025(P-16):1984
5.	pH	7.4	7.6	7.27	7.56	7.79	7.21	6.5-8.5	No Relax	IS-3025(P-11):1983
6.	Total Hardness as CaCO <sub>3</sub> , mg/l	568	632	310	512	424	320	200	600	IS 3025(P-21):2009
7.	Calcium as Ca, mg/l	138	90	71	126	128	95	75	200	IS 3025(P-40):1991
8.	Magnesium as Mg, mg/l	52.8	66.1	57.3	48	71	56.25	30	100	IS 3025(P-46):1994
9.	Chloride as Cl, mg/l	38	84	197.8	100.7	69.82	159	250	1000	IS 3025(P-32):1988
10.	Fluoride as F, mg/l	0.3	0.5	0.5	0.4	0.3	0.4	1.0	1.5	IS 3025(P-60):2008

Continued on Page -2

**Statements :**

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	<h2 style="margin:0;">ADITI R&amp;D SERVICES</h2> <h3 style="margin:0;">Testing Laboratory</h3> <p style="margin:0;"><b>NABL ACCREDITED</b></p> <p style="margin:0;">(A Constituent Board of Quality Council of India)</p> <p style="margin:0;"><b>ISO/IEC 17025:2017, ISO 9001:2015, ISO (OHSAS) 45001:2018 Certified</b></p>	Plot No. - I-B-17 (P) Sindri, Industrial Area, P.O. - Domgarh, Dist.- Dhanbad Jharkhand - 828107 Email ID: sindriaditi@gmail.com Website: aditimdsservices.com Phone: 0326-2952377 (O), Fax: 0326-2952377 Mobile: 09471358492, 09431512608
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- 2 -

Sl. No	PARAMETERS OF TEST	VALUE						IS as per IS 10500:1991		Test Method
		Purnadih (Jorapokhar)	Digwadih 10 No F&J.	Kalimela Kalimandir.	Upper Dungari	Kendu adih Basti.	6& 7 Pits (Auodhya Nagri)	Desirable	Permissible	
11	Sulphate as SO <sub>4</sub> , mg/l	120.0	126.16	117.9	131.5	98.2	113.5	200	400	IS 3025(P-24):1986
12	Nitrate as NO <sub>3</sub> , mg/l	8.4	9.6	5.6	5.8	6.2	5.4	45	No. Relax	IS 3025(P-34):1988
13	Alkalinity as CaCO <sub>3</sub> , mg/l,	1120	962.0	625	800	590	520	200	600	IS 3025(P-23):1983
14	Lead as Pb, mg/l	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	0.01	No. Relax	IS 3025(P-47):1994
15	Zinc as Zn, mg/l,	2.3	2.1	2.6	2.5	2.6	2.4	5	15	IS 3025(P-42):1992
16	Iron a Fe, mg/l	0.076	0.079	0.083	0.075	0.08	0.094	1.0	No. Relax	IS 3025(P-53):2003
17	Copper as Cu, mg/l	0.068	0.075	0.072	0.062	0.043	0.34	0.05	1.5	IS3025 (P-42):1992
18	Mercury as Hg, mg/l	BDL	BDL	BDL	BDL	BDL	BDL	0.001	No. Relax	IS 3025(P-48):1994
19	Cadmium as Cd, mg/l	BDL	BDL	BDL	BDL	BDL	BDL	0.003	No. Relax	IS 3025(P-41):1992
20	Nickel as Ni, mg/l	BDL	BDL	BDL	BDL	BDL	BDL	0.02	No. Relax	IS 3025(P-37):1992
21	Arsenic as As, mg/l	BDL	BDL	BDL	BDL	BDL	BDL	0.01	No. Relax	IS 3025(P-37):1988
22	Cyanide as CN, mg/l	BDL	BDL	BDL	BDL	BDL	BDL	0.05	No. Relax	IS 3025(P-27):1986
23	Total Chromium as Cr, mg/l	0.02	0.03	0.03	0.02	0.03	0.01	0.05	No. Relax	IS 3025(P-52):2003

NOTE: BDL - Below Detection Limit



*Akshay Kumar*  
Sr. Chemist  
Aditi R&D Services



*[Signature]*  
Quality Manager  
Aditi R&D Services, Sindri

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Ref. No.: - ARDS/25-26/AAQ/1		Date: 29/03/2026			
<h3><u>TEST REPORT OF AMBIENT AIR QUALITY</u></h3>					
<ul style="list-style-type: none"> <li>• Name of the industry : M/S TATA STEEL, JAMADOBA, TATA STEEL LIMITED, JAMADOBA GROUP PLANT, DIST. - DHANBAD (JHARKHAND)</li> <li>• Work Order Ref. NO.: : 4700126557/932 Date:- 29/05/2024</li> <li>• Date of Sample Collection : 25/03/2026 – 26/03/2026</li> <li>• Date of Testing : 27/03/2026 – 29/03/2026</li> <li>• Test Procedure : As per IS-5182</li> </ul>					
<h3><u>TEST RESULTS</u></h3>					
<b>LOCATION – CENTRAL WORKSHOP AREA, JAMADOBA</b>					
Environmental Conditions During Testing and Analysis →		Ambient Temperature	27°C± 2°C	Relative Humidity	50%±10%
SI No.	Particulars	Value	NAAQ - CPCB STANDARD		
1.	Particulate Matter (PM <sub>10</sub> ), µg/m <sup>3</sup>	92.82	100 µg/m <sup>3</sup>		
2.	Particulate Matter (PM <sub>2.5</sub> ), µg/m <sup>3</sup>	55.39	60 µg/m <sup>3</sup>		
3.	SO <sub>2</sub> , µg/m <sup>3</sup>	21.0	80 µg/m <sup>3</sup>		
4.	NO <sub>2</sub> , µg/m <sup>3</sup>	52.46	80 µg/m <sup>3</sup>		
5.	Ozone, µg/m <sup>3</sup>	12.40	180 µg/m <sup>3</sup>		
6.	NH <sub>3</sub> , µg/m <sup>3</sup>	22.50	400 µg/m <sup>3</sup>		
7.	CO, mg/m <sup>3</sup>	0.89	4 mg/m <sup>3</sup>		
8.	Pb, µg/m <sup>3</sup>	BDL	1 µg/m <sup>3</sup>		
9.	As, ng/m <sup>3</sup>	BDL	6ng/m <sup>3</sup>		
10.	Ni, ng/m <sup>3</sup>	BDL	20ng/m <sup>3</sup>		
11.	Benzene, µg/m <sup>3</sup>	BDL	5 µg/m <sup>3</sup>		
12.	Benzoapyrene ng/m <sup>3</sup>	BDL	1ng/m <sup>3</sup>		
NOTE: BDL - Below Detection Limit					
<i>Akash Kumar</i> Sr. Chemist Aditi R&D Services				<i>[Signature]</i> Quality Manager Aditi R&D Services, Sindri	
<b>Statements :</b> <ol style="list-style-type: none"> <li>The test report refers only to the particular item(s) submitted for testing.</li> <li>The test results reported in this report are valid at the time of and under the stated condition of measurement.</li> <li>This particular test report cannot be reproduced except in full, without prior written permission of Quality Manager of the laboratory.</li> </ol>					



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Ref. No.: - ARDS/25-26/ AAQ/2

Date: 29/03/2026

**TEST REPORT OF AMBIENT AIR QUALITY**

- Name of the industry : M/S TATA STEEL, JAMADOBA,  
TATA STEEL LIMITED  
JAMADOBA GROUP PLANT,  
DIST. - DHANBAD (JHARKHAND)
- Work Order Ref. NO.: : 4700126557/932 Date:- 29/05/2024
- Date of Sample Collection : 25/03/2026 – 26/03/2026
- Date of Testing : 27/03/2026 – 29/03/2026
- Test Procedure : As per IS-5182

**TEST RESULTS**

**LOCATION – OFFICER'S COLONY, 12 NO DIGWADIH**

Environmental Conditions During Testing and Analysis		Ambient Temperature	Relative Humidity
➔		27°C ± 2	50% ± 10
Sl No.	Particulars	Value	NAAQ - CPCB STANDARD
1.	Particulate Matter (PM <sub>10</sub> ), µg/m <sup>3</sup>	64.03	100 µg/m <sup>3</sup>
2.	Particulate Matter (PM <sub>2.5</sub> ), µg/m <sup>3</sup>	42.65	60 µg/m <sup>3</sup>
3.	SO <sub>2</sub> , µg/m <sup>3</sup>	17.75	80 µg/m <sup>3</sup>
4.	NO <sub>2</sub> , µg/m <sup>3</sup>	55.49	80 µg/m <sup>3</sup>
5.	Ozone, µg/m <sup>3</sup>	14.11	180 µg/m <sup>3</sup>
6.	NH <sub>3</sub> , µg/m <sup>3</sup>	24.78	400 µg/m <sup>3</sup>
7.	CO, mg/m <sup>3</sup>	0.78	4 mg/m <sup>3</sup>
8.	Pb, µg/m <sup>3</sup>	BDL	1 µg/m <sup>3</sup>
9.	As, ng/m <sup>3</sup>	BDL	6ng/m <sup>3</sup>
10.	Ni, ng/m <sup>3</sup>	BDL	20ng/m <sup>3</sup>
11.	Benzene, µg/m <sup>3</sup>	BDL	5 µg/m <sup>3</sup>
12.	Benzoapyrene ng/m <sup>3</sup>	BDL	1ng/m <sup>3</sup>

NOTE: BDL - Below Detection Limit

*Akshay Kumar*  
Sr. Chemist  
Aditi R&D Services



*[Signature]*  
Quality Manager  
Aditi R&D Services, Sindri

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Ref. No.: - ARDS/25-26/ AAQ/3

Date: 30/03/2026

**TEST REPORT OF AMBIENT AIR QUALITY**

- Name of the industry : M/S TATA STEEL, JAMADOBA,  
TATA STEEL LIMITED  
JAMADOBA GROUP PLANT,  
DIST. - DHANBAD (JHARKHAND)
- Work Order Ref. NO. : 4700126557/932 Date:- 29/05/2024
- Date of Sample Collection : 26/03/2026 – 27/03/2026
- Date of Testing : 28/03/2026 – 30/03/2026
- Test Procedure : As per IS-5182

**TEST RESULTS**

**LOCATION – 6&7 PITS COLLIERY OFFICE**

Environmental Conditions During Testing and Analysis		Ambient Temperature	27°C ± 2	Relative Humidity	50% ± 10
SI No.	Particulars	Value	NAAQ - CPCB STANDARD		
1.	Particulate Matter (PM <sub>10</sub> ), µg/m <sup>3</sup>	97.3	100 µg/m <sup>3</sup>		
2.	Particulate Matter (PM <sub>2.5</sub> ), µg/m <sup>3</sup>	56.45	60 µg/m <sup>3</sup>		
3.	SO <sub>2</sub> , µg/m <sup>3</sup>	19.39	80 µg/m <sup>3</sup>		
4.	NO <sub>2</sub> , µg/m <sup>3</sup>	17.80	80 µg/m <sup>3</sup>		
5.	Ozone, µg/m <sup>3</sup>	12.38	180 µg/m <sup>3</sup>		
6.	NH <sub>3</sub> , µg/m <sup>3</sup>	27.30	400 µg/m <sup>3</sup>		
7.	CO, mg/m <sup>3</sup>	1.04	4 mg/m <sup>3</sup>		
8.	Pb, µg/m <sup>3</sup>	BDL	1 µg/m <sup>3</sup>		
9.	As, ng/m <sup>3</sup>	BDL	6ng/m <sup>3</sup>		
10.	Ni, ng/m <sup>3</sup>	BDL	20ng/m <sup>3</sup>		
11.	Benzene, µg/m <sup>3</sup>	BDL	5 µg/m <sup>3</sup>		
12.	Benzoapyrene ng/m <sup>3</sup>	BDL	1ng/m <sup>3</sup>		

NOTE: BDL - Below Detection Limit


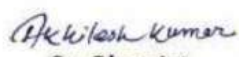

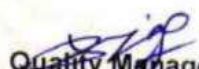
*Akshay Kumar*  
Sr. Chemist  
Aditi R&D Services



