



**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/KOCP/24/ 248 /2025
May 28th, 2025

Ref.: Environmental Clearance letter no. - J-11015/252/2005-IA. II (M) dated June 22, 2006

**SUB: Half Yearly Compliance Status Report of Environment Clearance conditions issued by
MoEFCC, New Delhi to Kalimela Open Cast Project, Tata Steel Limited, Dhanbad for
the period October-24 to March-2025.**


Dear Sir,

We are enclosing herewith compliance report for the period **October-24 to March-2025** for the EC granted vide letter no.- J-11015/252/2005-IA.II(M), Dated-22nd June 2006 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, 5th 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

| | |
|---|-------------------------------------|
| Proposal No | IA/JH/CMIN/8145/2005 |
| Compliance ID | 127785004 |
| Compliance Number(For Tracking) | EC/M/COMPLIANCE/127785004/2025 |
| Reporting Year | 2025 |
| Reporting Period | 01 Jun(01 Oct - 31 Mar) |
| Submission Date | 31-05-2025 |
| RO/SRO Name | Shri Senthil Kumar Sampath |
| RO/SRO Email | agmu156@ifs.nic.in |
| State | JHARKHAND |
| RO/SRO Office Address | 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
2025
01 Jun(01 Oct - 31 Mar)**

Acknowledgement

| | | | |
|--|---------------------------|-------------------------------|---------------|
| Proposal Name | | Kalimela OCP Expn. | |
| Name of Entity / Corporate Office | | Tata Steel Ltd. | |
| Village(s) | | N/A | |
| District | | DHANBAD | |
| Proposal No. | IA/JH/CMIN/8145/2005 | Category | Coal Mining |
| Plot / Survey / Khasra No. | N/A | Sub-District | N/A |
| State | JHARKHAND | Entity's PAN | *****2803M |
| MoEF File No. | J-11015/252/2005-IA.II(M) | Entity name as per PAN | UTSAV KASHYAP |

Compliance Reporting Details

| | |
|-------------------------|--|
| Reporting Year | 2025 |
| Remarks (if any) | Compliance status of Environmental Clearance of Kalimela Open Cast Mining Project (0.34 MTPA) of M/s Tata Steel Ltd., Village Dungri, Tehsil Jharia, dist. Dhanbad, Jharkhand vide MoEFCC Letter no J-11015/252/2005-IA.II (M) dated June 22, 2006 for October 2024 to March 2025. |
| Reporting Period | 01 Jun(01 Oct - 31 Mar) |

Details of Production and Project Area

| | | |
|--|---------------------------------------|--|
| Name of Entity / Corporate Office | Tata Steel Ltd. | |
| | Project Area as per EC Granted | Actual Project Area in Possession |
| Private | 0 | 0 |
| Revenue Land | 14.37 | 14.37 |
| Forest | 0 | 0 |
| Others | 23.67 | 23.67 |
| Total | 38.04 | 38.04 |

Production Capacity

| Sr. no | Product Name | units | Valid Upto | Capacity | Production last year | Capacity as per CTO |
|--------|--------------|-------------------------------|------------|----------|----------------------|---------------------|
| 1 | Coal | Million Tons per Annum (MTPA) | N/A | 0.3 | 0 | |

Conditions

Specific Conditions

| Sr.No. | Condition Type | Condition Details |
|--|----------------------|--|
| 1 | Statutory compliance | All the conditions stipulated by SPCB in their NOC no N-35 dated 31.01.2005 are to be implemented effectively. |
| PPs Submission: Complied NOC conditions are being complied with. The open cast operations have ceased, and no raw coal production is taking place. Currently the backfilling of the mine void by the OB has been completed and biological reclamation work is in progress. | | Date: 26/05/2025 |
| 2 | MISCELLANEOUS | The bund/embankment shall be designed taking into account highest flood level, based on past data, in the Damodar River/ Dungri Jore so as to guard against mine inundation. |
| PPs Submission: Complied The embankment exists along Dungri Jore. The HFL (Highest flood line) of Damodar river is way below the surface level of open cast mine hence bunds across the river is not necessary. | | Date: 26/05/2025 |
| 3 | GREENBELT | Topsoil should be stacked properly with proper slope at earmarked sites and should not be kept active and shall be used for reclamation and development of green belt. |
| PPs Submission: Complied No further top soil will be generated as coal mining activity has been ceased. The back filling has been completed and the top soil is being used for biological reclamation of backfilled and OB area. Glimpses of activities is attached as Annexure-1. | | Date: 29/05/2025 |
| 4 | Statutory compliance | OB should be stacked at earmarked external OB dumpsite(s) within ML area and shall be a maximum height of 60m only and consist of benches of 10m each. The ultimate slope of the dump shall not exceed 28°. Backfilling shall begin at the end of 3rd year in the decoaled area. Monitoring and management of existing reclaimed dumpsites should continue until the vegetation becomes self-sustaining. Compliance Status should be submitted to the MOEF and its regional office at Bhubaneswar on yearly basis. |
| PPs Submission: Complied OB was stacked within ML area at an area of 12 ha approx. About 24.08 lakh cum of OB generated has been stacked with an approximate height reached of 50 mts. The other conditions are being followed as well. This OB has been used for backfilling the mine pit as part of our mine closure plan. Now the backfilling work has been completed and biological reclamation work is in progress. | | Date: 26/05/2025 |
| 5 | MISCELLANEOUS | Catch drains and siltation ponds of appropriate size should be constructed to arrest silt and sediment flows from soil, OB and mineral dumps. The water so collected should be utilized for watering the mine area, roads, green belt development, etc. The drains should be regularly desilted and maintained properly. Garland drains (size, gradient and length) and sump capacity should be designed keeping |

| | | |
|---|---|---|
| | | 50% safety margin over and above the peak sudden rainfall and maximum discharge in the area adjoining the mine site. Sump capacity should also provide adequate retention period to allow proper settling of slit material. |
| PPs Submission: Complied Catch drain and siltation ponds have been constructed to arrest the debris, silt and sediment flows from OB dumps. Collected water had been used for watering mine area, roads and plantation. Total length of catch drains was 2200 mts. Garland drains (about 1790 mts) had been completely constructed around the mine site to ensure runoff water during rainy season is properly drained off. Since mine area has not going to expand, no additional garland drains are required as of now. | | Date: 26/05/2025 |
| 6 | MISCELLANEOUS | Dimension of the retaining wall at the toe of the dumps and OB benches within the mine to check run-off and siltation should be based on the rainfall data |
| PPs Submission: Complied Retention wall (or Toe wall) of about 2200 mts. exists around the dump area to check run-off and siltation. | | Date: 26/05/2025 |
| 7 | MISCELLANEOUS | The effluents from the coal washery shall be treated to prescribed norms before discharge from the lease. |
| PPs Submission: Complied There is no separate coal washery for OCP Kalimela. We have a central coal washery for Jamadoba group of mines, about 1.5 kms away, which has a closed water circuit system to maintain zero discharge. | | Date: 26/05/2025 |
| 8 | AIR QUALITY MONITORING AND PRESERVATION | Crushers at the CHP should be operated with high efficiency bag filters, water sprinkling system should be provided to check fugitive emissions from crushing operations, conveyor system, haulage roads, transfer points, etc. |
| PPs Submission: Complied There is no separate CHP for OCP Kalimela. The existing CHP for Jamadoba group of mines already has adequate measures in place such as water sprinkling system (fixed and movable) and dry fog system. | | Date: 26/05/2025 |
| 9 | AIR QUALITY MONITORING AND PRESERVATION | Drills should be wet operated. |
| PPs Submission: Complied It is not applicable now as mining has ceased. | | Date: 26/05/2025 |
| 10 | AIR QUALITY MONITORING AND PRESERVATION | Controlled blasting should be practiced only during daytime with use of delay detonators. The mitigative measures for control of ground vibration and to arrest the fly rocks and boulders should be implemented. |
| PPs Submission: Complied It is not applicable now as mining has ceased. | | Date: 26/05/2025 |
| 11 | GREENBELT | Area brought under afforestation includes reclaimed external OB dump (12.89 ha), backfilled area (25.15 ha), along ML boundary, along roads (0.45 ha) and in undisturbed area (1.14 ha) within the lease area by planting native species in consultation with the local DFO/Agriculture Department. The density of the trees should be around 2500 plants per ha. |

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| PPs Submission: Complied The backfilling work has been completed and the biological reclamation work is in progress. | | Date: 26/05/2025 |
| 12 | LAND RECLAMATION | A progressive closure plan shall be implemented by reclamation of quarry area of 25.15 ha which shall be backfilled and afforested by planting native plant species in consultation with the local DFO/Agriculture Department. The density of the trees should be around 2500 plants per ha. The balance 1.10 ha of decoaled area shall be converted into a water reservoir, the upper benches of which shall be gently sloped and stabilized and reclaimed with plantation. |
| PPs Submission: Complied The reclamation work is in progress as per the progressive mine closure Plan. The mine closure plan of KOCF is under mining plan of Jamadoba Colliery (including MCP of Kalimela) has been approved by MOC, Delhi. | | Date: 26/05/2025 |
| 13 | MISCELLANEOUS | Conservation Plan for endangered species, if any, found in and around the project area shall be formulated, if required, in consultation with the State Forest and Wildlife Departments. |
| PPs Submission: Complied Not Applicable. | | Date: 26/05/2025 |
| 14 | WATER QUALITY MONITORING AND PRESERVATION | The company shall obtain prior approval of CGWA/ CGWB Regional Office for use of groundwater if any, for mining operations. |
| PPs Submission: Complied Not Applicable. | | Date: 26/05/2025 |
| 15 | WATER QUALITY MONITORING AND PRESERVATION | Regular monitoring of groundwater level and quality should be carried out by establishing a network of existing wells and construction of new peizometers. The monitoring for quantity should 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 should be submitted to the Ministry of Environment & Forest and to the Central Pollution Control Board quarterly within one month of monitoring. |
| PPs Submission: Complied Now there will be no impact on ground water as mining has ceased. However, quality of groundwater is regularly analysed as required and attached in Annexure-II | | Date: 26/05/2025 |
| 16 | WATER QUALITY MONITORING AND PRESERVATION | The Company shall put up artificial groundwater recharge measures for augmentation of groundwater resource. The project authorities should meet water requirement of nearby village(s) in case the village wells go dry due to dewatering of mine. |
| PPs Submission: Complied Now there will be no impact on ground water as mining has ceased. However, quality of groundwater is regularly analysed as required and attached in Annexure-II | | Date: 26/05/2025 |
| 17 | WATER QUALITY MONITORING AND PRESERVATION | ETP should also be provided for workshop, coal washery and CHP wastewater. |
| PPs Submission: Complied | | Date: |

| | | |
|--|----------------------|--|
| It is not applicable. Though ETP for Central Workshop has been commissioned having facility of Oil and Grease Trap. | | 26/05/2025 |
| 18 | Statutory compliance | R&R shall not be less than the norms laid down by the State Government and shall be completed within a specified time-frame. |
| PPs Submission: Complied It is not applicable. | | Date: 26/05/2025 |
| 19 | Statutory compliance | A Final Mine Closure Plan along with details of Corpus Fund should be submitted to the Ministry of Environment & Forests for approval 5 years in advance of final mine closure for approval. |
| PPs Submission: Complied It has been approved by MOC, Delhi and submitted to MoEF and CC. | | Date: 26/05/2025 |
| 20 | Statutory compliance | Consent to operate shall be obtained before starting mining operations. |
| PPs Submission: Complied Consent to operate was obtained from JSPCB vide letter ref. No. SPCB/HO/RNC/CTO-13226858/2022/959 dated-04.07.2022, which was valid up to 30.09.2023, for backfilling and reclamation. The activities were completed, and biological reclamation is ongoing with trees plantation. Hence, the CTO was surrendered on 20.07.2023 vide letter no. JMB/ENV/SPCB/08/519/2023. | | Date: 31/05/2025 |

General Conditions

| Sr.No. | Condition Type | Condition Details |
|---|---|--|
| 1 | Statutory compliance | No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment and forest. |
| PPs Submission: Complied All mining excavation activities are terminated. Reclamation work is in progress | | Date: 26/05/2025 |
| 2 | Statutory compliance | No change in the calendar plan including excavation, quantum of mineral coal and waste should be made. |
| PPs Submission: Complied All mining excavation activities are terminated. Reclamation work is in progress. | | Date: 26/05/2025 |
| 3 | AIR QUALITY MONITORING AND PRESERVATION | Four Ambient Air quality monitoring station should be established in the core zones as well as in the buffer zone SPM, RSPM, SO2 and NOX monitoring location of the stations should be decided based on the metrological data & topographical features & environmentally & ecologically sensitive targets in consultation with SPCB. |
| PPs Submission: Complied The operations have now ceased. The ambient air monitoring is done at 4 locations and the reports are attached as Annexure -II | | Date: 26/05/2025 |
| 4 | AIR QUALITY MONITORING AND PRESERVATION | Fugitive dust emissions (SPM & RSPM) from all the sources should be controlled regularly monitored & data recorded properly. Water spraying arrangement on haul roads, wagon loading, and dump |

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| | | trucks (loading & unloading) points should be provided & properly maintained. |
| PPs Submission: Complied Presently no coal excavation and coal transportation jobs are going on. However, water sprinkling on roads is being done regularly. | | Date: 26/05/2025 |
| 5 | AIR QUALITY MONITORING AND PRESERVATION | Data on ambient air quality (SPM, RSPM, SO _x & NO _x) should be regularly submitted to the Ministry including its regional office at Bhubaneswar and to the SPCB & CPCB once in six months. |
| PPs Submission: Complied The ambient air monitoring is done at 4 locations and the reports are submitted to SPCB, CPCB and MoEFCC on half yearly basis Annexure - II | | Date: 26/05/2025 |
| 6 | Noise Monitoring & Prevention | Adequate measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in blasting and drilling operations of HEMM etc. All should be provided with Ear Plug/Muff. |
| PPs Submission: Complied It is not applicable now. | | Date: 26/05/2025 |
| 7 | WATER QUALITY MONITORING AND PRESERVATION | Industrial waste water (Workshop and Waste water from the mine) should be properly collected, treated so as to conform to the standards prescribed under GSR 422(E) dated 19th May 1993 and 31st December 1993 or as amended from time to time before discharged. Oil and Grease trap should be installed before discharge of Work shop effluent. |
| PPs Submission: Complied There is no generation of wastewater. | | Date: 26/05/2025 |
| 8 | AIR QUALITY MONITORING AND PRESERVATION | Vehicular emissions should be kept under control and regularly monitored. Vehicle used for transporting the mineral should be covered with tarpaulins and optimally loaded. |
| PPs Submission: Complied No mineral is being transported now. The vehicles carrying OB are only allowed to ply after securing full compliance on vehicle check list. Check list ensures the optimum load, good condition, emissions under limit. | | Date: 26/05/2025 |
| 9 | MISCELLANEOUS | Environmental laboratory should be established with adequate number and type of pollution monitoring and analysis equipment in consultation with the SPCB. |
| PPs Submission: Complied We have a fully equipped Environment Cell Laboratory with qualified personnel. The monitoring and analysis are also done at regular intervals by a NABL and JSPCB recognised laboratory. | | Date: 26/05/2025 |
| 10 | Human Health Environment | Personnel working in dusty area should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspect. Occupational Health Surveillance programme of the worker should be under taken periodically to observe any contraction due to exposure to dust and to take corrective measures if needed. |
| PPs Submission: Complied | | Date: |

| | | |
|--|--|---|
| It is not applicable now. | | 26/05/2025 |
| 11 | MISCELLANEOUS | A separate Environmental Management cell with suitable qualified personnel should be set up under the control of a senior executive, who will report directly to the Head of the Company. |
| PPs Submission: Complied We have a separate Environmental Management Cell with four qualified personnel. The reporting of Environmental Cell is directly to General Manager of the Division. | | Date: 26/05/2025 |
| 12 | Corporate Environmental Responsibility | Funds earmarked for environmental protection measures should be kept in separate A/C and should not be diverted for other purposes. Year wise expenditure should be reported to this ministry and its regional office at Bhubaneswar. |
| PPs Submission: Complied The Environment Cell has a separate fund for Environmental protection measures and for complying with legal requirements. | | Date: 26/05/2025 |
| 13 | MISCELLANEOUS | The regional office of this ministry located at Bhubaneswar shall monitor compliance of the stipulated conditions. The project authorities shall extend full co-operation to the officer of regional office by furnishing the requisite Data/ information/ monitoring report. |
| PPs Submission: Complied Being complied. All data is being furnished in the compliance report and during inspection. | | Date: 26/05/2025 |
| <h3 style="text-align: center;">Visit Remarks</h3> | | |
| Last Site Visit Report Date: | | N/A |
| Additional Remarks: | | |
| <p>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.</p> | | |

**HALF YEARLY COMPLIANCE REPORT
(PERIOD: OCTOBER'24 – MARCH'25)**

**OCP KALIMELA PROJECT
UNDER JAMADOBA COLLIERY**



TATA STEEL LIMITED, JHARIA DIVISION

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

**ENVIRONMENTAL CLEARANCE GRANTED VIDE LETTER NO. - J-11015/252/2005-
IA.II(M) DATED- 22ND JUNE 2006 ISSUED BY GOVT. OF INDIA, MINISTRY OF
ENVIRONMENT & FOREST, NEW DELHI.**

