



TSL/FAMD/SCM/FY25/2564

Date: - 28-05-2025

To,  
**Dy. Director General,  
Integrated Regional Office,  
Ministry of Environment and Forest & Climate Change, Eastern Region Office,  
A/3, Chandrasekharpur, Bhubaneswar-751023**

**Subject:** Submission of half-yearly compliance report on the stipulated environmental clearance terms and conditions in respect of Sukinda Chromite Block of M/s Tata Steel Limited, for the period from October 2024 to March 2025.

**Reference:**

- 1) MoEF Letter Ref No: J-11015/96/2011-IA. II (M), dated 06.09.2013
- 2) MoEF&CC's notification vide S.O-5845, dt. 28<sup>th</sup> Nov 2018

**Respected Sir,**

We are herewith submitting the six-monthly compliance report on the status of the implementation of the conditions stipulated in environmental clearance vested in favor of Sukinda Chromite Block of M/s Tata Steel Limited vide MoEF Letter Ref No: J-11015/96/2011-IA. II (M), dated 06.09.2013, for the period from October 2024 to March 2025 for your kind perusal.

This is in reference to the MoEF&CC's notification vide S.O-5845, dt. 28<sup>th</sup> Nov 2018, the six-monthly compliance report is being submitted only in soft copy mode, shared with your good office over e-mail @ [roez.bsr-mef@nic.in](mailto:roez.bsr-mef@nic.in) and is being uploaded in Parivesh portal. As per the Vesting order No. 5555 /SM/IV(B)SM-32/2020 dated 29th June'2020 issued by the Office of Nodal Officer, Steel & Mines Department of Government of Odisha, above environmental clearance has been vested to Tata Steel Mining Limited (Merged with Tata Steel Limited from 1<sup>st</sup> September 2023) for 50years (As per MMDR Act, 2021).

We believe the above submission is in order.

Thanking You.

Yours faithfully,  
f: Tata Steel Limited

Mines Manager,  
Sukinda Chromite Block

**Copy to:**

1. The Director, Ministry of Environment, Forests & Climate Change, Indira Paryavaran Bhawan, Aliganj, Jorbagh Road, New Delhi-110 003
2. The Regional Directorate, Central Pollution Control Board, 'South end Conclave' Block-502, 5th & 6th Floor, 1582, Razidanga, Main Road, Kolkata- 700107
3. Member Secretary, State Pollution Control Board, Odisha, Paribesh Bhawan, A/118, Nilakantha Nagar, Bhubaneswar, 751012.

**TATA STEEL LIMITED**

Ferro Alloys & Minerals Division | Sukinda Chromite Mine | Kalarangiatta | Jajpur | Odisha-755028

Registered Office Bombay House 24 Homi Mody Street Fort Mumbai 400 001 India

Tel 91 22 6665 8282 Fax 91 22 6665 7724 Website [www.tatasteel.com](http://www.tatasteel.com)

Corporate Identity Number L27100MH1907PLC000260

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

<b>Proposal No</b>	IA/OR/MIN/114264/2007
<b>Compliance ID</b>	112955993
<b>Compliance Number(For Tracking)</b>	EC/M/COMPLIANCE/112955993/2025
<b>Reporting Year</b>	2025
<b>Reporting Period</b>	01 Jun(01 Oct - 31 Mar)
<b>Submission Date</b>	30-05-2025
<b>RO/SRO Name</b>	Shri Senthil Kumar Sampath
<b>RO/SRO Email</b>	agmu156@ifs.nic.in
<b>State</b>	ODISHA
<b>RO/SRO Office Address</b>	Integrated Regional Offices, Bhubaneswar

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

**Half Yearly Compliance Report  
2025  
01 Jun(01 Oct - 31 Mar)**

**Acknowledgement**

<b>Proposal Name</b>	Sukinda Chromite Mines - Renewal of mine lease, expansion of Chrome Ore, Beneficiation Plant and Pyroxenite ore capacities and change of mining and beneficiation technologies of M/s Tata Steel Ltd. located at Sukinda P.O. Kalarangiatta, District Jajpur, Odisha - environmental clearance - regarding.		
<b>Name of Entity / Corporate Office</b>	Tata Steel Limited		
<b>Village(s)</b>	N/A		
<b>District</b>	JAJAPUR		
<b>Proposal No.</b>	IA/OR/MIN/114264/2007	<b>Category</b>	Non-Coal Mining
<b>Plot / Survey / Khasra No.</b>	N/A	<b>Sub-District</b>	N/A
<b>State</b>	ODISHA	<b>Entity's PAN</b>	*****2803M
<b>MoEF File No.</b>	J-11015/96/2011-IA.II(M)	<b>Entity name as per PAN</b>	UTSAV KASHYAP

**Compliance Reporting Details**

**Reporting Year** 2025  
**Remarks (if any)**  
**Reporting Period** 01 Jun(01 Oct - 31 Mar)

**Details of Production and Project Area**

**Name of Entity / Corporate Office** Tata Steel Limited

	<b>Project Area as per EC Granted</b>	<b>Actual Project Area in Possession</b>
Private	0	0
Revenue Land	332.303	332.303
Forest	247.382	247.382
Others	0	0
Total	579.685	579.685

**Production Capacity**

Sr. no	Product Name	units	Valid Upto	Capacity	Production last year	Capacity as per CTO
1	Pyroxenite	Tons per Annum (TPA)	31/03/2026	500000	0	0
2	Chromite Ore (ROM)	Tons per Annum (TPA)	31/03/2026	2400000	2,96,219	0

## Conditions

### Specific Conditions

Sr.No.	Condition Type	Condition Details
1	Statutory compliance	No mining activities will be allowed in forest area for which the Forest Clearance is not available.
<b>PPs Submission:</b> Complied Compliance: The lease of 406.00ha comprised 404.669ha of forest land (73.697 ha as per HAL , 330.972 ha as per SABIK) and 1.331ha of non-forest land. The details of Forest Clearance granted by MoEFCC are; a) Letter no. 8-78/96-FC dated 27.01.1998 over 73.797 ha. b) Letter No. 8-15/2016-FC dated 18.05.2018 over 330.972 ha. Mining and allied activities were carried within the lease hold area of 406.0ha within which the entire forest land had been diverted as per FC Act,1980.		Date: 30/05/2025
2	Statutory compliance	The project proponent will seek and obtain approval under the FC Act, 1980 for diversion of the entire forest land located within the mining lease within a period of two years from 01.02.2013 i.e. the date of issue of guidelines by FC vide their letter-F. No. 11-362/2012-FC, failing which the mining lease area will be reduced to the non-forest area plus the forest area for which the project proponent had been able to obtain the FC at the end of this time period. In the case of reduction in mine lease area, the project proponent will need to get a revised mining plan approved from the competent authority for reduced area and enter into a new mining lease as per reduced lease area. The EC will be construed to be available for the mining lease area as per the revised mining lease deed.
<b>PPs Submission:</b> Complied Compliance: Renewal Forest Diversion Proposal for entire forest land of 73.697 ha within the Mining Lease area was applied in time. The FDP has been duly recommended by the F E department, Govt. of Odisha to the Ministry of Environment Forests, Govt. of India for onward consideration for grant of Forest Clearance. MoEFCC has granted Stage I Forest Clearance with one year working permission vide letter no. 8 78/1996 FC (pt I), dated 03.11.2014. Subsequent to endorsement of the MMDR Amendment Act, 2015, the Govt. of Odisha extended the mining lease from 12.01.2013 to 31.03.2020 for which the supplementary lease deed was executed on 24.08.2015 and registered on 26.08.2015. In accordance with the MoEFCCs Circular No. F.No.11/51/2015/FC, dated.01.04.2015, the forest clearance dated 27.01.1998 got extended till 31.03.2020. Further, in accordance with the MoEFCCs Circular F.No.8 78/1996 FC, dated.10.03.2015, the forest area as on 25.10.1980 (i.e. Sabik Settlement) 404.669 ha. within the mining lease of 406 ha is now termed as forest land. Hence, fresh forest diversion proposal over an area of 330.972 ha (404.669 ha , already diverted area of 73.697 ha) has been applied on 02.11.2015 and with reference to the Agenda No.1 (F.No.8 15/2016 FC) of the Minutes of meeting of Forest Advisory Committee held on 25th April 2017 (published in the web site), the mine was accorded Stage I clearance vide letter F.No 8-15/2016-FC , dated 04.07.2017 over 330.972 ha of forest land as on 25.10.1980 and stage II in 2018. Thus, forest clearance was obtained in due time as per the rule then applicable. However, due to major change in land categorization of HAL and SABIK settlement by state government the identified SABIK forest land was diverted in 2018 as per the guidelines.		Date: 30/05/2025
3	Statutory compliance	Till all the clearance are obtained for the proposed tailing pond/dam the project would only use existing tailing dam.



<b>PPs Submission:</b> Complied Compliance: No chrome ore beneficiation plant is being operated at present. Thus, there is no tailing pond/dam.		Date: 30/05/2025
4	Statutory compliance	Environmental clearance is subject to obtaining clearance under the Wildlife (Protection) Act, 1972 from the Standing Committee of National Board for Wildlife, as may be applicable to this project.
<b>PPs Submission:</b> Complied Compliance: There are no wildlife sanctuary, national park, biosphere reserves or other eco sensitive zones nor within 10 Kms from the boundaries on the project site.		Date: 30/05/2025
5	Statutory compliance	The project proponent shall obtain Consent to Establish and Consent to Operate from the State Pollution Control Board, Odisha and effectively implement all the conditions stipulated therein.
<b>PPs Submission:</b> Complied Compliance: The Consent to Establish had already been obtained from Odisha State Pollution Control Board vide letter no. 17750/IND-II-NOC-5664 dated 30.09.2013 and same has been vested for 50 years. We have also obtained the Consent to Operate as consent order No. 2950 issued vide letter No. 6093/IND-I-CON-226, dt. 25/03/2025, valid till 31.03.2026.		Date: 30/05/2025
6	Statutory compliance	Environmental Clearance is subject to final order of the Hon ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No. 460 of 2004, as may be applicable to this project.
<b>PPs Submission:</b> Complied Compliance: Final order of the Honorable Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No. 460 of 2004, is awaited. The petition status from the website of Supreme court of India read as Pending for Motion hearing ; however, this did not affect the legal status of environmental clearance since The project area/ lease area neither falls partly/wholly within any protected areas (wildlife sanctuaries, national parks, biosphere reserves or any other sensitive zones) nor within 10kms from the boundaries of such protected areas concerning which the original petition was filed. We have not yet received any instructions from the Ministry of Environment, Forest and Climate Change in this regard. The Environmental Clearance is vested for 50 years.		Date: 30/05/2025
7	AIR QUALITY MONITORING AND PRESERVATION	As part of ambient air quality monitoring during operational phase of the project, the air samples shall also be analysed for their mineralogical composition as may be so prescribed or notified by this Ministry and records maintained.
<b>PPs Submission:</b> Complied Compliance: The ambient air quality is monitored twice a week at six locations within the Core Zone. The air samples are also analysed for their mineralogical composition on quarterly basis. All the stipulated parameters are being analysed and reported to OSPCB on monthly basis.		Date: 30/05/2025
8	MISCELLANEOUS	The ores and minerals shall be covered by tarpaulin or by such other means when transported out of the mine by road. The vehicles shall not be overloaded.
<b>PPs Submission:</b> Complied Compliance: Mineral and ores, transported out of the mine lease boundary to the various destinations were completely covered by tarpaulin and secured in position by safety straps. However, dispatch have been stopped since March 2025 as we are in the process of surrendering the mine.		Date: 30/05/2025
9	AIR QUALITY MONITORING AND	Effective safeguard measures such as conditioning of ore with water, regular water sprinkling shall be carried out in critical areas