*[Signature]*  
Quality Manager  
Aditi R&D Services, Sindri

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<h4 style="margin: 0;"><u>TEST RESULTS</u></h4>																																																							
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<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">SI No.</th> <th style="width: 40%;">Particulars</th> <th style="width: 15%;">Value</th> <th style="width: 35%;">NAAQ - CPCB STANDARD</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1.</td> <td>Particulate Matter (PM<sub>10</sub>), µg/m<sup>3</sup></td> <td style="text-align: center;">86.24</td> <td style="text-align: center;">100 µg/m<sup>3</sup></td> </tr> <tr> <td style="text-align: center;">2.</td> <td>Particulate Matter (PM<sub>2.5</sub>), µg/m<sup>3</sup></td> <td style="text-align: center;">49.3</td> <td style="text-align: center;">60 µg/m<sup>3</sup></td> </tr> <tr> <td style="text-align: center;">3.</td> <td>SO<sub>2</sub>, µg/m<sup>3</sup></td> <td style="text-align: center;">25.82</td> <td style="text-align: center;">80 µg/m<sup>3</sup></td> </tr> <tr> <td style="text-align: center;">4.</td> <td>NO<sub>2</sub>, µg/m<sup>3</sup></td> <td style="text-align: center;">66.50</td> <td style="text-align: center;">80 µg/m<sup>3</sup></td> </tr> <tr> <td style="text-align: center;">5.</td> <td>Ozone, µg/m<sup>3</sup></td> <td style="text-align: center;">14.9</td> <td style="text-align: center;">180 µg/m<sup>3</sup></td> </tr> <tr> <td style="text-align: center;">6.</td> <td>NH<sub>3</sub>, µg/m<sup>3</sup></td> <td style="text-align: center;">25.60</td> <td style="text-align: center;">400 µg/m<sup>3</sup></td> </tr> <tr> <td style="text-align: center;">7.</td> <td>CO, mg/m<sup>3</sup></td> <td style="text-align: center;">0.85</td> <td style="text-align: center;">4 mg/m<sup>3</sup></td> </tr> <tr> <td style="text-align: center;">8.</td> <td>Pb, µg/m<sup>3</sup></td> <td style="text-align: center;">BDL</td> <td style="text-align: center;">1 µg/m<sup>3</sup></td> </tr> <tr> <td style="text-align: center;">9.</td> <td>As, ng/m<sup>3</sup></td> <td style="text-align: center;">BDL</td> <td style="text-align: center;">6ng/m<sup>3</sup></td> </tr> <tr> <td style="text-align: center;">10.</td> <td>Ni, ng/m<sup>3</sup></td> <td style="text-align: center;">BDL</td> <td style="text-align: center;">20ng/m<sup>3</sup></td> </tr> <tr> <td style="text-align: center;">11.</td> <td>Benzene, µg/m<sup>3</sup></td> <td style="text-align: center;">BDL</td> <td style="text-align: center;">5 µg/m<sup>3</sup></td> </tr> <tr> <td style="text-align: center;">12.</td> <td>Benzoapyrene ng/m<sup>3</sup></td> <td style="text-align: center;">BDL</td> <td style="text-align: center;">1ng/m<sup>3</sup></td> </tr> </tbody> </table>	SI No.	Particulars	Value	NAAQ - CPCB STANDARD	1.	Particulate Matter (PM <sub>10</sub> ), µg/m <sup>3</sup>	86.24	100 µg/m <sup>3</sup>	2.	Particulate Matter (PM <sub>2.5</sub> ), µg/m <sup>3</sup>	49.3	60 µg/m <sup>3</sup>	3.	SO <sub>2</sub> , µg/m <sup>3</sup>	25.82	80 µg/m <sup>3</sup>	4.	NO <sub>2</sub> , µg/m <sup>3</sup>	66.50	80 µg/m <sup>3</sup>	5.	Ozone, µg/m <sup>3</sup>	14.9	180 µg/m <sup>3</sup>	6.	NH <sub>3</sub> , µg/m <sup>3</sup>	25.60	400 µg/m <sup>3</sup>	7.	CO, mg/m <sup>3</sup>	0.85	4 mg/m <sup>3</sup>	8.	Pb, µg/m <sup>3</sup>	BDL	1 µg/m <sup>3</sup>	9.	As, ng/m <sup>3</sup>	BDL	6ng/m <sup>3</sup>	10.	Ni, ng/m <sup>3</sup>	BDL	20ng/m <sup>3</sup>	11.	Benzene, µg/m <sup>3</sup>	BDL	5 µg/m <sup>3</sup>	12.	Benzoapyrene ng/m <sup>3</sup>	BDL	1ng/m <sup>3</sup>	NOTE: BDL - Below Detection Limit		
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10.	Ni, ng/m <sup>3</sup>	BDL	20ng/m <sup>3</sup>																																																				
11.	Benzene, µg/m <sup>3</sup>	BDL	5 µg/m <sup>3</sup>																																																				
12.	Benzoapyrene ng/m <sup>3</sup>	BDL	1ng/m <sup>3</sup>																																																				
 Sr. Chemist Aditi R&D Services		 Quality Manager Aditi R&D Services, Sindri																																																					
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**TEST REPORT OF NOISE (AMBIENT) LEVEL MONITORING**

Ref. No. & Date	NAME AND ADDRESS OF THE CLIENT			
ARDS/25-26/NOISE/1 Date: 29/03/2026	M/S TATA STEEL, JAMADOBA, TATA STEEL LIMITED, JAMADOBA GROUP PLANT, DIST. - DHANBAD (JHARKHAND)			
Date of Monitoring				
25/03/2026 to 26/03/2026	Ambient Temperature	Relative Humidity	Weather Condition	Status of the plant
Work Order 4700126557/932 Date:- 29/05/2024	27°C±2°C%	50%±10%	Clear	Running

**MONITORING RESULTS**

ad	Place of Monitoring	Day Time (6 AM to 10 PM) Avg. dB(A)			Night Time (10 PM to 6 AM) Avg. dB(A)			Noise level (Ambient standard) for Industrial Area as per CPCB Noise Pollution (Regulation and Control) (Amendment) Rules , 2000 notified vide S.O. 1046(E) Dt. 22.11.2020 Limit in dB(A) Leq	
		MAX	MIN	AVG. dB(A) Leq	MAX	MIN	AVERAGE dB(A) Leq	Day Time	Night Time
	LOCATION							Industrial Area	Industrial Area
	JAMADOBA GROUP								
1.	Central Workshop Area, Jamadoba.	74.9	53.4	71.92	62.8	46.2	59.88	75	70
2.	6 & 7 Pits Colliery Office.	62.8	57.3	60.87	70.2	50.6	67.24		
								Residential Area	Residential Area
3.	Officer Colony 12 No. Digwadih.	60.8	40.8	57.83	58.6	49.2	51.22	65	55
								Silence Zone	Silence Zone
4.	Tata Main Hospital.	50.2	48.6	49.47	38.6	32.4	36.52	50	40

*Akshay Kumar*  
Sr. Chemist  
Aditi R&D Services



*[Signature]*  
Quality Manager  
Aditi R&D Services, Sindri

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Ref. No.: - ARDS/25-26/MINER.

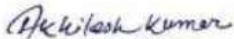
Date: 31/03/2026

**TEST REPORT OF MINERALOGICAL COMPOSITION**  
**OF PARTICULATE MATTER**

- Name of the industry : M/S TATA STEEL, JAMADOBA,  
TATA STEEL LIMITED  
JAMADOBA GROUP PLANT,  
DIST. - DHANBAD (JHARKHAND)
- Work Order Ref. NO. : 4700126557/932 Date:- 29/05/2024
- Date of Sample Collection : 27/03/2026
- Date of Testing : 28/03/2026 – 31/03/2026

**TEST RESULTS**

Sl No.	Particulars	Mineralogical Composition (%)			
		SiO <sub>2</sub>	FeO	Al <sub>2</sub> O <sub>3</sub>	CaO
1.	6 & 7 Pits Colliery office.	1.77	0.119	1.37	2.58
2.	Tata Main Hospital	1.72	0.108	1.12	2.43

  
Sr. Chemist  
Aditi R&D Services



  
Quality Manager  
Aditi R&D Services, Sindri

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Ref. No.: - ARDS/25-26/SW/1

Date: 31/03/2026

**TEST REPORT OF SURFACE WATER**

- Name of the industry : M/S TATA STEEL, JAMADOBA,  
TATA STEEL LIMITED  
JAMADOBA GROUP PLANT,  
DIST. - DHANBAD (JHARKHAND)
- Work Order Ref. NO.: : 4700126557/932 Date:- 29/05/2024
- Sample Code : 1. Damodar River Up Stream  
2. Damodar River Down Stream
- Date of Sample Collection: 26/03/2026
- Date of Testing : 27/03/2026 – 31/03/2026
- Test : pH, TDS, Turbidity, DO, BOD, Cl, F, SO<sub>4</sub>

**TEST RESULT**

Sl. No.	PARAMETERS OF TEST	VALUE		Limit as per IS 2296 Class - C	Test Method
		Damodar River Up Stream	Damodar River Down Stream		
1.	pH	8.12	7.68	6.5 -8.5	IS-3025 (P-11): 1983
2.	Total Dissolved Solids, mg/l	550	460	1500	IS-3025 (P-16): 1984
3.	Turbidity, NTU	3.6	2.7	-	IS-3025 (P-10):1984
4.	Dissolved Oxygen, mg/l	5.52	5.60	4.0 (Min)	IS-3025 (P-38):1989
5.	Bio chemical Oxygen Demand, mg/l	1.8	1.2	3.0	IS-3025 (P-44):1994
6.	Chloride as Cl, mg/l	54.30	40.73	600 (Max.)	IS-3025 (P-32):1988
7.	Fluoride as F, mg/l	0.05	0.05	1.5	IS-3025 (P-60):2008
8.	Sulphate as SO <sub>4</sub> , mg/l	95.29	81.27	400	IS-3025 (P-24):1986

*Akash Kumar*  
Sr. Chemist  
Aditi R&D Services



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Ref. No.: - ARDS/25-26/MWD/1

Date: 31/03/2026

### TEST REPORT OF MINE WATER DISCHARGE

- Name of the industry : M/S TATA STEEL, JAMADOBA, TATA STEEL LIMITED JAMADOBA GROUP PLANT, DIST. - DHANBAD (JHARKHAND)
- Work Order Ref. NO.: : 4700126557/932 Date:- 29/05/2024
- Sample Code : 1. 2 Pit Jamadoba Colliery  
2. 3 Pit Jamadoba Colliery  
3. 6 & 7 Pits Colliery  
4. Digwadih Colliery
- Date of Sample Collection: 26/03/2026 – 27/03/2026
- Date of Testing : 27/03/2026 – 31/03/2026
- Test : pH, TDS, TSS, BOD, COD, OIL & GREASE.

### TEST RESULT

Sl. No.	PARAMETERS OF TEST	VALUE				Limit as per IS-2296 Class B (For Bathing)	Test Method
		2 Pit Jamadoba Colliery	3 Pit Jamadoba Colliery	6 & 7 Pits Colliery	Digwadih Colliery		
1.	pH,	7.97	7.98	7.18	7.78	6.5-8.5	IS-3025 (P-11): 1983
2.	Total Dissolved Solids, mg/l	930	600.20	610	710.0	-	IS-3025 (P-16): 1984
3.	Total Suspended Solids, mg/l	22.0	22.8	18.0	24.0	-	IS-3025(P-17) : 1984
4.	Bio chemical Oxygen Demand, mg/l	2.8	2.4	1.8	2.8	3	IS-3025 (P-44):1994
5.	Chemical Oxygen Demand, mg/l	28.0	24.0	20.0	24.0	-	IS-3025 (P-58):2006
6.	Oil & Grease, mg/l	2.4	2.0	2.0	2.4	-	IS-3025 (P-39):2021




*Akhilash Kumar*  
Sr. Chemist  
Aditi R&D Services



*[Signature]*  
Quality Manager  
Aditi R&D Services, Sindri

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Ref. No.: - ARDS/25-26/STP/1		Date: 31/03/2026						
<h4>TEST REPORT OF SEWAGE</h4>								
<ul style="list-style-type: none"> <li>• Name of the industry : M/S TATA STEEL, JAMADOBA, TATA STEEL LIMITED, JAMADOBA GROUP PLANT, DIST. - DHANBAD (JHARKHAND)</li> <li>• Work Order Ref. NO.: : 4700126557/932 Date:- 29/05/2024</li> <li>• Sample Code : 1. STP Outlet- Railway Colony 2. STP Outlet -Digwadih 12 No Officers Colony 3. STP Outlet -Digwadih 12 No. Supervisor flat 4. STP Outlet- Jmb. Canteen 5. STP Outlet- JCPP Canteen</li> <li>• Date of Sample Collection: 26/03/2026 – 27/03/2026</li> <li>• Date of Testing : 27/03/2026 – 31/03/2026</li> <li>• Test : pH, TDS, TSS, BOD, COD, OIL &amp; GREASE, and Fecal Coliform, Total Nitrogen, Total Phosphorous.</li> </ul>								
<h4>TEST RESULT</h4>								
Sl. No.	PARAMETERS OF TEST	VALUE					As per MoEF&CC Notification for Sewage Treatment Plant	Test Method
		STP Outlet Railway Colony	STP Outlet Digwadih 12 No Officers Colony	STP Outlet Digwadih 12 No. Supervisor or flat	STP Outlet Jmb. Canteen	STP Outlet- JCPP Canteen		
1.	pH,	6.84	8.23	7.94	7.38	7.96	5.5-9.0	IS-3025(P-11):1983
2.	Total Dissolved Solids, mg/l	506	510	530	580	640	-	IS-3025(P-16):1984
3.	Total Suspended Solids, mg/l	20.0	18.2	19.6	15.0	18.8	20	IS-3025(P-17):1984
4.	Bio chemical Oxygen Demand, mg/l	4.6	3.5	4.0	3.0	4.1	10	IS-3025(P-44):1994
5.	Chemical Oxygen Demand, mg/l	40.0	30.0	36.0	24.0	38.0	50	IS-3025(P-58):2006
6.	Oil & Grease, mg/l	4.4	3.2	3.0	4.4	4.0	-	IS-3025(P-39):2021
7.	Fecal Coliform (FC) (MPN/100ml)	80	70	78	65	68	Desirable 100 & Permissible 230	IS - 1622
8.	Total Nitrogen as N, mg/l	3.2	2.8	3.0	2.6	2.9	10	IS – 3025 (P-34):1988
9.	Total Phosphorus as P, mg/l	0.075	0.046	0.052	0.048	0.050	1.0	IS – 3025 (P-31):1988
Akhilash Kumar Sr. Chemist Aditi R&D Services				 Quality Manager Aditi R&D Services, Sindri				
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Ref. No.: - ARDS/25-26/ETP/1

Date: 31/03/2026

### TEST REPORT OF EFFLUENT

- Name of the industry : M/S TATA STEEL, JAMADOBA,  
TATA STEEL LIMITED  
JAMADOBA GROUP PLANT,  
DIST. - DHANBAD (JHARKHAND)
- Work Order Ref. NO.: : 4700126557/932 Date:- 29/05/2024
- Sample Code : 1. E.T.P. Outlet T.C.H.  
2. E.T.P. Outlet Garage
- Date of Sample Collection: 27/03/2026
- Date of Testing : 27/03/2026 – 31/03/2026
- Test : pH, TDS, TSS, BOD, COD, OIL & GREASE.

### TEST RESULT

Sl. No.	PARAMETERS OF TEST	VALUE		General Standard for discharge of Environmental Pollutants , Inland Surface water by the MoEF&C	Test Method
		E.T.P. Outlet T.C.H.	E.T.P. Outlet Garage		
1.	pH,	8.41	7.98	5.5-9.0	IS-3025 (P-11): 1983
2.	Total Dissolved Solids, mg/l	860.6	648	-	IS-3025 (P-16): 1984
3.	Total Suspended Solids, mg/l	60.0	65.6	100	IS-3025(P-17) : 1984
4.	Bio chemical Oxygen Demand, mg/l	2.2	4.1	30	IS-3025 (P-44):1994
5.	Chemical Oxygen Demand, mg/l	18.0	30.3	250	IS-3025 (P-58):2006
6.	Oil & Grease, mg/l	3.6	4.0	10	IS-3025 (P-39):2021

Note : BDL - Below Detection Limit

*Akash Kumar*  
Sr. Chemist  
Aditi R&D Services



*[Signature]*  
Quality Manager  
Aditi R&D Services, Sindri

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Ref. No.: - ARDS/25-26/DW/1

Date: 31/03/2026

**TEST REPORT OF DRINKING WATER**

- Name of the industry : M/S TATA STEEL, JAMADOBA, TATA STEEL LIMITED, JAMADOBA GROUP PLANT, DIST. - DHANBAD (JHARKHAND)
- Work Order Ref. NO.: : 4700126557/932 Date:- 29/05/2024
- Sample Code : 1. Canteen- Jamadoba Colliery  
2. Canteen- Jamadoba Washery  
3. Canteen- Digwadih Colliery  
4. Canteen- 6&7 Pits Colliery
- Date of Sample Collection: 27/03/2026
- Date of Testing : 27/03/2026 – 31/03/2026
- Test :  
Colour, Odour, Taste, Turbidity, pH, Total Hardness, Iron, Chloride, Res. Free chlorine, Total Dissolved Solids, Calcium, Copper, Manganese, Sulphate, Nitrate, Fluoride, Phenolic Compound, Mercury, Cadmium, Arsenic, Cyanide, Lead, Zinc, Total Coliform, Total Chromium, Mineral Oil, Alkalinity, Aluminium & Boron.