Compliance status of Environmental Clearance of Kalimela Open Cast Mining Project (0.34 MTPA) of M/s Tata Steel Ltd., Village Dungri, Tehsil Jharia, dist. Dhanbad, Jharkhand vide MoEFCC Letter no J-11015/252/2005-IA.II (M) dated June 22, 2006

| S. No. | Condition | Compliance Status |
|----------------------------|--|--|
| Specific Condition: | | |
| (i) | All the conditions stipulated by SPCB in their NOC no N-35 dated 31.01.2005 are to be implemented effectively. | <p>NOC conditions are being complied with. The open cast operations have ceased, and no raw coal production is taking place.</p> <p>Currently the backfilling of the mine void by the OB has been completed and biological reclamation work is in progress.</p> |
| (ii) | The bund/embankment shall be designed taking into account highest flood level, based on past data, in the Damodar River/ Dungri Jore so as to guard against mine inundation. | The embankment exists along Dungri Jore. The HFL (Highest flood line) of Damodar river is way below the surface level of open cast mine hence bunds across the river is not necessary. |
| (iii) | Topsoil should be stacked properly with proper slope at earmarked sites and should not be kept active and shall be used for reclamation and development of green belt. | <p>No further top soil will be generated as coal mining activity has been ceased.</p> <p>The back filling has been completed and the top soil is being used for biological reclamation of backfilled and OB area. Glimpses of activities is attached as Annexure-1.</p> |
| (iv) | OB should be stacked at earmarked external OB dumpsite(s) within ML area and shall be a maximum height of 60m only and consist of benches of 10m each. The ultimate slope of the dump shall not exceed 28°. Backfilling shall begin at the end of 3rd year in the decoaled area. Monitoring and management of existing reclaimed dumpsites should continue until the vegetation becomes self-sustaining. Compliance Status should be submitted to the MOEF and its regional office at Bhubaneswar on yearly basis. | <p>OB was stacked within ML area at an area of 12 ha approx. About 24.08 lakh cum of OB generated has been stacked with an approximate height reached of 50 mts. The other conditions are being followed as well.</p> <p>This OB has been used for backfilling the mine pit as part of our mine closure plan. Now the backfilling work has been completed and biological reclamation work is in progress.</p> |
| (v) | <p>Catch drains and siltation ponds of appropriate size should be constructed to arrest silt and sediment flows from soil, OB and mineral dumps. The water so collected should be utilized for watering the mine area, roads, green belt development, etc. The drains should be regularly desilted and maintained properly.</p> <p>Garland drains (size, gradient and length) and sump capacity should be designed keeping 50% safety margin over and above the peak sudden rainfall and maximum discharge in the area adjoining the mine site. Sump capacity should also provide adequate</p> | <p>Catch drain and siltation ponds have been constructed to arrest the debris, silt and sediment flows from OB dumps. Collected water had been used for watering mine area, roads & plantation. Total length of catch drains was 2200 mts.</p> <p>Garland drains (about 1790 mts) had been completely constructed around the mine site to ensure runoff water during rainy season is properly drained off. Since mine area has not going to expand, no additional garland drains are required as of now.</p> |

Compliance status of Environmental Clearance of Kalimela Open Cast Mining Project (0.34 MTPA) of M/s Tata Steel Ltd., Village Dungri, Tehsil Jharia, dist. Dhanbad, Jharkhand vide MoEFCC Letter no J-11015/252/2005-IA.II (M) dated June 22, 2006

| | | |
|--------|--|--|
| | retention period to allow proper settling of slit material. | |
| (vi) | Dimension of the retaining wall at the toe of the dumps and OB benches within the mine to check run-off and siltation should be based on the rainfall data | Retention wall (or Toe wall) of about 2200 mts. exists around the dump area to check run-off and siltation. |
| (vii) | The effluents from the coal washery shall be treated to prescribed norms before discharge from the lease. | There is no separate coal washery for OCP Kalimela. We have a central coal washery for Jamadoba group of mines, about 1.5 kms away, which has a closed water circuit system to maintain zero discharge. |
| (viii) | Crushers at the CHP should be operated with high efficiency bag filters, water sprinkling system should be provided to check fugitive emissions from crushing operations, conveyor system, haulage roads, transfer points, etc. | There is no separate CHP for OCP Kalimela. The existing CHP for Jamadoba group of mines already has adequate measures in place such as water sprinkling system (fixed and movable) and dry fog system. |
| (ix) | Drills should be wet operated. | It is not applicable now as mining has ceased. |
| (x) | Controlled blasting should be practiced only during daytime with use of delay detonators. The mitigative measures for control of ground vibration and to arrest the fly rocks and boulders should be implemented. | It is not applicable now as mining has ceased. |
| (xi) | Area brought under afforestation includes reclaimed external OB dump (12.89 ha), backfilled area (25.15 ha), along ML boundary, along roads (0.45 ha) and in undisturbed area (1.14 ha) within the lease area by planting native species in consultation with the local DFO/Agriculture Department. The density of the trees should be around 2500 plants per ha. | The backfilling work has been completed and the biological reclamation work is in progress. |
| (xii) | A progressive closure plan shall be implemented by reclamation of quarry area of 25.15 ha which shall be backfilled and afforested by planting native plant species in consultation with the local DFO/Agriculture Department. The density of the trees should be around 2500 plants per ha. The balance 1.10 ha of decoaled area shall be converted into a water reservoir, the upper benches of which shall be gently sloped and stabilized and reclaimed with plantation. | <p>The reclamation work is in progress as per the progressive mine closure Plan.</p> <p>The mine closure plan of KOCP is under mining plan of Jamadoba Colliery (including MCP of Kalimela) has been approved by MOC, Delhi.</p> |
| (xiii) | Conservation Plan for endangered species, if any, found in and around the project area shall be formulated, if required, in consultation with the State Forest and Wildlife Departments. | Not Applicable. |

Compliance status of Environmental Clearance of Kalimela Open Cast Mining Project (0.34 MTPA) of M/s Tata Steel Ltd., Village Dungri, Tehsil Jharia, dist. Dhanbad, Jharkhand vide MoEFCC Letter no J-11015/252/2005-IA.II (M) dated June 22, 2006

| | | |
|----------------------------|---|---|
| (xiv) | The company shall obtain prior approval of CGWA/ CGWB Regional Office for use of groundwater if any, for mining operations. | Not Applicable. |
| (xv) | Regular monitoring of groundwater level and quality should be carried out by establishing a network of existing wells and construction of new peizometers. The monitoring for quantity should 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 should be submitted to the Ministry of Environment & Forest and to the Central Pollution Control Board quarterly within one month of monitoring. | Now there will be no impact on ground water as mining has ceased. However, quality of groundwater is regularly analysed as required and attached in Annexure-II |
| (xvi) | The Company shall put up artificial groundwater recharge measures for augmentation of groundwater resource. The project authorities should meet water requirement of nearby village(s) in case the village wells go dry due to dewatering of mine. | Now there will be no impact on ground water as mining has ceased. However, quality of groundwater is regularly analysed as required and attached in Annexure-II |
| (xvii) | ETP should also be provided for workshop, coal washery and CHP wastewater. | It is not applicable. Though ETP for Central Workshop has been commissioned having facility of Oil & Grease Trap. |
| (xviii) | R&R shall not be less than the norms laid down by the State Government and shall be completed within a specified time-frame. | It is not applicable. |
| (xix) | A Final Mine Closure Plan along with details of Corpus Fund should be submitted to the Ministry of Environment & Forests for approval 5 years in advance of final mine closure for approval. | It has been approved by MOC, Delhi and submitted to MoEF&CC. |
| (xx) | Consent to operate shall be obtained before starting mining operations. | Consent to operate was obtained from JSPCB vide letter ref. No. SPCB/HO/RNC/CTO-13226858/2022/959 dated-04.07.2022, which was valid up to 30.09.2023, for backfilling and reclamation. The activities were completed, and biological reclamation is ongoing with trees plantation. Hence, the CTO was surrendered on 20.07.2023 vide letter no. JMB/ENV/SPCB/08/519/2023. |
| General Conditions: | | |
| (i) | No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment and forest. | All mining excavation activities are terminated. Reclamation work is in progress |

Compliance status of Environmental Clearance of Kalimela Open Cast Mining Project (0.34 MTPA) of M/s Tata Steel Ltd., Village Dungri, Tehsil Jharia, dist. Dhanbad, Jharkhand vide MoEFCC Letter no J-11015/252/2005-IA.II (M) dated June 22, 2006

| | | |
|-------|--|---|
| (i) | No change in the calendar plan including excavation, quantum of mineral coal and waste should be made. | All mining excavation activities are terminated. Reclamation work is in progress. |
| (ii) | Four Ambient Air quality monitoring station should be established in the core zones as well as in the buffer zone SPM, RSPM, SO ₂ and NO _x monitoring location of the stations should be decided based on the metrological data & topographical features & environmentally & ecologically sensitive targets in consultation with SPCB. | The operations have now ceased. The ambient air monitoring is done at 4 locations and the reports are attached as Annexure -II |
| (iii) | Fugitive dust emissions (SPM & RSPM) from all the sources should be controlled regularly monitored & data recorded properly. Water spraying arrangement on haul roads, wagon loading, and dump trucks (loading & unloading) points should be provided & properly maintained. | Presently no coal excavation and coal transportation jobs are going on. However, water sprinkling on roads is being done regularly. |
| (iv) | Data on ambient air quality (SPM, RSPM, SO _x & NO _x) should be regularly submitted to the Ministry including its regional office at Bhubaneswar and to the SPCB & CPCB once in six months. | The ambient air monitoring is done at 4 locations and the reports are submitted to SPCB, CPCB & MoEFCC on half yearly basis Annexure - II |
| (v) | Adequate measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in blasting and drilling operations of HEMM etc. All should be provided with Ear Plug/Muff. | It is not applicable now. |
| (vi) | Industrial waste water (Workshop and Waste water from the mine) should be properly collected, treated so as to conform to the standards prescribed under GSR 422(E) dated 19th May 1993 and 31st December 1993 or as amended from time to time before discharged. Oil and Grease trap should be installed before discharge of Work shop effluent. | There is no generation of wastewater. |
| (vii) | Vehicular emissions should be kept under control and regularly monitored. Vehicle used for transporting the mineral should be covered with tarpaulins and optimally loaded. | No mineral is being transported now. The vehicles carrying OB are only allowed to ply after securing full compliance on vehicle check list. Check list ensures the optimum load, good condition, emissions under limit. |

Compliance status of Environmental Clearance of Kalimela Open Cast Mining Project (0.34 MTPA) of M/s Tata Steel Ltd., Village Dungri, Tehsil Jharia, dist. Dhanbad, Jharkhand vide MoEFCC Letter no J-11015/252/2005-IA.II (M) dated June 22, 2006

| | | |
|--------|---|--|
| (viii) | Environmental laboratory should be established with adequate number and type of pollution monitoring and analysis equipment in consultation with the SPCB. | We have a fully equipped Environment Cell Laboratory with qualified personnel. The monitoring and analysis are also done at regular intervals by a NABL and JSPCB recognised laboratory. |
| (ix) | Personnel working in dusty area should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspect. Occupational Health Surveillance programme of the worker should be under taken periodically to observe any contraction due to exposure to dust and to take corrective measures if needed. | It is not applicable now. |
| (x) | A separate Environmental Management cell with suitable qualified personnel should 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 four qualified personnel. The reporting of Environmental Cell is directly to General Manager of the Division. |
| (xi) | Funds earmarked for environmental protection measures should be kept in separate A/C and should not be diverted for other purposes. Year wise expenditure should 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. |
| (xii) | The regional office of this ministry located at Bhubaneswar shall monitor compliance of the stipulated conditions. The project authorities shall extend full co-operation to the officer of regional office by furnishing the requisite Data/ information/ monitoring report. | Being complied. All data is being furnished in the compliance report and during inspection. |

Eco restoration of mined out areas of Kalimela Opencast Project

Eco restoration through topsoil management, slope stabilisation through geocell has been completed. Plantation through native species is ongoing.



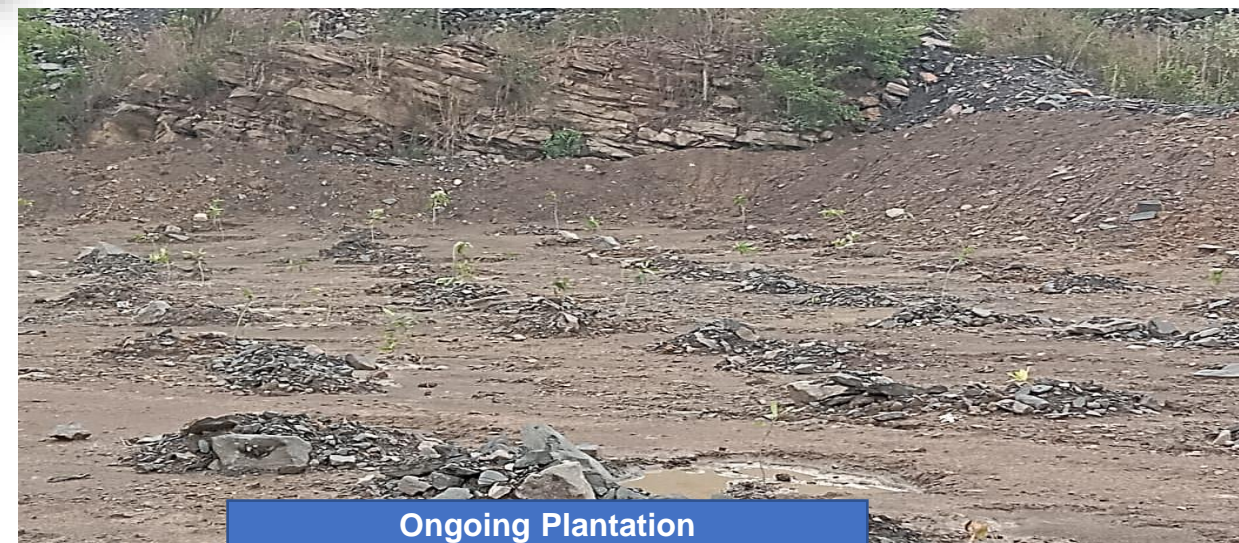
Fencing of the area



Arrangement of water supply



Top soil management



Ongoing Plantation

Eco restoration of mined out areas of Kalimela Opencast Project

Status of on-going plantation through native species. Around 4000 saplings have been planted in FY25.





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Mobile: 09471358492, 09431512608

Ref. No.: - ARDS/24-25/AAQ/1

Date: 04/12/2024

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 : 26/11/2024 To 27/11/2024
- Date of Testing : 28/11/2024 To 02/12/2024
- Test Procedure : As per IS-5182

TEST RESULTS

| LOCATION – 6 & 7 PITS COLLIERY OFFICE | | | | |
|---------------------------------------|--|-------|-----------------------|-----|
| | Avg. Ambient Temperature | 25°C | Avg. Humidity | 46% |
| Sl No. | Particulars | Value | NAAQ - CPCB STANDARD | |
| 1. | Particulate Matter (PM ₁₀), µg/m ³ | 83.98 | 100 µg/m ³ | |
| 2. | Particulate Matter (PM _{2.5}), µg/m ³ | 48.49 | 60 µg/m ³ | |
| 3. | SO ₂ , µg/m ³ | 19.30 | 80 µg/m ³ | |
| 4. | NO ₂ , µg/m ³ | 28.15 | 80 µg/m ³ | |
| 5. | Ozone, µg/m ³ | 16.23 | 180 µg/m ³ | |
| 6. | NH ₃ , µg/m ³ | 13.49 | 400 µg/m ³ | |
| 7. | CO, mg/m ³ | 0.78 | 4 mg/m ³ | |
| 8. | Pb, µg/m ³ | BDL | 1 µg/m ³ | |
| 9. | As, ng/m ³ | BDL | 6 ng/m ³ | |
| 10. | Ni, ng/m ³ | BDL | 20 ng/m ³ | |
| 11. | Benzene, µg/m ³ | BDL | 5 µg/m ³ | |
| 12. | Benzoapyrene ng/m ³ | BDL | 1 ng/m ³ | |

NOTE: BDL - Below Detection Limit

Sr. Chemist
Aditi R&D Services



Technical Manager
Aditi R&D Services, Sindri

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Ref. No.: - ARDS/24-25/ AAQ/2

Date: 04/12/2024

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 : 26/11/2024 to 27/11/2024
- Date of Testing : 28/11/2024 to 02/12/2024
- Test Procedure : As per IS-5182

TEST RESULTS

| LOCATION – OFFICERS COLONY, 12 NO. DIGWADIH | | | | |
|---|--|-------|-----------------------|-----|
| | Avg. Ambient Temperature | 25°C | Avg. Humidity | 46% |
| Sl No. | Particulars | Value | NAAQ - CPCB STANDARD | |
| 1. | Particulate Matter (PM ₁₀), µg/m ³ | 76.58 | 100 µg/m ³ | |
| 2. | Particulate Matter (PM _{2.5}), µg/m ³ | 41.36 | 60 µg/m ³ | |
| 3. | SO ₂ , µg/m ³ | 18.73 | 80 µg/m ³ | |
| 4. | NO ₂ , µg/m ³ | 26.65 | 80 µg/m ³ | |
| 5. | Ozone, µg/m ³ | 16.76 | 180 µg/m ³ | |
| 6. | NH ₃ , µg/m ³ | 13.78 | 400 µg/m ³ | |
| 7. | CO, mg/m ³ | 0.71 | 4 mg/m ³ | |
| 8. | Pb, µg/m ³ | BDL | 1 µg/m ³ | |
| 9. | As, ng/m ³ | BDL | 6 ng/m ³ | |
| 10. | Ni, ng/m ³ | BDL | 20 ng/m ³ | |
| 11. | Benzene, µg/m ³ | BDL | 5 µg/m ³ | |
| 12. | Benzoapyrene ng/m ³ | BDL | 1 ng/m ³ | |

NOTE: BDL - Below Detection Limit

Sr. Chemist
Aditi R&D Services



Technical Manager
Aditi R&D Services, Sindri

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Ref. No.: - ARDS/24-25/ AAQ/3

Date: 04/12/2024

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 : 25/11/2024 to 26/11/2024
- Date of Testing : 28/11/2024 to 02/12/2024
- Test Procedure : As per IS-5182

TEST RESULTS

| LOCATION – CENTRAL WORKSHOP AREA, JAMADOBA | | | | |
|--|--|-------|-----------------------|-----|
| | Avg. Ambient Temperature | 25°C | Avg. Humidity | 46% |
| Sl No. | Particulars | Value | NAAQ - CPCB STANDARD | |
| 1. | Particulate Matter (PM ₁₀), µg/m ³ | 86.84 | 100 µg/m ³ | |
| 2. | Particulate Matter (PM _{2.5}), µg/m ³ | 49.26 | 60 µg/m ³ | |
| 3. | SO ₂ , µg/m ³ | 21.78 | 80 µg/m ³ | |
| 4. | NO ₂ , µg/m ³ | 29.96 | 80 µg/m ³ | |
| 5. | Ozone, µg/m ³ | 18.84 | 180 µg/m ³ | |
| 6. | NH ₃ , µg/m ³ | 16.76 | 400 µg/m ³ | |
| 7. | CO, mg/m ³ | 0.94 | 4 mg/m ³ | |
| 8. | Pb, µg/m ³ | BDL | 1 µg/m ³ | |
| 9. | As, ng/m ³ | BDL | 6 ng/m ³ | |
| 10. | Ni, ng/m ³ | BDL | 20 ng/m ³ | |
| 11. | Benzene, µg/m ³ | BDL | 5 µg/m ³ | |
| 12. | Benzoapyrene ng/m ³ | BDL | 1 ng/m ³ | |

NOTE: BDL - Below Detection Limit

Sr. Chemist
Aditi R&D Services



Technical Manager
Aditi R&D Services, Sindri

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Ref. No.: - ARDS/24-25/ AAQ/4

Date: 04/12/2024

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 : 25/11/2024 To 26/11/2024
- Date of Testing : 28/11/2024 to 02/12/2024
- Test Procedure : As per IS-5182