	PRESERVATION	prone to air pollution and having high levels of particulate matter such as around crushing and screening plant, loading and unloading point and transfer points. It should be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.
<b>PPs Submission:</b> Complied Compliance: Ambient air quality is being monitored at six locations within the core zone/lease area as per NAAQS 2009 guidelines. Currently, the mining operation has been stopped, final mine closure has been approved by IBM vide letter no. MCDR MiFL0CR/5/2022 BBS IBM RO BBS and the application for surrendering of mine lease has been submitted to state govt. vide letter no. VPRM/038/25.		Date: 30/05/2025
10	WATER QUALITY MONITORING AND PRESERVATION	The project authority shall implement suitable conservation measures to augment ground water resources in the area in consultation with the Regional Director, Central Ground Water Board.
<b>PPs Submission:</b> Complied Compliance: Rainwater harvesting measures in the form of series of harvesting ponds were constructed in the peripheral villages in coordination with Tata Steel Foundation, CSR wing of Tata Steel. CGWA has granted NOC for groundwater abstraction vide NOC no. CGWA/NOC/MIN/ORIG/2024/21093 dated 17/12/2024. Presently, a fully functional roof top rainwater harvesting project (water harvesting potential of 1220 m3) at the administrative office inaugurated in Oct 2014 is in working condition. Further, feasibility study was conducted through KRG Foundation to explore the possibility of water harvesting in the nearby villages located in the mine periphery. As per the recommendations we have constructed 14 nos of rainwater harvesting ponds (30x30x3 mtr) and check dams for water recharge.		Date: 30/05/2025
11	WATER QUALITY MONITORING AND PRESERVATION	Regular monitoring of ground water level and quality shall be carried out in and around the mine lease by establishing a network of existing wells and installing new piezometers during the mining operation. The periodic monitoring (at least four times in a year pre-monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January), once in each season) shall be carried out in consultation with the State Ground Water Board/Central Ground Water Authority and the data thus collected may be sent regularly to the Ministry of Environment and Forests and its Regional Office Bhubaneswar, the Central Ground Water Authority and the Regional Director, Central Ground Water Board. If at any stage, it is observed that the groundwater table is getting depleted due to the mining activity; necessary corrective measures shall be carried out.
<b>PPs Submission:</b> Complied Compliance: Ground water levels are being monitored continuously through a network of piezometers constructed along the mine periphery. Apart from this, regular monitoring of ground water quality around nearby villages is also conducted on quarterly basis at ten (10) locations through a network of open wells/ dug wells. Ground water monitoring is being carried in both core and buffer zones and reports are attached. Presently there is 1 no. of piezometer with telemetry installed in the periphery of the quarry and data on ground water level is being monitored. The trend analysis of the ground water level is attached.		Date: 30/05/2025
12	WASTE MANAGEMENT	The maximum height of the overburden dumps from its toe to the top of the dump on sloping ground shall not be more than 110 m. The dump slope shall be suitably terraced by leaving berms of adequate width in between lifts such that the overall slope angle (i.e. angle between the line joining the crest to the toe of the dump and across all such lifts with the horizontal) does not exceed 28 degrees.

<b>PPs Submission:</b> Complied Compliance: Currently, the mining operation has been stopped, final mine closure has been approved by IBM vide letter no. MCDR-MiFL0CR/5/2022 BBS IBM RO BBS and the application for surrendering of mine lease has been submitted to state govt. vide letter no. VPRM/038/25.		Date: 30/05/2025
13	WASTE MANAGEMENT	The individual slopes and berms of each lift or bench of the overburden dump when completed shall be provided with adequate drainage arrangements or shall be suitably stabilized by such other means to prevent erosion due to surface run-offs.
<b>PPs Submission:</b> Complied Compliance: Adequate stabilization measures were implemented for the dump slopes maintained with proper drainage network. Currently, the mining operation has been stopped, final mine closure has been approved by IBM vide letter no. MCDR MiFL0CR/5/2022 BBS IBM RO BBS and the application for surrendering of mine lease has been submitted to state govt. vide letter no. VPRM/038/25.		Date: 30/05/2025
14	WASTE MANAGEMENT	Adequate precautionary measures shall be taken for strengthening the dump foundation. Particularly while dumping over soft ground, the toe region all along the extremities of such dumps shall be suitably buttressed with hard rocky boulders after excavating the topsoil and soft ground. Dumping operations shall commence only after such preparatory work for the dump foundation is completed in order to prevent its failure, which may trigger a slide of the entire dump.
<b>PPs Submission:</b> Complied Compliance: Currently, the mining operation has been stopped, final mine closure has been approved by IBM vide letter no. MCDR MiFL0CR/5/2022 BBS IBM RO BBS and the application for surrendering of mine lease has been submitted to state govt. vide letter no. VPRM/038/25.		Date: 30/05/2025
15	LAND RECLAMATION	All external over burden dumps at the end of the mine life shall be reclaimed and rehabilitated by afforestation. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment and Forests and its Regional Office located at Bhubaneswar on six monthly basis
<b>PPs Submission:</b> Complied Compliance: Rehabilitation of OB dumps was done in accordance with the provisions of the approved mine plan and final mine closure plan.		Date: 30/05/2025
16	WATER QUALITY MONITORING AND PRESERVATION	Catch drains and siltation ponds of appropriate size shall be constructed around the mine working, soil, mineral and OB dump(s) to prevent run off of water and flow of sediments directly into the Damsala Nallah and other water bodies. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly. Garland drains, settling tanks and check dams of appropriate size, gradient and length shall be constructed both around the mine pit and over burden dump(s) to prevent run off of water and flow of sediments directly into the Damsala Nallah and other water bodies and sump capacity should be designed keeping 50 percent safety margin over and above peak sudden rainfall (based on 20 years data) and maximum discharge in the area adjoining the mine site. Sump capacity should also provide adequate retention period to allow proper settling of silt material. Sedimentation pits shall be constructed at the corners of the garland drains and desilted at regular intervals.

<b>PPs Submission:</b> Complied Compliance: Garland drain and settling pits of appropriate dimensions have been constructed to arrest the silts and sediments during the wash out/runoff from the mine workings/dumps. The adequacy of the surface runoff management is to be assessed and validated while considering the rainfall data of the region. Entire surface runoff from the mine is guided up to the Effluent Treatment Plant of capacity 4500Kl/hr from where the treated effluent is reused/recycled back for greenbelt development and maintenance, dust suppression, drinking and other domestic utilities. Currently, the mining operation has been stopped, final mine closure has been approved by IBM vide letter no. MCDR MiFL0CR/5/2022 BBS IBM RO BBS and the application for surrendering of mine lease has been submitted to state govt. vide letter no. VPRM/038/25. Only dewatering of mine pit is being carried out for usage of domestic water after treatment in ETP and WTP.		Date: 30/05/2025
17	WASTE MANAGEMENT	Retaining wall having adequate dimensions shall be constructed at the toe of the over burden dumps to check run-off and siltation.
<b>PPs Submission:</b> Complied Compliance: Toe wall along with garland drains had been constructed as per the mine plan. The ruptured retaining walls are boulder pitched and maintained around the periphery of the dump. Currently, the mining operation has been stopped, final mine closure has been approved by IBM vide letter no. MCDR MiFL0CR/5/2022 BBS IBM RO BBS and the application for surrendering of mine lease has been submitted to state govt. vide letter no. VPRM/038/25.		Date: 30/05/2025
18	GREENBELT	Plantation shall be raised in an area of 384.44 ha including a 7.5m wide green belt in the safety zone around the mining lease, backfilled and reclaimed area, around the higher benches of /excavated void etc. after the completion of opencast mining activity by planting the native species in consultation with the local DFO/Agriculture Department. The density of the trees should be around 2500 plants per ha.
<b>PPs Submission:</b> Complied Compliance: The plantation programme were carried out as per the Final Mine Closure Plan.		Date: 30/05/2025
19	AIR QUALITY MONITORING AND PRESERVATION	Effective safeguard measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of SPM and RPM such as haul road, loading and unloading point and transfer points. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.
<b>PPs Submission:</b> Complied Compliance: Ambient air quality is monitored at six locations within the core zone/lease area as per NAAQS 2009 guidelines. Currently, the mining operation has been stopped, final mine closure has been approved by IBM vide letter no. MCDR MiFL0CR/5/2022 BBS IBM RO BBS and the application for surrendering of mine lease has been submitted to state govt. vide letter no. VPRM/038/25.		Date: 30/05/2025
20	WATER QUALITY MONITORING AND PRESERVATION	Mine water discharge and/or any waste water shall be properly treated in an ETP/s for the removal of hexavalent chromium and to meet the prescribed standards before reuse/discharge. The runoff from OB dumps and other surface run off shall be analyzed for hexavalent chrome and in case its concentration is found higher than the permissible limit, the waste water should be treated before discharge/reuse.
<b>PPs Submission:</b> Complied Compliance: An Effluent Treatment Plant (ETP) of capacity 4500KL/hr designed with automated dosing system, clari flocculator, and flash mixture, dry sludge collection system, multi bed filtration		Date: 30/05/2025

		<p>system, etc, was in operation for surface runoff/mine water treatment. FeSO<sub>4</sub> is used as the reductant to ensure removal of Cr<sub>6</sub>. The effectiveness of the treatment was continuously monitored through real time online monitoring system with Sensor based analysers for parameters like pH, TSS and Cr<sub>6</sub>. Apart from the continuous effluent monitoring system, samples from the Inlet and Outlet of ETP are also analysed at our laboratory (inhouse facility) on daily basis for all the operational shifts. Surface water samples are also analysed from the mine pits, runoffs from dumps, etc. by an OSPCB accredited third party on monthly basis and records are being maintained. No discharge of runoff/effluent is allowed without prior treatment and checking its conformance with the permissible standards.</p>	
21	WATER QUALITY MONITORING AND PRESERVATION	The decanted water from the beneficiation plant shall be re-circulated within the plant and there shall be zero discharge.	
<b>PPs Submission:</b> Complied Compliance: Beneficiation plant is not operational, hence there no waste water is being generated.			Date: 30/05/2025
22	WATER QUALITY MONITORING AND PRESERVATION	Regular monitoring of water quality upstream and downstream of Damsala Nallah shall be carried out and record of monitoring data should be maintained and submitted to Ministry of Environment and Forests, its Regional Office, Bhubneswar, Central Groundwater Authority, Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board.	
<b>PPs Submission:</b> Complied Compliance: The monitoring of water quality at upstream and downstream of Damsala Nallah is being carried out by an OSPCB empanelled laboratory and the records were maintained and submitted to the State Pollution Control Board on monthly basis. Monitoring results were also submitted along with the compliance report to the MoEF and CC (regional Office) with the abstract of the monitoring results.			Date: 30/05/2025
23	WATER QUALITY MONITORING AND PRESERVATION	Appropriate mitigative measures shall be taken to prevent pollution of Damsala Nallah, if any, in consultation with the State Pollution Control Board.	
<b>PPs Submission:</b> Complied Compliance: Following mitigative measures have been implemented to prevent pollution of Damsala Nallah: 1. ETP with capacity of 4500Kl/hr, designed with settling pit, flash mixture, clarri focculator, automatic dosing system, dry sludge collection system, multi sand filters etc. was in operation. 2. Treated water from the ETP is reused /recycled within the mine for various purposes like greenbelt, dust suppression, drinking water treatment etc. to minimize the discharge load on the Damsala Nallah. 3. No effluent is discharged beyond the mine premises without prior treatment and its conformance with the permissible discharge norms. 4. Effluents discharged from the outlet of ETP, are monitored on real time basis with continuous effluent monitoring system for parameters like pH, TSS, flow and Cr <sub>6</sub> . 5. We have been utilizing the mine effluents for drinking purpose within the camp since May 2018 after two stage treatment processes such as primary treatment at ETP with correction to suspended solids, pH, Hexavalent Chromium and secondary treatment at WTP with disinfection and other subsequent processes.			Date: 30/05/2025
24	Statutory compliance	The project proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of surface water for the project.	
<b>PPs Submission:</b> Complied Compliance: The total water requirement is fulfilled from the ETP treated water. No surface water is being withdrawn for mining use.			Date: 30/05/2025
25	WATER QUALITY MONITORING AND PRESERVATION	Suitable rainwater harvesting measures on long term basis shall be planned and implemented in consultation with Regional Director, Central Ground Water Board.	