**TEST RESULT**

Sl. No	PARAMETERS OF TEST	VALUE				IS as per IS 10500:2012		Test Method
		Canteen-Jamadoba Colliery	Canteen-Jamadoba Washery	Canteen-Digwadih Colliery	Canteen-6&7 Pits Colliery	Desirable	Permissible	
1.	Colour, (Hazen Unit)	2	2	3	1	5.00	15.0	IS 3025 (P-4):2021
2.	Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	IS 3025 (P-5):2018
3.	Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	IS 3025 (P-7):2017
4.	Turbidity, NTU	0.7	0.7	2.4	0.7	1.0	5.0	IS 3025 (P-10):1984
5.	pH	7.97	7.98	7.78	7.18	6.5-8.5	No. Relax.	IS-3025 (P-11):1983
6.	Total Hardness as CaCO <sub>3</sub> , mg/l	580	540	524	595	200	600	IS 3025 (P-21):2009
7.	Chloride as Cl, mg/l	122.18	60.12	52.36	17.45	250	1000	IS 3025 (P-32):1988
8.	Res. Free chlorine as Cl <sub>2</sub> mg/l	N.T.	N.T.	N.T.	N.T.	0.20	1.0	IS 3025 (P-26):2021
9.	Total Dissolved Solids, mg/l	860	790	674.1	615	500	2000	IS 3025 (P-16):1984
10.	Calcium as Ca, mg/l	78.4	61.0	60.8	52.8	75	200	IS 3025 (P-40):1991
11.	Copper as Cu, mg/l	0.028	0.019	0.032	0.033	0.05	1.5	IS 3025 (P-42):1992

Continued on Page 2

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- 2 -

Sl. No.	PARAMETERS OF TEST	VALUE				IS as per IS 10500:2012		Test Method
		Canteen-Jamadoba Colliery	Canteen-Jamadoba Washery	Canteen Digwadih Colliery	Canteen - 6&7 Pits Colliery	Desirable	Permissible	
12.	Manganese as Mn, mg/l	0.027	0.036	0.029	0.010	0.10	0.30	IS 3025 (P-59):2006
13.	Sulphate as SO <sub>4</sub> , mg/l	163.83	127.62	120.0	29.58	200	400	IS 3025 (P-24):1986
14.	Nitrate as NO <sub>3</sub> , mg/l	8.12	5.06	7.66	8.68	45	No. Relax	IS 3025 (P-34):1988
15.	Fluoride as F, mg/l	0.10	0.05	0.15	0.18	1.0	1.5	IS 3025 (P-60):2008
16.	Phenolic Compound as (C <sub>6</sub> H <sub>5</sub> OH) mg/l	BDL	BDL	BDL	BDL	0.001	0.002	IS 3025 (P-43):1992
17.	Mercury as Hg, mg/l	BDL	BDL	BDL	BDL	0.001	No. Relax	IS 3025 (P-48):1994
18.	Cadmium as Cd, mg/l	BDL	BDL	BDL	BDL	0.003	No. Relax	IS 3025 (P-41):1992
19.	Arsenic as As, mg/l	BDL	BDL	BDL	BDL	0.01	No. Relax	IS 3025 (P-37):1988
20.	Cyanide as CN, mg/l	BDL	BDL	BDL	BDL	0.05	No. Relax	IS 3025 (P-27):1986
21.	Lead as Pb, mg/l	BDL	BDL	BDL	BDL	0.01	No. Relax	IS 3025 (P-47):1994
22.	Zinc as Zn, mg/l,	2.8	2.9	2.6	2.2	5	15	IS 3025 (P-42):1992
23.	Total Coliform, No./100ml	Absent	Absent	Absent	Absent	Absent	Absent	IS 3025 (P-49):1994
24.	Total Chromium as Cr, mg/l	0.046	0.020	0.037	0.033	0.05	No. Relax	IS 3025 (P-52):2003
25.	Mineral Oil, mg/l	BDL	BDL	BDL	BDL	0.5	No. Relax	IS 3025 (P-39):1989
26.	Alkalinity as CaCO <sub>3</sub> , mg/l,	580	432	380.0	56.0	200	600	IS 3025 (P-23):1983
27.	Aluminium as Al, mg/l	BDL	BDL	BDL	BDL	0.03	0.2	IS 3025 (P-55):2003
28.	Boron as B, mg/l	0.21	0.19	0.28	0.16	0.5	1.0	IS 3025 (P-57):2005

NOTE: BDL - Below Detection Limit

*Akshay Kumar*  
Sr. Chemist  
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*[Signature]*  
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Aditi R&D Services, Sindri

**Statements :**

1. The test report refers only to the particular item(s) submitted for testing.
2. The test results reported in this report are valid at the time of and under the stated condition of measurement.
3. This particular test report cannot be reproduced except in full, without prior written permission of Quality Manager of the laboratory.

	<h2 style="margin:0;">ADITI R&amp;D SERVICES</h2> <h3 style="margin:0;">Testing Laboratory</h3> <p style="margin:0;"><b>NABL ACCREDITED &amp; REGISTERED BY JSPCB RANCHI</b></p> <p style="margin:0;">(A Constituent Board of Quality Council of India)</p> <p style="margin:0;"><b>ISO/IEC 17025:2017, ISO 9001:2015, ISO (OHSAS) 45001:2018 Certified</b></p>	Plot No. - I-B-17 (P) Sindri, Industrial Area, P.O. - Domgarh, Dist.- Dhanbad Jharkhand - 828107 Email ID: sindriaditi@gmail.com Website: aditimdservices.com Phone: 0326-2952377 (O), Fax: 0326-2952377 Mobile: 09471358492, 09431512608
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Ref. No.: - ARDS/25-26/GW/1

Date: 31/03/2026

**TEST REPORT OF GROUND WATER**

- Name of the industry : M/S TATA STEEL, JAMADOBA, TATA STEEL LIMITED, JAMADOBA GROUP PLANT, DIST. - DHANBAD (JHARKHAND)
- Work Order Ref. NO. : 4700126557/932 Date:- 29/05/2024
- Sample Code :
  1. Bhowra 13 No
  2. Jorapokhar Kushtand
  3. Jamadoba 3 No
  - 4 Lower Dungari
  5. Mohalbani Basti.
- Date of Sample Collection : 26/03/2026 – 27/03/2026
- Date of Testing : 27/03/2026 to 31/03/2026

**TEST RESULT**

Sl. No	PARAMETERS OF TEST	VALUE					IS as per IS 10500:2012		Test Method
		Bhowra 13 No	Jorapokhar Kushtand	Jamadoba 3 No	Lower Dungari	Mohalbani Basti	Desirable	Permissible	
1.	Depth (In Meter)	5.1	4.8	5.0	5.2	5.9	-	-	-
2.	Temperature °C	26	24	26	26	26	-	-	-
3.	Electrical Conductivity, µmhos/cm	820	2900	1310	750	830	-	-	-
4.	Total Dissolved Solids, mg/l	530	1790	815	480	520	500	2000	IS 3025(P-16):1984
5.	pH	7.72	7.70	7.54	7.65	7.29	6.5-8.5	No Relax	IS-3025(P-11):1983
6.	Total Hardness as CaCO <sub>3</sub> , mg/l	368.0	592.0	520.0	252.0	372.0	200	600	IS 3025(P-21):2009
7.	Calcium as Ca, mg/l	78.4	140.8	40.0	51.2	86.4	75	200	IS 3025(P-40):1991
8.	Magnesium as Mg, mg/l	41.28	77.60	110.8	29.76	37.44	30	100	IS 3025(P-46):1994
9.	Chloride as Cl, mg/l	58.18	341.33	87.27	73.70	44.61	250	1000	IS 3025(P-32):1988
10.	Fluoride as F, mg/l	0.20	0.15	0.05	0.10	0.25	1.0	1.5	IS 3025(P-60):2008
11.	Sulphate as SO <sub>4</sub> , mg/l	60.32	65.18	55.36	60.45	65.20	200	400	IS 3025(P-24):1986
12.	Nitrate as NO <sub>3</sub> , mg/l	8.12	7.86	7.89	8.06	7.72	45	No. Relax	IS 3025(P-34):1988
13.	Alkalinity as CaCO <sub>3</sub> , mg/l,	304.0	532	580.0	236.0	260.0	200	600	IS 3025(P-23):1983

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Sl. No	PARAMETERS OF TEST	VALUE					IS as per IS 10500:2012		Test Method
		Bhowra 13 No	Jorapokhar Kushtand	Jamadoba 3 No	Lower Dungari	MohalbaniB asti	Desirable	Permissible	
14.	Colour, (Hazen Unit)	1	1	1	1	1	5	15	IS 3025 (P-4):2021
15.	Lead as Pb, mg/l	BDL	BDL	BDL	BDL	BDL	0.01	No. Relax	IS 3025(P-47):1994
16.	Zinc as Zn, mg/l,	2.8	2.9	2.6	2.7	2.5	5	15	IS 3025(P-42):1992
17.	Iron a Fe, mg/l	0.87	0.83	1.15	0.60	0.88	1.0	No. Relax	IS 3025(P-53):2003
18.	Copper as Cu, mg/l	0.028	0.019	0.002	0.014	0.017	0.05	1.5	IS3025 (P-42):1992
19.	Mercury as Hg, mg/l	BDL	BDL	BDL	BDL	BDL	0.001	No. Relax	IS 3025(P-48):1994
20.	Cadmium as Cd, mg/l	BDL	BDL	BDL	BDL	BDL	0.003	No. Relax	IS 3025(P-41):1992
21.	Nickel as Ni, mg/l	BDL	BDL	BDL	BDL	BDL	0.02	No. Relax	IS 3025(P-37):1992
22.	Arsenic as As, mg/l	BDL	BDL	BDL	BDL	BDL	0.01	No. Relax	IS 3025(P-37):1988
23.	Cyanide as CN, mg/l	BDL	BDL	BDL	BDL	BDL	0.05	No. Relax	IS 3025(P-27):1986
24.	Total Chromium as Cr, mg/l	0.036	0.028	0.022	0.024	0.024	0.05	No. Relax	IS 3025(P-52):2003

NOTE: BDL - Below Detection Limit

*Akshay Kumar*  
Sr. Chemist  
Aditi R&D Services



*[Signature]*  
Quality Manager  
Aditi R&D Services, Sindri

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Ambient Air Quality, Ambient Noise Quality, Effluent Water and Groundwater Quality Report  
(Period-October-25 to March-26)

Annexure- II

**TATA STEEL LIMITED**  
JHARIA DIVISION

Area Manager, Jamadoba Colliery  
Area. Manager, Digwadih Colliery  
Area. Manager, 6 & 7 Pits Colliery  
Head, Jamadoba Coal Washery  
CMO, Tata Main Hospital, Jamadoba

Ref: JMB /ENV /LAB /02 / 482 / 25

Date: 31 / 10 / 2025

**Re: AIR QUALITY REPORT**

We wish to inform you that Air Quality Monitoring was carried out in **JAMADOBA GROUP** in the month of **OCTOBER'2025**. The results are as given below.

**Core zone (as per Ambient Air quality standards for coal mines notified vide notification G.S.R. 742(E) dated-25.09.2000**

S.No	Location	Latitude/ Longitude	Date of Sampling	Weather Condition	SPM 24 Hourly Limit-700 µg/m <sup>3</sup>	RSPM 24 Hourly Limit-300 µg/m <sup>3</sup>	SO <sub>2</sub> 24 Hourly Limit-120 µg/m <sup>3</sup>	NO <sub>x</sub> 24 Hourly Limit-120 µg/m <sup>3</sup>
1	6&7 Pits Kalimandir area	23°43'15" N/ 86°24'12" E	09.10.25	Clear	194.5	71.3	16.8	18.4

**Buffer zone (as per NAAQS 2009 for Ambient Air quality standards)**

S.No	Location	Latitude/ Longitude	Date of Sampling	Weather Condition	PM <sub>10</sub> 24 Hourly Limit-100 µg/m <sup>3</sup>	PM <sub>2.5</sub> 24 Hourly Limit- 60 µg/m <sup>3</sup>	SO <sub>2</sub> 24 Hourly Limit-80 µg/m <sup>3</sup>	NO <sub>x</sub> 24 Hourly Limit-80 µg/m <sup>3</sup>
1	Jamadoba Group Office	23°42'15.3" N/ 86°24'11" E	09.10.25	Clear	69.8	29.4	17.7	19.1
2	Digwadih 12 No. Colony	23°41'42" N/ 86°24'45.3" E	09.10.25	Clear	71.9	30.8	16.3	18.2
3	New Village Colony, Jamadoba	23°41'51" N/ 86°23'19" E	10.10.25	Clear	68.4	28.7	15.6	17.9
4	Tata Main Hospital, Jamadoba	23°42'36" N/ 86°24'10.4"E	10.10.25	Clear	73.5	32.6	18.9	20.3

**Note:** PM<sub>10</sub> - Less than 10-micron Particulate Matter  
PM<sub>2.5</sub> - Less than 2.5-micron Particulate Matter  
µg - Microgram

This is for your information and necessary action please.