TEST RESULTS

LOCATION – TATA CENTRAL HOSPITAL

| | Avg. Ambient Temperature | 25°C | Avg. Humidity | 46% |
|--------|--|-------|-----------------------|-----|
| Sl No. | Particulars | Value | NAAQ - CPCB STANDARD | |
| 1. | Particulate Matter (PM ₁₀), µg/m ³ | 69.80 | 100 µg/m ³ | |
| 2. | Particulate Matter (PM _{2.5}), µg/m ³ | 38.75 | 60 µg/m ³ | |
| 3. | SO ₂ , µg/m ³ | 16.38 | 80 µg/m ³ | |
| 4. | NO ₂ , µg/m ³ | 26.58 | 80 µg/m ³ | |
| 5. | Ozone, µg/m ³ | 17.75 | 180 µg/m ³ | |
| 6. | NH ₃ , µg/m ³ | 15.63 | 400 µg/m ³ | |
| 7. | CO, mg/m ³ | 0.83 | 4 mg/m ³ | |
| 8. | Pb, µg/m ³ | BDL | 1 µg/m ³ | |
| 9. | As, ng/m ³ | BDL | 6 ng/m ³ | |
| 10. | Ni, ng/m ³ | BDL | 20 ng/m ³ | |
| 11. | Benzene, µg/m ³ | BDL | 5 µg/m ³ | |
| 12. | Benzoapyrene ng/m ³ | BDL | 1 ng/m ³ | |

NOTE: BDL - Below Detection Limit

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Aditi R&D Services



Technical Manager
Aditi R&D Services, Sindri

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|---|--|--|--|-----------------------------------|---|------|-------------------|--|------------------|
| | <h3 style="margin:0;">TEST REPORT OF NOISE (AMBIENT) LEVEL MONITORING</h3> | | | | | | | | |
| | Ref. No. & Date ARDS/24-25/NOISE/1 Date: 04/12/2024 | | NAME AND ADDRESS OF THE CLIENT M/S TATA STEEL, JAMADOBA, TATA STEEL LIMITED, JAMADOBA GROUP PLANT, DIST. - DHANBAD (JHARKHAND) | | | | | | |
| Date of Monitoring 25/11/2024 To 27/11/2024 | | Avg. Ambient Temperature (°C) 25 | Average Humidity (%) 49 | Weather Condition Clear | Status of the plant Running | | | | |
| Work Order 4700126557/932 Date:- 29/05/2024 | | | | | | | | | |
| 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 |
| LOCATION JAMADOBA GROUP | | | | | | | | Industrial Area | Industrial Area |
| 1. | Central Workshop Area | 57.9 | 54.3 | 56.46 | 49.6 | 42.1 | 47.3 | 75 | 70 |
| 2. | 6 & 7 Pits Colliery Office | 59.7 | 51.9 | 57.36 | 46.8 | 40.6 | 44.72 | | |
| | | | | | | | | Residential Area | Residential Area |
| 3. | Officer Colony 12 No. Digwadih | 53.4 | 49.6 | 51.9 | 45.6 | 42.7 | 44.39 | 65 | 55 |
| | | | | | | | | Silence Zone | Silence Zone |
| 4. | Tata Central Hospital | 47.2 | 42.8 | 45.53 | 39.4 | 36.4 | 38.15 | 50 | 40 |


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Ref. No.: - ARDS/24-25/MINER./1

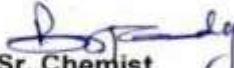
Date: 04/12/2024

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 : 26/11/2024 and 27/11/2024
- Date of Testing : 28/11/2024 To 30/11/2024

TEST RESULTS

| Sl No. | Particulars | Mineralogical Composition (%) | | | |
|--------|----------------------------------|-------------------------------|------|--------------------------------|------|
| | | SiO ₂ | FeO | Al ₂ O ₃ | CaO |
| 1. | Central Work Shop Area, Jamadoba | 1.90 | 0.14 | 1.41 | 2.8 |
| 2. | Officer Colony 12 No. Digwadih | 1.87 | 0.12 | 1.35 | 2.36 |


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Ref. No.: - ARDS/24-25/SW/1

Date: 04/12/2024

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: 27/11/2024
- Date of Testing : 28/11/2024 To 03/12/2024
- Test : pH, TDS, Turbidity, DO, BOD, Cl, F, SO₄

TEST RESULT

| Sl. No. | PARAMETERS OF TEST | VALUE | | Test Method |
|---------|------------------------------------|-------------------------|-------------------------|----------------------|
| | | Damodar River Up Stream | Damodar River Dn Stream | |
| 1. | pH | 7.2 | 7.3 | IS-3025 (P-11): 1983 |
| 2. | Total Dissolved Solids, mg/l | 410 | 428 | IS-3025 (P-16): 1984 |
| 3. | Turbidity, NTU | 2 | 2 | IS-3025 (P-10):1984 |
| 4. | Dissolved Oxygen, mg/l | 5.6 | 5.8 | IS-3025 (P-38):1989 |
| 5. | Bio chemical Oxygen Demand, mg/l | 1.6 | 1.9 | IS-3025 (P-44):1994 |
| 6. | Chloride as Cl, mg/l | 28 | 27.5 | IS-3025 (P-32):1988 |
| 7. | Fluoride as F, mg/l | 0.58 | 0.62 | IS-3025 (P-60):2008 |
| 8. | Sulphate as SO ₄ , mg/l | 65.0 | 60.4 | IS-3025 (P-24):1986 |

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Aditi R&D Services, Sindri

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Mobile: 09471358492, 09431512608

Ref. No.: - ARDS/24-25/MWD/1

Date: 04/12/2024

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 :
 - 2 Pit Jamadoba Colliery
 - 3 Pit Jamadoba Colliery
 - 6 & 7 Pits Colliery
 - Digwadih Colliery
- Date of Sample Collection: 25/11/2024 To 26/11/2024
- Date of Testing : 28/11/2024 To 03/12/2024
- Test : pH, TDS, TSS, BOD, COD, OIL & GREASE.

TEST RESULT

| Sl. No. | PARAMETERS OF TEST | VALUE | | | | Test Method |
|---------|----------------------------------|-------------------------|-------------------------|---------------------|-------------------|---------------------|
| | | 2 Pit Jamadoba Colliery | 3 Pit Jamadoba Colliery | 6 & 7 Pits Colliery | Digwadih Colliery | |
| 1. | pH, | 7.5 | 7.7 | 7.5 | 7.4 | IS-3025 (P-11):1983 |
| 2. | Total Dissolved Solids, mg/l | 865 | 839 | 915 | 790 | IS-3025 (P-16):1984 |
| 3. | Total Suspended Solids, mg/l | 39 | 42 | 46 | 38 | IS-3025(P-17): 1984 |
| 4. | Bio chemical Oxygen Demand, mg/l | 2.2 | 3.4 | 2.9 | 2.7 | IS-3025 (P-4):1994 |
| 5. | Chemical Oxygen Demand, mg/l | 66 | 72 | 62 | 69 | IS-3025 (P-8):2006 |
| 6. | Oil & Grease, mg/l | BDL | 0.9 | 0.8 | BDL | IS-3025 (P-39):2021 |





Sr. Chemist
Aditi R&D Services







Technical Manager
Aditi R&D Services, Sindri

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|--|----------------------------------|---|---|---|-------------------------|--------------------------|--------------------|
| Ref. No.: - ARDS/24-25/STP/1 | | Date: 04/12/2024 | | | | | |
| TEST REPORT OF SEWAGE | | | | | | | |
| • 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. 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 | | | | | |
| • Date of Sample Collection: | | 25/11/2024 To 26/11/2024 | | | | | |
| • Date of Testing : | | 28/11/2024 To 03/12/2024 | | | | | |
| • Test : | | pH, TDS, TSS, BOD, COD, OIL & GREASE, and Fecal Coliform. | | | | | |
| TEST RESULT | | | | | | | |
| Sl. No. | PARAMETERS OF TEST | VALUE | | | | | Test Method |
| | | STP Outlet Railway Colony | STP Outlet Digwadih 12 No Officers Colony | STP Outlet Digwadih 12 No. Supervisor flat | STP Outlet Jmb. Canteen | STP Outlet- JCPP Canteen | |
| 1. | pH, | 7.9 | 7.8 | 7.8 | 7.6 | 7.5 | IS-3025(P-11):1983 |
| 2. | Total Dissolved Solids, mg/l | 855 | 850 | 910 | 812 | 710 | IS-3025(P-16):1984 |
| 3. | Total Suspended Solids, mg/l | 39 | 42 | 46 | 38 | 42 | IS-3025(P-17):1984 |
| 4. | Bio chemical Oxygen Demand, mg/l | 3.2 | 5.9 | 7.4 | 2.8 | 6.4 | IS-3025(P-44):1994 |
| 5. | Chemical Oxygen Demand, mg/l | 88 | 79 | 90 | 65 | 70 | IS-3025(P-58):2006 |
| 6. | Oil & Grease, mg/l | 1.0 | 0.7 | 0.9 | 0.9 | 0.8 | IS-3025(P-39):2021 |
| 7. | Fecal Coliform (FC) (MPN/100ml) | 720 | 620 | 592 | 570 | 518 | IS - 1622 |
|  Sr. Chemist Aditi R&D Services | |  | |  Technical Manager Aditi R&D Services, Sindri | | | |
| Statements : | | | | | | | |
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|---|----------------------------------|--|----------------------|---|--|
| Ref. No.: - ARDS/24-25/ETP/1 | | | | Date: 04/12/2024 | |
| <u>TEST REPORT OF EFFLUENT</u> | | | | | |
| <ul style="list-style-type: none">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:- 29/05/2024Sample Code : 1. E.T.P. Outlet T.C.H. 2. E.T.P. Outlet GarageDate of Sample Collection: 25/11/2024 To 26/11/2024Date of Testing : 28/11/2024 To 03/12/2024Test : pH, TDS, TSS, BOD, COD, OIL & GREASE. | | | | | |
| <u>TEST RESULT</u> | | | | | |
| Sl. No. | PARAMETERS OF TEST | VALUE | | Test Method | |
| | | E.T.P. Outlet T.C.H. | E.T.P. Outlet Garage | | |
| 1. | pH, | 8.2 | 8.0 | IS-3025 (P-11): 1983 | |
| 2. | Total Dissolved Solids, mg/l | 788 | 895 | IS-3025 (P-16): 1984 | |
| 3. | Total Suspended Solids, mg/l | 39 | 43 | IS-3025(P-17) : 1984 | |
| 4. | Bio chemical Oxygen Demand, mg/l | 2.4 | 7.2 | IS-3025 (P-44):1994 | |
| 5. | Chemical Oxygen Demand, mg/l | 58 | 89 | IS-3025 (P-58):2006 | |
| 6. | Oil & Grease, mg/l | 0.9 | 2.4 | IS-3025 (P-39):2021 | |
| Note : BDL - Below Detection Limit | | | | | |
|  Sr. Chemist Aditi R&D Services | |  | |  Technical Manager Aditi R&D Services, Sindri | |
| Statements : | | | | | |
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Ref. No.: - ARDS/24-25/DW/1

Date: 04/12/2024

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: 07.08.2024 To 09.08.2024
- Date of Testing : 10.08.2024 To 16.08.2024
- 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 | Desirab le | Permi ssible | |
| 1. | Colour, (Hazen Unit) | 1 | 1 | 1 | 1 | 5.00 | 15.0 | IS 3025 (P-4):2021 |
| 2. | Odour | Agreeable | Agreeable | Agreeable | Agreeable | Agreeabl e | Agree able | IS 3025 (P-5):2018 |
| 3. | Taste | Agreeable | Agreeable | Agreeable | Agreeable | Agreeabl e | Agree able | IS 3025 (P-7):2017 |
| 4. | Turbidity, NTU | 1.0 | 0.8 | 0.2 | 3.0 | 1.0 | 5.0 | IS 3025 (P-10):1984 |
| 5. | pH | 7.52 | 7.76 | 7.92 | 7.80 | 6.5-8.5 | No. Relax. | IS-3025 (P-11):1983 |
| 6. | Total Hardness as CaCO ₃ , mg/l | 400 | 580 | 540 | 304 | 200 | 600 | IS 3025 (P-21):2009 |
| 7. | Chloride as Cl, mg/l | 65.77 | 80.81 | 67.65 | 33.82 | 250 | 1000 | IS 3025 (P-32):1988 |
| 8. | Res. Free chlorine as Cl ₂ mg/l | NIL | NIL | NIL | NIL | 0.20 | 1.0 | IS 3025 (P-26):2021 |
| 9. | Total Dissolved Solids, mg/l | 535 | 540 | 595 | 280 | 500 | 2000 | IS 3025 (P-16):1984 |
| 10. | Calcium as CaCO ₃ , mg/l | 188 | 160 | 128 | 136 | 75 | 200 | IS 3025 (P-40):1991 |
| 11. | Copper as Cu, mg/l | BDL | BDL | BDL | BDL | 0.05 | 1.5 | IS 3025 (P-42):1992 |

Continued on Page 2

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Fax: 0326-2952377
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- 2 -

| Sl. 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 | Desira ble | Permis sible | |
| 12. | Manganese as Mn, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | 0.10 | 0.30 | IS 3025 (P-59):2006 |
| 13. | Sulphate as SO ₄ , mg/l | 48.10 | 41.70 | 51.4 | 42.6 | 200 | 400 | IS 3025 (P-24):1986 |
| 14. | Nitrate as NO ₃ , mg/l | 3.3 | 5.6 | 4.9 | 4.2 | 45 | No. Relax | IS 3025 (P-34):1988 |
| 15. | Fluoride as F, mg/l | 0.34 | 0.30 | 0.32 | 0.37 | 1.0 | 1.5 | IS 3025 (P-60):2008 |
| 16. | Phenolic Compound as (C ₆ H ₅ OH) mg/l | B.D.L | B.D.L | B.D.L | B.D.L | 0.001 | 0.002 | IS 3025 (P-43):1992 |
| 17. | Mercury as Hg, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | 0.001 | No. Relax | IS 3025 (P-48):1994 |
| 18. | Cadmium as Cd, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | 0.003 | No. Relax | IS 3025 (P-41):1992 |
| 19. | Arsenic as As, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | 0.01 | No. Relax | IS 3025 (P-37):1988 |
| 20. | Cyanide as CN, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | 0.05 | No. Relax | IS 3025 (P-27):1986 |
| 21. | Lead as Pb, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | 0.01 | No. Relax | IS 3025 (P-47):1994 |
| 22. | Zinc as Zn, mg/l, | 0.12 | 0.18 | 0.23 | 0.16 | 5 | 15 | IS 3025 (P-42):1992 |
| 23. | Total Coliform, No./100ml | Absent | Absent | Absent | Absent | Absen t | Absent | IS 3025 (P-49):1994 |
| 24. | Total Chromium as Cr, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | 0.05 | No. Relax | IS 3025 (P-52):2003 |
| 25. | Mineral Oil, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | 0.5 | No. Relax | IS 3025 (P-39):1989 |
| 26. | Alkalinity as CaCO ₃ , mg/l, | 424 | 388 | 400 | 568 | 200 | 600 | IS 3025 (P-23):1983 |
| 27. | Aluminium as Al, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | 0.03 | 0.2 | IS 3025 (P-55):2003 |
| 28. | Boron as B, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | 0.5 | 1.0 | IS 3025 (P-57):2005 |

NOTE: BDL - Below Detection Limit

Sr. Chemist
Aditi R&D Services



Technical Manager
Aditi R&D Services, Sindri

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Ref. No.: - ARDS/24-25/GW/1

Date: 04/12/2024

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. Kali Mela Kali Mandir
 4. Upper Dungari
 5. Kenduadih Basti
 6. 6&7 Pits (Ayodhya Nagri)
- Date of Sample Collection : 25/11/2024 to 26/11/2024
- Date of Testing : 28/11/2024 To 04/12/2024
- 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 | PARAMETER S OF TEST | VALUE | | | | | | IS as per IS 10500:1991 | | Test Method |
|--------|--|----------|--------------------|----------------------|---------------|-----------------|--------------------------|-------------------------|---------------|--------------------|
| | | Purnadih | Digwadih 10 NoF&J. | Kali Mela KaliMandir | Upper Dungari | Kenduadih Basti | 6 & 7Pit (Ayodhya Nagri) | Desir - able | Permi- ssible | |
| 1. | Colour, (Hazen Unit) | 2 | 1 | 2 | 2 | 1 | 1 | 5 | 15 | IS 3025 (P-4):2021 |
| 2. | Temperature °C | 25 | 24 | 25 | 24 | 25 | 24 | - | - | - |
| 3. | Electrical Conductivity, µmhos/cm | 1414 | 1390 | 1070 | 590 | 780 | 810 | - | - | - |
| 4. | Total Dissolved Solids, mg/l | 710 | 680 | 513 | 539 | 577 | 510 | 500 | 2000 | IS 3025(P-16):1984 |
| 5. | pH | 7.9 | 7.8 | 7.4 | 7.7 | 7.3 | 7.8 | 6.5-8.5 | No Relax | IS-3025(P-11):1983 |
| 6. | Total Hardness as CaCO ₃ , mg/l | 575 | 480 | 496 | 336 | 380 | 362 | 200 | 600 | IS 3025(P-21):2009 |
| 7. | Calcium as Ca, mg/l | 155.2 | 163.4 | 95 | 144 | 78 | 67.5 | 75 | 200 | IS 3025(P-40):1991 |
| 8. | Magnesium as Mg, mg/l | 50.4 | 20.2 | 62.8 | 48.2 | 43.5 | 48.4 | 30 | 100 | IS 3025(P-46):1994 |
| 9. | Chloride as Cl, mg/l | 347.69 | 199 | 107.12 | 30.02 | 35.70 | 57.2 | 250 | 1000 | IS 3025(P-32):1988 |
| 10. | Fluoride as F, mg/l | 0.42 | 0.32 | 0.39 | 0.50 | 0.40 | 0.38 | 1.0 | 1.5 | IS 3025(P-60):2008 |