<b>PPs Submission:</b> Complied Compliance: One roof top rain water harvesting structure had been constructed at administrative office building which is working effectively. Further, feasibility study was conducted through KRG Foundation to explore the possibility of water harvesting in the nearby villages located in the mine periphery. As per the recommendations we have constructed 14 nos of rainwater harvesting ponds (30x30x3 mtr) and check dams for water recharge.		Date: 30/05/2025
26	MISCELLANEOUS	Vehicular emissions shall be kept under control and regularly monitored. Measures shall be taken for maintenance of vehicles used in mining operations and in transportation of mineral from mine face to the beneficiation plant. The vehicles shall not be overloaded.
<b>PPs Submission:</b> Complied Compliance: Currently, the mining operation has been stopped, final mine closure has been approved by IBM vide letter no. MCDR MiFL0CR/5/2022 BBS IBM RO BBS and the application for surrendering of mine lease has been submitted to state govt. vide letter no. VPRM/038/25.		Date: 30/05/2025
27	Risk Mitigation and Disaster Management	Blasting operation shall be carried out only during the daytime. Controlled blasting shall be practiced. The mitigative measures for control of ground vibrations and to arrest fly rocks and boulders should be implemented.
<b>PPs Submission:</b> Complied Compliance: Currently, the mining operation has been stopped, final mine closure has been approved by IBM vide letter no. MCDR MiFL0CR/5/2022 BBS IBM RO BBS and the application for surrendering of mine lease has been submitted to state govt. vide letter no. VPRM/038/25.		Date: 30/05/2025
28	AIR QUALITY MONITORING AND PRESERVATION	Mineral handling plant shall be provided with either adequate number of high efficiency dust extraction system or water injection system. Loading and unloading areas including all the transfer points should also have efficient dust control arrangements. These should be properly maintained and operated.
<b>PPs Submission:</b> Complied Compliance: No mineral handing plant (COB Plant, Crushing and Screening Plant) is in operation.		Date: 30/05/2025
29	Statutory compliance	Consent to operate shall be obtained from State Pollution Control Board prior to start of enhanced production from the mine.
<b>PPs Submission:</b> Complied Compliance: We have obtained the Consent to Operate as consent order No. 2950 issued vide letter No. 6093/IND I CON 226, dt. 25/03/2025, valid till 31.03.2026		Date: 30/05/2025
30	WATER QUALITY MONITORING AND PRESERVATION	Sewage treatment plant shall be installed for the colony. ETP shall also be provided for workshop and waste water generated during mining operation.
<b>PPs Submission:</b> Complied Compliance: A Sewage Treatment Plant of 1000KLD had been constructed as per BIS standard for domestic effluent/sewerage and the treated effluent is being reused for garden development. An ETP with capacity of 4500 KI/hr having the facilities like, settling pit, flash mixture, clarri flocculator, dry sludge collection system, multi sand filters, etc. had been constructed and in operation for the treatment of mine pit water and surface runoff.		Date: 30/05/2025
31	MISCELLANEOUS	Digital processing of the entire lease area using remote sensing technique shall be carried out regularly once in three years for monitoring land use pattern and report submitted to Ministry of Environment and Forests and its Regional Office, Bhubaneswar.

<b>PPs Submission:</b> Complied Compliance: The drone image was submitted with compliance report for RO inspection on 02.08.2023 .		Date: 30/05/2025
32	AIR QUALITY MONITORING AND PRESERVATION	Regular monitoring of ambient air quality including free silica shall be carried out and records maintained.
<b>PPs Submission:</b> Complied Compliance: Regular monitoring of ambient air quality is carried out at six locations as per NAAQS 2009 and the free silica in ambient air is monitored by personal dust sampling to assess the workforces exposure to RPM in ambient air and percent free silica content in it. The record is maintained.		Date: 30/05/2025
33	Human Health Environment	Pre-placement medical examination and periodical medical examination of the workers engaged in the project shall be carried out and records maintained. For the purpose, schedule of health examination of the workers should be drawn and followed accordingly.
<b>PPs Submission:</b> Complied Compliance: Pre Employment/Pre placement medical examination is mandatorily ensured for employees prior to their joining. Apart from this, periodical medical examination (PME) is conducted for all employees and the records are maintained. Besides this the company is also undertaking various initiatives for the improvement in the occupational health and for removing the safety hazards at industrial workplace.		Date: 30/05/2025
34	Statutory compliance	The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna such as elephant etc. spotted in the buffer zone of the mine and contribute towards the cost of implementation of the plan and/or Regional Wildlife Management Plan for conservation of flora and fauna so prepared by the State Forest and Wildlife Department. The amount so contributed shall be included in the project cost. A copy of action plan shall be submitted to the Ministry and its Regional Office, Bhubaneswar within 3 months.
<b>PPs Submission:</b> Complied Compliance: Site specific Wildlife Conservation Plan has already been submitted to DFO, Cuttack vide our letter no. SCM/ ENV/091/13, dated 18.12.2013. We have contributed to State Specific CAMPA Fund for implementation of Site Specific Wildlife Conservation Plan. All applicable precautionary measures stipulated by State Forest Department and laid down during the approval of Site Specific Wildlife Conservation Plan is adhered to. As per year wise afforestation programme proposed in Mining Plan, plantation is being carried out in optimized waste dump floor and slope.		Date: 30/05/2025
35	MINING PLAN	A Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment and Forests 5 years in advance of final mine closure for approval.
<b>PPs Submission:</b> Complied Compliance: This mine was obtained during auction process as per MMDR Act, 2020. We have already submitted the 10percent of the total resource value to Govt, the amount will be adjusted during closure of mine. The final mine closure has been approved by IBM vide letter no, MCDR MiFLOCR/5/2022 BBS IBM RO BBS and the application for surrendering of mine lease has been submitted to state govt. vide letter no. VPRM/038/25.		Date: 30/05/2025
36	Statutory compliance	Drills shall either be operated with dust extractors or equipped with water injection system.



<b>PPs Submission:</b> Complied Compliance: Currently, the mining operation has been stopped, final mine closure has been approved by IBM vide letter no. MCDR MiFL0CR/5/2022 BBS IBM RO BBS and the application for surrendering of mine lease has been submitted to state govt. vide letter no. VPRM/038/25.		Date: 30/05/2025
37	Statutory compliance	The project authority shall adopt best mining practices for given conditions in the mining area, adequate number of check dam, retaining wall/ structure, garland drains and settling ponds should be provided to arrest the wash off with rain water in catchment area.
<b>PPs Submission:</b> Complied We are practicing best available mining technologies for given conditions in the mining area. Adequate number of check dam, retaining wall/ structure, garland drains and settling ponds have been provided to arrest the wash off with rainwater in catchment area as per approved mining plan.		Date: 30/05/2025
38	WATER QUALITY MONITORING AND PRESERVATION	The natural water bodies and or stream which are flowing in and around the village should not be disturbed. The water table should be nurtured so as not to go down below the pre-mining period. In case of any water scarcity in the area, the project authority has to provide water to the villagers for their use. A provision for regular monitoring of water table in open dug well
<b>PPs Submission:</b> Complied No such water bodies exist within mine lease area.		Date: 30/05/2025
39	MISCELLANEOUS	The illumination and sound at night at project sites disturb the village in respect of both human and animal population. Consequent sleeping disorder and stress may affect the health in the village located close to mining operation. Habitations have a right to darkness and minimal noise level at night. The Project Proponents must ensure that the biological clock of the village is not disturbed by orienting the floodlights mask way from the village and keeping the noise levels well within prescribed limits for day/ night hours.
<b>PPs Submission:</b> Complied No such long-range flood lights have been installed within mine. All Lighting masts installed within mine are oriented for optimal illumination within mine lease area.		Date: 30/05/2025
40	MISCELLANEOUS	The project Authority shall make necessary alternative arrangement, where required, in consultation with state Government to provided alternated areas for livestock grazing. In this case context, the Project Authority should implement the direction of Hon ble Supreme Court with regard to acquiring grazing land. The sparse tress on such grazing ground, which provides mid-day shelter from the scorching sun, should be scrupulously guarded felling lest the cattle abandon the grazing ground or return home by noon.
<b>PPs Submission:</b> Complied The entire mine area of 406.00ha is of govt lands (404.669ha of forest land and 1.331ha of non forest land). No such grazing land have been acquired by the company.		Date: 30/05/2025
41	Statutory compliance	Where ever blasting is undertaken as part of mining activity, the Project Authority shall carry out vibration studies well before approaching any such habitats or other building to evaluate the zone of influence and impact of blasting on neighbourhood. Within 500 meters of such sites vulnerable to blasting vibration, avoidance of use of explosives and adoption of alternative means of mineral extraction such as ripper/dozer combination/ rock breakers/ surface mineral etc should be seriously considered and practiced wherever practicable. A

		provision for monitoring of each blast should be made so that impact of blasting on nearby habitation and dwelling unit could be ascertained. The covenant of lease deed under rule 31 of MCR 1960 provided that no mining operation shall be carried out within 50 meters of public works such as public roads and building or inhabited sites except with prior permission from the competent Authority.
<b>PPs Submission:</b> Complied Currently, the mining operation has been stopped, final mine closure has been approved by IBM vide letter no. MCDR MiFL0CR/5/2022 BBS IBM RO BBS and the application for surrendering of mine lease has been submitted to state govt. vide letter no. VPRM/038/25.		Date: 30/05/2025
42	AIR QUALITY MONITORING AND PRESERVATION	Main haulage road in the mines should be provided with permanent water sprinkler and other road should be regularly wetted water tanker fitted with sprinkler. Crusher and material transfer points should be invariably be provided with bag filter and or dry fogging system. Belt conveyor fully covered to avoid air borne dust.
<b>PPs Submission:</b> Complied Currently, the mining operation has been stopped, final mine closure has been approved by IBM vide letter no. MCDR MiFL0CR/5/2022 BBS IBM RO BBS and the application for surrendering of mine lease has been submitted to state govt. vide letter no. VPRM/038/25.		Date: 30/05/2025
43	MISCELLANEOUS	The project Authority shall ensure that productivity of agriculture crops is not affected due to the mining operation. Crop Liability Insurance Policy has to be taken by PP as a precaution to compensate for the crop loss. The impact zone shall be 5 Km from the boundary of mine lease area for insurance policy. In case, several mines are located in cluster mines, formed inter alia, to sub serve such and objective shall be responsibility for securing such Crop Liability Policy.
<b>PPs Submission:</b> Complied No such potential adverse impact on the agricultural land had been evidence. However, in case of any such scenario is envisaged in future the same will be addressed in desired manner. We have agreed to insure the crop liability insurance policy as suitable to operation and impact.		Date: 30/05/2025
44	MISCELLANEOUS	In case any village is located within the mining leasehold which is not likely to be affected due to mining activities during the life of mine, the Expert Appraisal Committee (EAC) should consider the proposal of Environmental Clearance (EC) for reduced mining area. The mining lease may be executed for the area for which EC is accorded. The mining plan also accordingly revised and required stipulation under the MMDR Act 1957 and MCR 1969 met.
<b>PPs Submission:</b> Complied There are no villages within the lease hold area of 406.0ha for which EC had been accorded by MoEFCC.		Date: 30/05/2025
45	MISCELLANEOUS	Transportation of minerals by road passing through the village shall not be allowed. A bypass road should be constructed (say leaving a gap of at least 200 m) for the purpose of transportation of minerals so that the impact of sound, dust and accidents could be mitigated. The PP shall bear the cost towards the widening and strengthening of existing public road network in case same is proposed to be used for the project. No road movement should be allowed on existing village road network without appropriately increasing carrying capacity of such road.
<b>PPs Submission:</b> Complied		Date:

Mineral is transported via public Tamka-Mangalpur Road maintained by state R and B. Transit of mineral is regulated by valid transit permits issued under Odisha Minerals (prevention of theft, smuggling, illegal mining and regulation of possession, storage trading and transportation) Rules, 2007. During the construction phase, M/s. Tata Steel Limited has contributed in the construction of a major segments of the road,		30/05/2025
46	MISCELLANEOUS	Likewise, alteration or re-routing of foot paths, pagdandies, cart road and village infrastructure/ public utilities or roads (for purpose of land acquisition for mining) shall be avoided to extent possible and in such case acquisition is inevitable, alternative arrangements shall be made first and the only the area can be acquired. In these types of cases Inspection reports by site visit by expert may be insisted upon which should be done through reputed Institutes.
<b>PPs Submission:</b> Complied Entire lease area of 406.0ha is govt. land (404.669ha of forest land and 1.331ha of non-forest land thus this project is not subjected to land acquisition.		Date: 30/05/2025
47	MISCELLANEOUS	The CSR activates by companies including mining establishment has become mandatory up to 2 percent their financial turn over, socio Economic Development of neighbourhood. Habitats could also be planned and executed by the PPs more systemically based on need based door to door survey by established Social Institute/ Workers on the lines as required under TOR. R and R Plan// compensation details for Project Affected People (PAP) should be furnished. While preparing the R and R plant, the relevant State/ national Rehabilitation and Resettlement Policy should be kept in view. In respect of SCs and STs and weaker section of society in study, a need bashed sample survey, family-wise, should be undertaken to assess their requirement, and action programmes prepared and submitted accordingly, integrating the sectoral programs of line department of State Government. It may be clearly brought out whether the village including their R and R and socio-economics aspect should be discussed in EIA report.
<b>PPs Submission:</b> Complied CSR activities concerning the points mentioned are undertaken by Tata Steel Foundation dept. of Tata Steel in and around the mine. This mine is not subjected to land acquisition because the nature of land involved (govt. land) thereby eliminating the R and R obligations of the company.		Date: 30/05/2025
<b>General Conditions</b>		
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 Forests.
<b>PPs Submission:</b> Complied Compliance: There was no change in mining technology and scope of working. Mine is operated within the scope of the vested EC and approved mining plan.		Date: 30/05/2025
2	Statutory compliance	The calendar plan quantity of excavation, chrome ore, beneficiated chrome concentrates, pyroxenite ore and waste shall not be exceeded.
<b>PPs Submission:</b> Complied Compliance: The calendar plan is followed as per approved mining plan.		Date: 30/05/2025

3	AIR QUALITY MONITORING AND PRESERVATION	At least four ambient air quality-monitoring stations should be established in the core zone as well as in the buffer zone for RSPM (Particulate matter with size less than 10 micron i.e., PM10) and NOX monitoring. Location of the stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets and frequency of monitoring should be undertaken in consultation with the State Pollution Control Board. The data so recorded should be regularly submitted to the Ministry including its Regional office located at Bhubaneswar and the State Pollution Control Board / Central Pollution Control Board once in six months.
<b>PPs Submission:</b> Complied Compliance: Six ambient air quality monitoring stations (four in the work zone, one in residential area and one near dispensary) is established for ambient air quality monitoring in line with CPCB guidelines fulfilling the requirements of NAAQS 2009. Apart from this, quarterly monitoring is also done at 10 buffer zone locations in the nearby villages. Parameters monitored are as per NAAQS 2009. The locations have been finalized in consultation with Regional Officer, State Pollution Control board according to the impact zone and wind direction. The monthly monitoring report is being submitted to SPCB for compliance to the specific and general conditions.		Date: 30/05/2025
4	Noise Monitoring & Prevention	Measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM, etc. should be provided with ear plugs / muffs.
<b>PPs Submission:</b> Complied Compliance: DG sets were provided with acoustic enclosures to control the noise level below 85dB(A) in the work environment. Currently, the mining operation has been stopped, final mine closure has been approved by IBM vide letter no. MCDR MiFL0CR/5/2022 BBS IBM RO BBS and the application for surrendering of mine lease has been submitted to state govt. vide letter no. VPRM/038/25.		Date: 30/05/2025
5	WATER QUALITY MONITORING AND PRESERVATION	There will be zero waste water discharge from the plant.
<b>PPs Submission:</b> Complied Compliance: Chrome Ore beneficiation plant is not in operation.		Date: 30/05/2025
6	Human Health Environment	Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects.
<b>PPs Submission:</b> Complied Compliance: Persons working in dusty areas are provided with DGMS approved dust masks. Regular training programmes are conducted for the employees for raising awareness on health and safety aspects.		Date: 30/05/2025
7	Human Health Environment	Occupational health surveillance program of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.
<b>PPs Submission:</b> Complied Compliance: All the employees have to undergo periodical medical examination (PME) in hospital. To improve the occupational health and removing the safety hazards at industrial workplace, TSL has formulated Zero harm policy. Apart from this, persons engaged in mining operations are also tested for their exposure to free silica content in respirable air (RPM) on quarterly basis.		Date: 30/05/2025
8	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 Organization.
<b>PPs Submission:</b> Complied Compliance: The Environmental Management Cell is headed by the Head Environment Management RM at the corporate level who reports to senior management and is supported by Manager (Environment) and Environmental Monitoring Group at the site.		Date: 30/05/2025
9	MISCELLANEOUS	The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the Ministry and its Regional Office located at Bhubaneswar.
<b>PPs Submission:</b> Complied Compliance: Separate budget is allocated for environmental protection measures every year and maintained under a separate cost centre. Actual Expenditure on Environmental Protection Measures is being reported in Half yearly compliance report.		Date: 30/05/2025
10	Statutory compliance	The project authorities should inform to the Regional Office located at Bhubaneswar regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
<b>PPs Submission:</b> Complied Compliance: In accordance to the Rule 24 of MCDR 2017, final mine closure has been approved by IBM vide letter no. MCDR MiFL0CR/5/2022 BBS IBM RO BBS and the application for surrendering of mine lease has been submitted to state govt. vide letter no. VPRM/038/25.		Date: 30/05/2025
11	Statutory compliance	The Regional Office of this Ministry located at Bhubaneswar shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data/ information/ monitoring reports.
<b>PPs Submission:</b> Complied Compliance: The mine management will always be extending full cooperation to officer(s) of Regional office by furnishing the requisite data/ information/ monitoring report as and when required.		Date: 30/05/2025
12	Statutory compliance	The project proponent shall submit six monthly reports on the status of compliance of the stipulated environmental clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the Ministry of Environment and Forests, its Regional Office Bhubaneswar, the respective Zonal Office of Central Pollution Control Board and the State Pollution Control Board. The proponent shall upload the status of compliance of the environmental clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the Ministry of Environment and Forests, Bhubaneswar, the respective Zonal Officer of Central Pollution Control Board and the State Pollution Control Board.
<b>PPs Submission:</b> Complied Compliance: Six monthly reports on the status of compliance of the stipulated environmental clearance conditions including results of monitored data will be submitted to the Ministry of Environment, Forests and Climate Change and its Regional Office Bhubaneswar, the respective Zonal Office of Central Pollution Control Board and the State Pollution Control Board in soft copy. The Six monthly EC compliance report along with environmental monitoring data is being uploaded in our website (www.tatasteel.com).		Date: 30/05/2025
13	MISCELLANEOUS	A copy of the clearance letter shall be sent by the proponent to

		concerned Panchayat, Zila Parisad / Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.
<b>PPs Submission:</b> Complied Compliance: The Environment Clearance letters was sent to concerned Panchayat, Zila Parisad / Municipal Corporation, Urban Local Body. The clearance letter is being displayed in website.		Date: 30/05/2025
14	MISCELLANEOUS	The State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industry Centre and the Collectors office/ Tehsildars Office for 30 days.
<b>PPs Submission:</b> Complied Compliance: Copy of the EC clearance letter has already been sent to Odisha State Pollution Control Board, its Regional office, District Industry Centre and the Collector office/ Tehsildar Office.		Date: 30/05/2025
15	MISCELLANEOUS	The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Office of the Ministry of Environment and Forests, Bhubaneswar by e-mail.
<b>PPs Submission:</b> Complied Compliance: The Environment Statement in Form V is submitted before 30th Sept of every year .Copy of Environmental Statement is being sent to the State Pollution Control Board and to the Regional Office of MoEF and CC by e mail. Environmental statement is being updated/uploaded on the website (www.tatasteel.com). The Environment Statement for FY24 vide letter number TSL/SCM/FY25/1401, was submitted on 30.09.2024 and the same is also uploaded in the company website.		Date: 30/05/2025
16	MISCELLANEOUS	The project authorities should advertise at least in two local newspapers of the District or State in which the project is located and widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project had been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and also at web site of the Ministry of Environment and Forests at <a href="http://envfor.nic.in">http://envfor.nic.in</a> and a copy of the same should be forwarded to the Regional Office of this Ministry located at Bhubaneswar.
<b>PPs Submission:</b> Complied Compliance: The grant of Environmental Clearance was advertised earlier in the Oriya daily "The Samaja" (date: 11.09.2013, page 5) and in English daily "The New Indian Express" (date: 11.09.2013, page 5). Copy of the above advertisement is also forwarded to the Eastern Regional Office of the MoEF vide letter no. SCM/ ENV/ 012/066/13, dated 18.06.2013. Now the same EC has been vested to Sukinda Chromite Block, M/s. Tata Steel Mining Limited (TSML) for fifty (50) years and name change done TSML to TSL.		Date: 30/05/2025
<b>Visit Remarks</b>		
<b>Last Site Visit Report Date:</b>		N/A

<b>Additional Remarks:</b>	
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**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.