  
Lab. Assistant (Environment)

  
Sr. Manager (Environment)

Ambient Air Quality, Ambient Noise Quality, Effluent Water and Groundwater Quality Report  
(Period-October-25 to March-26)

Annexure- II

**TATA STEEL LIMITED**  
JHARIA DIVISION

Area Manager, Jamadoba Colliery  
Area. Manager, Digwadih Colliery  
Area. Manager, 6 & 7 Pits Colliery  
Head, Jamadoba Coal Washery  
CMO, Tata Main Hospital, Jamadoba

Ref: JMB /ENV /LAB /02 / 523 / 25

Date: 12 / 12 / 2025

**Re: AIR QUALITY REPORT**

We wish to inform you that Air Quality Monitoring was carried out in **JAMADOBA GROUP** in the month of **NOVEMBER'2025**. The results are as given below.

**Core zone (as per Ambient Air quality standards for coal mines notified vide notification G.S.R. 742(E) dated-25.09.2000**

S.No	Location	Latitude/ Longitude	Date of Sampling	Weather Condition	SPM 24 Hourly Limit-700 µg/m <sup>3</sup>	RSPM 24 Hourly Limit-300 µg/m <sup>3</sup>	SO <sub>2</sub> 24 Hourly Limit-120 µg/m <sup>3</sup>	NO <sub>x</sub> 24 Hourly Limit-120 µg/m <sup>3</sup>
1	6&7 Pits Kalimandir area	23°43'15" N/ 86°24'12" E	10.11.25	Clear	235.7	85.9	18.2	20.6

**Buffer zone (as per NAAQS 2009 for Ambient Air quality standards)**

S.No	Location	Latitude/ Longitude	Date of Sampling	Weather Condition	PM <sub>10</sub> 24 Hourly Limit-100 µg/m <sup>3</sup>	PM <sub>2.5</sub> 24 Hourly Limit- 60 µg/m <sup>3</sup>	SO <sub>2</sub> 24 Hourly Limit-80 µg/m <sup>3</sup>	NO <sub>x</sub> 24 Hourly Limit-80 µg/m <sup>3</sup>
1	Jamadoba Group Office	23°42'15.3" N/ 86°24'11" E	10.11.25	Clear	90.2	48.6	19.7	21.0
2	Digwadih 12 No. Colony	23°41'42" N/ 86°24'45.3" E	10.11.25	Clear	87.6	45.3	17.6	19.5
3	New Village Colony, Jamadoba	23°41'51" N/ 86°23'19" E	11.11.25	Clear	71.8	32.6	18.2	20.4
4	Tata Main Hospital, Jamadoba	23°42'36" N/ 86°24'10.4"E	11.11.25	Clear	82.4	40.5	16.3	18.1

**Note:** PM<sub>10</sub> - Less than 10-micron Particulate Matter  
PM<sub>2.5</sub> - Less than 2.5-micron Particulate Matter  
µg - Microgram

This is for your information and necessary action please.

  
Lab. Assistant (Environment)

  
Sr. Manager (Environment)

Ambient Air Quality, Ambient Noise Quality, Effluent Water and Groundwater Quality Report  
(Period-October-25 to March-26)

Annexure- II

**TATA STEEL LIMITED**  
JHARIA DIVISION

Area Manager, Jamadoba Colliery  
Area. Manager, Digwadih Colliery  
Area. Manager, 6 & 7 Pits Colliery  
Head, Jamadoba Coal Washery  
CMO, Tata Main Hospital, Jamadoba

Ref: JMB /ENV /LAB /02 / 544 / 25  
Date: 31 / 12 / 2025

**Re: AIR QUALITY REPORT**

We wish to inform you that Air Quality Monitoring was carried out in **JAMADOBA GROUP** in the month of **DECEMBER'2025**. The results are as given below.

**Core zone (as per Ambient Air quality standards for coal mines notified vide notification G.S.R. 742(E) dated-25.09.2000**

S.No	Location	Latitude/ Longitude	Date of Sampling	Weather Condition	SPM 24 Hourly Limit-700 µg/m <sup>3</sup>	RSPM 24 Hourly Limit-300 µg/m <sup>3</sup>	SO <sub>2</sub> 24 Hourly Limit-120 µg/m <sup>3</sup>	NO <sub>x</sub> 24 Hourly Limit-120 µg/m <sup>3</sup>
1	6&7 Pits Kalimandir area	23°43'15" N/ 86°24'12" E	08.12.25	Clear	254.6	89.2	19.1	21.3

**Buffer zone (as per NAAQS 2009 for Ambient Air quality standards)**

S.No	Location	Latitude/ Longitude	Date of Sampling	Weather Condition	PM <sub>10</sub> 24 Hourly Limit-100 µg/m <sup>3</sup>	PM <sub>2.5</sub> 24 Hourly Limit- 60 µg/m <sup>3</sup>	SO <sub>2</sub> 24 Hourly Limit-80 µg/m <sup>3</sup>	NO <sub>x</sub> 24 Hourly Limit-80 µg/m <sup>3</sup>
1	Jamadoba Group Office	23°42'15.3" N/ 86°24'11" E	08.12.25	Clear	95.7	54.7	20.1	22.2
2	Digwadih 12 No. Colony	23°41'42" N/ 86°24'45.3" E	08.12.25	Clear	91.5	51.2	18.2	20.4
3	New Village Colony, Jamadoba	23°41'51" N/ 86°23'19" E	10.12.25	Clear	82.0	41.6	16.7	18.6
4	Tata Main Hospital, Jamadoba	23°42'36" N/ 86°24'10.4"E	10.12.25	Clear	85.9	44.2	15.8	17.5

**Note:** PM<sub>10</sub> - Less than 10-micron Particulate Matter  
PM<sub>2.5</sub> - Less than 2.5-micron Particulate Matter  
µg - Microgram

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Lab. Assistant (Environment)



Manager (Environment)

Ambient Air Quality, Ambient Noise Quality, Effluent Water and Groundwater Quality Report  
(Period-October-25 to March-26)

Annexure- II

**TATA STEEL LIMITED**  
JHARIA DIVISION

Area Manager, Jamadoba Colliery  
Area. Manager, Digwadih Colliery  
Area. Manager, 6 & 7 Pits Colliery  
Head, Jamadoba Coal Washery  
CMO, Tata Main Hospital, Jamadoba

Ref: JMB /ENV /LAB /02 / 18 / 26

Date: 28 / 01 / 2026

**Re: AIR QUALITY REPORT**

We wish to inform you that Air Quality Monitoring was carried out in **JAMADOBA GROUP** in the month of **JANUARY\*2026**. The results are as given below.

**Core zone (as per Ambient Air quality standards for coal mines notified vide notification G.S.R. 742(E) dated-25.09.2000**

S.No	Location	Latitude/ Longitude	Date of Sampling	Weather Condition	SPM 24 Hourly Limit-700 µg/m <sup>3</sup>	RSPM 24 Hourly Limit-300 µg/m <sup>3</sup>	SO <sub>2</sub> 24 Hourly Limit-120 µg/m <sup>3</sup>	NO <sub>x</sub> 24 Hourly Limit-120 µg/m <sup>3</sup>
1	6&7 Pits Kalimandir area	23°43'15" N/ 86°24'12" E	06.01.26	Clear	276.2	96.5	16.4	18.2

**Buffer zone (as per NAAQS 2009 for Ambient Air quality standards)**

S.No	Location	Latitude/ Longitude	Date of Sampling	Weather Condition	PM <sub>10</sub> 24 Hourly Limit-100 µg/m <sup>3</sup>	PM <sub>2.5</sub> 24 Hourly Limit- 60 µg/m <sup>3</sup>	SO <sub>2</sub> 24 Hourly Limit-80 µg/m <sup>3</sup>	NO <sub>x</sub> 24 Hourly Limit-80 µg/m <sup>3</sup>
1	Jamadoba Group Office	23°42'15.3" N/ 86°24'11" E	06.01.26	Clear	110.8	58.9	17.9	19.6
2	Digwadih 12 No. Colony	23°41'42" N/ 86°24'45.3" E	06.01.26	Clear	104.5	56.1	16.4	18.7
3	New Village Colony, Jamadoba	23°41'51" N/ 86°23'19" E	08.01.26	Clear	90.2	46.1	15.2	17.3
4	Tata Main Hospital, Jamadoba	23°42'36" N/ 86°24'10.4"E	08.01.26	Clear	95.6	48.9	18.3	20.1

**Note:** PM<sub>10</sub> - Less than 10-micron Particulate Matter  
PM<sub>2.5</sub> - Less than 2.5-micron Particulate Matter  
µg - Microgram

This is for your information and necessary action please.

  
**Lab. Assistant (Environment)**

  
**Manager (Environment)**

**TATA STEEL LIMITED**  
JHARIA DIVISION

Area Manager, Jamadoba Colliery  
Area. Manager, Digwadih Colliery  
Area. Manager, 6 & 7 Pits Colliery  
Head, Jamadoba Coal Washery  
CMO, Tata Main Hospital, Jamadoba

Ref: JMB /ENV /LAB /02 / 44 / 26

Date: 02 / 03 / 2026

**Re: AIR QUALITY REPORT**

We wish to inform you that Air Quality Monitoring was carried out in **JAMADOBA GROUP** in the month of **FEBRUARY'2026**. The results are as given below.

**Core zone (as per Ambient Air quality standards for coal mines notified vide notification G.S.R. 742(E) dated-25.09.2000**

S.No	Location	Latitude/ Longitude	Date of Sampling	Weather Condition	SPM 24 Hourly Limit- 700 µg/m <sup>3</sup>	RSPM 24 Hourly Limit- 300 µg/m <sup>3</sup>	SO <sub>2</sub> 24 Hourly Limit- 120 µg/m <sup>3</sup>	NOx 24 Hourly Limit- 120 µg/m <sup>3</sup>
1	6&7 Pits Kalimandir area	23°43'15" N/ 86°24'12" E	09.02.26	Clear	267.9	93.2	18.2	20.1

**Buffer zone (as per NAAQS 2009 for Ambient Air quality standards)**

S.No	Location	Latitude/ Longitude	Date of Sampling	Weather Condition	PM <sub>10</sub> 24 Hourly Limit- 100 µg/m <sup>3</sup>	PM <sub>2.5</sub> 24 Hourly Limit- 60 µg/m <sup>3</sup>	SO <sub>2</sub> 24 Hourly Limit-80 µg/m <sup>3</sup>	NOx 24 Hourly Limit- 80 µg/m <sup>3</sup>
1	Jamadoba Group Office	23°42'15.3" N/ 86°24'11" E	09.02.26	Clear	106.7	56.4	19.2	21.0
2	Digwadih 12 No. Colony	23°41'42" N/ 86°24'45.3" E	09.02.26	Clear	112.8	58.6	18.4	20.3
3	New Village Colony, Jamadoba	23°41'51" N/ 86°23'19" E	11.02.26	Clear	92.1	48.9	17.0	19.5
4	Tata Main Hospital, Jamadoba	23°42'36" N/ 86°24'10.4"E	11.02.26	Clear	89.2	46.5	20.7	22.0

**Note:** PM<sub>10</sub> - Less than 10-micron Particulate Matter  
PM<sub>2.5</sub> - Less than 2.5-micron Particulate Matter  
µg - Microgram

This is for your information and necessary action please.



Lab. Assistant (Environment)



Manager (Environment)

Ambient Air Quality, Ambient Noise Quality, Effluent Water and Groundwater Quality Report  
(Period-October-25 to March-26)

Annexure- II

**TATA STEEL LIMITED**  
JHARIA DIVISION

Area Manager, Jamadoba Colliery  
Manager, Digwadiah Colliery  
Manager, 6 & 7 Pits Colliery  
Head, Jamadoba Coal Washery  
CMO, Tata Main Hospital, Jamadoba

Ref: JMB /ENV /LAB /02 / 76 / 26

Date: 06 / 04 / 2026

**Re: AIR QUALITY REPORT**

We wish to inform you that Air Quality Monitoring was carried out in **JAMADOBA GROUP** in the month of **MARCH'2026**. The results are as given below.

**Core zone (as per Ambient Air quality standards for coal mines notified vide notification G.S.R. 742(E) dated-25.09.2000**

S.No	Location	Latitude/ Longitude	Date of Sampling	Weather Condition	SPM 24 Hourly Limit-700 µg/m <sup>3</sup>	RSPM 24 Hourly Limit-300 µg/m <sup>3</sup>	SO <sub>2</sub> 24 Hourly Limit-120 µg/m <sup>3</sup>	NO <sub>x</sub> 24 Hourly Limit-120 µg/m <sup>3</sup>
1	6&7 Pits Kalimandir area	23°43'15" N/ 86°24'12" E	06.03.26	Clear	251.8	90.8	19.4	21.2

**Buffer zone (as per NAAQS 2009 for Ambient Air quality standards)**

S.No	Location	Latitude/ Longitude	Date of Sampling	Weather Condition	PM <sub>10</sub> 24 Hourly Limit-100 µg/m <sup>3</sup>	PM <sub>2.5</sub> 24 Hourly Limit- 60 µg/m <sup>3</sup>	SO <sub>2</sub> 24 Hourly Limit-80 µg/m <sup>3</sup>	NO <sub>x</sub> 24 Hourly Limit-80 µg/m <sup>3</sup>
1	Jamadoba Group Office	23°42'15.3" N/ 86°24'11" E	06.03.26	Clear	96.5	51.2	18.4	20.6
2	Digwadiah 12 No. Colony	23°41'42" N/ 86°24'45.3" E	06.03.26	Clear	89.5	46.3	16.9	18.1
3	New Village Colony, Jamadoba	23°41'51" N/ 86°23'19" E	09.03.26	Clear	86.5	42.1	19.2	21.7
4	Tata Main Hospital, Jamadoba	23°42'36" N/ 86°24'10.4"E	09.03.26	Clear	92.1	48.6	17.1	18.2

**Note:** PM<sub>10</sub> - Less than 10-micron Particulate Matter  
PM<sub>2.5</sub> - Less than 2.5-micron Particulate Matter  
µg - Microgram

This is for your information and necessary action please.