Continued on Page -2

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| Sl. No | PARAMETERS OF TEST | VALUE | | | | | | IS as per IS 10500:1991 | | Test Method |
|--------|---|----------|--------------------|---------------------|---------------|------------------|--------------------------|-------------------------|---------------|--------------------|
| | | Purnadih | Digwadih 10 NoF&J. | KaliMela KaliMandir | Upper Dungari | Kenduadi h Basti | 6 & 7Pit (Ayodhya Nagri) | Desir-able | Perm is-sible | |
| 11 | Sulphate as SO ₄ , mg/l | 47.2 | 53.4 | 59.0 | 52.0 | 54.80 | 39.2 | 200 | 400 | IS 3025(P-24):1986 |
| 12 | Nitrate as NO ₃ , mg/l | 7.2 | 7.9 | 8.4 | 7.5 | 8.0 | 7.8 | 45 | No. Relax | IS 3025(P-34):1988 |
| 13 | Alkalinity as CaCO ₃ , mg/l, | 15.0 | 16.0 | 5.8 | 4.8 | 7.0 | 418 | 200 | 600 | IS 3025(P-23):1983 |
| 14 | Lead as Pb, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | B.D.L | B.D.L | 0.01 | No. Relax | IS 3025(P-47):1994 |
| 15 | Zinc as Zn, mg/l, | 0.19 | 0.12 | 0.13 | 0.2 | 0.18 | 0.19 | 5 | 15 | IS 3025(P-42):1992 |
| 16 | Iron a Fe, mg/l | 0.13 | 0.20 | 0.24 | 0.22 | 0.25 | 0.12 | 1.0 | No. Relax | IS 3025(P-53):2003 |
| 17 | Copper as Cu, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | B.D.L | B.D.L | 0.05 | 1.5 | IS3025 (P-42):1992 |
| 18 | Mercury as Hg, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | B.D.L | B.D.L | 0.001 | No. Relax | IS 3025(P-48):1994 |
| 19 | Cadmium as Cd, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | B.D.L | B.D.L | 0.003 | No. Relax | IS 3025(P-41):1992 |
| 20 | Nickel as Ni, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | B.D.L | B.D.L | 0.02 | No. Relax | IS 3025(P-37):1992 |
| 21 | Arsenic as As, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | B.D.L | B.D.L | 0.01 | No. Relax | IS 3025(P-37):1988 |
| 22 | Cyanide as CN, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | B.D.L | B.D.L | 0.05 | No. Relax | IS 3025(P-27):1986 |
| 23 | Total Chromium as Cr, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | B.D.L | B.D.L | 0.05 | No. Relax | IS 3025(P-52):2003 |

NOTE: BDL - Below Detection Limit


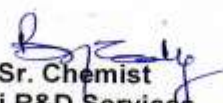


Sr. Chemist
Aditi R&D Services



Technical Manager
Aditi R&D Services, Sindri

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|--|--|--|-----------------------|---|--|--------------------------|--|------|---------------|-----|--------|-------------|-------|----------------------|--|----|---|-------|-----------------------|--|----|--|-------|----------------------|--|----|-------------------------------------|-------|----------------------|--|----|-------------------------------------|-------|----------------------|--|----|--------------------------|-------|-----------------------|--|----|-------------------------------------|-------|-----------------------|--|----|-----------------------|------|---------------------|--|----|-----------------------|-----|---------------------|--|----|-----------------------|-----|---------------------|--|-----|-----------------------|-----|----------------------|--|-----|----------------------------|-----|---------------------|--|-----|--------------------------------|-----|---------------------|--|
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| TEST REPORT OF AMBIENT AIR QUALITY | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <ul style="list-style-type: none">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:- 29/05/2024Date of Sample Collection : 12/02/2025 To 13/02/2025Date of Testing : 14/02/2025 To 18/02/2025Test Procedure : As per IS-5182 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TEST RESULTS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LOCATION – 6 & 7 PITS COLLIERY OFFICE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"><thead><tr><th colspan="2">Avg. Ambient Temperature</th><th>29°C</th><th>Avg. Humidity</th><th>28%</th></tr><tr><th>Sl No.</th><th>Particulars</th><th>Value</th><th colspan="2">NAAQ - CPCB STANDARD</th></tr></thead><tbody><tr><td>1.</td><td>Particulate Matter (PM₁₀), µg/m³</td><td>79.78</td><td colspan="2">100 µg/m³</td></tr><tr><td>2.</td><td>Particulate Matter (PM_{2.5}), µg/m³</td><td>46.06</td><td colspan="2">60 µg/m³</td></tr><tr><td>3.</td><td>SO₂, µg/m³</td><td>18.33</td><td colspan="2">80 µg/m³</td></tr><tr><td>4.</td><td>NO₂, µg/m³</td><td>26.74</td><td colspan="2">80 µg/m³</td></tr><tr><td>5.</td><td>Ozone, µg/m³</td><td>15.42</td><td colspan="2">180 µg/m³</td></tr><tr><td>6.</td><td>NH₃, µg/m³</td><td>12.81</td><td colspan="2">400 µg/m³</td></tr><tr><td>7.</td><td>CO, mg/m³</td><td>0.74</td><td colspan="2">4 mg/m³</td></tr><tr><td>8.</td><td>Pb, µg/m³</td><td>BDL</td><td colspan="2">1 µg/m³</td></tr><tr><td>9.</td><td>As, ng/m³</td><td>BDL</td><td colspan="2">6 ng/m³</td></tr><tr><td>10.</td><td>Ni, ng/m³</td><td>BDL</td><td colspan="2">20 ng/m³</td></tr><tr><td>11.</td><td>Benzene, µg/m³</td><td>BDL</td><td colspan="2">5 µg/m³</td></tr><tr><td>12.</td><td>Benzoapyrene ng/m³</td><td>BDL</td><td colspan="2">1 ng/m³</td></tr></tbody></table> | | | | | | Avg. Ambient Temperature | | 29°C | Avg. Humidity | 28% | Sl No. | Particulars | Value | NAAQ - CPCB STANDARD | | 1. | Particulate Matter (PM ₁₀), µg/m ³ | 79.78 | 100 µg/m ³ | | 2. | Particulate Matter (PM _{2.5}), µg/m ³ | 46.06 | 60 µg/m ³ | | 3. | SO ₂ , µg/m ³ | 18.33 | 80 µg/m ³ | | 4. | NO ₂ , µg/m ³ | 26.74 | 80 µg/m ³ | | 5. | Ozone, µg/m ³ | 15.42 | 180 µg/m ³ | | 6. | NH ₃ , µg/m ³ | 12.81 | 400 µg/m ³ | | 7. | CO, mg/m ³ | 0.74 | 4 mg/m ³ | | 8. | Pb, µg/m ³ | BDL | 1 µg/m ³ | | 9. | As, ng/m ³ | BDL | 6 ng/m ³ | | 10. | Ni, ng/m ³ | BDL | 20 ng/m ³ | | 11. | Benzene, µg/m ³ | BDL | 5 µg/m ³ | | 12. | Benzoapyrene ng/m ³ | BDL | 1 ng/m ³ | |
| Avg. Ambient Temperature | | 29°C | Avg. Humidity | 28% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sl No. | Particulars | Value | NAAQ - CPCB STANDARD | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1. | Particulate Matter (PM ₁₀), µg/m ³ | 79.78 | 100 µg/m ³ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2. | Particulate Matter (PM _{2.5}), µg/m ³ | 46.06 | 60 µg/m ³ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3. | SO ₂ , µg/m ³ | 18.33 | 80 µg/m ³ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4. | NO ₂ , µg/m ³ | 26.74 | 80 µg/m ³ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5. | Ozone, µg/m ³ | 15.42 | 180 µg/m ³ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6. | NH ₃ , µg/m ³ | 12.81 | 400 µg/m ³ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7. | CO, mg/m ³ | 0.74 | 4 mg/m ³ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8. | Pb, µg/m ³ | BDL | 1 µg/m ³ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9. | As, ng/m ³ | BDL | 6 ng/m ³ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10. | Ni, ng/m ³ | BDL | 20 ng/m ³ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11. | Benzene, µg/m ³ | BDL | 5 µg/m ³ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12. | Benzoapyrene ng/m ³ | BDL | 1 ng/m ³ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NOTE: BDL - Below Detection Limit | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  Sr. Chemist Aditi R&D Services | |  | |  Technical Manager Aditi R&D Services, Sindri | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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ADITI R&D SERVICES

Testing Laboratory
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Ref. No.: - ARDS/24-25/ AAQ/2

Date: 19/02/2025

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 : 12/02/2025 to 13/02/2025
- Date of Testing : 14/02/2025 to 18/02/2025
- Test Procedure : As per IS-5182

TEST RESULTS

| LOCATION – OFFICERS COLONY, 12 NO. DIGWADIH | | | | |
|---|--|-------|-----------------------|-----|
| | Avg. Ambient Temperature | 29°C | Avg. Humidity | 28% |
| Sl No. | Particulars | Value | NAAQ - CPCB STANDARD | |
| 1. | Particulate Matter (PM ₁₀), µg/m ³ | 72.75 | 100 µg/m ³ | |
| 2. | Particulate Matter (PM _{2.5}), µg/m ³ | 39.29 | 60 µg/m ³ | |
| 3. | SO ₂ , µg/m ³ | 17.79 | 80 µg/m ³ | |
| 4. | NO ₂ , µg/m ³ | 25.32 | 80 µg/m ³ | |
| 5. | Ozone, µg/m ³ | 15.92 | 180 µg/m ³ | |
| 6. | NH ₃ , µg/m ³ | 13.09 | 400 µg/m ³ | |
| 7. | CO, mg/m ³ | 0.67 | 4 mg/m ³ | |
| 8. | Pb, µg/m ³ | BDL | 1 µg/m ³ | |
| 9. | As, ng/m ³ | BDL | 6 ng/m ³ | |
| 10. | Ni, ng/m ³ | BDL | 20 ng/m ³ | |
| 11. | Benzene, µg/m ³ | BDL | 5 µg/m ³ | |
| 12. | Benzoapyrene ng/m ³ | BDL | 1 ng/m ³ | |

NOTE: BDL - Below Detection Limit

Sr. Chemist
Aditi R&D Services



Technical Manager
Aditi R&D Services, Sindri

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Ref. No.: - ARDS/24-25/ AAQ/3

Date: 19/02/2025

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 : 11/02/2025 to 12/02/2025
- Date of Testing : 14/02/2025 to 18/02/2025
- Test Procedure : As per IS-5182

TEST RESULTS

| LOCATION – CENTRAL WORKSHOP AREA , JAMADOBA | | | | |
|---|--|-------|-----------------------|-----|
| Avg. Ambient Temperature | | 29°C | Avg. Humidity | 28% |
| Sl No. | Particulars | Value | NAAQ - CPCB STANDARD | |
| 1. | Particulate Matter (PM ₁₀), µg/m ³ | 82.45 | 100 µg/m ³ | |
| 2. | Particulate Matter (PM _{2.5}), µg/m ³ | 46.79 | 60 µg/m ³ | |
| 3. | SO ₂ , µg/m ³ | 20.69 | 80 µg/m ³ | |
| 4. | NO ₂ , µg/m ³ | 28.46 | 80 µg/m ³ | |
| 5. | Ozone, µg/m ³ | 17.89 | 180 µg/m ³ | |
| 6. | NH ₃ , µg/m ³ | 15.92 | 400 µg/m ³ | |
| 7. | CO, mg/m ³ | 0.89 | 4 mg/m ³ | |
| 8. | Pb, µg/m ³ | BDL | 1 µg/m ³ | |
| 9. | As, ng/m ³ | BDL | 6 ng/m ³ | |
| 10. | Ni, ng/m ³ | BDL | 20 ng/m ³ | |
| 11. | Benzene, µg/m ³ | BDL | 5 µg/m ³ | |
| 12. | Benzoapyrene ng/m ³ | BDL | 1 ng/m ³ | |

NOTE: BDL - Below Detection Limit

Sr. Chemist
Aditi R&D Services



Technical Manager
Aditi R&D Services, Sindri

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Ref. No.: - ARDS/24-25/ AAQ/4

Date: 19/02/2025

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 : 11/02/2025 To 12/02/2025
- Date of Testing : 14/02/2025 to 18/02/2025
- Test Procedure : As per IS-5182

TEST RESULTS

LOCATION – TATA CENTRAL HOSPITAL

| SI No. | Avg. Ambient Temperature | 29°C | Avg. Humidity | 28% |
|--------|--|-------|-----------------------|-----|
| | Particulars | Value | NAAQ - CPCB STANDARD | |
| 1. | Particulate Matter (PM ₁₀), µg/m ³ | 66.31 | 100 µg/m ³ | |
| 2. | Particulate Matter (PM _{2.5}), µg/m ³ | 36.81 | 60 µg/m ³ | |
| 3. | SO ₂ , µg/m ³ | 15.56 | 80 µg/m ³ | |
| 4. | NO ₂ , µg/m ³ | 25.06 | 80 µg/m ³ | |
| 5. | Ozone, µg/m ³ | 16.86 | 180 µg/m ³ | |
| 6. | NH ₃ , µg/m ³ | 14.85 | 400 µg/m ³ | |
| 7. | CO, mg/m ³ | 0.79 | 4 mg/m ³ | |
| 8. | Pb, µg/m ³ | BDL | 1 µg/m ³ | |
| 9. | As, ng/m ³ | BDL | 6 ng/m ³ | |
| 10. | Ni, ng/m ³ | BDL | 20 ng/m ³ | |
| 11. | Benzene, µg/m ³ | BDL | 5 µg/m ³ | |
| 12. | Benzoapyrene ng/m ³ | BDL | 1 ng/m ³ | |

NOTE: BDL - Below Detection Limit


Sr. Chemist
Aditi R&D Services




Technical 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/24-25/NOISE/1 Date: 19/02/2025 | | | | M/S TATA STEEL, JAMADOBA, TATA STEEL LIMITED, JAMADOBA GROUP PLANT, DIST. - DHANBAD (JHARKHAND) | | | | | | | |
| Date of Monitoring | | | | | | | | | | | |
| 11/02/2025 To 13/02/2025 | | | | Avg. Ambient Temperature (°C) | | Average Humidity (%) | | Weather Condition | | Status of the plant | |
| Work Order 4700126557/932 Date:- 29/05/2024 | | | | 29 | | 30 | | 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 | | |
| JAMADOBA GROUP | | | | | | | | Industrial Area | Industrial Area | | |
| 1. | Central Workshop Area | 62.68 | 57.01 | 60.71 | 52.08 | 44.21 | 49.73 | 75 | 70 | | |
| 2. | 6 & 7 Pits Colliery Office | 60.79 | 54.49 | 58.69 | 49.14 | 42.63 | 47.01 | | | | |
| | | | | | | | | Residential Area | Residential Area | | |
| 3. | Officer Colony 12 No. Digwadih | 56.07 | 58.87 | 57.69 | 47.88 | 44.83 | 46.62 | 65 | 55 | | |
| | | | | | | | | Silence Zone | Silence Zone | | |
| 4. | Tata Central Hospital | 48.56 | 49.5 | 49.06 | 41.37 | 38.22 | 40.07 | 50 | 40 | | |

Sr. Chemist
Aditi R&D Services



Technical Manager
Aditi R&D Services, Sindri

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Mobile: 09471358492, 09431512608

Ref. No.: - ARDS/24-25/MINER./1

Date: 19/02/2025

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 : 12/02/2025 and 13/02/2025
- Date of Testing : 14/02/2025 To 18/02/2025

TEST RESULTS

| Sl No. | Particulars | Mineralogical Composition (%) | | | |
|--------|----------------------------|-------------------------------|------|--------------------------------|------|
| | | SiO ₂ | FeO | Al ₂ O ₃ | CaO |
| 1. | 6 & 7 Pits Colliery Office | 1.81 | 0.13 | 1.34 | 2.70 |
| 2. | Tata Central Hospital | 1.78 | 0.11 | 1.28 | 2.24 |


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Mobile: 09471358492, 09431512608

Ref. No.: - ARDS/24-25/SW/1

Date: 19/02/2025

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: 11/02/2025
- Date of Testing : 14/02/2025 To 18/02/2025
- Test : pH, TDS, Turbidity, DO, BOD, Cl, F, SO₄

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 | 7.9 | 7.6 | 6.5 -8.5 | IS-3025 (P-11): 1983 |
| 2. | Total Dissolved Solids, mg/l | 434 | 532 | 1500 | IS-3025 (P-16): 1984 |
| 3. | Turbidity, NTU | 1 | 1 | - | IS-3025 (P-10):1984 |
| 4. | Dissolved Oxygen, mg/l | 5.1 | 5.2 | 4.0 (Min) | IS-3025 (P-38):1989 |
| 5. | Bio chemical Oxygen Demand, mg/l | 1.7 | 2.2 | 3.0 | IS-3025 (P-44):1994 |
| 6. | Chloride as Cl, mg/l | 44.6 | 36.8 | 600 (Max.) | IS-3025 (P-32):1988 |
| 7. | Fluoride as F, mg/l | 0.4 | 0.4 | 1.5 | IS-3025 (P-60):2008 |
| 8. | Sulphate as SO ₄ , mg/l | 28.2 | 24.6 | 400 | IS-3025 (P-24):1986 |


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Aditi R&D Services




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Aditi R&D Services, Sindri

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Mobile: 09471358492, 09431512608

Ref. No.: - ARDS/24-25/MWD/1

Date: 21/02/2025

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: 11/02/2025 To 12/02/2025
- Date of Testing : 14/02/2025 To 18/02/2025
- 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, | 7.9 | 7.6 | 7.9 | 7.8 | 6.5-8.5 | IS-3025 (P-11): 1983 |
| 2. | Total Dissolved Solids, mg/l | 1209 | 897 | 624 | 987 | - | IS-3025 (P-16): 1984 |
| 3. | Total Suspended Solids, mg/l | 22 | 25 | 27 | 29 | - | IS-3025(P-17) : 1984 |
| 4. | Bio chemical Oxygen Demand, mg/l | 2.0 | 1.6 | 1.5 | 2.4 | 3 | IS-3025 (P-44):1994 |
| 5. | Chemical Oxygen Demand, mg/l | 96 | 84 | 78 | 110 | - | IS-3025 (P-58):2006 |
| 6. | Oil & Grease, mg/l | 2.1 | 1.9 | 1.6 | 1.2 | - | IS-3025 (P-39):2021 |


Sr. Chemist
Aditi R&D Services




Technical Manager
Aditi R&D Services, Sindri

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Testing Laboratory

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Fax: 0326-2952377
Mobile: 09471358492, 09431512608

Ref. No.: - ARDS/24-25/ETP/1

Date: 19/02/2025

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: 11/02/2025 To 12/02/2025
- Date of Testing : 14/02/2025 To 18/02/2025
- 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, | 8.5 | 8.3 | 5.5-9.0 | IS-3025 (P-11): 1983 |
| 2. | Total Dissolved Solids, mg/l | 845 | 715 | - | IS-3025 (P-16): 1984 |
| 3. | Total Suspended Solids, mg/l | 26 | 65 | 100 | IS-3025(P-17) : 1984 |
| 4. | Bio chemical Oxygen Demand, mg/l | 5.0 | 7.0 | 30 | IS-3025 (P-44):1994 |
| 5. | Chemical Oxygen Demand, mg/l | 40 | 56 | 250 | IS-3025 (P-58):2006 |
| 6. | Oil & Grease, mg/l | 1.6 | 3.2 | 10 | IS-3025 (P-39):2021 |