# Visiontek Consultancy Services Pvt. Ltd.

(Committed For Better Environment)

Report. No: Envlab/25-26/TR-02656

Date: 07.04.2025

## SIX MONTHLY COMPLIANCE REPORT (OCT-2024 TO MAR-2025) AMBIENT AIR QUALITY (CORE ZONE)

Name & Address of the Client : Sukinda Chromite Block,  
M/s TATA Steel Limited, Kalarangiatta, Dist. Jajpur, Odisha

### AAQMS1- View Point

Monthly Average	PM <sub>10</sub> µg/m <sup>3</sup>	PM <sub>2.5</sub> µg/m <sup>3</sup>	SO <sub>2</sub> µg/m <sup>3</sup>	NO <sub>x</sub> µg/m <sup>3</sup>	CO mg/m <sup>3</sup>	O <sub>3</sub> µg/m <sup>3</sup>	NH <sub>3</sub> µg/m <sup>3</sup>	C <sub>6</sub> H <sub>6</sub> µg/m <sup>3</sup>	Benzo(a) Pyrene ng/m <sup>3</sup>	Pb Lead µg/m <sup>3</sup>	As Arsenic ng/m <sup>3</sup>	Ni Nickel ng/m <sup>3</sup>
OCT-24	53.4	30.1	10.0	15.0	0.52	9.1	BDL	BDL	BDL	BDL	BDL	BDL
NOV-24	58.1	34.0	10.4	16.4	0.53	9.7	BDL	BDL	BDL	BDL	BDL	BDL
DEC-24	61.3	32.3	10.2	17.1	0.54	9.6	BDL	BDL	BDL	BDL	BDL	BDL
JAN-25	67.8	38.5	11.4	18.3	0.58	10.2	BDL	BDL	BDL	BDL	BDL	BDL
FEB-25	69.6	39.2	12.2	18.4	0.60	10.6	BDL	BDL	BDL	BDL	BDL	BDL
MAR-25	72.4	40.6	13.7	19.9	0.66	11.7	BDL	BDL	BDL	BDL	BDL	BDL
AVERAGE	63.8	35.8	11.3	17.5	0.57	10.2	BDL	BDL	BDL	BDL	BDL	BDL
NAAQ Standard	100.00 (24 hours)	60.00 (24 hours)	80.00 (1hours)	80.00 (1 hour)	4.0 (1hour)	180 (1hour)	400 (24 hours)	5 (Annual)	1 (Annual)	1 (24 hours)	6 (Annual)	20 (Annual)
Method of Testing	IS: 5182, PART-4, 23	IS: 5182, PART-4, 23	IS: 5182, PART-2	IS: 5182, PART-6	IS: 5182, PART- 10	CPCB Guidelin es	IS: 5182, PART-22	CPCB Guidelin es	IS: 5182, PART-12	IS: 5182, PART-12	IS: 5182, PART-22	IS: 5182, PART-22

  
Reviewed By:



  
Approved By:



# Visiontek Consultancy Services Pvt. Ltd.

(Committed For Better Environment)

Report. No: Envlab/25-26/TR-02657

Date: 07.04.2025

## SIX MONTHLY COMPLIANCE REPORT (OCT-2024 TO MAR-2025)

### AMBIENT AIR QUALITY (CORE ZONE)

Name & Address of the Client : Sukinda Chromite Block,  
M/s TATA Steel Limited, Kalarangiatta, Dist. Jajpur, Odisha

AAQMS2- Paradeep Gate												
Monthly Average	PM10 µg/m <sup>3</sup>	PM2.5 µg/m <sup>3</sup>	SO <sub>2</sub> µg/m <sup>3</sup>	NO <sub>x</sub> µg/m <sup>3</sup>	CO mg/m <sup>3</sup>	O <sub>3</sub> µg/m <sup>3</sup>	NH <sub>3</sub> µg/m <sup>3</sup>	C <sub>6</sub> H <sub>6</sub> µg/m <sup>3</sup>	Benzo(a) Pyrene ng/m <sup>3</sup>	Pb Lead µg/m <sup>3</sup>	As Arsenic ng/m <sup>3</sup>	Ni Nickel ng/m <sup>3</sup>
OCT-24	54.0	29.8	10.1	17.2	0.54	10.0	BDL	BDL	BDL	BDL	BDL	BDL
NOV-24	61.3	34.1	10.3	18.1	0.57	9.7	BDL	BDL	BDL	BDL	BDL	BDL
DEC-24	60.1	32.1	10.1	18.0	0.55	9.4	BDL	BDL	BDL	BDL	BDL	BDL
JAN-25	65.8	38.3	11.4	19.1	0.63	10.0	BDL	BDL	BDL	BDL	BDL	BDL
FEB-25	68.9	39.2	12.1	20.2	0.69	10.4	BDL	BDL	BDL	BDL	BDL	BDL
MAR-25	71.0	39.9	12.3	21.8	0.68	11.0	BDL	BDL	BDL	BDL	BDL	BDL
AVERAGE	63.5	35.6	11.1	19.1	0.61	10.1	BDL	BDL	BDL	BDL	BDL	BDL
NAAQ Standard	100.00 (24 hours)	60.00 (24 hours)	80.00 (1hours)	80.00 (1 hour)	4.0 (1hour)	180 (1hour)	400 (24 hours)	5 (Annual)	1 (Annual)	1 (24 hours)	6 (Annual)	20 (Annual)
Method of Testing	IS: 5182, PART-4, 23	IS: 5182, PART-4, 23	IS: 5182, PART-2	IS: 5182, PART-6	IS: 5182, PART- 10	CPCB Guidelin es	IS: 5182, PART-22	CPCB Guidelin es	IS: 5182, PART-12	IS: 5182, PART-12	IS: 5182, PART-22	IS: 5182, PART-22

Reviewed By:

*B. Patra*



Approved By:

*P. Patra*





# Visiontek Consultancy Services Pvt. Ltd.

(Committed For Better Environment)

Report. No: Envlab/25-26/TR-02658

Date: 07.04.2025

## SIX MONTHLY COMPLIANCE REPORT (OCT-2024 TO MAR-2025)

### AMBIENT AIR QUALITY (CORE ZONE)

Name & Address of the Client : Sukinda Chromite Block,  
M/s TATA Steel Limited, Kalarangiatta, Dist. Jajpur, Odisha

#### AAQMS3- COB Plant

Monthly Average	PM10 µg/m3	PM2.5 µg/m3	SO2 µg/m3	NOx µg/m3	CO mg/m3	O3 µg/m3	NH3 µg/m3	C6H6 µg/m3	Benzo(a) Pyrene ng/m3	Pb Lead µg/m3	As Arsenic ng/m3	Ni Nickel ng/m3
OCT-24	56.6	31.4	9.9	16.4	0.55	10.3	BDL	BDL	BDL	BDL	BDL	BDL
NOV-24	63.7	35.5	10.3	17.5	0.56	10.7	BDL	BDL	BDL	BDL	BDL	BDL
DEC-24	62.8	33.4	10.3	17.9	0.55	10.6	BDL	BDL	BDL	BDL	BDL	BDL
JAN-25	69.0	38.9	11.2	19.3	0.58	11.1	BDL	BDL	BDL	BDL	BDL	BDL
FEB-25	71.1	41.2	11.9	20.3	0.61	11.7	BDL	BDL	BDL	BDL	BDL	BDL
MAR-25	74.8	41.6	13.1	20.9	0.64	13.0	BDL	BDL	BDL	BDL	BDL	BDL
AVERAGE	66.3	37.0	11.1	18.7	0.58	11.2	BDL	BDL	BDL	BDL	BDL	BDL
NAAQ Standard	100.00 (24 hours)	60.00 (24 hours)	80.00 (1hours)	80.00 (1 hour)	4.0 (1hour)	180 (1hour)	400 (24 hours)	5 (Annual)	1 (Annual)	1 (24 hours)	6 (Annual)	20 (Annual)
Method of Testing	IS: 5182, PART-4, 23	IS: 5182, PART-4, 23	IS: 5182, PART-2	IS: 5182, PART-6	IS: 5182, PART- 10	CPCB Guidelin es	IS: 5182, PART-22	CPCB Guidelin es	IS: 5182, PART-12	IS: 5182, PART-12	IS: 5182, PART-22	IS: 5182, PART-22

  
Reviewed By:



  
Approved By:



# Visiontek Consultancy Services Pvt. Ltd.

(Committed For Better Environment)

Report. No: Envlab/25-26/TR-02659

Date: 07.04.2025

## SIX MONTHLY COMPLIANCE REPORT (OCT-2024 TO MAR-2025)

### AMBIENT AIR QUALITY (CORE ZONE)

Name & Address of the Client : Sukinda Chromite Block,  
M/s TATA Steel Limited, Kalarangiatta, Dist. Jajpur, Odisha

#### AAQMS4- Laboratory Top

Monthly Average	PM10 µg/m3	PM2.5 µg/m3	SO2 µg/m3	NOx µg/m3	CO mg/m3	O3 µg/m3	NH3 µg/m3	C6H6 µg/m3	Benzo(a) Pyrene ng/m3	Pb Lead µg/m3	As Arsenic ng/m3	Ni Nickel ng/m3
OCT-24	50.7	30.0	10.0	15.8	0.47	10.0	BDL	BDL	BDL	BDL	BDL	BDL
NOV-24	54.3	30.7	9.9	15.8	0.44	10.0	BDL	BDL	BDL	BDL	BDL	BDL
DEC-24	55.6	31.2	9.9	15.6	0.45	10.0	BDL	BDL	BDL	BDL	BDL	BDL
JAN-25	57.6	32.9	10.3	16.3	0.47	10.5	BDL	BDL	BDL	BDL	BDL	BDL
FEB-25	60.2	33.5	11.1	16.7	0.52	11.3	BDL	BDL	BDL	BDL	BDL	BDL
MAR-25	63.1	35.6	11.4	16.9	0.54	11.6	BDL	BDL	BDL	BDL	BDL	BDL
AVERAGE	56.9	32.3	10.4	16.2	0.48	10.6	BDL	BDL	BDL	BDL	BDL	BDL
NAAQ Standard	100.00 (24 hours)	60.00 (24 hours)	80.00 (1hours)	80.00 (1 hour)	4.0 (1hour)	180 (1hour)	400 (24 hours)	5 (Annual)	1 (Annual)	1 (24 hours)	6 (Annual)	20 (Annual)
Method of Testing	IS: 5182, PART-4, 23	IS: 5182, PART-4, 23	IS: 5182, PART-2	IS: 5182, PART-6	IS: 5182, PART- 10	CPCB Guidelin es	IS: 5182, PART-22	CPCB Guidelin es	IS: 5182, PART-12	IS: 5182, PART-12	IS: 5182, PART-22	IS: 5182, PART-22

  
Reviewed By:



  
Approved By:



# Visiontek Consultancy Services Pvt. Ltd.

(Committed For Better Environment)

Report. No: Envlab/25-26/TR-02660

Date: 07.04.2025

## SIX MONTHLY COMPLIANCE REPORT (OCT-2024 TO MAR-2025) AMBIENT AIR QUALITY (CORE ZONE)

Name & Address of the Client : Sukinda Chromite Block,  
M/s TATA Steel Limited, Kalarangiatta, Dist. Jajpur, Odisha

### AAQMS5- Nickel Guest House

Monthly Average	PM10 µg/m3	PM2.5 µg/m3	SO2 µg/m3	NOx µg/m3	CO mg/m3	O3 µg/m3	NH3 µg/m3	C6H6 µg/m3	Benzo(a) Pyrene ng/m3	Pb Lead µg/m3	As Arsenic ng/m3	Ni Nickel ng/m3
OCT-24	48.2	26.9	9.9	13.4	0.49	8.9	19.6	BDL	BDL	BDL	BDL	BDL
NOV-24	52.1	31.7	9.8	13.9	0.50	9.1	21.1	BDL	BDL	BDL	BDL	BDL
DEC-24	53.7	28.6	9.8	13.7	0.50	9.0	21.4	BDL	BDL	BDL	BDL	BDL
JAN-25	56.7	31.6	10.4	14.2	0.52	9.2	22.4	BDL	BDL	BDL	BDL	BDL
FEB-25	61.8	35.0	11.5	15.0	0.55	9.2	22.4	BDL	BDL	BDL	BDL	BDL
MAR-25	64.7	34.9	12.2	15.2	0.57	9.8	22.9	BDL	BDL	BDL	BDL	BDL
AVERAGE	56.2	31.5	10.6	14.2	0.52	9.2	21.6	BDL	BDL	BDL	BDL	BDL
NAAQ Standard	100.00 (24 hours)	60.00 (24 hours)	80.00 (1hours)	80.00 (1 hour)	4.0 (1hour)	180 (1hour)	400 (24 hours)	5 (Annual)	1 (Annual)	1 (24 hours)	6 (Annual)	20 (Annual)
Method of Testing	IS: 5182, PART-4, 23	IS: 5182, PART-4, 23	IS: 5182, PART-2	IS: 5182, PART-6	IS: 5182, PART- 10	CPCB Guidelin es	IS: 5182, PART-22	CPCB Guidelin es	IS: 5182, PART-12	IS: 5182, PART-12	IS: 5182, PART-22	IS: 5182, PART-22