Lab. Assistant (Environment)



Manager (Environment)

**TATA STEEL LIMITED**  
JHARIA DIVISION

Head, Jamadoba Colliery  
Head, Jamadoba Coal Washery  
Sr. Manager, Digwadih Colliery  
Sr. Manager, 6 & 7 Pits Colliery

Ref : JMB/ ENV/ LAB/ 05/470/25

Dated: 31/10/2025

**Re: Ambient Noise Level Report**

We wish to inform you that Ambient Noise Level Monitoring was carried out in **JAMADOBA GROUP** in the month of **OCTOBER'2025**. The results are as given below:

S.No	Monitoring Station	Date	Day (06.00 – 22.00 Hrs.)			Night (22.00-06.00 Hrs)		
			CPCB Standard- 55			CPCB Standard- 45		
	<b>Residential Area (Buffer Zone)</b>		Min.	Max.	Avg.	Min.	Max.	Avg.
1	Digwadih 12 No. Colony	21.10.25	41.3	43.5	42.4	33.1	35.3	34.2
2	New Village Colony, Jamadoba	21.10.25	43.1	45.3	44.2	35.3	37.5	36.4
3	6&7 Pits Kalimandir Colony	21.10.25	42.5	44.7	43.6	34.6	36.8	35.7
4	Digwadih 10 No. Colony	21.10.25	42.4	44.6	43.5	34.2	36.4	35.3

S.No	Monitoring Station	Date	Day (06.00 – 22.00 Hrs.)			Night (22.00-06.00 Hrs)		
			CPCB Standard- 75			CPCB Standard- 70		
	<b>Industrial Area (Core Zone)</b>		Min.	Max.	Avg.	Min.	Max.	Avg.
1	2 Pit Main Gate Security Post	21.10.25	54.5	57.8	56.2	46.2	49.5	47.9
2	2 Pit Top Kalimandir, Jamadoba	21.10.25	51.3	53.5	52.4	43.5	45.8	44.7
3	Weigh Bridge, Digwadih	21.10.25	46.2	48.4	47.3	38.1	40.3	39.2
4	Canteen Complex, Digwadih	21.10.25	47.2	49.5	48.4	39.4	41.7	40.6
5	Head Office Complex, Digwadih	21.10.25	40.5	42.7	41.6	32.3	34.5	33.4
6	Check Post Security Gate, 6&7 Pits	21.10.25	49.4	51.6	50.5	40.6	42.7	41.7
7	Canteen Complex, 6&7 Pits	21.10.25	42.2	44.4	43.3	34.1	36.3	35.2
8	Fan house- Nitrogen Plant, 6&7 Pits	21.10.25	41.3	43.5	42.4	33.7	35.9	34.8
9	Joota Gate, JCPP	21.10.25	59.6	62.8	61.2	51.4	54.6	53.0
10	Main Gate Stores, JCPP	21.10.25	54.2	57.4	55.8	46.3	49.7	48.0
11	Railway Siding Yard, JCPP	21.10.25	51.3	54.6	53.0	43.5	46.8	45.2

Analysis: All the values are within permissible limit.

This is for your information please.

  
**Lab. Assistant (Environment)**

  
**Sr. Manager (Environment)**

Copy to: Specialist (OH). TCH

**TATA STEEL LIMITED**  
JHARIA DIVISION

Head, Jamadoba Colliery  
Head, Jamadoba Coal Washery  
Sr. Manager, Digwadih Colliery  
Sr. Manager, 6 & 7 Pits Colliery

Ref : JMB/ ENV/ LAB/ 05/ 521/ 25

Dated: 12/ 12/ 2025

**Re: Ambient Noise Level Report**

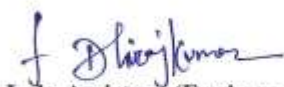
We wish to inform you that Ambient Noise Level Monitoring was carried out in JAMADOBA GROUP in the month of NOVEMBER'2025. The results are as given below:

S.No	Monitoring Station	Date	Day (06.00 – 22.00 Hrs.)			Night (22.00-06.00 Hrs)		
			CPCB Standard- 55			CPCB Standard- 45		
	<b>Residential Area (Buffer Zone)</b>		Min.	Max.	Avg.	Min.	Max.	Avg.
1	Digwadih 12 No. Colony	05.11.25	41.5	43.7	42.6	33.4	35.7	34.6
2	New Village Colony, Jamadoba	05.11.25	42.3	44.5	43.4	34.1	36.3	35.2
3	6&7 Pits Kalimandir Colony	05.11.25	41.2	43.6	42.4	33.5	35.8	34.7
4	Digwadih 10 No. Colony	05.11.25	43.3	45.7	44.5	35.2	37.4	36.3

S.No	Monitoring Station	Date	Day (06.00 – 22.00 Hrs.)			Night (22.00-06.00 Hrs)		
			CPCB Standard- 75			CPCB Standard- 70		
	<b>Industrial Area (Core Zone)</b>		Min.	Max.	Avg.	Min.	Max.	Avg.
1	2 Pit Main Gate Security Post	05.11.25	52.3	55.6	54.0	44.5	47.8	46.2
2	2 Pit Top Kalimandir, Jamadoba	05.11.25	50.5	52.8	51.7	42.3	44.7	43.5
3	Weigh Bridge, Digwadih	05.11.25	45.2	47.5	46.4	37.4	39.5	38.5
4	Canteen Complex, Digwadih	05.11.25	46.4	48.7	47.6	38.1	40.3	39.2
5	Head Office Complex, Digwadih	05.11.25	42.3	44.5	43.4	34.5	36.7	35.6
6	Check Post Security Gate, 6&7 Pits	05.11.25	49.7	51.9	50.8	41.4	43.6	42.5
7	Canteen Complex, 6&7 Pits	05.11.25	43.4	45.6	44.5	35.2	37.4	36.3
8	Fan house- Nitrogen Plant, 6&7 Pits	05.11.25	41.6	43.8	42.7	33.5	35.8	34.7
9	Joota Gate, JCPP	05.11.25	57.2	60.4	58.8	49.1	52.3	50.7
10	Main Gate Stores, JCPP	05.11.25	55.6	58.7	57.2	47.3	50.5	48.9
11	Railway Siding Yard, JCPP	05.11.25	50.4	53.6	52.0	42.6	45.8	44.2

Analysis: All the values are within permissible limit.

This is for your information please.



Lab. Assistant (Environment)



Sr. Manager (Environment)

Copy to: Specialist (OH). TCH

**TATA STEEL LIMITED**  
JHARIA DIVISION

Head, Jamadoba Colliery  
Head, Jamadoba Coal Washery  
Sr. Manager, Digwadih Colliery  
Sr. Manager, 6 & 7 Pits Colliery

Ref : JMB/ ENV/ LAB/ 05/557/25

Dated: 31/12/2025

**Re: Ambient Noise Level Report**

We wish to inform you that Ambient Noise Level Monitoring was carried out in **JAMADOBA GROUP** in the month of **DECEMBER'2025**. The results are as given below:

S.No	Monitoring Station	Date	Day (06.00 – 22.00 Hrs.)			Night (22.00-06.00 Hrs)		
			CPCB Standard- 55			CPCB Standard- 45		
	<b>Residential Area (Buffer Zone)</b>		Min.	Max.	Avg.	Min.	Max.	Avg.
1	Digwadih 12 No. Colony	19.12.25	41.9	43.8	42.9	33.4	35.6	34.5
2	New Village Colony, Jamadoba	19.12.25	42.5	44.7	43.6	34.3	36.5	35.4
3	6&7 Pits Kalimandir Colony	19.12.25	42.4	44.8	43.6	34.5	36.7	35.6
4	Digwadih 10 No. Colony	19.12.25	41.7	43.5	42.6	33.6	35.9	34.8

S.No	Monitoring Station	Date	Day (06.00 – 22.00 Hrs.)			Night (22.00-06.00 Hrs)		
			CPCB Standard- 75			CPCB Standard- 70		
	<b>Industrial Area (Core Zone)</b>		Min.	Max.	Avg.	Min.	Max.	Avg.
1	2 Pit Main Gate Security Post	19.12.25	52.5	55.7	54.1	44.2	47.5	45.9
2	2 Pit Top Kalimandir, Jamadoba	19.12.25	50.7	53.9	52.3	42.4	45.7	44.1
3	Weigh Bridge, Digwadih	19.12.25	46.3	48.5	47.4	38.1	40.3	39.2
4	Canteen Complex, Digwadih	19.12.25	46.5	48.8	47.7	38.3	40.5	39.4
5	Head Office Complex, Digwadih	19.12.25	42.7	44.6	43.7	34.5	36.7	35.6
6	Check Post Security Gate, 6&7 Pits	19.12.25	48.5	51.7	50.1	40.7	43.9	42.3
7	Canteen Complex, 6&7 Pits	19.12.25	42.1	44.3	43.2	34.4	36.6	35.5
8	Fan house- Nitrogen Plant, 6&7 Pits	19.12.25	42.3	45.5	43.9	34.5	37.8	36.2
9	Joota Gate, JCPP	19.12.25	58.6	61.4	60.0	50.7	53.9	52.3
10	Main Gate Stores, JCPP	19.12.25	56.4	59.6	58.0	48.3	51.5	49.9
11	Railway Siding Yard, JCPP	19.12.25	50.7	53.9	52.3	42.5	45.7	44.1

**Analysis:** All the values are within permissible limit.

This is for your information please.



**Lab. Assistant (Environment)**

Copy to: Specialist (OH), TCH



**Manager (Environment)**

**TATA STEEL LIMITED**  
JHARIA DIVISION

Head, Jamadoba Colliery  
Head, Jamadoba Coal Washery  
Sr. Manager, Digwadih Colliery  
Sr. Manager, 6 & 7 Pits Colliery

Ref : JMB/ ENV/ LAB/ 05/ 28 /26

Dated: 28/01/2026

**Re: Ambient Noise Level Report**

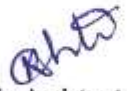
We wish to inform you that Ambient Noise Level Monitoring was carried out in **JAMADOBA GROUP** in the month of **JANUARY'2026**. The results are as given below:


S.No	Monitoring Station	Date	Day (06.00 – 22.00 Hrs.)			Night (22.00-06.00 Hrs)		
			CPCB Standard- 55			CPCB Standard- 45		
	<b>Residential Area (Buffer Zone)</b>		Min.	Max.	Avg.	Min.	Max.	Avg.
1	Digwadih 12 No. Colony	20.01.26	47.3	49.6	48.5	39.5	41.7	40.6
2	New Village Colony, Jamadoba	20.01.26	44.5	46.8	45.7	36.2	38.5	37.4
3	6&7 Pits Kalimandir Colony	20.01.26	49.7	51.5	50.6	41.6	43.8	42.7
4	Digwadih 10 No. Colony	20.01.26	43.2	45.3	44.3	35.4	37.6	36.5

S.No	Monitoring Station	Date	Day (06.00 – 22.00 Hrs.)			Night (22.00-06.00 Hrs)		
			CPCB Standard- 75			CPCB Standard- 70		
	<b>Industrial Area (Core Zone)</b>		Min.	Max.	Avg.	Min.	Max.	Avg.
1	2 Pit Main Gate Security Post	20.01.26	58.2	61.5	59.9	50.4	53.2	51.8
2	2 Pit Top Kalimandir, Jamadoba	20.01.26	50.4	53.7	52.1	42.6	45.7	44.2
3	Weigh Bridge, Digwadih	20.01.26	46.2	49.4	47.8	38.1	41.3	39.7
4	Canteen Complex, Digwadih	20.01.26	42.1	44.2	43.2	34.3	36.5	35.4
5	Head Office Complex, Digwadih	20.01.26	39.5	41.7	40.6	31.6	33.7	32.7
6	Check Post Security Gate, 6&7 Pits	20.01.26	45.6	48.8	47.2	37.4	40.6	39.0
7	Canteen Complex, 6&7 Pits	20.01.26	41.3	43.5	42.4	33.6	35.9	34.8
8	Fan house- Nitrogen Plant, 6&7 Pits	20.01.26	46.7	49.4	48.1	38.5	41.7	40.1
9	Joota Gate, JCPP	20.01.26	67.4	70.7	69.1	59.3	62.5	60.9
10	Main Gate Stores, JCPP	20.01.26	57.2	60.4	58.8	49.1	52.3	50.7
11	Railway Siding Yard, JCPP	20.01.26	54.3	57.5	55.9	46.4	49.6	48.0

Analysis: All the values are within permissible limit.

This is for your information please.

  
Lab. Assistant (Environment)

  
Manager (Environment)

Copy to: Specialist (OH). TCH

**TATA STEEL LIMITED**  
JHARIA DIVISION

Head, Jamadoba Colliery  
Head, Jamadoba Coal Washery  
Sr. Manager, Digwadih Colliery  
Sr. Manager, 6 & 7 Pits Colliery

Ref : JMB/ ENV/ LAB/ 05/ 56 /26

Dated: 02 / 03 / 2026

**Re: Ambient Noise Level Report**

We wish to inform you that Ambient Noise Level Monitoring was carried out in **JAMADOBA GROUP** in the month of **FEBRUARY'2026**. The results are as given below:

S.No	Monitoring Station	Date	Day (06.00 – 22.00 Hrs.)			Night (22.00-06.00 Hrs)		
			CPCB Standard- 55			CPCB Standard- 45		
	<b>Residential Area (Buffer Zone)</b>		Min.	Max.	Avg.	Min.	Max.	Avg.
1	Digwadih 12 No. Colony	09.02.26	46.5	48.8	47.7	38.3	40.5	39.4
2	New Village Colony, Jamadoba	09.02.26	45.2	47.4	46.3	37.4	39.7	38.6
3	6&7 Pits Kalimandir Colony	09.02.26	47.4	49.6	48.5	39.2	41.4	40.3
4	Digwadih 10 No. Colony	09.02.26	46.5	48.7	47.6	38.6	40.8	39.7

S.No	Monitoring Station	Date	Day (06.00 – 22.00 Hrs.)			Night (22.00-06.00 Hrs)		
			CPCB Standard- 75			CPCB Standard- 70		
	<b>Industrial Area (Core Zone)</b>		Min.	Max.	Avg.	Min.	Max.	Avg.
1	2 Pit Main Gate Security Post	09.02.26	57.6	60.8	59.2	49.4	52.6	51.0
2	2 Pit Top Kalimandir, Jamadoba	09.02.26	50.8	53.7	52.3	42.6	45.9	44.3
3	Weigh Bridge, Digwadih	09.02.26	46.5	49.7	48.1	38.3	41.5	39.9
4	Canteen Complex, Digwadih	09.02.26	42.3	44.5	43.4	34.1	36.3	35.2
5	Head Office Complex, Digwadih	09.02.26	40.1	42.3	41.2	32.3	34.6	33.5
6	Check Post Security Gate, 6&7 Pits	09.02.26	46.4	49.6	48.0	38.6	41.8	40.2
7	Canteen Complex, 6&7 Pits	09.02.26	41.5	43.7	42.6	33.4	35.7	34.6
8	Fan house- Nitrogen Plant, 6&7 Pits	09.02.26	45.2	48.6	46.9	37.5	40.8	39.2
9	Joota Gate, JCPP	09.02.26	66.7	69.9	68.3	58.4	61.6	60.0
10	Main Gate Stores, JCPP	09.02.26	58.4	61.5	60.0	50.2	53.4	51.8
11	Railway Siding Yard, JCPP	09.02.26	53.6	56.8	55.2	45.5	48.7	47.1

**Analysis:** All the values are within permissible limit.

This is for your information please.