Note : BDL - Below Detection Limit

Sr. Chemist
Aditi R&D Services



Technical Manager
Aditi R&D Services, Sindri

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Ref. No.: - ARDS/24-25/DW/1

Date: 21/02/2025

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: 11/02/2025 To 12/02/2025
- Date of Testing : 14/02/2025 To 20/02/2025
- 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 | Desirab le | Permi ssible | |
| 1. | Colour, (Hazen Unit) | 1 | 1 | 1 | 1 | 5.00 | 15.0 | IS 3025 (P-4):2021 |
| 2. | Odour | Agreeable | Agreeable | Agreeable | Agreeable | Agreeabl e | Agree able | IS 3025 (P-5):2018 |
| 3. | Taste | Agreeable | Agreeable | Agreeable | Agreeable | Agreeabl e | Agree able | IS 3025 (P-7):2017 |
| 4. | Turbidity, NTU | 2 | 2 | 1 | 1 | 1.0 | 5.0 | IS 3025 (P-10):1984 |
| 5. | pH | 7.8 | 7.7 | 7.9 | 7.9 | 6.5-8.5 | No. Relax. | IS-3025 (P-11):1983 |
| 6. | Total Hardness as CaCO ₃ , mg/l | 583.8 | 567.0 | 441.0 | 344.4 | 200 | 600 | IS 3025 (P-21):2009 |
| 7. | Chloride as Cl, mg/l | 71.8 | 74.0 | 75.0 | 40.7 | 250 | 1000 | IS 3025 (P-32):1988 |
| 8. | Res. Free chlorine as Cl ₂ mg/l | NIL | NIL | NIL | NIL | 0.20 | 1.0 | IS 3025 (P-26):2021 |
| 9. | Total Dissolved Solids, mg/l | 792 | 840 | 752 | 418 | 500 | 2000 | IS 3025 (P-16):1984 |
| 10. | Calcium as Ca, mg/l | 80.6 | 65.5 | 57.1 | 68.8 | 75 | 200 | IS 3025 (P-40):1991 |
| 11. | Copper as Cu, mg/l | BDL | BDL | BDL | BDL | 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 10500:1991 | | Test Method |
|---------|--|---------------------------|--------------------------|---------------------------|-----------------------------|-------------------------|-------------|---------------------|
| | | Canteen-Jamadoba Colliery | Canteen Jamadoba Washery | Canteen Digwadih Colliery | Canteen - 6&7 Pits Colliery | Desirable | Permissible | |
| 12. | Manganese as Mn, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | 0.10 | 0.30 | IS 3025 (P-59):2006 |
| 13. | Sulphate as SO ₄ , mg/l | 35.6 | 37.8 | 34.8 | 38.6 | 200 | 400 | IS 3025 (P-24):1986 |
| 14. | Nitrate as NO ₃ , mg/l | 5.4 | 5.3 | 5.2 | 5.0 | 45 | No. Relax | IS 3025 (P-34):1988 |
| 15. | Fluoride as F, mg/l | 0.3 | 0.4 | 0.2 | 0.2 | 1.0 | 1.5 | IS 3025 (P-60):2008 |
| 16. | Phenolic Compound as (C ₆ H ₅ OH) mg/l | B.D.L | B.D.L | B.D.L | B.D.L | 0.001 | 0.002 | IS 3025 (P-43):1992 |
| 17. | Mercury as Hg, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | 0.001 | No. Relax | IS 3025 (P-48):1994 |
| 18. | Cadmium as Cd, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | 0.003 | No. Relax | IS 3025 (P-41):1992 |
| 19. | Arsenic as As, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | 0.01 | No. Relax | IS 3025 (P-37):1988 |
| 20. | Cyanide as CN, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | 0.05 | No. Relax | IS 3025 (P-27):1986 |
| 21. | Lead as Pb, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | 0.01 | No. Relax | IS 3025 (P-47):1994 |
| 22. | Zinc as Zn, mg/l, | 2 | 3 | 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 | B.D.L | B.D.L | B.D.L | B.D.L | 0.05 | No. Relax | IS 3025 (P-52):2003 |
| 25. | Mineral Oil, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | 0.5 | No. Relax | IS 3025 (P-39):1989 |
| 26. | Alkalinity as CaCO ₃ , mg/l, | 448 | 424 | 400 | 184 | 200 | 600 | IS 3025 (P-23):1983 |
| 27. | Aluminium as Al, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | 0.03 | 0.2 | IS 3025 (P-55):2003 |
| 28. | Boron as B, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | 0.5 | 1.0 | IS 3025 (P-57):2005 |

NOTE: BDL - Below Detection Limit

[Signature]
Sr. Chemist
Aditi R&D Services



[Signature]
Technical Manager
Aditi R&D Services, Sindri

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Fax: 0326-2952377
Mobile: 09471358492, 09431512608

TEST REPORT OF STACK EMISSION

| Ref. No & Dt. | NAME AND ADDRESS OF THE CLIENT | | | |
|---------------------------------|--|---------------------|--------------------------|----------------|
| ARDS/23-24/S/1 Date: 20/02/2025 | M/S TATA STEEL, JAMADOBA, TATA STEEL LIMITED, JAMADOBA GROUP PLANT, DIST. - DHANBAD (JHARKHAND) | | | |
| Date of Sample Collection | | | | |
| 14/02/2025 | | | | |
| Date of Testing | Nature of Sampling Collection: ISO – KINETIC SAMPLING | | | |
| 17/02/2025 to 18/02/2025 | Weather condition | Status of the Plant | Ambient Temperature (°C) | R.Humidity (%) |
| | Clear | Running | 28 | 49 |

GENERAL INFORMATION

| | | |
|----|---|--|
| 1. | Nature of the Plant | M.S. |
| 2. | Capacity of DG Set | 2.0+2.0+2.0 MVA (6.0 MVA) |
| 3. | Location | Central Workshop Area, Jamadoba |
| 4. | No. of Stack | 1 |
| 5. | Stack Height from G.L. in Meter | 30 |
| 6. | Inner Shape & Size of Stack (in meter)φ | 2.5 |
| 7. | Stack attached to | DG Set |
| 8. | Type of Fuel used | HSD |

GASEOUS EMISSION ANALYSIS RESULTS

| Sl. No | Particulars | Method | Value | As per CPCB STANDARD mg/Nm ³ |
|--------|--|---------------------|------------------|---|
| 1. | Flue gas temperature (°C) | IS : 11255 (Part-3) | 103 | – |
| 2. | Velocity of flue gas (m/sec) | IS : 11255 (Part-3) | 9.2 | – |
| 3. | Flow Rate of Flue gas (Nm ³ /Hr) | IS : 11255 (Part-3) | 128903.11 | – |
| 4. | Concentration of Particulate Matter (mg/ Nm ³) at 15% O ₂ | IS : 11255 (Part-1) | 62.36 | 75 |
| 5. | Concentration of SOX as SO ₂ (mg/ Nm ³) at 15% O ₂ | IS : 11255 (Part-2) | 54.76 | – |
| 6. | Concentration of NOX as NO ₂ (mg/ Nm ³) at 15% O ₂ | IS : 11255 (Part-7) | 126.41 | 360 |
| 7. | Non Methane Hydrocarbon (NMHC) at 15% O ₂ | IS : 13270 | 46.79 | 100 |
| 8. | Carbon Monoxide (CO) (mg/Nm) ³ | IS : 13270 | 37.2 | 150 |

Sr. Chemist
Aditi R&D Services



Technical 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/23-24/N/S/1 Date: 20/02/2025 | M/S TATA STEEL, JAMADOBA, TATA STEEL LIMITED, JAMADOBA GROUP PLANT, DIST. - DHANBAD (JHARKHAND) | | | |
| Date of Monitoring | | | | |
| 12/02/2025 | Avg. Ambient Temperature (°C) | Average Humidity (%) | Weather Condition | Status of the plant |
| Work Order 4700092573/932 Dt. 20.07.2021 | 28 | 49 | Clear | Running |
| MONITORING RESULTS | | | | |

| Sl. No | Place of Monitoring | Day Time (6 AM to 10 PM) 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 | |
|---|------------------------|--|------------|---|------------------------|
| | | | | Day Time | Night Time |
| LOCATION | | MAX | MIN | Industrial Area | Industrial Area |
| JAMADOBA GROUP | | | | | |
| Central Workshop Area Jamadoba near DG Set | | 71.2 | 66.4 | 75 | 70 |

Remarks: Noise level is well within the standard specified limit for Industrial Area.


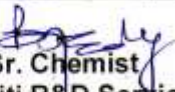



Sr. Technician
 Aditi R&D Services





Technical Manager
 Aditi R&D Services, Sindri



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|---|----------------------------------|---|---|--|-------------------------|--------------------------|--|-----------------------|
| Ref. No.: ARDS/24-25/STP/1 | | Date: 21/02/2025 | | | | | | |
| TEST REPORT OF SEWAGE | | | | | | | | |
| • 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. 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 | | | | | | |
| • Date of Sample Collection: | | 11/02/2025 To 12/02/2025 | | | | | | |
| • Date of Testing : | | 14/02/2025 To 18/02/2025 | | | | | | |
| • Test : | | pH, TDS, TSS, BOD, COD, OIL & GREASE, and Fecal Coliform, Total Nitrogen, Total Phosphorous. | | | | | | |
| TEST RESULT | | | | | | | | |
| 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, | 7.6 | 8.1 | 7.8 | 7.6 | 8.3 | 5.5-9.0. | IS-3025(P-11):1983 |
| 2. | Total Dissolved Solids, mg/l | 1306.5 | 916.5 | 1144 | 1105 | 760.5 | - | IS-3025(P-16):1984 |
| 3. | Total Suspended Solids, mg/l | 12 | 10 | 20 | 15 | 19 | 20 | IS-3025(P-17):1984 |
| 4. | Bio chemical Oxygen Demand, mg/l | 8.2 | 6.5 | 8.0 | 9.0 | 9.8 | 10 | IS-3025(P-44):1994 |
| 5. | Chemical Oxygen Demand, mg/l | 30 | 45 | 48 | 48.8 | 47.6 | 50 | IS-3025(P-58):2006 |
| 6. | Oil & Grease, mg/l | 1.3 | 1.5 | 1.9 | 2.3 | 2.5 | - | IS-3025(P-39):2021 |
| 7. | Fecal Coliform (FC) (MPN/100ml) | 125 | 116 | 122 | 128 | 136 | Desirable 100 & Permissible 230 | IS - 1622 |
| 8. | Total Nitrogen as N, mg/l | 8.2 | 7.7 | 8.9 | 7.8 | 8.0 | 10 | IS - 3025 (P-34):1988 |
| 9. | Total Phosphorus as P, mg/l | 0.68 | 0.65 | 0.69 | 0.74 | 0.71 | 10 | IS - 3025 (P-31):1988 |
|  Sr. Chemist Aditi R&D Services | |  | |  Technical Manager Aditi R&D Services, Sindri | | | | |
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|--|---|---|---------------|-----------------|---------------|---------------|-------------------------|-------------|--------------------|
| Ref. No.: - ARDS/23-24/GW/1 | | Date: 21/02/2025 | | | | | | | |
| TEST REPORT OF GROUND WATER | | | | | | | | | |
| <ul style="list-style-type: none"> • 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 : <ul style="list-style-type: none"> 1. Jorapokhar Kustand 2. Bhowra 13 No. 3. Mohalbani Basti 4. Lower Dungari 5. Jamadoba 3 No. • Date of Sample Collection : 11/02/2025 to 12/02/2025 • Date of Testing : 14/02/2025 to 20/02/2025 • 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 |
| | | Jorapokhar Kustand | Bhowra 13 No. | Mohalbani Basti | Lower Dungari | Jamadoba 3 No | Desirable | Permissible | |
| 1. | Colour, (Hazen Unit) | 2 | 2 | 2 | 2 | 1 | 5 | 15 | IS 3025 (P-4):2021 |
| 2. | Temperature °C | 27 | 28 | 27 | 28 | 27 | - | - | - |
| 3. | Electrical Conductivity, µmhos/cm | 2030 | 730 | 1030 | 660 | 840 | - | - | - |
| 4. | Total Dissolved Solids, mg/l | 1308 | 460 | 650 | 415 | 546 | 500 | 2000 | IS 3025(P-16):1984 |
| 5. | pH | 7.8 | 7.5 | 7.1 | 6.7 | 7.3 | 6.5-8.5 | No Relax | IS-3025(P-11):1983 |
| 6. | Total Hardness as CaCO ₃ , mg/l | 399 | 281.4 | 340.2 | 298.2 | 310 | 200 | 600 | IS 3025(P-21):2009 |
| 7. | Calcium as Ca, mg/l | 124 | 86.6 | 116.0 | 67.2 | 80.4 | 75 | 200 | IS 3025(P-40):1991 |
| 8. | Magnesium as Mg, mg/l | 21.4 | 16.2 | 12.0 | 31.2 | 26.2 | 30 | 100 | IS 3025(P-46):1994 |
| 9. | Chloride as Cl, mg/l | 248 | 64 | 106.7 | 85.3 | 72.6 | 250 | 1000 | IS 3025(P-32):1988 |
| 10. | Fluoride as F, mg/l | 0.2 | 0.2 | 0.5 | 0.2 | 0.1 | 1.0 | 1.5 | IS 3025(P-60):2008 |

Continued on Page -2

Statements :

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



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

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P.O. - Domgarh, Dist. - Dhanbad
Jharkhand - 828107
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Phone: 0326-2952377 (O),
Fax: 0326-2952377
Mobile: 09471358492, 09431512608

| Sl. No | PARAMETERS OF TEST | VALUE | | | | | IS as per IS 10500:1991 | | Test Method |
|--------|---|--------------------|---------------|-----------------|---------------|----------------|-------------------------|----------------|--------------------|
| | | Jorapokhar Kustand | Bhowra 13 No. | Mohalbani Basti | Lower Dungari | Jamado ba 3 No | Desir - able | Permis - sible | |
| 11 | Sulphate as SO ₄ , mg/l | 45.5 | 40.6 | 50.6 | 45.2 | 56.4 | 200 | 400 | IS 3025(P-24):1986 |
| 12. | Nitrate as NO ₃ , mg/l | 4.9 | 4.8 | 5.6 | 4.8 | 4.9 | 45 | No. Relax | IS 3025(P-34):1988 |
| 13. | Alkalinity as CaCO ₃ , mg/l, | 676 | 252 | 236 | 168 | 268 | 200 | 600 | IS 3025(P-23):1983 |
| 14. | Lead as Pb, mg/l | B.D.L | B.D.L | B.D.L | B.D.L. | B.D.L. | 0.01 | No. Relax | IS 3025(P-47):1994 |
| 15. | Zinc as Zn, mg/l, | 3 | 3 | 3 | 2 | 2 | 5 | 15 | IS 3025(P-42):1992 |
| 16. | Iron a Fe, mg/l | 0.17 | 0.15 | 0.15 | 0.17 | 0.18 | 1.0 | No. Relax | IS 3025(P-53):2003 |
| 17. | Copper as Cu, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | B.D.L. | 0.05 | 1.5 | IS3025 (P-42):1992 |
| 18. | Mercury as Hg, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | B.D.L. | 0.001 | No. Relax | IS 3025(P-48):1994 |
| 19. | Cadmium as Cd, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | B.D.L. | 0.003 | No. Relax | IS 3025(P-41):1992 |
| 20. | Nickel as Ni, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | B.D.L. | 0.02 | No. Relax | IS 3025(P-37):1992 |
| 21. | Arsenic as As, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | B.D.L. | 0.01 | No. Relax | IS 3025(P-37):1988 |
| 22. | Cyanide as CN, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | B.D.L. | 0.05 | No. Relax | IS 3025(P-27):1986 |
| 23. | Total Chromium as Cr, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | B.D.L. | 0.05 | No. Relax | IS 3025(P-52):2003 |

NOTE: BDL - Below Detection Limit


Sr. Chemist
Aditi R&D Services




Technical Manager
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 measurment.
3. This particular test report cannot be reproduced except in full, without prior written permission of Quality Manager of the laboratory.

TATA STEEL LIMITED
JHARIA DIVISION

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

Ref: JMB/ENV/LAB/02/ 687 / 24

Date: 12/11/2024

Re: AIR QUALITY REPORT

We wish to inform you that Air Quality Monitoring was carried out in **JAMADOBA GROUP** in the month of **OCTOBER'2024**. 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 ³ | RSPM 24 Hourly Limit-300 µg/m ³ | SO ₂ 24 Hourly Limit-120 µg/m ³ | NO _x 24 Hourly Limit-120 µg/m ³ |
|------|-----------------------------|-----------------------------|---------------------|----------------------|--|---|--|--|
| 1 | 6&7 Pits Kalimandir area | 23°43'15" N/ 86°24'12" E | 04.10.24 | Cloudy | 190.7 | 66.3 | 17.8 | 20.5 |

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

| S.No | Location | Latitude/ Longitude | Date of Sampling | Weather Condition | PM ₁₀ 24 Hourly Limit-100 µg/m ³ | PM _{2.5} 24 Hourly Limit- 60 µg/m ³ | SO ₂ 24 Hourly Limit-80 µg/m ³ | NO _x 24 Hourly Limit-80 µg/m ³ |
|------|---------------------------------|-------------------------------|---------------------|----------------------|---|--|---|---|
| 1 | Jamadoba Group Office | 23°42'15.3" N/ 86°24'11" E | 03.10.24 | Cloudy | 70.6 | 35.8 | 16.5 | 19.2 |
| 2 | Digwadih 12 No. Colony | 23°41'42" N/ 86°24'45.3" E | 07.10.24 | Clear | 86.3 | 42.8 | 17.2 | 20.8 |
| 3 | New Village Colony, Jamadoba | 23°41'51" N/ 86°23'19" E | 08.10.24 | Clear | 80.1 | 40.7 | 18.6 | 21.1 |
| 4 | Tata Central Hospital | 23°42'36" N/ 86°24'10.4"E | 09.10.24 | Clear | 76.2 | 38.5 | 15.4 | 18.3 |

Note: PM₁₀ - Less than 10-micron Particulate Matter
PM_{2.5} - Less than 2.5-micron Particulate Matter
µg - Microgram

This is for your information and necessary action please.