  
Reviewed By:



  
Approved By:





# Visiontek Consultancy Services Pvt. Ltd.

(Committed For Better Environment)

Report. No: Envlab/25-26/TR-02661

Date: 07.04.2025

## SIX MONTHLY COMPLIANCE REPORT (OCT-2024 TO MAR-2025) AMBIENT AIR QUALITY (CORE ZONE)


Name & Address of the Client : Sukinda Chromite Block,  
M/s TATA Steel Limited, Kalarangiatta, Dist. Jajpur, Odisha

### AAQMS6- Stack Yard

Monthly Average	PM10 µg/m3	PM2.5 µg/m3	SO2 µg/m3	NOx µg/m3	CO mg/m3	O3 µg/m3	NH3 µg/m3	C6H6 µg/m3	Benzo(a) Pyrene ng/m3	Pb Lead µg/m3	As Arsenic ng/m3	Ni Nickel ng/m3
OCT-24	56.9	31.5	12.4	18.9	0.5	9.1	BDL	BDL	BDL	BDL	BDL	BDL
NOV-24	62.8	34.8	12.6	18.7	0.46	9.3	BDL	BDL	BDL	BDL	BDL	BDL
DEC-24	63.2	33.7	12.6	18.7	0.44	9.2	BDL	BDL	BDL	BDL	BDL	BDL
JAN-25	67.2	38.1	12.8	19.2	0.51	10.0	BDL	BDL	BDL	BDL	BDL	BDL
FEB-25	70.3	40.8	13.0	21.0	0.54	10.7	BDL	BDL	BDL	BDL	BDL	BDL
MAR-25	74.0	42.3	14.1	22.0	0.61	11.3	BDL	BDL	BDL	BDL	BDL	BDL
AVERAGE	65.7	36.9	12.9	19.8	0.51	9.9	BDL	BDL	BDL	BDL	BDL	BDL
NAAQ Standard	100.00 (24 hours)	60.00 (24 hours)	80.00 (1hours)	80.00 (1 hour)	4.0 (1hour)	180 (1hour)	400 (24 hours)	5 (Annual)	1 (Annual)	1 (24 hours)	6 (Annual)	20 (Annual)
Method of Testing	IS: 5182, PART-4, 23	IS: 5182, PART-4, 23	IS: 5182, PART-2	IS: 5182, PART-6	IS: 5182, PART- 10	CPCB Guidelin es	IS: 5182, PART-22	CPCB Guidelin es	IS: 5182, PART-12	IS: 5182, PART-12	IS: 5182, PART-22	IS: 5182, PART-22

  
Reviewed By:



  
Approved By:



Report. No: Envlab/25-26/TR-02662

Date: 07.04.2025

## SIX MONTHLY COMPLIANCE REPORT (OCT-2024 TO MAR-2025) AMBIENT AIR QUALITY (BUFFER ZONE)

Name & Address of the Client : Sukinda Chromite Block,  
M/s TATA Steel Limited, Kalarangiatta, Dist. Jajpur, Odisha

AAQBZ-1: Birasal												
Monthly Average	PM10 µg/m3	PM2.5 µg/m3	SO2 µg/m3	NOx µg/m3	CO mg/m3	O3 µg/m3	NH3 µg/m3	C6H6 µg/m3	Benzo(a) Pyrene ng/m3	Pb Lead µg/m3	As Arsenic ng/m3	Ni Nickel ng/m3
DEC-24	57.2	29.5	6.5	14.5	0.28	BDL	BDL	BDL	BDL	BDL	BDL	BDL
MAR-25	60.1	34.2	7.9	14.9	0.29	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Average	58.6	31.8	7.2	14.7	0.29	BDL	BDL	BDL	BDL	BDL	BDL	BDL
NAAQ Standard	100.00 (24 hours)	60.00 (24 hours)	80.00 (1hours)	80.00 (1 hour)	4.0 (1hour)	180 (1hour)	400 (24 hours)	5 (Annual)	1 (Annual)	1 (24 hours)	6 (Annual)	20 (Annual)
Method of Testing	IS: 5182, PART-4, 23	IS: 5182, PART-4, 23	IS: 5182, PART-2	IS: 5182, PART-6	IS: 5182, PART-10	CPCB Guidelines	IS: 5182, PART-22	CPCB Guidelines	IS: 5182, PART-12	IS: 5182, PART-12	IS: 5182, PART-22	IS: 5182, PART-22

AAQBZ-2: Maruabil												
Monthly Average	PM10 µg/m3	PM2.5 µg/m3	SO2 µg/m3	NOx µg/m3	CO mg/m3	O3 µg/m3	NH3 µg/m3	C6H6 µg/m3	Benzo(a) Pyrene ng/m3	Pb Lead µg/m3	As Arsenic ng/m3	Ni Nickel ng/m3
DEC-24	53.6	30.1	7.0	14.2	0.31	BDL	BDL	BDL	BDL	BDL	BDL	BDL
MAR-25	63.2	36.8	8.2	15.1	0.36	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Average	58.4	33.5	7.6	14.7	0.34	BDL	BDL	BDL	BDL	BDL	BDL	BDL
NAAQ Standard	100.00 (24 hours)	60.00 (24 hours)	80.00 (1hours)	80.00 (1 hour)	4.0 (1hour)	180 (1hour)	400 (24 hours)	5 (Annual)	1 (Annual)	1 (24 hours)	6 (Annual)	20 (Annual)
Method of Testing	IS: 5182, PART-4, 23	IS: 5182, PART-4, 23	IS: 5182, PART-2	IS: 5182, PART-6	IS: 5182, PART-10	CPCB Guidelines	IS: 5182, PART-22	CPCB Guidelines	IS: 5182, PART-12	IS: 5182, PART-12	IS: 5182, PART-22	IS: 5182, PART-22

  
Reviewed By:



  
Approved By:





# Visiontek Consultancy Services Pvt. Ltd.

(Committed For Better Environment)

Report. No: Envlab/25-26/TR-02663

Date: 07.04.2025

## SIX MONTHLY COMPLIANCE REPORT (OCT-2024 TO MAR-2025)

### AMBIENT AIR QUALITY (BUFFER ZONE)

Name & Address of the Client : Sukinda Chromite Block,  
M/s TATA Steel Limited, Kalarangiatta, Dist. Jajpur, Odisha

AAQBZ-3: Sendheswar												
Monthly Average	PM10 µg/m3	PM2.5 µg/m3	SO2 µg/m3	NOx µg/m3	CO mg/m3	O3 µg/m3	NH3 µg/m3	C6H6 µg/m3	Benzo(a) Pyrene ng/m3	Pb Lead µg/m3	As Arsenic ng/m3	Ni Nickel ng/m3
DEC-24	51.2	26.7	6.8	13.8	0.30	BDL	BDL	BDL	BDL	BDL	BDL	BDL
MAR-25	61.9	35.9	7.5	15.3	0.35	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Average	56.6	31.3	7.15	14.6	0.33	BDL	BDL	BDL	BDL	BDL	BDL	BDL
NAAQ Standard	100.00 (24 hours)	60.00 (24 hours)	80.00 (1hours)	80.00 (1 hour)	4.0 (1hour)	180 (1hour)	400 (24 hours)	5 (Annual)	1 (Annual)	1 (24 hours)	6 (Annual)	20 (Annual)
Method of Testing	IS: 5182, PART-4, 23	IS: 5182, PART-4, 23	IS: 5182, PART-2	IS: 5182, PART-6	IS: 5182, PART-10	CPCB Guidelines	IS: 5182, PART-22	CPCB Guidelines	IS: 5182, PART-12	IS: 5182, PART-12	IS: 5182, PART-22	IS: 5182, PART-22

AAQBZ-4: Kanheipal												
Monthly Average	PM10 µg/m3	PM2.5 µg/m3	SO2 µg/m3	NOx µg/m3	CO mg/m3	O3 µg/m3	NH3 µg/m3	C6H6 µg/m3	Benzo(a) Pyrene ng/m3	Pb Lead µg/m3	As Arsenic ng/m3	Ni Nickel ng/m3
DEC-24	55.4	30.5	6.3	14.4	0.26	BDL	BDL	BDL	BDL	BDL	BDL	BDL
MAR-25	58.3	31.2	8.0	15.2	0.33	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Average	56.9	30.9	7.15	14.8	0.30	BDL	BDL	BDL	BDL	BDL	BDL	BDL
NAAQ Standard	100.00 (24 hours)	60.00 (24 hours)	80.00 (1hours)	80.00 (1 hour)	4.0 (1hour)	180 (1hour)	400 (24 hours)	5 (Annual)	1 (Annual)	1 (24 hours)	6 (Annual)	20 (Annual)
Method of Testing	IS: 5182, PART-4, 23	IS: 5182, PART-4, 23	IS: 5182, PART-2	IS: 5182, PART-6	IS: 5182, PART-10	CPCB Guidelines	IS: 5182, PART-22	CPCB Guidelines	IS: 5182, PART-12	IS: 5182, PART-12	IS: 5182, PART-22	IS: 5182, PART-22

Reviewed By:



Approved By:



# Visiontek Consultancy Services Pvt. Ltd.

(Committed For Better Environment)

Report. No: Envlab/25-26/TR-02664

Date: 07.04.2025

## SIX MONTHLY COMPLIANCE REPORT (OCT-2024 TO MAR-2025)

### AMBIENT AIR QUALITY (BUFFER ZONE)

Name & Address of the Client : Sukinda Chromite Block,  
M/s TATA Steel Limited, Kalarangiatta, Dist. Jajpur, Odisha

AAQBZ-5: Laxmidharpur												
Monthly Average	PM10 µg/m3	PM2.5 µg/m3	SO2 µg/m3	NOx µg/m3	CO mg/m3	O3 µg/m3	NH3 µg/m3	C6H6 µg/m3	Benzo(a) Pyrene ng/m3	Pb Lead µg/m3	As Arsenic ng/m3	Ni Nickel ng/m3
DEC-24	53.9	30.3	6.1	14.7	0.31	BDL	BDL	BDL	BDL	BDL	BDL	BDL
MAR-25	59.7	33.8	8.1	14.7	0.34	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Average	56.8	32.1	7.1	14.7	0.33	BDL	BDL	BDL	BDL	BDL	BDL	BDL
NAAQ Standard	100.00 (24 hours)	60.00 (24 hours)	80.00 (1hours)	80.00 (1 hour)	4.0 (1hour)	180 (1hour)	400 (24 hours)	5 (Annual)	1 (Annual)	1 (24 hours)	6 (Annual)	20 (Annual)
Method of Testing	IS: 5182, PART-4, 23	IS: 5182, PART-4, 23	IS: 5182, PART-2	IS: 5182, PART-6	IS: 5182, PART-10	CPCB Guidelines	IS: 5182, PART-22	CPCB Guidelines	IS: 5182, PART-12	IS: 5182, PART-12	IS: 5182, PART-22	IS: 5182, PART-22
AAQBZ-6: Kakudia												
Monthly Average	PM10 µg/m3	PM2.5 µg/m3	SO2 µg/m3	NOx µg/m3	CO mg/m3	O3 µg/m3	NH3 µg/m3	C6H6 µg/m3	Benzo(a) Pyrene ng/m3	Pb Lead µg/m3	As Arsenic ng/m3	Ni Nickel ng/m3
DEC-24	52.3	29.3	6.0	13.8	0.24	BDL	BDL	BDL	BDL	BDL	BDL	BDL
MAR-25	61.8	36.5	8.0	15.2	0.29	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Average	57.1	32.9	7.0	14.5	0.27	BDL	BDL	BDL	BDL	BDL	BDL	BDL
NAAQ Standard	100.00 (24 hours)	60.00 (24 hours)	80.00 (1hours)	80.00 (1 hour)	4.0 (1hour)	180 (1hour)	400 (24 hours)	5 (Annual)	1 (Annual)	1 (24 hours)	6 (Annual)	20 (Annual)
Method of Testing	IS: 5182, PART-4, 23	IS: 5182, PART-4, 23	IS: 5182, PART-2	IS: 5182, PART-6	IS: 5182, PART-10	CPCB Guidelines	IS: 5182, PART-22	CPCB Guidelines	IS: 5182, PART-12	IS: 5182, PART-12	IS: 5182, PART-22	IS: 5182, PART-22