  
**Lab. Assistant (Environment)**

  
**Manager (Environment)**

Copy to: Specialist (OH), TCH

**TATA STEEL LIMITED**  
JHARIA DIVISION

Head, Jamadoba Colliery  
Head, Jamadoba Coal Washery  
Sr. Manager, Digwadih Colliery  
Sr. Manager, 6 & 7 Pits Colliery

Ref : JMB/ ENV/ LAB/ 05/ 85 /26

Dated: 06 / 04 / 2026

**Re: Ambient Noise Level Report**

We wish to inform you that Ambient Noise Level Monitoring was carried out in JAMADOBA GROUP in the month of MARCH'2026. The results are as given below:

S.No	Monitoring Station	Date	Day (06.00 – 22.00 Hrs.)			Night (22.00-06.00 Hrs)		
			CPCB Standard- 55			CPCB Standard- 45		
	<b>Residential Area (Buffer Zone)</b>		Min.	Max.	Avg.	Min.	Max.	Avg.
1	Digwadih 12 No. Colony	13.03.26	46.1	48.3	47.2	38.2	40.5	39.4
2	New Village Colony, Jamadoba	13.03.26	44.3	46.5	45.4	36.4	38.7	37.6
3	6&7 Pits Kalimandir Colony	13.03.26	47.6	49.8	48.7	39.3	41.5	40.4
4	Digwadih 10 No. Colony	13.03.26	45.4	47.6	46.5	37.5	39.8	38.7

S.No	Monitoring Station	Date	Day (06.00 – 22.00 Hrs.)			Night (22.00-06.00 Hrs)		
			CPCB Standard- 75			CPCB Standard- 70		
	<b>Industrial Area (Core Zone)</b>		Min.	Max.	Avg.	Min.	Max.	Avg.
1	2 Pit Main Gate Security Post	13.03.26	55.3	58.6	57.0	47.5	50.7	49.1
2	2 Pit Top Kalimandir, Jamadoba	13.03.26	51.5	54.7	53.1	43.4	46.6	45.0
3	Weigh Bridge, Digwadih	13.03.26	46.2	49.4	47.8	38.5	41.8	40.2
4	Canteen Complex, Digwadih	13.03.26	42.5	44.7	43.6	34.2	36.4	35.3
5	Head Office Complex, Digwadih	13.03.26	40.4	42.6	41.5	32.3	34.6	33.5
6	Check Post Security Gate, 6&7 Pits	13.03.26	45.7	47.9	46.8	37.5	39.7	38.6
7	Canteen Complex, 6&7 Pits	13.03.26	41.3	43.5	42.4	33.4	35.6	34.5
8	Fan house- Nitrogen Plant, 6&7 Pits	13.03.26	46.5	49.8	48.2	38.6	41.8	40.2
9	Joota Gate, JCPP	13.03.26	65.4	68.7	67.1	57.3	60.5	58.9
10	Main Gate Stores, JCPP	13.03.26	57.6	60.9	59.3	49.5	52.7	51.1
11	Railway Siding Yard, JCPP	13.03.26	52.8	55.7	54.3	44.6	47.9	46.3

**Analysis:** All the values are within permissible limit.

This is for your information please.

  
Lab. Assistant (Environment)

  
Manager (Environment)

Copy to: Specialist (OH). TCH

Ambient Air Quality, Ambient Noise Quality, Effluent Water and Groundwater Quality Report  
(Period-October-25 to March-26)

Annexure- II

**TATA STEEL LIMITED**  
JHARIA DIVISION

Area Manager Jamadoba Colliery  
C.M.O, TMH, Jamadoba

Ref. No. - JMB / ENV / LAB / 03 / 477 / 2025

Dated - 31 / 10 / 2025

**Sub: ETP WATER ANALYSIS REPORT.**

We wish to inform you that Trade Effluent Sampling was carried out in **JAMADOBA GROUP** in the month of **OCTOBER'2025**.  
The results are as given below:

S. No	Location (Final Discharge Point)	Sampling Date	Sampling Time	Temp	pH	TSS	TDS	BOD	COD	Oil & Grease
				< 40°C	5.5 - 9.0	100 mg/l	2100 mg/l	30 mg/l	250 mg/l	10 mg/l
1	ETP, TMH- Inlet	21.10.25	12:05 PM	27	7.9	123	710	30.9	284	3.2
2	ETP, TMH- Outlet	21.10.25	12:10 PM	26	7.6	21	678	7.9	106	1.5
3	ETP, Garage- Inlet	21.10.25	10:30 AM	27	7.7	154	816	29.3	264	4.2
4	ETP, Garage- Outlet	21.10.25	10:35 AM	26	7.5	27	742	5.9	82	2.6

All the parameters are within the limit, and you are requested to maintain the same.

This is for your information and necessary action please.

*P. Mahanta*

Lab.Assistant (Environment)

*Umesh*

Sr. Manager (Environment)

Ambient Air Quality, Ambient Noise Quality, Effluent Water and Groundwater Quality Report  
(Period-October-25 to March-26)

Annexure- II

**TATA STEEL LIMITED**  
JHARIA DIVISION

Area Manager, Jamadoba Colliery  
Area Manager, Digwadih Colliery  
Manager Mining ,6&7 Pits Colliery

Ref. No. - JMB / ENV / LAB / 03 / 475 / 2025

Dated - 31 / 10 / 2025

**Sub: MINE WATER ANALYSIS REPORT.**

We wish to inform you that Trade Effluent Sampling was carried out in **JAMADOBA GROUP** in the month of **OCTOBER'2025**.  
The results are as given below:

S. No	Location (Final Discharge Point) (Mine's Water)	Sampling Date	Sampling Time	Temp	pH	TSS	TDS	BOD	COD	Oil & Grease
				< 40°C	5.5 - 9.0	100 mg/l	2100 mg/l	30 mg/l	250 mg/l	10 mg/l
1	2 Pit Jamadoba Colliery	21.10.25	01:05 PM	No Discharge						
2	3 Pit Jamadoba Colliery	21.10.25	12:20 PM	No Discharge						
3	2 Incline Jamadoba Colliery	21.10.25	12:50 PM	No Discharge						
4	6&7 Pits Colliery	21.10.25	11:55 AM	No Discharge						
5	Digwadih Colliery	21.10.25	11:45 AM	No Discharge						

All the parameters are within the limit, and you are requested to maintain the same.

This is for your information and necessary action please.

  
Lab.Assistant (Environment)

  
Sr. Manager (Environment)

Ambient Air Quality, Ambient Noise Quality, Effluent Water and Groundwater Quality Report  
(Period-October-25 to March-26)

Annexure- II

**TATA STEEL LIMITED**  
JHARIA DIVISION

Head, Jamadoba Coal Preparation Plant  
Area Manager Jamadoba Colliery  
Area Manager Digwadih Colliery

Ref. No. - JMB / ENV / LAB / 03 / 476 / 2025

Dated - 31 / 10 / 2025

**Sub: STP WATER ANALYSIS REPORT.**

We wish to inform you that Trade Effluent Sampling was carried out in JAMADOBA GROUP in the month of OCTOBER'2025. The results are as given below:

S. No	Location (Final Discharge Point)	Sampling Date	Sampling Time	Temp	pH	TSS	TDS	BOD	COD	Oil & Gres
				< 40°C	6.5-8.5	≤ 10 mg/L	-	≤ 10 mg/L	≤ 50 mg/L	-
1	STP, Jmb. Canteen- Inlet	21.10.25	10:40 AM	28	8.1	139	936	34.8	306	3.9
2	STP, Jmb. Canteen- Outlet	21.10.25	10:45 AM	27	7.8	16	839	6.3	79	1.2
3	STP, JCPP Canteen- Inlet	21.10.25	12:30 PM	28	7.9	168	884	32.4	278	3.4
4	STP, JCPP Canteen- Outlet	21.10.25	12:35 PM	27	7.6	14	713	6.5	108	2.0
5	STP, Railway Colony- Inlet	21.10.25	11:05 AM	27	8.0	128	876	33.2	316	4.3
6	STP, Railway Colony-Outlet	21.10.25	11:10 AM	26	7.7	11	793	4.8	90	1.6
7	STP, Digwadih 12 No. Officer's colony-Inlet	21.10.25	11:25 AM	28	7.8	135	806	31.8	324	3.9
8	STP, Digwadih 12 No. Officer's colony- Outlet	21.10.25	11:30 AM	27	7.5	20	778	5.1	52	1.9
9	STP, Digwadih 12 No. Supervisor flat - Inlet	21.10.25	11:40 AM	28	8.2	152	810	35.3	284	3.3
10	STP, Digwadih 12 No. Supervisor flat -Outlet	21.10.25	11:45 AM	27	7.8	21	769	6.7	102	1.4

All the parameters are within the limit, and you are requested to maintain the same.

This is for your information and necessary action please.

  
Lab.Assistant (Environment)

  
Sr. Manager (Environment)

Ambient Air Quality, Ambient Noise Quality, Effluent Water and Groundwater Quality Report  
(Period-October-25 to March-26)

Annexure- II

**TATA STEEL LIMITED**  
JHARIA DIVISION

Area Manager, Jamadoba Colliery  
Area Manager, Digwadih Colliery  
Manager Mining ,6&7 Pits Colliery

Ref. No. - JMB / ENV / LAB / 03 / 503 / 2025

Dated - 12 / 12 / 2025

**Sub: MINE WATER ANALYSIS REPORT.**

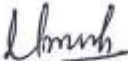
We wish to inform you that Trade Effluent Sampling was carried out in **JAMADOBA GROUP** in the month of **NOVEMBER'2025**.

The results are as given below:

S. No	Location (Final Discharge Point) (Mine's Water)	Sampling Date	Sampling Time	Temp	pH	TSS	TDS	BOD	COD	Oil & Grease
				< 40°C	5.5 - 9.0	100 mg/l	2100 mg/l	30 mg/l	250 mg/l	10 mg/l
1	2 Pit Jamadoba Colliery	05.11.25	01:10 PM	No Discharge						
2	3 Pit Jamadoba Colliery	05.11.25	12:25 PM	No Discharge						
3	2 Incline Jamadoba Colliery	05.11.25	12:55 PM	No Discharge						
4	6&7 Pits Colliery	05.11.25	12:05 PM	No Discharge						
5	Digwadih Colliery	05.11.25	11:50 AM	No Discharge						

All the parameters are within the limit, and you are requested to maintain the same.  
This is for your information and necessary action please.

  
Lab. Assistant (Environment)

  
Sr. Manager (Environment)

Ambient Air Quality, Ambient Noise Quality, Effluent Water and Groundwater Quality Report  
(Period-October-25 to March-26)

Annexure- II

**TATA STEEL LIMITED**  
JHARIA DIVISION

Head, Jamadoba Coal Preparation Plant  
Area Manager Jamadoba Colliery  
Area Manager Digwadih Colliery

Ref. No. - JMB / ENV / LAB / 03 / 503 / 2025

Dated - 12 / 12 / 2025

**Sub: STP WATER ANALYSIS REPORT.**

We wish to inform you that Trade Effluent Sampling was carried out in JAMADOBA GROUP in the month of NOVEMBER'2025.

The results are as given below:

S. No	Location (Final Discharge Point)	Sampling Date	Sampling Time	Temp	pH	TSS	TDS	BOD	COD	Oil & Grease
				< 40°C	6.5-8.5	≤ 10 mg/L	-	≤ 10 mg/L	≤ 50 mg/L	-
1	STP, Jmb. Canteen- Inlet	05.11.25	10:45 AM	26	7.9	146	863	33.1	316	4.1
2	STP, Jmb. Canteen- Outlet	05.11.25	10:50 AM	25	7.7	18	774	5.2	84	1.5
3	STP, JCPP Canteen- Inlet	05.11.25	12:35 PM	26	8.2	133	769	34.1	310	2.9
4	STP, JCPP Canteen- Outlet	05.11.25	12:40 PM	25	8.0	16	695	7.1	94	1.7
5	STP, Railway Colony- Inlet	05.11.25	11:10 AM	26	7.9	137	816	35.1	302	3.9
6	STP, Railway Colony-Outlet	05.11.25	11:15 AM	25	7.6	17	715	5.7	87	1.2
7	STP, Digwadih 12 No. Officer's colony-Inlet	05.11.25	11:30 AM	27	8.1	145	908	33.2	298	3.6
8	STP, Digwadih 12 No. Officer's colony- Outlet	05.11.25	11:35 AM	26	7.8	22	819	6.8	76	1.1
9	STP, Digwadih 12 No. Supervisor flat - Inlet	05.11.25	11:45 AM	26	7.9	137	913	31.2	310	3.7
10	STP, Digwadih 12 No. Supervisor flat -Outlet	05.11.25	11:50 AM	25	7.6	20	847	5.1	108	1.3

All the parameters are within the limit, and you are requested to maintain the same.  
This is for your information and necessary action please.

  
Lab. Assistant (Environment)

  
Sr. Manager (Environment)

Ambient Air Quality, Ambient Noise Quality, Effluent Water and Groundwater Quality Report  
(Period-October-25 to March-26)

Annexure- II

**TATA STEEL LIMITED**  
JHARIA DIVISION

Head, Jamadoba Coal Preparation Plant  
Area Manager Jamadoba Colliery  
C.M.O, TMH, Jamadoba

Ref. No. - JMB / ENV / LAB / 03 / 503 / 2025

Dated - 12 / 12 / 2025

**Sub: ETP WATER ANALYSIS REPORT.**

We wish to inform you that Trade Effluent Sampling was carried out in **JAMADOBA GROUP** in the month of **NOVEMBER'2025**.

The results are as given below:

S.No	Location (Final Discharge Point)	Sampling Date	Sampling Time	Temp	pH	TSS	TDS	BOD	COD	Oil & Grease
				< 40°C	5.5 - 9.0	100 mg/l	2100 mg/l	30 mg/l	250 mg/l	10 mg/l
1	ETP, TMH- Inlet	05.11.25	12:10 PM	27	8.0	99	901	28.5	262	3.1
2	ETP, TMH- Outlet	05.11.25	12:15 PM	26	7.7	19	819	6.8	99	1.2
3	ETP, Garage- Inlet	05.11.25	10:35 AM	27	7.8	112	793	31.5	299	5.1
4	ETP, Garage- Outlet	05.11.25	10:40 AM	26	7.6	22	697	4.6	54	1.9

All the parameters are within the limit, and you are requested to maintain the same.