Lab. Assistant (Environment)


Area 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 Central Hospital, Jamadoba

Ref: JMB /ENV /LAB /02 / 770 / 24

Date: 09/12/2024

Re: AIR QUALITY REPORT

We wish to inform you that Air Quality Monitoring was carried out in **JAMADOBA GROUP** in the month of **NOVEMBER'2024**. 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 ³ | RSPM 24 Hourly Limit-300 µg/m ³ | SO ₂ 24 Hourly Limit-120 µg/m ³ | NO _x 24 Hourly Limit-120 µg/m ³ |
|------|-----------------------------|-----------------------------|---------------------|----------------------|--|---|--|--|
| 1 | 6&7 Pits Kalimandir area | 23°43'15" N/ 86°24'12" E | 12.11.24 | Clear | 216.9 | 84.6 | 15.2 | 17.0 |

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

| S.No | Location | Latitude/ Longitude | Date of Sampling | Weather Condition | PM ₁₀ 24 Hourly Limit-100 µg/m ³ | PM _{2.5} 24 Hourly Limit- 60 µg/m ³ | SO ₂ 24 Hourly Limit-80 µg/m ³ | NO _x 24 Hourly Limit-80 µg/m ³ |
|------|---------------------------------|-------------------------------|---------------------|----------------------|---|--|---|---|
| 1 | Jamadoba Group Office | 23°42'15.3" N/ 86°24'11" E | 12.11.24 | Clear | 90.2 | 54.6 | 19.7 | 22.3 |
| 2 | Digwadih 12 No. Colony | 23°41'42" N/ 86°24'45.3" E | 12.11.24 | Clear | 82.5 | 41.3 | 16.1 | 18.4 |
| 3 | New Village Colony, Jamadoba | 23°41'51" N/ 86°23'19" E | 13.11.24 | Clear | 78.4 | 37.5 | 17.8 | 20.4 |
| 4 | Tata Central Hospital | 23°42'36" N/ 86°24'10.4"E | 13.11.24 | Clear | 80.6 | 39.2 | 18.3 | 21.7 |

Note: PM₁₀ - Less than 10-micron Particulate Matter
PM_{2.5} - 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 Central Hospital, Jamadoba

Ref: JMB /ENV /LAB /02 / 910 /24

Date: 31/12/2024

Re: AIR QUALITY REPORT

We wish to inform you that Air Quality Monitoring was carried out in **JAMADOBA GROUP** in the month of **DECEMBER'2024**. 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 ³ | RSPM 24 Hourly Limit-300 µg/m ³ | SO ₂ 24 Hourly Limit-120 µg/m ³ | NO _x 24 Hourly Limit-120 µg/m ³ |
|------|-----------------------------|-----------------------------|---------------------|----------------------|--|---|--|--|
| 1 | 6&7 Pits Kalimandir area | 23°43'15" N/ 86°24'12" E | 06.12.24 | Clear | 248.9 | 82.5 | 16.8 | 18.3 |

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

| S.No | Location | Latitude/ Longitude | Date of Sampling | Weather Condition | PM ₁₀ 24 Hourly Limit-100 µg/m ³ | PM _{2.5} 24 Hourly Limit- 60 µg/m ³ | SO ₂ 24 Hourly Limit-80 µg/m ³ | NO _x 24 Hourly Limit-80 µg/m ³ |
|------|---------------------------------|-------------------------------|---------------------|----------------------|---|--|---|---|
| 1 | Jamadoba Group Office | 23°42'15.3" N/ 86°24'11" E | 06.12.24 | Clear | 88.7 | 47.5 | 17.2 | 19.1 |
| 2 | Digwadih 12 No. Colony | 23°41'42" N/ 86°24'45.3" E | 06.12.24 | Clear | 80.6 | 39.7 | 18.2 | 20.3 |
| 3 | New Village Colony, Jamadoba | 23°41'51" N/ 86°23'19" E | 10.12.24 | Clear | 76.2 | 32.1 | 15.9 | 17.2 |
| 4 | Tata Central Hospital | 23°42'36" N/ 86°24'10.4"E | 10.12.24 | Clear | 92.5 | 51.8 | 19.7 | 22.4 |

Note: PM₁₀ - Less than 10-micron Particulate Matter
PM_{2.5} - 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 Central Hospital, Jamadoba

Ref: JMB /ENV /LAB /02 / 44 / 25
Date: 31 / 01 / 2025

Re: AIR QUALITY REPORT

We wish to inform you that Air Quality Monitoring was carried out in **JAMADOBA GROUP** in the month of **JANUARY'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 ³ | RSPM 24 Hourly Limit-300 µg/m ³ | SO ₂ 24 Hourly Limit-120 µg/m ³ | NO _x 24 Hourly Limit-120 µg/m ³ |
|------|-----------------------------|-----------------------------|---------------------|----------------------|--|---|--|--|
| 1 | 6&7 Pits Kalimandir area | 23°43'15" N/ 86°24'12" E | 07.01.25 | Clear | 239.5 | 80.3 | 17.2 | 20.4 |

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

| S.No | Location | Latitude/ Longitude | Date of Sampling | Weather Condition | PM ₁₀ 24 Hourly Limit-100 µg/m ³ | PM _{2.5} 24 Hourly Limit- 60 µg/m ³ | SO ₂ 24 Hourly Limit-80 µg/m ³ | NO _x 24 Hourly Limit-80 µg/m ³ |
|------|---------------------------------|-------------------------------|---------------------|----------------------|---|--|---|---|
| 1 | Jamadoba Group Office | 23°42'15.3" N/ 86°24'11" E | 07.01.25 | Clear | 86.5 | 42.1 | 16.8 | 18.3 |
| 2 | Digwadih 12 No. Colony | 23°41'42" N/ 86°24'45.3" E | 07.01.25 | Clear | 82.1 | 40.3 | 15.9 | 17.6 |
| 3 | New Village Colony, Jamadoba | 23°41'51" N/ 86°23'19" E | 08.01.25 | Clear | 70.8 | 30.9 | 17.3 | 19.5 |
| 4 | Tata Central Hospital | 23°42'36" N/ 86°24'10.4"E | 08.01.25 | Clear | 90.4 | 46.7 | 18.2 | 21.3 |

Note: PM₁₀ - Less than 10-micron Particulate Matter
PM_{2.5} - 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 Central Hospital, Jamadoba

Ref: JMB /ENV /LAB /02 / 89 / 25
Date: 28/02/2025

Re: AIR QUALITY REPORT

We wish to inform you that Air Quality Monitoring was carried out in **JAMADOBA GROUP** in the month of **FEBRUARY'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 ³ | RSPM 24 Hourly Limit-300 µg/m ³ | SO ₂ 24 Hourly Limit-120 µg/m ³ | NO _x 24 Hourly Limit-120 µg/m ³ |
|------|-----------------------------|-----------------------------|---------------------|----------------------|--|---|--|--|
| 1 | 6&7 Pits Kalimandir area | 23°43'15" N/ 86°24'12" E | 11.02.25 | Clear | 231.7 | 84.6 | 18.3 | 21.7 |

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

| S.No | Location | Latitude/ Longitude | Date of Sampling | Weather Condition | PM ₁₀ 24 Hourly Limit-100 µg/m ³ | PM _{2.5} 24 Hourly Limit- 60 µg/m ³ | SO ₂ 24 Hourly Limit-80 µg/m ³ | NO _x 24 Hourly Limit-80 µg/m ³ |
|------|---------------------------------|-------------------------------|---------------------|----------------------|---|--|---|---|
| 1 | Jamadoba Group Office | 23°42'15.3" N/ 86°24'11" E | 11.02.25 | Clear | 78.9 | 37.2 | 15.0 | 17.2 |
| 2 | Digwadih 12 No. Colony | 23°41'42" N/ 86°24'45.3" E | 11.02.25 | Clear | 80.6 | 39.5 | 17.2 | 19.1 |
| 3 | New Village Colony, Jamadoba | 23°41'51" N/ 86°23'19" E | 12.02.25 | Clear | 76.2 | 33.1 | 16.4 | 18.5 |
| 4 | Tata Central Hospital | 23°42'36" N/ 86°24'10.4"E | 12.02.25 | Clear | 87.5 | 42.2 | 19.2 | 22.4 |

Note: PM₁₀ - Less than 10-micron Particulate Matter
PM_{2.5} - 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 Central Hospital, Jamadoba

Ref: JMB /ENV /LAB /02 / 153 / 25

Date: 07/04 / 2025

Re: AIR QUALITY REPORT

We wish to inform you that Air Quality Monitoring was carried out in **JAMADOBA GROUP** in the month of **MARCH'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 ³ | RSPM 24 Hourly Limit-300 µg/m ³ | SO ₂ 24 Hourly Limit-120 µg/m ³ | NO _x 24 Hourly Limit-120 µg/m ³ |
|------|-----------------------------|-----------------------------|---------------------|----------------------|--|---|--|--|
| 1 | 6&7 Pits Kalimandir area | 23°43'15" N/ 86°24'12" E | 05.03.25 | Clear | 247.6 | 86.2 | 19.1 | 22.6 |

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

| S.No | Location | Latitude/ Longitude | Date of Sampling | Weather Condition | PM ₁₀ 24 Hourly Limit-100 µg/m ³ | PM _{2.5} 24 Hourly Limit- 60 µg/m ³ | SO ₂ 24 Hourly Limit-80 µg/m ³ | NO _x 24 Hourly Limit-80 µg/m ³ |
|------|---------------------------------|-------------------------------|---------------------|----------------------|---|--|---|---|
| 1 | Jamadoba Group Office | 23°42'15.3" N/ 86°24'11" E | 05.03.25 | Clear | 92.4 | 51.6 | 18.2 | 21.7 |
| 2 | Digwadih 12 No. Colony | 23°41'42" N/ 86°24'45.3" E | 05.03.25 | Clear | 84.5 | 42.3 | 16.8 | 18.3 |
| 3 | New Village Colony, Jamadoba | 23°41'51" N/ 86°23'19" E | 06.03.25 | Clear | 78.6 | 36.5 | 15.1 | 17.4 |
| 4 | Tata Central Hospital | 23°42'36" N/ 86°24'10.4"E | 06.03.25 | Clear | 83.1 | 40.9 | 17.8 | 20.1 |

Note: PM₁₀ - Less than 10-micron Particulate Matter
PM_{2.5} - 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/ 64/ 24

Dated: 01/11/2024

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'2024**. 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 | | |
| | Residential Area (Buffer Zone) | | Min. | Max. | Avg. | Min. | Max. | Avg. |
| 1 | Digwadih 12 No. Colony | 24.10.24 | 42.2 | 44.5 | 43.4 | 34.3 | 36.7 | 35.5 |
| 2 | New Village Colony, Jamadoba | 24.10.24 | 43.5 | 45.7 | 44.6 | 35.7 | 37.8 | 36.8 |
| 3 | 6&7 Pits Kalimandir Colony | 24.10.24 | 42.4 | 44.7 | 43.6 | 34.5 | 36.4 | 35.5 |
| 4 | Digwadih 10 No. Colony | 24.10.24 | 43.1 | 45.6 | 44.4 | 35.3 | 37.5 | 36.4 |

| S.No | Monitoring Station | Date | Day (06.00 – 22.00 Hrs.) | | | Night (22.00-06.00 Hrs) | | |
|------|-------------------------------------|----------|--------------------------|------|------|-------------------------|------|------|
| | | | CPCB Standard- 75 | | | CPCB Standard- 70 | | |
| | Industrial Area (Core Zone) | | Min. | Max. | Avg. | Min. | Max. | Avg. |
| 1 | 2 Pit Main Gate Security Post | 24.10.24 | 53.4 | 56.7 | 55.1 | 45.2 | 48.4 | 46.8 |
| 2 | 2 Pit Top Kalimandir, Jamadoba | 24.10.24 | 52.1 | 55.4 | 53.8 | 44.3 | 47.6 | 46.0 |
| 3 | Weigh Bridge, Digwadih | 24.10.24 | 49.7 | 52.6 | 51.2 | 41.5 | 44.7 | 43.1 |
| 4 | Canteen Complex, Digwadih | 24.10.24 | 46.4 | 47.7 | 47.1 | 38.1 | 40.3 | 39.2 |
| 5 | Head Office Complex, Digwadih | 24.10.24 | 46.2 | 48.5 | 47.4 | 38.4 | 40.6 | 39.5 |
| 6 | Check Post Security Gate, 6&7 Pits | 24.10.24 | 50.5 | 53.8 | 52.2 | 42.7 | 45.9 | 44.3 |
| 7 | Canteen Complex, 6&7 Pits | 24.10.24 | 46.3 | 47.6 | 47.0 | 38.5 | 40.7 | 39.6 |
| 8 | Fan house- Nitrogen Plant, 6&7 Pits | 24.10.24 | 72.3 | 73.5 | 72.9 | 64.2 | 65.6 | 64.9 |
| 9 | Joota Gate, JCPP | 24.10.24 | 58.8 | 61.9 | 60.4 | 50.6 | 53.4 | 52.0 |
| 10 | Main Gate Stores, JCPP | 24.10.24 | 53.6 | 56.4 | 55.0 | 45.4 | 48.6 | 47.0 |
| 11 | Railway Siding Yard, JCPP | 24.10.24 | 50.4 | 53.7 | 52.1 | 42.7 | 45.4 | 44.1 |

Analysis: All the values are within permissible limit.

This is for your information please.


Lab. Assistant (Environment)


Area 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/ 731 /24
Dated: 04 /12/ 2024

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'2024**. 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 | | |
| | Residential Area (Buffer Zone) | | Min. | Max. | Avg. | Min. | Max. | Avg. |
| 1 | Digwadih 12 No. Colony | 22.11.24 | 42.4 | 44.7 | 43.6 | 34.7 | 36.5 | 35.6 |
| 2 | New Village Colony, Jamadoba | 22.11.24 | 43.1 | 45.3 | 44.2 | 35.3 | 37.6 | 36.5 |
| 3 | 6&7 Pits Kalimandir Colony | 22.11.24 | 42.3 | 44.5 | 43.4 | 34.5 | 36.3 | 35.4 |
| 4 | Digwadih 10 No. Colony | 22.11.24 | 43.5 | 45.7 | 44.6 | 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 | | |
| | Industrial Area (Core Zone) | | Min. | Max. | Avg. | Min. | Max. | Avg. |
| 1 | 2 Pit Main Gate Security Post | 22.11.24 | 51.5 | 54.8 | 53.2 | 43.3 | 46.5 | 44.9 |
| 2 | 2 Pit Top Kalimandir, Jamadoba | 22.11.24 | 50.3 | 53.5 | 51.9 | 42.4 | 45.7 | 44.1 |
| 3 | Weigh Bridge, Digwadih | 22.11.24 | 48.4 | 50.7 | 49.6 | 40.2 | 42.5 | 41.4 |
| 4 | Canteen Complex, Digwadih | 22.11.24 | 44.2 | 46.4 | 45.3 | 36.5 | 38.6 | 37.6 |
| 5 | Head Office Complex, Digwadih | 22.11.24 | 44.1 | 46.3 | 45.2 | 36.3 | 38.5 | 37.4 |
| 6 | Check Post Security Gate, 6&7 Pits | 22.11.24 | 50.4 | 52.6 | 51.5 | 42.6 | 44.8 | 43.7 |
| 7 | Canteen Complex, 6&7 Pits | 22.11.24 | 44.4 | 46.7 | 45.6 | 36.2 | 38.6 | 37.4 |
| 8 | Fan house- Nitrogen Plant, 6&7 Pits | 22.11.24 | 72.2 | 73.4 | 72.8 | 64.2 | 65.7 | 65.0 |
| 9 | Joota Gate, JCPP | 22.11.24 | 56.5 | 59.7 | 58.1 | 48.7 | 51.9 | 50.3 |
| 10 | Main Gate Stores, JCPP | 22.11.24 | 52.4 | 55.6 | 54.0 | 44.5 | 47.8 | 46.2 |
| 11 | Railway Siding Yard, JCPP | 22.11.24 | 50.1 | 53.3 | 51.7 | 42.3 | 45.4 | 43.9 |

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/ 817/24

Dated: 31/12/2024

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'2024**. 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 | | |
| | Residential Area (Buffer Zone) | | Min. | Max. | Avg. | Min. | Max. | Avg. |
| 1 | Digwadih 12 No. Colony | 20.12.24 | 42.2 | 44.5 | 43.4 | 34.4 | 36.7 | 35.6 |
| 2 | New Village Colony, Jamadoba | 20.12.24 | 44.3 | 45.7 | 45.0 | 36.5 | 38.8 | 37.7 |
| 3 | 6&7 Pits Kalimandir Colony | 20.12.24 | 42.7 | 44.6 | 43.7 | 34.3 | 36.5 | 35.4 |
| 4 | Digwadih 10 No. Colony | 20.12.24 | 43.1 | 45.3 | 44.2 | 35.6 | 37.9 | 36.8 |


| S.No | Monitoring Station | Date | Day (06.00 – 22.00 Hrs.) | | | Night (22.00-06.00 Hrs) | | |
|------|-------------------------------------|----------|--------------------------|------|------|-------------------------|------|------|
| | | | CPCB Standard- 75 | | | CPCB Standard- 70 | | |
| | Industrial Area (Core Zone) | | Min. | Max. | Avg. | Min. | Max. | Avg. |
| 1 | 2 Pit Main Gate Security Post | 20.12.24 | 52.2 | 55.6 | 53.9 | 44.5 | 47.8 | 46.2 |
| 2 | 2 Pit Top Kalimandir, Jamadoba | 20.12.24 | 50.5 | 53.7 | 52.1 | 42.1 | 45.5 | 43.8 |
| 3 | Weigh Bridge, Digwadih | 20.12.24 | 48.2 | 50.4 | 49.3 | 40.3 | 42.6 | 41.5 |
| 4 | Canteen Complex, Digwadih | 20.12.24 | 44.7 | 45.6 | 45.2 | 36.2 | 38.4 | 37.3 |
| 5 | Head Office Complex, Digwadih | 20.12.24 | 44.4 | 46.5 | 45.5 | 36.5 | 38.7 | 37.6 |
| 6 | Check Post Security Gate, 6&7 Pits | 20.12.24 | 51.3 | 53.2 | 52.3 | 43.1 | 45.3 | 44.2 |
| 7 | Canteen Complex, 6&7 Pits | 20.12.24 | 44.6 | 45.4 | 45.0 | 36.4 | 38.7 | 37.6 |
| 8 | Fan house- Nitrogen Plant, 6&7 Pits | 20.12.24 | 72.3 | 73.5 | 72.9 | 64.4 | 65.6 | 65.0 |
| 9 | Joota Gate, JCPP | 20.12.24 | 57.4 | 60.7 | 59.1 | 49.5 | 52.8 | 51.2 |
| 10 | Main Gate Stores, JCPP | 20.12.24 | 51.6 | 54.9 | 53.3 | 43.2 | 46.5 | 44.9 |
| 11 | Railway Siding Yard, JCPP | 20.12.24 | 50.3 | 53.6 | 52.0 | 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/ 51 /25