  
Reviewed By:



  
Approved By:



Report. No: Envlab/25-26/TR-02665

Date: 07.04.2025

## SIX MONTHLY COMPLIANCE REPORT (OCT-2024 TO MAR-2025) AMBIENT AIR QUALITY (BUFFER ZONE)

Name & Address of the Client : Sukinda Chromite Block,  
M/s TATA Steel Limited, Kalarangiatta, Dist. Jajpur, Odisha

AAQBZ-7: Sukrangi												
Monthly Average	PM10 µg/m3	PM2.5 µg/m3	SO2 µg/m3	NOx µg/m3	CO mg/m3	O3 µg/m3	NH3 µg/m3	C6H6 µg/m3	Benzo(a) Pyrene ng/m3	Pb Lead µg/m3	As Arsenic ng/m3	Ni Nickel ng/m3
DEC-24	52.6	28.6	6.5	14.3	0.28	BDL	BDL	BDL	BDL	BDL	BDL	BDL
MAR-25	62.3	36.2	7.6	15.6	0.37	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Average	57.5	32.4	7.1	15.0	0.33	BDL	BDL	BDL	BDL	BDL	BDL	BDL
NAAQ Standard	100.00 (24 hours)	60.00 (24 hours)	80.00 (1hours)	80.00 (1 hour)	4.0 (1hour)	180 (1hour)	400 (24 hours)	5 (Annual)	1 (Annual)	1 (24 hours)	6 (Annual)	20 (Annual)
Method of Testing	IS: 5182, PART-4, 23	IS: 5182, P ART-4, 23	IS: 5182, PART-2	IS: 5182, PART-6	IS: 5182, PART-10	CPCB Guidelines	IS: 5182, PART-22	CPCB Guidelines	IS: 5182, PART-12	IS: 5182, PART-12	IS: 5182, PART-22	IS: 5182, PART-22
AAQBZ-8: Kaliapani												
Monthly Average	PM10 µg/m3	PM2.5 µg/m3	SO2 µg/m3	NOx µg/m3	CO mg/m3	O3 µg/m3	NH3 µg/m3	C6H6 µg/m3	Benzo(a) Pyrene ng/m3	Pb Lead µg/m3	As Arsenic ng/m3	Ni Nickel ng/m3
DEC-24	56.1	30.4	6.2	13.2	0.29	BDL	BDL	BDL	BDL	BDL	BDL	BDL
MAR-25	60.7	34.5	7.9	13.7	0.33	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Average	58.4	32.5	7.1	13.5	0.31	BDL	BDL	BDL	BDL	BDL	BDL	BDL
NAAQ Standard	100.00 (24 hours)	60.00 (24 hours)	80.00 (1hours)	80.00 (1 hour)	4.0 (1hour)	180 (1hour)	400 (24 hours)	5 (Annual)	1 (Annual)	1 (24 hours)	6 (Annual)	20 (Annual)
Method of Testing	IS: 5182, PART-4, 23	IS: 5182, P ART-4, 23	IS: 5182, PART-2	IS: 5182, PART-6	IS: 5182, PART-10	CPCB Guidelines	IS: 5182, PART-22	CPCB Guidelines	IS: 5182, PART-12	IS: 5182, PART-12	IS: 5182, PART-22	IS: 5182, PART-22

Reviewed By:   


Approved By:   




Report. No: Envlab/25-26/TR-02666

Date: 07.04.2025

## SIX MONTHLY COMPLIANCE REPORT (OCT-2024 TO MAR-2025) AMBIENT AIR QUALITY (BUFFER ZONE)

Name & Address of the Client : Sukinda Chromite Block,  
M/s TATA Steel Limited, Kalarangiatta, Dist. Jajpur, Odisha

AAQBZ-9: Kalarangi												
Monthly Average	PM10 µg/m <sup>3</sup>	PM2.5 µg/m <sup>3</sup>	SO <sub>2</sub> µg/m <sup>3</sup>	NO <sub>x</sub> µg/m <sup>3</sup>	CO mg/m <sup>3</sup>	O <sub>3</sub> µg/m <sup>3</sup>	NH <sub>3</sub> µg/m <sup>3</sup>	C <sub>6</sub> H <sub>6</sub> µg/m <sup>3</sup>	Benzo(a) Pyrene ng/m <sup>3</sup>	Pb Lead µg/m <sup>3</sup>	As Arsenic ng/m <sup>3</sup>	Ni Nickel ng/m <sup>3</sup>
DEC-24	54.5	29.8	6.4	13.8	0.31	BDL	BDL	BDL	BDL	BDL	BDL	BDL
MAR-25	59.4	33.7	8.1	14.9	0.35	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Average	57.0	31.8	7.3	14.4	0.33	BDL	BDL	BDL	BDL	BDL	BDL	BDL
NAAQ Standard	100.00 (24 hours)	60.00 (24 hours)	80.00 (1hours)	80.00 (1 hour)	4.0 (1hour)	180 (1hour)	400 (24 hours)	5 (Annual)	1 (Annual)	1 (24 hours)	6 (Annual)	20 (Annual )
Method of Testing	IS: 5182, PART-4, 23	IS: 5182, P ART-4, 23	IS: 5182, PART-2	IS: 5182, PART-6	IS: 5182, PART-10	CPCB Guidelines	IS: 5182, PART-22	CPCB Guidelines	IS: 5182, PART-12	IS: 5182, PART-12	IS: 5182, PART-22	IS: 5182, PART-22
AAQBZ-10: Kharkhari												
Monthly Average	PM10 µg/m <sup>3</sup>	PM2.5 µg/m <sup>3</sup>	SO <sub>2</sub> µg/m <sup>3</sup>	NO <sub>x</sub> µg/m <sup>3</sup>	CO mg/m <sup>3</sup>	O <sub>3</sub> µg/m <sup>3</sup>	NH <sub>3</sub> µg/m <sup>3</sup>	C <sub>6</sub> H <sub>6</sub> µg/m <sup>3</sup>	Benzo(a) Pyrene ng/m <sup>3</sup>	Pb Lead µg/m <sup>3</sup>	As Arsenic ng/m <sup>3</sup>	Ni Nickel ng/m <sup>3</sup>
DEC-24	50.9	28.4	6.2	14.2	0.26	BDL	BDL	BDL	BDL	BDL	BDL	BDL
MAR-25	66.3	36.9	7.8	15.1	0.37	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Average	58.6	32.7	7.0	14.7	0.32	BDL	BDL	BDL	BDL	BDL	BDL	BDL
NAAQ Standard	100.00 (24 hours)	60.00 (24 hours)	80.00 (1hours)	80.00 (1 hour)	4.0 (1hour)	180 (1hour)	400 (24 hours)	5 (Annual)	1 (Annual)	1 (24 hours)	6 (Annual)	20 (Annual )
Method of Testing	IS: 5182, PART-4, 23	IS: 5182, P ART-4, 23	IS: 5182, PART-2	IS: 5182, PART-6	IS: 5182, PART-10	CPCB Guidelines	IS: 5182, PART-22	CPCB Guidelines	IS: 5182, PART-12	IS: 5182, PART-12	IS: 5182, PART-22	IS: 5182, PART-22



Reviewed By:





Approved By:





Report. No: Envlab/25-26/TR-02667

Date: 07.04.2025

## SIX MONTHLY COMPLIANCE REPORT (OCT-2024 TO MAR-2025) STACK EMISSION MONITORING REPORT

Name & Address of the Client : Sukinda Chromite Block,  
M/s TATA Steel Limited, Kalarangiatta, Dist. Jajpur, Odisha

### Stack-1: 500 KVA DG

Parameters	CPCB Standard for DG $\geq$ 800KW ( $\geq$ 1000KVA)	OCT-24	NOV-24	DEC-24	JAN-25	FEB-25	MAR-25	AVERAGE
Stack Temp °C	--	178	175	176	174	172	176	175
Stack Velocity m/sec	--	13.9	13.8	14.1	13.3	13.9	14.8	14.0
Particulate Matter (PM), mg/Nm <sup>3</sup>	75 mg/Nm <sup>3</sup>	68	65	63	61	60	68	64
Oxides of Nitrogen (NOx), ppm	710 ppm	63	62	61	58	58	64	61
Sulphur Dioxide (SO <sub>2</sub> ), ppm	--	16.2	16.3	16.5	16.1	15.8	16.1	16.2
Carbon Monoxide, mg/Nm <sup>3</sup>	150 mg/Nm <sup>3</sup>	64.2	62.7	61.6	60.3	60.9	61.3	61.8
Non Methyl Hydro Carbon as C, mg/Nm <sup>3</sup>	100 mg/Nm <sup>3</sup>	27.2	26.8	28.5	27.3	26.9	31.2	28.0

### Stack-2: 500 KVA DG

Parameters	CPCB Standard for DG $\geq$ 800KW ( $\geq$ 1000KVA)	OCT-24	NOV-24	DEC-24	JAN-25	FEB-25	MAR-25	AVERAGE
Stack Temp °C	--	175	173	175	176	175	172	174
Stack Velocity m/sec	--	14.2	14.0	13.6	13.8	14.1	14.6	14.1
Particulate Matter (PM), mg/Nm <sup>3</sup>	75 mg/Nm <sup>3</sup>	66	67	65	63	65	63	65
Oxides of Nitrogen (NOx), ppm	710 ppm	62	60	63	60	62	59	61
Sulphur Dioxide (SO <sub>2</sub> ), ppm	--	16.8	16.5	16.2	15.9	16.1	15.8	16.2
Carbon Monoxide, mg/Nm <sup>3</sup>	150 mg/Nm <sup>3</sup>	62.9	60.9	62.2	61.7	61.4	60.8	61.7
Non Methyl Hydro Carbon as C, mg/Nm <sup>3</sup>	100 mg/Nm <sup>3</sup>	26.9	27.1	27.9	26.8	27.4	29.8	27.7

  
Reviewed By:



  
Approved By:



Report. No: Envlab/25-26/TR-02668

Date: 07.04.2025

**SIX MONTHLY COMPLIANCE REPORT (OCT-2024 TO MAR-2025)**  
**GROUND WATER QUALITY ANALYSIS REPORT**

Name & Address of the Client : Sukinda Chromite Block,  
M/s TATA Steel Limited, Kalarangiatta, Dist. Jajpur, Odisha