This is for your information and necessary action please.

  
Lab.Assistant (Environment)

  
Sr. Manager (Environment)

**TATA STEEL LIMITED**  
JHARIA DIVISION

**Well Water Quality Report of Jamadoba Group for the month of NOVEMBER'2025**

**JAMADOBA GROUP**

S.No	Date	Location	Time	Depth in meter	pH	Electrical Conductivity $\mu$ S/m
1	26.11.25	Purnadih (Jorapokhar)	11:40 AM	2.87	7.2	1140
2	26.11.25	Bhowra 13 No	11:55 AM	1.64	7.4	945
3	26.11.25	Bhowra Gourkhutti	12:20 PM	2.12	7.2	973
4	26.11.25	Digwadih 10 No F & J	01:05 AM	1.73	7.4	1532
5	26.11.25	Kalimela Shivmandir	10:25 AM	0.96	7.1	987
6	26.11.25	Kalimela Kalimandir	10:40 AM	2.68	7.5	1384
7	26.11.25	Lower Dungari	10:10 AM	2.72	7.4	828
8	26.11.25	Upper Dungari	09:20 AM	1.54	7.2	863
9	26.11.25	Digwadih 12 No.	12:40 PM	1.97	7.1	929
10	26.11.25	Kenduadih Basti	09:40 AM	1.27	7.3	994
11	26.11.25	Jorapokhar Kushtand	11:05 AM	3.05	7.5	1427
12	26.11.25	6&7 Pits (Ayodhya Nagri)	01:40 PM	1.56	7.3	1141
13	26.11.25	Jorapokhar Basti Chhattand	01:20 PM	0.92	7.5	1315
14	26.11.25	Jorapokhar Babu Basa	11:25 AM	1.44	7.2	1087



Lab.Assistant (Environment)



Sr. Manager (Environment)

Ambient Air Quality, Ambient Noise Quality, Effluent Water and Groundwater Quality Report  
(Period-October-25 to March-26)

Annexure- II

**TATA STEEL LIMITED**  
JHARIA DIVISION

Head, Jamadoba Coal Preparation Plant  
Area Manager Jamadoba Colliery  
C.M.O, TMH, Jamadoba

Ref. No. - JMB / ENV / LAB / 03 / 547 / 2025  
Dated - 31 / 12 / 2025

**Sub: ETP WATER ANALYSIS REPORT.**

We wish to inform you that Trade Effluent Sampling was carried out in **JAMADOBA GROUP** in the month of **DECEMBER**'2025. The results are as given below:

S. No	Location (Final Discharge Point)	Sampling Date	Sampling Time	Temp	pH	TSS	TDS	BOD	COD	Oil & Grease
				< 40°C	5.5 - 9.0	100 mg/l	2100 mg/l	30 mg/l	250 mg/l	10 mg/l
1	ETP, TMH- Inlet	19.12.25	12:25 PM	25	8.4	108	829	29.4	268	2.9
2	ETP, TMH- Outlet	19.12.25	12:30 PM	24	8.2	36	792	7.3	92	1.3
3	ETP, Garage- Inlet	19.12.25	01:20 PM	26	8.2	167	784	32.8	306	4.9
4	ETP, Garage- Outlet	19.12.25	01:25 PM	25	8.0	41	624	7.6	66	2.3

All the parameters are within the limit, and you are requested to maintain the same.  
This is for your information and necessary action please.

  
Lab.Assistant (Environment)

  
Manager (Environment)

Ambient Air Quality, Ambient Noise Quality, Effluent Water and Groundwater Quality Report  
(Period-October-25 to March-26)

Annexure- II

**TATA STEEL LIMITED**  
JHARIA DIVISION

Area Manager, Jamadoba Colliery  
Area Manager, Digwadih Colliery  
Manager Mining ,6&7 Pits Colliery

Ref. No. - JMB / ENV / LAB / 03 / 545 / 2025

Dated - 31 / 12 / 2025

**Sub: MINE WATER ANALYSIS REPORT.**

We wish to inform you that Trade Effluent Sampling was carried out in **JAMADOBA GROUP** in the month of **DECEMBER'2025**. The results are as given below:

S. No	Location (Final Discharge Point) (Mine's Water)	Sampling Date	Sampling Time	Temp	pH	TSS	TDS	BOD	COD	Oil & Grease
				< 40°C	5.5 - 9.0	100 mg/l	2100 mg/l	30 mg/l	250 mg/l	10 mg/l
1	2 Pit Jamadoba Colliery	19.12.25	09:45 AM	No Discharge						
2	3 Pit Jamadoba Colliery	19.12.25	10:00 AM	No Discharge						
3	2 Incline Jamadoba Colliery	19.12.25	10:20 AM	No Discharge						
4	6&7 Pits Colliery	19.12.25	12:15 PM	No Discharge						
5	Digwadih Colliery	19.12.25	11:55 AM	32	7.8	15	910	3.2	84	2.1

All the parameters are within the limit, and you are requested to maintain the same.

This is for your information and necessary action please.



Lab.Assistant (Environment)



Manager (Environment)

Ambient Air Quality, Ambient Noise Quality, Effluent Water and Groundwater Quality Report  
(Period-October-25 to March-26)

Annexure- II

**TATA STEEL LIMITED**  
JHARIA DIVISION

Head, Jamadoba Coal Preparation Plant  
Area Manager Jamadoba Colliery  
Area Manager Digwadih Colliery

Ref. No. - JMB / ENV / LAB / 03 / 546 / 2025

Dated - 31 / 12 / 2025

**Sub: STP WATER ANALYSIS REPORT.**

We wish to inform you that Trade Effluent Sampling was carried out in JAMADOBA GROUP in the month of DECEMBER'2025. The results are as given below:

S. No	Location (Final Discharge Point)	Sampling Date	Sampling Time	Temp	pH	TSS	TDS	BOD	COD	Oil & Grease
				< 40°C	6.5-8.5	≤ 10 mg/L	-	≤ 10 mg/L	≤ 50 mg/L	-
1	STP, Jmb. Canteen- Inlet	19.12.25	01:05 PM	25	8.2	122	1026	31.5	294	3.9
2	STP, Jmb. Canteen- Outlet	19.12.25	01:10 PM	24	8.0	32	987	4.8	56	2.1
3	STP, JCPP Canteen- Inlet	19.12.25	12:45 PM	25	8.1	144	1028	33.6	316	3.5
4	STP, JCPP Canteen- Outlet	19.12.25	12:50 PM	24	7.9	21	916	6.2	102	1.8
5	STP, Railway Colony- Inlet	19.12.25	10:35 AM	25	8.0	117	906	33.9	310	4.1
6	STP, Railway Colony-Outlet	19.12.25	10:40 AM	24	7.8	28	816	5.2	70	1.9
7	STP, Digwadih 12 No. Officer's colony-Inlet	19.12.25	11:10 AM	26	8.3	119	814	35.8	306	3.7
8	STP, Digwadih 12 No. Officer's colony- Outlet	19.12.25	11:15 AM	25	8.1	26	706	4.1	54	2.0
9	STP, Digwadih 12 No. Supervisor flat - Inlet	19.12.25	11:30 AM	26	8.0	122	927	30.9	272	4.5
10	STP, Digwadih 12 No. Supervisor flat -Outlet	19.12.25	11:35 AM	25	7.8	32	842	3.9	84	1.6

All the parameters are within the limit, and you are requested to maintain the same.

This is for your information and necessary action please.

  
Lab.Assistant (Environment)

  
Manager (Environment)

Ambient Air Quality, Ambient Noise Quality, Effluent Water and Groundwater Quality Report  
(Period-October-25 to March-26)

Annexure- II

**TATA STEEL LIMITED**  
JHARIA DIVISION

Head, Jamadoba Coal Preparation Plant  
Area Manager Jamadoba Colliery  
C.M.O, TMH, Jamadoba

Ref. No. - JMB / ENV / LAB / 03 / 21 / 2026

Dated - 28 / 01 / 2026

**Sub: ETP WATER ANALYSIS REPORT.**

We wish to inform you that Trade Effluent Sampling was carried out in **JAMADOBA GROUP** in the month of **JANUARY** 2026.  
The results are as given below:

S. No	Location (Final Discharge Point)	Sampling Date	Sampling Time	Temp	pH	TSS	TDS	BOD	COD	Oil & Grease
				< 40°C	5.5 - 9.0	100 mg/l	2100 mg/l	30 mg/l	250 mg/l	10 mg/l
1	ETP, TMH- Inlet	20.01.26	10:55 AM	26	8.5	119	916	28.6	275	3.1
2	ETP, TMH- Outlet	20.01.26	11:00 AM	25	8.3	14	826	5.9	86	1.1
3	ETP, Garage- Inlet	20.01.26	01:05 PM	26	8.1	143	758	30.6	312	4.6
4	ETP, Garage- Outlet	20.01.26	01:10 PM	25	8.0	16	687	6.2	79	2.2

All the parameters are within the limit, and you are requested to maintain the same.

This is for your information and necessary action please.

Lab.Assistant (Environment)

Manager (Environment)

Ambient Air Quality, Ambient Noise Quality, Effluent Water and Groundwater Quality Report  
(Period-October-25 to March-26)

Annexure- II

**TATA STEEL LIMITED**  
JHARIA DIVISION

Area Manager, Jamadoba Colliery  
Manager, Digwadih Colliery  
Manager Mining ,6&7 Pits Colliery

Ref. No. - JMB / ENV / LAB / 03 / 19 / 2026

Dated - 28 / 01 / 2026

**Sub: MINE WATER ANALYSIS REPORT.**

We wish to inform you that Trade Effluent Sampling was carried out in **JAMADOBA GROUP** in the month of **JANUARY** 2026. The results are as given below:

S. No	Location (Final Discharge Point) (Mine's Water)	Sampling Date	Sampling Time	Temp	pH	TSS	TDS	BOD	COD	Oil & Grease
				< 40°C	5.5 - 9.0	100 mg/l	2100 mg/l	30 mg/l	250 mg/l	10 mg/l
1	2 Pit Jamadoba Colliery	20.01.26	11:15 AM	No Discharge						
2	3 Pit Jamadoba Colliery	20.01.26	11:30 AM	No Discharge						
3	2 Incline Jamadoba Colliery	20.01.26	11:50 AM	No Discharge						
4	6&7 Pits Colliery	20.01.26	10:45 AM	No Discharge						
5	Digwadih Colliery	20.01.26	10:25 AM	No Discharge						

All the parameters are within the limit, and you are requested to maintain the same.

This is for your information and necessary action please.

  
Lab.Assistant (Environment)

  
Manager (Environment)

Ambient Air Quality, Ambient Noise Quality, Effluent Water and Groundwater Quality Report  
(Period-October-25 to March-26)

Annexure- II

**TATA STEEL LIMITED**  
JHARIA DIVISION

Head, Jamadoba Coal Preparation Plant  
Area Manager Jamadoba Colliery  
Manager Digwadih Colliery

Ref. No. - JMB / ENV / LAB / 03 / 20 / 2026

Dated - 28 / 01 / 2026

**Sub: STP WATER ANALYSIS REPORT.**

We wish to inform you that Trade Effluent Sampling was carried out in JAMADOBA GROUP in the month of JANUARY'2026. The results are as given below:

S. No	Location (Final Discharge Point)	Sampling Date	Sampling Time	Temp	pH	TSS	TDS	BOD	COD	Oil & Grease
				< 40°C	6.5-8.5	≤ 10 mg/L	-	≤ 10 mg/L	≤ 50 mg/L	-
1	STP, Jmb. Canteen- Inlet	20.01.26	12:45 PM	26	7.6	137	1019	35.7	320	4.3
2	STP, Jmb. Canteen- Outlet	20.01.26	12:50 PM	25	7.4	29	982	7.1	88	1.7
3	STP, JCPP Canteen- Inlet	20.01.26	12:30 PM	25	7.5	162	1096	35.1	284	4.1
4	STP, JCPP Canteen- Outlet	20.01.26	12:35 PM	24	7.3	40	1016	4.8	116	1.2
5	STP, Railway Colony- Inlet	20.01.26	12:10 PM	26	7.8	125	1131	34.8	328	4.6
6	STP, Railway Colony-Outlet	20.01.26	12:15 PM	25	7.6	24	1025	7.2	64	2.0
7	STP, Digwadih 12 No. Officer's colony-Inlet	20.01.26	09:45 AM	26	8.4	139	724	30.1	264	2.9
8	STP, Digwadih 12 No. Officer's colony- Outlet	20.01.26	09:50 AM	25	8.2	17	612	4.8	102	1.5
9	STP, Digwadih 12 No. Supervisor flat - Inlet	20.01.26	10:05 AM	26	7.9	143	623	33.7	302	4.1
10	STP, Digwadih 12 No. Supervisor flat -Outlet	20.01.26	10:10 AM	25	7.7	12	589	4.7	70	1.0

All the parameters are within the limit, and you are requested to maintain the same.

This is for your information and necessary action please.

  
Lab.Assistant (Environment)

  
Manager (Environment)

Ambient Air Quality, Ambient Noise Quality, Effluent Water and Groundwater Quality Report  
(Period-October-25 to March-26)

Annexure- II

**TATA STEEL LIMITED**  
JHARIA DIVISION

Head, Jamadoba Coal Preparation Plant  
Area Manager Jamadoba Colliery  
C.M.O, TMH, Jamadoba

Ref. No. - JMB / ENV / LAB / 03 / 47 / 2026

Dated - 02 / 03 / 2026

**Sub: ETP WATER ANALYSIS REPORT.**

We wish to inform you that Trade Effluent Sampling was carried out in JAMADOBA GROUP in the month of FEBRUARY 2026. The results are as given below:

S. No	Location (Final Discharge Point)	Sampling Date	Sampling Time	Temp	pH	TSS	TDS	BOD	COD	Oil & Grease
				< 40°C	5.5 - 9.0	100 mg/l	2100 mg/l	30 mg/l	250 mg/l	10 mg/l
1	ETP, TMH- Inlet	09.02.26	11:00 AM	27	8.2	103	839	27.4	282	2.5
2	ETP, TMH- Outlet	09.02.26	11:05 AM	26	8.0	19	796	6.1	62	1.4
3	ETP, Garage- Inlet	09.02.26	01:10 PM	26	8.3	132	762	31.4	296	3.9
4	ETP, Garage- Outlet	09.02.26	01:15 PM	25	8.1	20	692	5.8	48	1.8

All the parameters are within the limit, and you are requested to maintain the same.