Dated: 31 /01 / 2025

Re: Ambient Noise Level Report

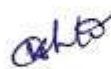
We wish to inform you that Ambient Noise Level Monitoring was carried out in **JAMADOBA GROUP** in the month of **JANUARY'2025**. The results are as given below:

| S.No | Monitoring Station | Date | Day (06.00 – 22.00 Hrs.) | | | Night (22.00-06.00 Hrs) | | |
|------|---------------------------------------|----------|--------------------------|------|------|-------------------------|------|------|
| | | | CPCB Standard- 55 | | | CPCB Standard- 45 | | |
| | Residential Area (Buffer Zone) | | Min. | Max. | Avg. | Min. | Max. | Avg. |
| 1 | Digwadih 12 No. Colony | 13.01.25 | 41.7 | 43.4 | 42.6 | 33.5 | 35.8 | 34.7 |
| 2 | New Village Colony, Jamadoba | 13.01.25 | 42.5 | 44.6 | 43.6 | 34.3 | 36.5 | 35.4 |
| 3 | 6&7 Pits Kalimandir Colony | 13.01.25 | 42.3 | 44.5 | 43.4 | 34.6 | 36.8 | 35.7 |
| 4 | Digwadih 10 No. Colony | 13.01.25 | 43.6 | 45.8 | 44.7 | 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 | | |
| | Industrial Area (Core Zone) | | Min. | Max. | Avg. | Min. | Max. | Avg. |
| 1 | 2 Pit Main Gate Security Post | 13.01.25 | 52.6 | 55.8 | 54.2 | 44.5 | 47.7 | 46.1 |
| 2 | 2 Pit Top Kalimandir, Jamadoba | 13.01.25 | 51.4 | 54.6 | 53.0 | 43.2 | 46.4 | 44.8 |
| 3 | Weigh Bridge, Digwadih | 13.01.25 | 49.7 | 51.5 | 50.6 | 41.6 | 43.8 | 42.7 |
| 4 | Canteen Complex, Digwadih | 13.01.25 | 45.2 | 47.5 | 46.4 | 37.3 | 39.6 | 38.5 |
| 5 | Head Office Complex, Digwadih | 13.01.25 | 44.8 | 46.6 | 45.7 | 36.5 | 38.7 | 37.6 |
| 6 | Check Post Security Gate, 6&7 Pits | 13.01.25 | 52.5 | 54.8 | 53.7 | 44.7 | 46.8 | 45.8 |
| 7 | Canteen Complex, 6&7 Pits | 13.01.25 | 44.1 | 46.3 | 45.2 | 36.3 | 38.5 | 37.4 |
| 8 | Fan house- Nitrogen Plant, 6&7 Pits | 13.01.25 | 72.4 | 73.6 | 73.0 | 64.5 | 65.7 | 65.1 |
| 9 | Joota Gate, JCPP | 13.01.25 | 56.7 | 59.9 | 58.3 | 48.4 | 51.6 | 50.0 |
| 10 | Main Gate Stores, JCPP | 13.01.25 | 52.5 | 55.7 | 54.1 | 44.2 | 47.5 | 45.9 |
| 11 | Railway Siding Yard, JCPP | 13.01.25 | 51.4 | 54.5 | 53.0 | 43.5 | 46.7 | 45.1 |

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/ 102/25

Dated: 28/02/2025

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 **FEBRUARY'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 | | |
| | Residential Area (Buffer Zone) | | Min. | Max. | Avg. | Min. | Max. | Avg. |
| 1 | Digwadih 12 No. Colony | 26.02.25 | 44.8 | 46.5 | 45.7 | 36.4 | 38.6 | 37.5 |
| 2 | New Village Colony, Jamadoba | 26.02.25 | 42.4 | 44.6 | 43.5 | 34.6 | 36.8 | 35.7 |
| 3 | 6&7 Pits Kalimandir Colony | 26.02.25 | 48.4 | 50.2 | 49.3 | 40.3 | 42.5 | 41.4 |
| 4 | Digwadih 10 No. Colony | 26.02.25 | 45.6 | 47.7 | 46.7 | 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 | | |
| | Industrial Area (Core Zone) | | Min. | Max. | Avg. | Min. | Max. | Avg. |
| 1 | 2 Pit Main Gate Security Post | 26.02.25 | 56.5 | 59.7 | 58.1 | 48.3 | 51.5 | 49.9 |
| 2 | 2 Pit Top Kalimandir, Jamadoba | 26.02.25 | 52.2 | 55.1 | 53.7 | 44.5 | 47.7 | 46.1 |
| 3 | Weigh Bridge, Digwadih | 26.02.25 | 50.4 | 52.6 | 51.5 | 42.2 | 44.5 | 43.4 |
| 4 | Canteen Complex, Digwadih | 26.02.25 | 48.6 | 50.4 | 49.5 | 40.4 | 42.7 | 41.6 |
| 5 | Head Office Complex, Digwadih | 26.02.25 | 43.2 | 45.5 | 44.4 | 35.5 | 37.6 | 36.6 |
| 6 | Check Post Security Gate, 6&7 Pits | 26.02.25 | 50.1 | 53.3 | 51.7 | 42.3 | 45.5 | 43.9 |
| 7 | Canteen Complex, 6&7 Pits | 26.02.25 | 47.4 | 49.6 | 48.5 | 39.6 | 41.8 | 40.7 |
| 8 | Fan house- Nitrogen Plant, 6&7 Pits | 26.02.25 | 61.7 | 63.8 | 62.8 | 53.4 | 52.6 | 53.0 |
| 9 | Joota Gate, JCPP | 26.02.25 | 59.3 | 62.5 | 60.9 | 51.2 | 54.4 | 52.8 |
| 10 | Main Gate Stores, JCPP | 26.02.25 | 54.6 | 57.7 | 56.2 | 46.4 | 49.5 | 48.0 |
| 11 | Railway Siding Yard, JCPP | 26.02.25 | 52.1 | 55.3 | 53.7 | 44.5 | 47.7 | 46.1 |

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/ 149 /25

Dated: 07/04/2025

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 **MARCH'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 | | |
| | Residential Area (Buffer Zone) | | Min. | Max. | Avg. | Min. | Max. | Avg. |
| 1 | Digwadih 12 No. Colony | 24.03.25 | 42.3 | 44.6 | 43.5 | 34.5 | 36.7 | 35.6 |
| 2 | New Village Colony, Jamadoba | 24.03.25 | 43.5 | 45.8 | 44.7 | 35.3 | 37.5 | 36.4 |
| 3 | 6&7 Pits Kalimandir Colony | 24.03.25 | 46.7 | 48.5 | 47.6 | 38.4 | 40.7 | 39.6 |
| 4 | Digwadih 10 No. Colony | 24.03.25 | 44.5 | 46.7 | 45.6 | 36.7 | 38.9 | 37.8 |

| S.No | Monitoring Station | Date | Day (06.00 – 22.00 Hrs.) | | | Night (22.00-06.00 Hrs) | | |
|------|-------------------------------------|----------|--------------------------|------|------|-------------------------|------|------|
| | | | CPCB Standard- 75 | | | CPCB Standard- 70 | | |
| | Industrial Area (Core Zone) | | Min. | Max. | Avg. | Min. | Max. | Avg. |
| 1 | 2 Pit Main Gate Security Post | 24.03.25 | 57.2 | 60.5 | 58.9 | 49.4 | 52.7 | 51.1 |
| 2 | 2 Pit Top Kalimandir, Jamadoba | 24.03.25 | 51.4 | 54.7 | 53.1 | 43.1 | 46.3 | 44.7 |
| 3 | Weigh Bridge, Digwadih | 24.03.25 | 49.8 | 51.6 | 50.7 | 41.5 | 43.7 | 42.6 |
| 4 | Canteen Complex, Digwadih | 24.03.25 | 48.3 | 50.2 | 49.3 | 40.4 | 42.5 | 41.5 |
| 5 | Head Office Complex, Digwadih | 24.03.25 | 42.6 | 44.7 | 43.7 | 34.3 | 36.6 | 35.5 |
| 6 | Check Post Security Gate, 6&7 Pits | 24.03.25 | 50.3 | 52.5 | 51.4 | 42.5 | 44.8 | 43.7 |
| 7 | Canteen Complex, 6&7 Pits | 24.03.25 | 48.2 | 50.1 | 49.2 | 40.1 | 42.4 | 41.3 |
| 8 | Fan house- Nitrogen Plant, 6&7 Pits | 24.03.25 | 58.4 | 60.3 | 59.4 | 50.6 | 52.7 | 51.7 |
| 9 | Joota Gate, JCPP | 24.03.25 | 60.2 | 63.5 | 61.9 | 52.4 | 55.6 | 54.0 |
| 10 | Main Gate Stores, JCPP | 24.03.25 | 52.7 | 55.6 | 54.2 | 44.5 | 47.8 | 46.2 |
| 11 | Railway Siding Yard, JCPP | 24.03.25 | 52.4 | 54.7 | 53.6 | 44.2 | 46.5 | 45.4 |

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'24 to March'25**)

Annexure- II

TATA STEEL LIMITED
JHARIA DIVISION

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

Ref. No. - JMB / ENV / LAB / 03 / **681** / 2024

Dated - **12/11** / 2024

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'2024**.
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 | 24.10.24 | 05:05 PM | 30 | 7.7 | 20 | 773 | 2.4 | 68 | 0.5 |
| 2 | 3 Pit Jamadoba Colliery | 24.10.24 | 04:50 PM | 31 | 7.2 | 16 | 793 | 2.5 | 56 | 0.3 |
| 3 | 2 Incline Jamadoba Colliery | 24.10.24 | 04:15 PM | No Discharge | | | | | | |
| 4 | 6 & 7 Pits Colliery | 24.10.24 | 02:20 PM | 30 | 7.3 | 14 | 724 | 2.8 | 92 | 0 |
| 5 | Digwadih Colliery | 24.10.24 | 02:40 PM | 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)


Area Manager (Environment)

Ambient Air Quality, Ambient Noise Quality, Effluent Water and Groundwater Quality Report
(Period- **October'24 to March'25**)

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 / **680** / 2024

Dated - **12/11** / 2024

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'2024**.
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 | STP, Jmb. Canteen- Inlet | 24.10.24 | 12:30 PM | 27 | 7.8 | 145 | 1024 | 31.8 | 290 | 2.5 |
| 2 | STP, Jmb. Canteen- Outlet | 24.10.24 | 12:35 PM | 26 | 7.5 | 24 | 726 | 7.0 | 84 | 0.7 |
| 3 | STP, JCPP Canteen- Inlet | 24.10.24 | 01:40 PM | 27 | 7.9 | 137 | 924 | 32.9 | 306 | 3.7 |
| 4 | STP, JCPP Canteen- Outlet | 24.10.24 | 01:45 PM | 26 | 7.6 | 20 | 654 | 5.2 | 70 | 0.4 |
| 5 | STP, Railway Colony- Inlet | 24.10.24 | 03:45 PM | 28 | 8.4 | 178 | 1067 | 34.8 | 319 | 3.1 |
| 6 | STP, Railway Colony-Outlet | 24.10.24 | 03:50 PM | 27 | 8.1 | 36 | 953 | 6.9 | 52 | 1.4 |
| 7 | STP, Digwadih 12 No. Officer's colony-Inlet | 24.10.24 | 03:15 PM | 27 | 8.0 | 117 | 921 | 33.7 | 284 | 2.9 |
| 8 | STP, Digwadih 12 No. Officer's colony- Outlet | 24.10.24 | 03:20 PM | 26 | 7.7 | 39 | 637 | 4.6 | 102 | 1.3 |
| 9 | STP, Digwadih 12 No. Supervisor flat -Inlet | 24.10.24 | 02:55 PM | 27 | 7.8 | 122 | 974 | 29.8 | 332 | 3.2 |
| 10 | STP, Digwadih 12 No. Supervisor flat -Outlet | 24.10.24 | 03:00 PM | 26 | 7.6 | 18 | 735 | 6.2 | 64 | 0.9 |

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)



Area Manager (Environment)

Ambient Air Quality, Ambient Noise Quality, Effluent Water and Groundwater Quality Report
(Period- **October'24 to March'25**)

Annexure- II

TATA STEEL LIMITED
JHARIA DIVISION

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

Ref. No. - JMB / ENV / LAB / 03 / 682 / 2024

Dated - 12/11 / 2024

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'2024**.
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, TCH- Inlet | 24.10.24 | 02:00 PM | 27 | 8.3 | 98 | 742 | 28.2 | 260 | 1.5 |
| 2 | ETP, TCH- Outlet | 24.10.24 | 02:05 PM | 26 | 8.1 | 19 | 675 | 6.4 | 52 | 0.3 |
| 3 | ETP, Garage- Inlet | 24.10.24 | 12:45 PM | 27 | 8.2 | 161 | 972 | 31.2 | 326 | 3.8 |
| 4 | ETP, Garage- Outlet | 24.10.24 | 12:50 PM | 26 | 7.8 | 34 | 816 | 7.2 | 94 | 1.6 |
| 5 | Final Settling Pond JCPP | 24.10.24 | 04:35 PM | Dry Pond | | | | | | |

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)


Area Manager (Environment)

Ambient Air Quality, Ambient Noise Quality, Effluent Water and Groundwater Quality Report
(Period- **October'24 to March'25**)

Annexure- II

TATA STEEL LIMITED
JHARIA DIVISION

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

Ref. No. - JMB / ENV / LAB / 03 / 766 / 2024

Dated - 09/12 / 2024

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'2024**.
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, TCH- Inlet | 22.11.24 | 12:25 PM | 28 | 8.4 | 116 | 736 | 27.8 | 294 | 1.8 |
| 2 | ETP, TCH- Outlet | 22.11.24 | 12:30 PM | 27 | 8.2 | 26 | 658 | 5.2 | 48 | 0.7 |
| 3 | ETP, Garage- Inlet | 22.11.24 | 01:30 PM | 27 | 8.1 | 139 | 928 | 29.1 | 316 | 4.1 |
| 4 | ETP, Garage- Outlet | 22.11.24 | 01:35 PM | 26 | 7.9 | 27 | 821 | 6.9 | 102 | 1.7 |
| 5 | Final Settling Pond JCPP | 22.11.24 | 09:55 AM | Dry Pond | | | | | | |

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'24 to March'25**)

Annexure- II

TATA STEEL LIMITED
JHARIA DIVISION

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

Ref. No. - JMB / ENV / LAB / 03 / 768 / 2024

Dated - 09 / 12 / 2024

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'2024**.
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 | 22.11.24 | 09:25 AM | No Discharge | | | | | | |
| 2 | 3 Pit Jamadoba Colliery | 22.11.24 | 09:40 AM | 30 | 7.5 | 23 | 806 | 2.9 | 68 | 0.6 |
| 3 | 2 Incline Jamadoba Colliery | 22.11.24 | 10:15 AM | No Discharge | | | | | | |
| 4 | 6 & 7 Pits Colliery | 22.11.24 | 12:10 PM | 31 | 7.7 | 32 | 789 | 2.6 | 74 | 0.4 |
| 5 | Digwadih Colliery | 22.11.24 | 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)


Manager (Environment)

Ambient Air Quality, Ambient Noise Quality, Effluent Water and Groundwater Quality Report
(Period- **October'24 to March'25**)

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 / 767 / 2024

Dated - 09/12/2024

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'2024**.
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 | STP, Jmb. Canteen- Inlet | 22.11.24 | 01:10 PM | 27 | 8.0 | 137 | 916 | 34.6 | 316 | 2.6 |
| 2 | STP, Jmb. Canteen- Outlet | 22.11.24 | 01:15 PM | 26 | 7.7 | 31 | 694 | 6.9 | 72 | 0.5 |
| 3 | STP, JCPP Canteen- Inlet | 22.11.24 | 12:50 PM | 27 | 8.1 | 126 | 896 | 33.1 | 294 | 3.4 |
| 4 | STP, JCPP Canteen- Outlet | 22.11.24 | 12:55 PM | 26 | 7.8 | 34 | 672 | 6.2 | 108 | 0.6 |
| 5 | STP, Railway Colony- Inlet | 22.11.24 | 10:35 AM | 28 | 8.2 | 156 | 1025 | 33.2 | 332 | 2.9 |
| 6 | STP, Railway Colony-Outlet | 22.11.24 | 10:40 AM | 27 | 8.0 | 27 | 876 | 7.1 | 85 | 1.3 |
| 7 | STP, Digwadih 12 No. Officer's colony-Inlet | 22.11.24 | 11:05 AM | 28 | 8.1 | 124 | 936 | 34.1 | 310 | 3.2 |
| 8 | STP, Digwadih 12 No. Officer's colony- Outlet | 22.11.24 | 11:10 AM | 27 | 7.8 | 21 | 716 | 5.4 | 54 | 1.0 |
| 9 | STP, Digwadih 12 No. Supervisor flat - Inlet | 22.11.24 | 11:25 AM | 27 | 8.0 | 167 | 963 | 32.5 | 296 | 3.5 |
| 10 | STP, Digwadih 12 No. Supervisor flat -Outlet | 22.11.24 | 11:30 AM | 26 | 7.7 | 26 | 769 | 5.8 | 78 | 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.


Lab.Assistant (Environment)


Manager (Environment)

TATA STEEL LIMITED
JHARIA DIVISION

Well Water Quality Report of Jamadoba Group for the month of NOVEMBER'2024

JAMADOBA GROUP

| S.No | Date | Location | Time | Depth in meter | pH | Electrical Conductivity $\mu\text{S/m}$ |
|------|----------|----------------------------|----------|----------------|-----|---|
| 1 | 22.11.24 | Purnadih (Jorapokhar) | 01:15 PM | 4.13 | 7.3 | 1243 |
| 2 | 22.11.24 | Bhowra 13 No | 12:55 PM | 1.27 | 7.4 | 1014 |
| 3 | 22.11.24 | Mohalbani Basti | 02:25 PM | 2.13 | 7.3 | 1041 |
| 4 | 22.11.24 | Digwadih 10 No F & J | 12:10 PM | 1.52 | 7.1 | 1639 |
| 5 | 22.11.24 | Kalimela Shivmandir | 11:05 AM | 0.98 | 7.2 | 917 |
| 6 | 22.11.24 | Kalimela Kalimandir | 11:20 AM | 3.13 | 7.5 | 1358 |
| 7 | 22.11.24 | Lower Dungari | 10:45 AM | 3.67 | 7.3 | 725 |
| 8 | 22.11.24 | Upper Dungari | 10:25 AM | 1.72 | 7.2 | 756 |
| 9 | 22.11.24 | Pattia Basti | 10:00 AM | 3.48 | 7.0 | 894 |
| 10 | 22.11.24 | Kenduadih Basti | 09:35 AM | 1.32 | 7.2 | 972 |
| 11 | 22.11.24 | Jorapokhar Kushtand | 01:55 PM | 3.84 | 7.4 | 1637 |
| 12 | 22.11.24 | 6&7 Pits (Ayodhya Nagri) | 11:45 AM | 1.76 | 7.2 | 1242 |
| 13 | 22.11.24 | Jorapokhar Basti Chhattand | 12:25 PM | 1.13 | 7.4 | 1384 |
| 14 | 22.11.24 | Jorapokhar Babu Basa | 01:30 PM | 2.11 | 7.1 | 1169 |


Lab.Assistant (Environment)


Manager (Environment)

Ambient Air Quality, Ambient Noise Quality, Effluent Water and Groundwater Quality Report
(Period- **October'24 to March'25**)

Annexure- II

TATA STEEL LIMITED
JHARIA DIVISION

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

Ref. No. - JMB / ENV / LAB / 03 / 2 / 2024

Dated - 31 / 12 / 2024

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'2024**.
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, TCH- Inlet | 20.12.24 | 12:30 PM | 26 | 8.3 | 164 | 816 | 29.1 | 264 | 1.4 |
| 2 | ETP, TCH- Outlet | 20.12.24 | 12:35 PM | 25 | 8.1 | 39 | 786 | 4.9 | 54 | 0.5 |
| 3 | ETP, Garage- Inlet | 20.12.24 | 01:35 PM | 25 | 8.3 | 142 | 941 | 30.5 | 310 | 3.6 |
| 4 | ETP, Garage- Outlet | 20.12.24 | 01:40 PM | 24 | 8.0 | 32 | 894 | 7.1 | 88 | 1.6 |
| 5 | Final Settling Pond JCPP | 20.12.24 | 09:55 AM | Dry Pond | | | | | | |

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'24 to March'25**)

Annexure- II

TATA STEEL LIMITED
JHARIA DIVISION

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

Ref. No. - JMB / ENV / LAB / 03 / / 2024
Dated - / / 2024

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'2024**
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 | 20.12.24 | 09:30 AM | No Discharge | | | | | | |
| 2 | 3 Pit Jamadoba Colliery | 20.12.24 | 09:45 AM | 32 | 7.7 | 36 | 837 | 3.4 | 42 | 0.9 |
| 3 | 2 Incline Jamadoba Colliery | 20.12.24 | 10:20 AM | No Discharge | | | | | | |
| 4 | 6 & 7 Pits Colliery | 20.12.24 | 12:15 PM | 30 | 7.5 | 21 | 912 | 2.8 | 68 | 0.8 |
| 5 | Digwadih Colliery | 20.12.24 | 11:55 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'24 to March'25)

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 / 813 / 2024

Dated - 31 / 12 / 2024

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'2024**
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 | STP, Jmb. Canteen- Inlet | 20.12.24 | 01:15 PM | 25 | 7.9 | 126 | 924 | 35.7 | 338 | 2.9 |
| 2 | STP, Jmb. Canteen- Outlet | 20.12.24 | 01:20 PM | 24 | 7.6 | 34 | 810 | 4.8 | 65 | 0.9 |
| 3 | STP, JCPP Canteen- Inlet | 20.12.24 | 12:55 PM | 25 | 8.0 | 135 | 873 | 32.4 | 284 | 3.5 |
| 4 | STP, JCPP Canteen- Outlet | 20.12.24 | 01:00 PM | 24 | 7.5 | 29 | 712 | 6.4 | 72 | 0.8 |
| 5 | STP, Railway Colony- Inlet | 20.12.24 | 10:40 AM | 26 | 8.1 | 143 | 987 | 30.1 | 294 | 3.5 |
| 6 | STP, Railway Colony-Outlet | 20.12.24 | 10:45 AM | 25 | 7.9 | 22 | 855 | 5.2 | 87 | 1.0 |
| 7 | STP, Digwadih 12 No. Officer's colony-Inlet | 20.12.24 | 11:10 AM | 26 | 8.0 | 167 | 987 | 36.4 | 316 | 3.7 |
| 8 | STP, Digwadih 12 No. Officer's colony- Outlet | 20.12.24 | 11:15 AM | 25 | 7.7 | 36 | 845 | 5.9 | 79 | 0.8 |
| 9 | STP, Digwadih 12 No. Supervisor flat - Inlet | 20.12.24 | 11:30 AM | 25 | 8.2 | 128 | 1016 | 34.0 | 284 | 3.7 |
| 10 | STP, Digwadih 12 No. Supervisor flat -Outlet | 20.12.24 | 11:35 AM | 24 | 7.8 | 31 | 910 | 7.2 | 90 | 0.9 |

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)


Manager (Environment)

Ambient Air Quality, Ambient Noise Quality, Effluent Water and Groundwater Quality Report
(Period- **October'24 to March'25**)

Annexure- II

TATA STEEL LIMITED
JHARIA DIVISION

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

Ref. No. - JMB / ENV / LAB / 03 / 31 / 2025

Dated - 31 / 01 / 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 **JANUARY'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, TCH- Inlet | 13.01.25 | 10:45 AM | 27 | 8.2 | 108 | 824 | 28.6 | 276 | 1.6 |
| 2 | ETP, TCH- Outlet | 13.01.25 | 10:50 AM | 26 | 8 | 32 | 774 | 5.1 | 72 | 0.4 |
| 3 | ETP, Garage- Inlet | 13.01.25 | 01:20 PM | 26 | 8.1 | 135 | 976 | 31.3 | 284 | 3.8 |
| 4 | ETP, Garage- Outlet | 13.01.25 | 01:25 PM | 25 | 7.9 | 29 | 872 | 6.8 | 76 | 1.2 |
| 5 | Final Settling Pond JCPP | 13.01.25 | 09:50 AM | Dry Pond | | | | | | |

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'24 to March'25**)

Annexure- II

TATA STEEL LIMITED
JHARIA DIVISION

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

Ref. No. - JMB / ENV / LAB / 03 / 30 / 2025

Dated - 31 / 01 / 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 **JANUARY'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 | 13.01.25 | 09:20 AM | No Discharge | | | | | | |
| 2 | 3 Pit Jamadoba Colliery | 13.01.25 | 09:35 AM | 32 | 7.6 | 23 | 796 | 3.2 | 72 | 0.7 |
| 3 | 2 Incline Jamadoba Colliery | 13.01.25 | 10:05 AM | No Discharge | | | | | | |
| 4 | 6 & 7 Pits Colliery | 13.01.25 | 11:10 AM | 30 | 7.7 | 21 | 874 | 2.5 | 62 | 0.5 |
| 5 | Digwadih Colliery | 13.01.25 | 12:15 PM | 32 | 7.8 | 36 | 916 | 2.7 | 80 | 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'24 to March'25**)

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 / 29 / 2025

Dated - 31/01/2025

Sub: STP WATER ANALYSIS REPORT.

We wish to inform you that Trade Effluent Sampling was carried out in **JAMADOBA GROUP** in the month of **JANUARY'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 | STP, Jmb. Canteen- Inlet | 13.01.25 | 01:05 PM | 26 | 8.1 | 122 | 918 | 34.8 | 332 | 3.1 |
| 2 | STP, Jmb. Canteen- Outlet | 13.01.25 | 01:10 PM | 25 | 7.8 | 25 | 779 | 4.5 | 84 | 0.7 |
| 3 | STP, JCPP Canteen- Inlet | 13.01.25 | 12:40 PM | 26 | 7.9 | 164 | 857 | 31.2 | 296 | 3.2 |
| 4 | STP, JCPP Canteen- Outlet | 13.01.25 | 12:45 PM | 25 | 7.6 | 26 | 772 | 5.7 | 102 | 0.3 |
| 5 | STP, Railway Colony- Inlet | 13.01.25 | 10:25 AM | 27 | 8.3 | 128 | 971 | 32.2 | 319 | 3.8 |
| 6 | STP, Railway Colony-Outlet | 13.01.25 | 10:30 AM | 26 | 8.0 | 36 | 832 | 5.8 | 98 | 1.2 |
| 7 | STP, Digwadih 12 No. Officer's colony-Inlet | 13.01.25 | 11:30 AM | 27 | 8.0 | 141 | 974 | 34.2 | 260 | 3.5 |
| 8 | STP, Digwadih 12 No. Officer's colony- Outlet | 13.01.25 | 11:35 AM | 26 | 7.6 | 34 | 836 | 5.7 | 62 | 0.2 |
| 9 | STP, Digwadih 12 No. Supervisor flat - Inlet | 13.01.25 | 11:50 AM | 26 | 8.1 | 152 | 987 | 33.6 | 324 | 3.8 |
| 10 | STP, Digwadih 12 No. Supervisor flat -Outlet | 13.01.25 | 11:55 AM | 25 | 7.9 | 22 | 896 | 6.9 | 106 | 0.7 |

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)

TATA STEEL LIMITED
JHARIA DIVISION

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

JAMADOBA GROUP

| S.No | Date | Location | Time | Depth in meter | pH | Electrical Conductivity $\mu\text{S/m}$ |
|------|----------|----------------------------|----------|----------------|-----|---|
| 1 | 24.01.25 | Purnadih (Jorapokhar) | 09:55 AM | 4.45 | 7.2 | 1236 |
| 2 | 24.01.25 | Bhowra 13 No | 10:15 AM | 1.82 | 7.3 | 1024 |
| 3 | 24.01.25 | Mohalbani Basti | 02:10 PM | 2.46 | 7.4 | 1082 |
| 4 | 24.01.25 | Digwadih 10 No F & J | 10:40 AM | 1.95 | 7.5 | 1726 |
| 5 | 24.01.25 | Kalimela Shivmandir | 01:30 PM | 1.13 | 7.3 | 908 |
| 6 | 24.01.25 | Kalimela Kalimandir | 01:45 PM | 3.47 | 7.4 | 1339 |
| 7 | 24.01.25 | Lower Dungari | 01:10 PM | 3.85 | 7.2 | 762 |
| 8 | 24.01.25 | Upper Dungari | 12:45 PM | 1.98 | 7.4 | 768 |
| 9 | 24.01.25 | Pattia Basti | 12:25 PM | 3.72 | 7.2 | 905 |
| 10 | 24.01.25 | Kenduadih Basti | 12:05 PM | 1.67 | 7.3 | 968 |
| 11 | 24.01.25 | Jorapokhar Kushtand | 11:20 AM | 4.15 | 7.2 | 1708 |
| 12 | 24.01.25 | 6&7 Pits (Ayodhya Nagri) | 11:40 AM | 1.97 | 7.3 | 1216 |
| 13 | 24.01.25 | Jorapokhar Basti Chhattand | 10:55 AM | 1.27 | 7.2 | 1372 |
| 14 | 24.01.25 | Jorapokhar Babu Basa | 09:40 AM | 2.21 | 7.4 | 1176 |

P. Mahabo.

Lab.Assistant (Environment)

Chmsh

Manager (Environment)

Ambient Air Quality, Ambient Noise Quality, Effluent Water and Groundwater Quality Report
(Period- **October'24 to March'25**)

Annexure- II

TATA STEEL LIMITED
JHARIA DIVISION

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

Ref. No. - JMB / ENV / LAB / 03 / *87* / 2025

Dated - *28/02* / 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 **FEBRUARY'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, TCH- Inlet | 26.02.25 | 10:50 AM | 28 | 8.2 | 135 | 914 | 29.8 | 294 | 1.3 |
| 2 | ETP, TCH- Outlet | 26.02.25 | 10:55 AM | 27 | 7.9 | 29 | 846 | 5.6 | 72 | 1.0 |
| 3 | ETP, Garage- Inlet | 26.02.25 | 01:25 PM | 27 | 8.0 | 163 | 872 | 30.2 | 306 | 3.1 |
| 4 | ETP, Garage- Outlet | 26.02.25 | 01:30 PM | 26 | 7.8 | 33 | 715 | 7.2 | 74 | 1.7 |
| 5 | Final Settling Pond JCPP | 26.02.25 | 09:55 AM | Dry Pond | | | | | | |

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. Mahato

Lab.Assistant (Environment)

Umesh

Manager (Environment)

Ambient Air Quality, Ambient Noise Quality, Effluent Water and Groundwater Quality Report
(Period- **October'24 to March'25**)

Annexure- II

TATA STEEL LIMITED
JHARIA DIVISION

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

Ref. No. - JMB / ENV / LAB / 03 / *85* / 2025
Dated - *28/02/2025*

Sub: MINE WATER ANALYSIS REPORT.

We wish to inform you that Trade Effluent Sampling was carried out in **JAMADOBA GROUP** in the month of **FEBRUARY'202**
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 | 26.02.25 | 09:25 AM | No Discharge | | | | | | |
| 2 | 3 Pit Jamadoba Colliery | 26.02.25 | 09:40 AM | 30 | 7.5 | 20 | 896 | 2.1 | 86 | 1.2 |
| 3 | 2 Incline Jamadoba Colliery | 26.02.25 | 10:10 AM | No Discharge | | | | | | |
| 4 | 6 & 7 Pits Colliery | 26.02.25 | 11:15 AM | No Discharge | | | | | | |
| 5 | Digwadih Colliery | 26.02.25 | 12:20 PM | 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'24 to March'25)

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 / 86 / 2025

Dated - 28/02/2025

Sub: STP WATER ANALYSIS REPORT.

We wish to inform you that Trade Effluent Sampling was carried out in JAMADOBA GROUP in the month of FEBRUARY'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 | STP, Jmb. Canteen- Inlet | 26.02.25 | 01:10 PM | 27 | 8.0 | 154 | 998 | 36.1 | 320 | ? |
| 2 | STP, Jmb. Canteen- Outlet | 26.02.25 | 01:15 PM | 26 | 7.6 | 38 | 906 | 8.7 | 98 | 1.4 |
| 3 | STP, JCPP Canteen- Inlet | 26.02.25 | 12:45 PM | 28 | 8.1 | 132 | 836 | 33.4 | 327 | 2.9 |
| 4 | STP, JCPP Canteen- Outlet | 26.02.25 | 12:50 PM | 27 | 7.8 | 25 | 760 | 7.4 | 144 | 1.7 |
| 5 | STP, Railway Colony- Inlet | 26.02.25 | 10:30 AM | 28 | 8.0 | 167 | 1036 | 35.4 | 336 | 3.4 |
| 6 | STP, Railway Colony-Outlet | 26.02.25 | 10:35 AM | 27 | 7.6 | 41 | 996 | 8.9 | 82 | 1.5 |
| 7 | STP, Digwadih 12 No. Officer's colony-Inlet | 26.02.25 | 11:35 AM | 28 | 8.2 | 127 | 1016 | 33.1 | 290 | 3.8 |
| 8 | STP, Digwadih 12 No. Officer's colony- Outlet | 26.02.25 | 11:40 AM | 27 | 8.0 | 32 | 910 | 6.5 | 68 | 1.3 |
| 9 | STP, Digwadih 12 No. Supervisor flat - Inlet | 26.02.25 | 11:55 AM | 27 | 8.2 | 173 | 1038 | 31.9 | 296 | 2.9 |
| 10 | STP, Digwadih 12 No. Supervisor flat -Outlet | 26.02.25 | 12:05 PM | 26 | 7.8 | 39 | 987 | 7.8 | 84 | 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.

P. Mahabo.

Lab.Assistant (Environment)

Umesh

Manager (Environment)

Ambient Air Quality, Ambient Noise Quality, Effluent Water and Groundwater Quality Report
(Period- **October'24 to March'25**)

Annexure- II

TATA STEEL LIMITED
JHARIA DIVISION

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

Ref. No. - JMB / ENV / LAB / 03 / 145 / 2025

Dated - 07/04/2025

Sub: ETP WATER ANALYSIS REPORT.

We wish to inform you that Trade Effluent Sampling was carried out in **JAMADOBA GROUP** in the month of **MARCH'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, TCH- Inlet | 24.03.25 | 02:00 PM | 27 | 8.3 | 147 | 935 | 31.7 | 286 | 2.1 |
| 2 | ETP, TCH- Outlet | 24.03.25 | 02:05 PM | 26 | 8.0 | 39 | 822 | 5.2 | 98 | 1.2 |
| 3 | ETP, Garage- Inlet | 24.03.25 | 12:45 PM | 27 | 8.1 | 163 | 867 | 29.5 | 316 | 3.5 |
| 4 | ETP, Garage- Outlet | 24.03.25 | 12:50 PM | 26 | 7.9 | 24 | 754 | 6.8 | 106 | 1.3 |
| 5 | Final Settling Pond JCPP | 24.03.25 | 04:35 PM | Dry Pond | | | | | | |

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'24 to March'25**)

Annexure- II

TATA STEEL LIMITED
JHARIA DIVISION

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

Ref. No. - JMB / ENV / LAB / 03 / 147 / 2025

Dated - 07/04/2025

Sub: MINE WATER ANALYSIS REPORT.

We wish to inform you that Trade Effluent Sampling was carried out in **JAMADOBA GROUP** in the month of **MARCH'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 | 24.03.25 | 05:05 PM | No Discharge | | | | | | |
| 2 | 3 Pit Jamadoba Colliery | 24.03.25 | 04:50 PM | 32 | 7.6 | 26 | 874 | 2.3 | 84 | 1.4 |
| 3 | 2 Incline Jamadoba Colliery | 24.03.25 | 04:15 PM | No Discharge | | | | | | |
| 4 | 6 & 7 Pits Colliery | 24.03.25 | 02:20 PM | No Discharge | | | | | | |
| 5 | Digwadih Colliery | 24.03.25 | 02:40 PM | 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'24 to March'25)

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 / 146 / 2025
Dated - 07/04 / 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 **MARCH'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 | STP, Jmb. Canteen- Inlet | 24.03.25 | 12:30 PM | 28 | 7.9 | 133 | 954 | 35.2 | 316 | 3.9 |
| 2 | STP, Jmb. Canteen- Outlet | 24.03.25 | 12:35 PM | 27 | 7.5 | 28 | 872 | 7.2 | 116 | 0.8 |
| 3 | STP, JCPP Canteen- Inlet | 24.03.25 | 01:40 PM | 28 | 8.0 | 143 | 824 | 35.1 | 298 | 3.5 |
| 4 | STP, JCPP Canteen- Outlet | 24.03.25 | 01:45 PM | 27 | 7.7 | 31 | 728 | 6.9 | 112 | 1.4 |
| 5 | STP, Railway Colony- Inlet | 24.03.25 | 03:45 PM | 27 | 8.1 | 141 | 936 | 36.8 | 328 | 3.6 |
| 6 | STP, Railway Colony-Outlet | 24.03.25 | 03:50 PM | 26 | 7.7 | 21 | 872 | 8.2 | 86 | 1.0 |
| 7 | STP, Digwadih 12 No. Officer's colony-Inlet | 24.03.25 | 03:15 PM | 27 | 8.0 | 164 | 974 | 35.5 | 312 | 2.9 |
| 8 | STP, Digwadih 12 No. Officer's colony- Outlet | 24.03.25 | 03:20 PM | 26 | 7.8 | 27 | 873 | 6.4 | 114 | 1.5 |
| 9 | STP, Digwadih 12 No. Supervisor flat - Inlet | 24.03.25 | 02:55 PM | 27 | 7.9 | 135 | 1024 | 33.1 | 260 | 2.5 |
| 10 | STP, Digwadih 12 No. Supervisor flat -Outlet | 24.03.25 | 03:00 PM | 26 | 7.6 | 34 | 946 | 7.3 | 94 | 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.


Lab.Assistant (Environment)


Manager (Environment)