This is for your information and necessary action please.

*P. Saha*

Lab.Assistant (Environment)

*P. Saha*

Manager (Environment)

Ambient Air Quality, Ambient Noise Quality, Effluent Water and Groundwater Quality Report  
(Period-October-25 to March-26)

Annexure- II

**TATA STEEL LIMITED**  
JHARIA DIVISION

Area Manager, Jamadoba Colliery  
Manager, Digwadih Colliery  
Manager Mining ,6&7 Pits Colliery

Ref. No. - JMB / ENV / LAB / 03 / 45 / 2026  
Dated - 02 / 03 / 2026

**Sub: MINE WATER ANALYSIS REPORT.**

We wish to inform you that Trade Effluent Sampling was carried out in **JAMADOBA GROUP** in the month of **FEBRUARY'2026**.  
The results are as given below:

S. No	Location (Final Discharge Point) (Mine's Water)	Sampling Date	Sampling Time	Temp	pH	TSS	TDS	BOD	COD	Oil & Grease
				< 40°C	5.5 - 9.0	100 mg/l	2100 mg/l	30 mg/l	250 mg/l	10 mg/l
1	2 Pit Jamadoba Colliery	09.02.26	11:20 AM	No Discharge						
2	3 Pit Jamadoba Colliery	09.02.26	11:35 AM	No Discharge						
3	2 Incline Jamadoba Colliery	09.02.26	11:55 AM	No Discharge						
4	6&7 Pits Colliery	09.02.26	10:50 AM	No Discharge						
5	Digwadih Colliery	09.02.26	10:30 AM	No Discharge						

All the parameters are within the limit, and you are requested to maintain the same.  
This is for your information and necessary action please.

  
Lab.Assistant (Environment)

  
Manager (Environment)

Ambient Air Quality, Ambient Noise Quality, Effluent Water and Groundwater Quality Report  
(Period-October-25 to March-26)

Annexure- II

**TATA STEEL LIMITED**  
JHARIA DIVISION

Head, Jamadoba Coal Preparation Plant  
Area Manager Jamadoba Colliery  
Manager Digwadih Colliery

Ref. No. - JMB / ENV / LAB / 03 / 46 / 2026

Dated - 02 / 03 / 2026

**Sub: STP WATER ANALYSIS REPORT.**

We wish to inform you that Trade Effluent Sampling was carried out in JAMADOBA GROUP in the month of FEBRUARY'2026. The results are as given below:

S. No	Location (Final Discharge Point)	Sampling Date	Sampling Time	Temp	pH	TSS	TDS	BOD	COD	Oil & Grease
				< 40°C	6.5-8.5	≤ 10 mg/L	-	≤ 10 mg/L	≤ 50 mg/L	-
1	STP, Jmb. Canteen- Inlet	09.02.26	12:50 PM	27	7.8	109	922	34.1	236	5.9
2	STP, Jmb. Canteen- Outlet	09.02.26	12:55 PM	26	7.6	14	873	6.2	68	1.4
3	STP, JCPP Canteen- Inlet	09.02.26	12:35 PM	26	7.7	113	952	36.4	318	5.6
4	STP, JCPP Canteen- Outlet	09.02.26	12:40 PM	25	7.5	35	921	5.8	96	1.1
5	STP, Railway Colony- Inlet	09.02.26	12:15 PM	27	7.9	163	1048	35.7	324	3.2
6	STP, Railway Colony-Outlet	09.02.26	12:20 PM	26	7.8	39	997	6.7	102	2.1
7	STP, Digwadih 12 No. Officer's colony-Inlet	09.02.26	09:50 AM	26	8.2	110	763	29.7	271	3.6
8	STP, Digwadih 12 No. Officer's colony- Outlet	09.02.26	09:55 AM	25	8.0	14	706	3.6	88	1.0
9	STP, Digwadih 12 No. Supervisor flat - Inlet	09.02.26	10:10 AM	26	7.8	114	678	31.4	262	3.8
10	STP, Digwadih 12 No. Supervisor flat -Outlet	09.02.26	10:15 AM	25	7.6	22	622	3.8	52	1.3

All the parameters are within the limit, and you are requested to maintain the same.

This is for your information and necessary action please.

Lab.Assistant (Environment)

Manager (Environment)

Ambient Air Quality, Ambient Noise Quality, Effluent Water and Groundwater Quality Report  
(Period-October-25 to March-26)

Annexure- II

**TATA STEEL LIMITED**  
JHARIA DIVISION

Head, Jamadoba Coal Preparation Plant  
Area Manager Jamadoba Colliery  
C.M.O, TMH, Jamadoba

Ref. No. - JMB / ENV / LAB / 03 / 79 / 2026

Dated - 06 / 04 / 2026

**Sub: ETP WATER ANALYSIS REPORT.**

We wish to inform you that Trade Effluent Sampling was carried out in **JAMADOBA GROUP** in the month of **MARCH'2026**.  
The results are as given below:

S. No	Location (Final Discharge Point)	Sampling Date	Sampling Time	Temp	pH	TSS	TDS	BOD	COD	Oil & Grease
				< 40°C	5.5 - 9.0	100 mg/l	2100 mg/l	30 mg/l	250 mg/l	10 mg/l
1	ETP, TMH- Inlet	13.03.26	11:55 AM	27	8.3	128	916	29.7	291	3.5
2	ETP, TMH- Outlet	13.03.26	12:05 PM	26	8.1	22	882	5.8	93	1.0
3	ETP, Garage- Inlet	13.03.26	12:55 PM	28	8.2	105	798	29.6	267	4.1
4	ETP, Garage- Outlet	13.03.26	01:00 PM	27	8.0	24	726	6.1	62	1.4

All the parameters are within the limit, and you are requested to maintain the same.

This is for your information and necessary action please.

*P. Mahapatra*

Lab.Assistant (Environment)

*B. S. S.*

Manager (Environment)

Ambient Air Quality, Ambient Noise Quality, Effluent Water and Groundwater Quality Report  
(Period-October-25 to March-26)

Annexure- II

**TATA STEEL LIMITED**  
JHARIA DIVISION

Area Manager, Jamadoba Colliery  
Manager, Digwadih Colliery  
Manager Mining ,6&7 Pits Colliery


Ref. No. - JMB / ENV / LAB / 03 / 77 / 2026  
Dated - 06 / 04 / 2026

**Sub: MINE WATER ANALYSIS REPORT.**

We wish to inform you that Trade Effluent Sampling was carried out in **JAMADOBA GROUP** in the month of **MARCH'2026**.  
The results are as given below:

S. No	Location (Final Discharge Point) (Mine's Water)	Sampling Date	Sampling Time	Temp	pH	TSS	TDS	BOD	COD	Oil & Grease
				< 40°C	5.5 - 9.0	100 mg/l	2100 mg/l	30 mg/l	250 mg/l	10 mg/l
1	2 Pit Jamadoba Colliery	13.03.26	09:25 AM	No Discharge						
2	3 Pit Jamadoba Colliery	13.03.26	09:40 AM	No Discharge						
3	2 Incline Jamadoba Colliery	13.03.26	10:00 AM	No Discharge						
4	6&7 Pits Colliery	13.03.26	11:45 AM	No Discharge						
5	Digwadih Colliery	13.03.26	11:25 AM	No Discharge						

All the parameters are within the limit, and you are requested to maintain the same.  
This is for your information and necessary action please.

  
Lab.Assistant (Environment)

  
Manager (Environment)

Ambient Air Quality, Ambient Noise Quality, Effluent Water and Groundwater Quality Report  
(Period-October-25 to March-26)

Annexure- II

**TATA STEEL LIMITED**  
JHARIA DIVISION

Head, Jamadoba Coal Preparation Plant  
Area Manager Jamadoba Colliery  
Manager Digwadih Colliery

Ref. No. - JMB / ENV / LAB / 03 / 78 / 2026

Dated - 06 / 04 / 2026

**Sub: STP WATER ANALYSIS REPORT.**

We wish to inform you that Trade Effluent Sampling was carried out in JAMADOBA GROUP in the month of MARCH'2026. The results are as given below:

S. No	Location (Final Discharge Point)	Sampling Date	Sampling Time	Temp	pH	TSS	TDS	BOD	COD	Oil & Grease
				< 40°C	6.5-8.5	≤ 10 mg/L	-	≤ 10 mg/L	≤ 50 mg/L	-
1	STP, Jmb. Canteen- Inlet	13.03.26	12:40 PM	28	7.7	119	872	36.2	306	4.1
2	STP, Jmb. Canteen- Outlet	13.03.26	12:45 PM	27	7.5	11	806	5.9	72	1.2
3	STP, JCPP Canteen- Inlet	13.03.26	12:15 PM	27	7.9	127	910	33.4	289	4.7
4	STP, JCPP Canteen- Outlet	13.03.26	12:20 PM	26	7.7	24	897	3.9	106	1.3
5	STP, Railway Colony- Inlet	13.03.26	10:15 AM	28	7.8	102	872	31.2	284	3.7
6	STP, Railway Colony-Outlet	13.03.26	10:20 AM	27	7.6	19	821	5.8	82	1.9
7	STP, Digwadih 12 No. Officer's colony-Inlet	13.03.26	11:05 AM	28	8.1	136	778	32.5	315	4.1
8	STP, Digwadih 12 No. Officer's colony- Outlet	13.03.26	11:10 AM	27	7.9	16	725	4.2	56	1.4
9	STP, Digwadih 12 No. Supervisor flat - Inlet	13.03.26	10:50 AM	28	7.9	146	692	30.7	284	4.2
10	STP, Digwadih 12 No. Supervisor flat -Outlet	13.03.26	10:55 AM	27	7.8	23	654	3.3	92	1.2

All the parameters are within the limit, and you are requested to maintain the same.

This is for your information and necessary action please.

*P. Sahas*

Lab.Assistant (Environment)

*B. Shal*

Manager (Environment)

GM (J)

Chief (HR/IR)

Publication

**DAINIK BHASKAR, DHANBAD** Date **11-10-13**



**TATA**

**TATA STEEL**

**सूचना**

जन साधारण को सूचित किया जाता है कि भारत सरकार, वन एवं पर्यावरण मंत्रालय के पत्रांक संख्या- J -11015/372/2010-IA.II(M) डिगवाडीह कोलियरी (0.38 मिलियन टन प्रति वर्ष से 0.6 मिलियन टन प्रति वर्ष, विस्तारीकरण परियोजना) मेसर्स टाटा स्टील लिमिटेड, डिगवाडीह, जिला-धनबाद को पर्यावरण स्वीकृति प्रदान की गई है। जिसकी प्रतिलिपि क्षेत्रीय कार्यालय, झारखंड राज्य प्रदूषण नियंत्रण परिषद, धनबाद में उपलब्ध है तथा भारत सरकार, वन एवं पर्यावरण मंत्रालय के इंटरनेट साइट :- <http://envfor.nic.in> में भी देखी जा सकती है।

महाप्रबंधक (झारिया)

टाटा स्टील, जामाडोबा (धनबाद)

GM (J)

Chief (HR/IR)

Publication

**PRABHAT KHABAR, DHANBAD** Date 11-10-13



**TATA STEEL**  
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महाप्रबंधक (झरिया)  
टाटा स्टील, जामाडोबा (धनबाद)

GM (J)  Chief (HR/IR)

Publication HINDUSTAN, DHANBAD Date 11-10-13



**TATA STEEL**  
**सूचना**

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महाप्रबंधक (झरिया)  
टाटा स्टील, जामाडोबा (धनबाद)

GM (J)

Chief (HR/IR)

Publication

**DAINIK JAGRAN, DHANBAD**

Date **11-10-13**



**TATA**

**TATA STEEL**

**सूचना**

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महाप्रबंधक (झरिया)

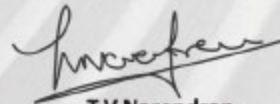
टाटा स्टील, जामाडोबा (धनबाद)

## ENVIRONMENTAL POLICY

Tata Steel's environmental responsibilities are driven by our commitment to preserve the environment and are integral to the way we do business.

1. We are committed to deal proactively with Climate Change issue by efficient use of natural resources & energy; reducing and preventing pollution; promoting waste avoidance and recycling measures; and product stewardship.
  - We shall identify, assess and manage our environment impact.
  - We shall regularly monitor, review and report publicly our environmental performance.
  - We shall develop & rehabilitate abandoned sites through afforestation and landscaping and shall protect and preserve the biodiversity in the areas of our operations.
  - We shall enhance awareness, skill and competence of our employees and contractors so as to enable them to demonstrate their involvement, responsibility and accountability for sound environmental performance.
2. We are committed to continual improvement in our environmental performance.
  - We shall set objective-targets, develop, implement and maintain management standards and systems, and go beyond compliance of the relevant industry standards, legal and other requirements.
3. We will truly succeed when we sustain our environmental achievement and are valued by the communities in which we work.

Date : November 1, 2017



**TV Narendran**  
CEO & Managing Director



Municipal Commissioner,  
Dhanbad.

Ref No.: JMB/ENV/DIG/37/ 805 /2018

September 17 , 2018

Sub: Submission of copy of Environmental Clearance granted to units of M/s Tata Steel Limited

Dear Sir,

Please find enclosed the letter of Environmental Clearance (EC) granted by MoEFCC to various units of Tata Steel Limited, Jharia Division, Dhanbad as per the following details-

1. Digwadih Colliery (for expansion from 0.38 MTPA to 0.6 MTPA in ML area 314.57 ha), dist. Dhanbad, Jharkhand.
2. 6 & 7 Pits Colliery (for expansion from 0.28 MTPA to 0.6 MTPA in ML area 168.12 ha), dist. Dhanbad, Jharkhand.
3. Jamadoba Coal Washery (for expansion from 1 MTPA to 2 MTPA in 7 Ha area), dist. Dhanbad, Jharkhand.

The copy of EC letter and its compliance is also uploaded in website (<http://www.tatasteel.com/sustainability/environment-compliance-reports/>) for your kind perusal.

Thanking You,

Yours faithfully,



Head, Planning  
Jharia Division