**GW1: Tube well Water in front of Main Gate**

Sl. No	Parameter	Unit of Measurement	OCT-24	NOV-24	DEC-24	JAN-25	FEB-25	MAR-25	AVERAGE
1	pH at 25 degree C	--	7.25	7.16	7.17	7.19	7.22	7.15	7.2
2	Turbidity	NTU	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
3	Total Hardness	mg/l	172	123	124	118	124	118	130
4	Alkalinity	mg/l	95	96	84	78	80	86	87
5	Total Dissolved Solids	mg/l	278	250	256	244	229	234	248.5
6	Chloride as Cl	mg/l	31.2	31.2	31.2	30.9	31.3	32.3	31.4
7	Residual free Chlorine	mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
8	Dissolve Oxygen	mg/l	4.6	4.4	4.2	4.4	4.2	4.4	4.4
9	Calcium as Ca	mg/l	32.5	30.6	30.9	31.3	33.6	34.6	32.3
10	Magnesium as Mg	mg/l	22.1	11.3	11.4	9.68	9.7	7.7	12.0
11	Sulphate as SO <sub>4</sub>	mg/l	7.8	8.5	6.8	6.4	6.1	5.9	6.9
12	Fluoride as F	mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
13	Nitrate	mg/l	1.28	1.20	1.22	1.16	1.12	1.21	1.20
14	Hexavalent Chromium as Cr+6	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
15	Cyanide (as CN)	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
16	Arsenic (as As)	mg/l	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
17	Iron as Fe	mg/l	0.25	0.22	0.21	0.2	0.22	0.25	0.23
18	Lead (as Pb)	mg/l	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
19	Zinc (as Zn)	mg/l	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
20	Copper (as Cu)	mg/l	<0.05	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
21	Manganese (as Mn)	mg/l	<0.05	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
22	Mercury as Hg	mg/l	<0.001	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
23	Cadmium (as Cd)	mg/l	<0.003	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
24	Boron (as B)	mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
25	Selenium (as Se)	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
26	Mineral Oil	mg/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

*Bab*

Reviewed By:



*P. Patu*

Approved By:



# Visiontek Consultancy Services Pvt. Ltd.

(Committed For Better Environment)

Report. No: Envlab/25-26/TR-02669

Date: 07.04.2025

## GW2: Tube well Near Market Complex

Sl. No	Parameter	Unit of Measurement	OCT-24	NOV-24	DEC-24	JAN-25	FEB-25	MAR-25	AVERAGE
1	pH at 25 degree C	--	7.30	7.2	7.21	7.25	7.26	7.28	7.25
2	Turbidity	NTU	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
3	Total Hardness	mg/l	158	114	118	112	108	110	120
4	Alkalinity	mg/l	102	78	92	82	86	92	89
5	Total Dissolved Solids	mg/l	289	244	244	231	236	346	265.0
6	Chloride as Cl	mg/l	32.8	31.9	30.9	31.5	33.9	34.1	32.5
7	Residual free Chlorine	mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
8	Dissolve Oxygen	mg/l	4.0	4.0	4.4	4.2	4.4	4.8	4.3
9	Calcium as Ca	mg/l	29.7	31.2	31.2	31.9	31.8	32.8	31.4
10	Magnesium as Mg	mg/l	20.4	8.8	9.7	7.86	6.9	6.8	10.1
11	Sulphate as SO <sub>4</sub>	mg/l	7.5	8.0	6.1	5.8	5.5	6.1	6.5
12	Fluoride as F	mg/l	<1.0	<0.1	<1.0	<1.0	<1.0	<1.0	<1.0
13	Nitrate	mg/l	1.3	1.24	1.15	1.21	1.18	1.15	1.21
14	Hexavalent Chromium as Cr+6	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
15	Cyanide (as CN)	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
16	Arsenic (as As)	mg/l	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
17	Iron as Fe	mg/l	0.23	0.25	0.19	0.22	0.26	0.29	0.24
18	Lead (as Pb)	mg/l	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
19	Zinc (as Zn)	mg/l	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
20	Copper (as Cu)	mg/l	<0.05	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
21	Manganese (as Mn)	mg/l	<0.05	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
22	Mercury as Hg	mg/l	<0.001	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
23	Cadmium (as Cd)	mg/l	<0.003	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
24	Boron (as B)	mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
25	Selenium (as Se)	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
26	Mineral Oil	mg/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

  
Reviewed By:



  
Approved By:





Report. No: Envlab/25-26/TR-02670

Date: 07.04.2025

## SIX MONTHLY COMPLIANCE REPORT (OCT-2024 TO MAR-2025)

### SURFACE WATER QUALITY ANALYSIS REPORT

Name & Address of the Client : Sukinda Chromite Block,  
M/s TATA Steel Limited, Kalarangiatta, Dist. Jajpur, Odisha

#### SW1: Damsala Nallah Upstream Water

Sl. No	Parameter	Unit	OCT-24	NOV-24	DEC-24	JAN-25	FEB-25	MAR-25	AVERAG E
1	Colour (max)	Hazen	<15	<15	<15	<15	<15	<15	<15
2	pH Value	--	7.25	7.29	7.24	7.31	7.35	7.33	7.30
3	Suspended solids	mg/l	90	84	78	74	72	66	77.3
4	Dissolved Oxygen (minimum)	mg/l	5.0	4.6	4.4	4.6	4.4	4	4.5
5	Turbidity	NTU	14.9	11.9	11.3	10.9	10.1	9.6	11.5
6	Chloride (max)	mg/l	31.5	30.5	32.6	31.9	32.4	33.8	32.1
7	Total Dissolved Solids	mg/l	274	259	248	236	224	230	245
8	BOD (3) days at 270C (max)	mg/l	<1.0	<1	<1	<1	<1	<1	<1
9	Arsenic as As	mg/l	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
10	Lead as Pb(max)	mg/l	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
11	Cadmium as Cd (max)	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
12	Hexa Chromium as Cr +6	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
13	Copper as Cu (max)	mg/l	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
14	Zinc as Zn(max)	mg/l	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
15	Selenium as Se (max)	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
16	Cyanide as CN (max)	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
17	Fluoride as F (max)	mg/l	0.22	0.21	0.19	0.18	0.17	0.21	0.20
18	Sulphates (SO4) (max)	mg/l	0.45	0.43	0.42	0.44	0.42	0.53	0.45
19	Phenolic Compounds as C6H5OH (max)	mg/l	<0.005	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
20	Iron as Fe (max)	mg/l	0.25	0.21	0.23	0.21	0.23	0.31	0.24
21	Nitrate as NO3, (max)	mg/l	2.3	2.2	2.1	2.3	2.4	2.6	2.32
22	Anionic Detergents (max)	mg/l	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
23	Total Coli form	MPN/ 100 ml	580	520	480	440	420	480	487

  
Reviewed By:



  
Approved By:



# Visiontek Consultancy Services Pvt. Ltd.

(Committed For Better Environment)

Report. No: Envlab/25-26/TR-02671

Date: 07.04.2025

## SW2: Damsala Nallah Downstream Water

Sl. No	Parameter	Unit	OCT-24	NOV-24	DEC-24	JAN-25	FEB-25	MAR-25	AVERAGE
1	Colour (max)	Hazen	<10	<10	<10	<10	<10	<10	<10
2	pH Value	--	7.33	7.31	7.3	7.26	7.3	7.25	7.29
3	Suspended solids	mg/l	107	93	92	96	90	82	93.3
4	Dissolved Oxygen (minimum)	mg/l	5.8	5	4.6	4.8	4.6	4.8	4.9
5	Turbidity	NTU	16.5	12.5	12.8	11.5	11.9	11.2	12.7
6	Chloride (max)	mg/l	32.1	31.8	33.2	35.6	35.2	32.5	33.4
7	Total Dissolved Solids	mg/l	289	274	260	274	260	274	272
8	BOD (3) days at 270C (max)	mg/l	<1.0	<1	<1	<1	<1	<1	<1
9	Arsenic as As	mg/l	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
10	Lead as Pb(max)	mg/l	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
11	Cadmium as Cd (max)	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
12	Hexa Chromium as Cr +6	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
13	Copper as Cu (max)	mg/l	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
14	Zinc as Zn(max)	mg/l	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
15	Selenium as Se (max)	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
16	Cyanide as CN (max)	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
17	Fluoride as F (max)	mg/l	0.25	0.24	0.22	0.23	0.2	0.25	0.23
18	Sulphates (SO4) (max)	mg/l	0.51	0.48	0.46	0.47	0.51	0.59	0.50
19	Phenolic Compounds as C6H5OH (max)	mg/l	<0.005	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
20	Iron as Fe (max)	mg/l	0.27	0.25	0.26	0.25	0.27	0.36	0.28
21	Nitrate as NO3, (max)	mg/l	3.0	2.6	2.5	2.5	2.2	2.8	2.60
22	Anionic Detergents (max)	mg/l	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
23	Total Coli form	MPN/100 ml	720	640	520	480	460	540	560



Reviewed By:





Approved By:



Report. No: Envlab/25-26/TR-02672

Date: 07.04.2025

## SIX MONTHLY COMPLIANCE REPORT (OCT-2024 TO MAR-2025)

### DRINKING WATER QUALITY ANALYSIS REPORT

Name & Address of the Client : Sukinda Chromite Block,  
M/s TATA Steel Limited, Kalarangiatta, Dist. Jajpur, Odisha

#### DW1-Water Before Treatment at WTP

Sl. No	Parameter	Unit	OCT-24	NOV-24	DEC-24	JAN-25	FEB-25	MAR-25	AVERAGE
1	pH at 250C	--	7.25	7.21	7.20	7.24	7.28	7.33	7.25
2	Colour	Hazen	<5	<5	<5	<5	<5	<5	<5
3	Odour	--	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
4	Total Hardness	mg/l	198.0	186	175	186	178	168	182
5	Turbidity	NTU	1.1	1.1	<1.0	<1.0	<1.0	1.1	1.1
6	Total Dissolved Solids	mg/l	352	339	326	336	342	338	339
7	Chloride as Cl	mg/l	31.8	32.3	31.6	31.2	33.2	30.9	31.8
8	Dissolve Oxygen	mg/l	5.4	5	4.4	4.6	4.4	4.2	4.7
9	Calcium as Ca	mg/l	33.6	32.3	31.2	32.6	33.6	32.6	32.7
10	Magnesium as Mg	mg/l	27.73	25.60	23.59	25.4	22.87	21.0	24.4
11	Sulphate as SO4	mg/l	4.2	4.5	4.3	4.6	4.2	4.3	4.4
12	Fluoride as F	mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
13	Iron as Fe	mg/l	0.26	0.25	0.22	0.18	0.22	0.25	0.23
14	Total Chromium as Cr	mg/l	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
15	Hexavalent Chromium as Cr+6	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
16	Mercury as Hg	mg/l	<0.001	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
17	Pesticide	mg/l	Absent	Absent	Absent	Absent	Absent	Absent	Absent
18	Total Coli form	MPN/100 ml	ND	ND	ND	ND	<1.1	<1.1	<1.1
19	Nickel (as Ni)	mg/l	<0.02	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
20	Total alkalinity as CaCO3	mg/l	98	96	94	92	89	92	94
21	Manganese as Mn	mg/l	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
22	Free Residual Chlorine	mg/l	ND	ND	ND	ND	ND	ND	ND
23	Anionic Detergents	mg/l	ND	ND	ND	ND	ND	ND	ND
24	Ammonia (as total ammonia-N)	mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
25	Aluminium (as Al)	mg/l	<0.03	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
26	Taste	mg/l	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable

  
Reviewed By:



  
Approved By:



Report. No: Envlab/25-26/TR-02673

Date: 07.04.2025

## SIX MONTHLY COMPLIANCE REPORT (OCT-2024 TO MAR-2025)

### DRINKING WATER QUALITY ANALYSIS REPORT

Name & Address of the Client : Sukinda Chromite Block,  
M/s TATA Steel Limited, Kalarangiatta, Dist. Jajpur, Odisha

#### DW2- Water After Treatment at WTP

Sl. No	Parameter	Unit	OCT-24	NOV-24	DEC-24	JAN-25	FEB-25	MAR-25	AVERAGE
1	pH at 250C	--	7.42	7.38	7.34	7.31	7.35	7.25	7.34
2	Colour	Hazen	<5	<5	<5	<5	<5	<5	<5
3	Odour	--	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
4	Total Hardness	mg/l	220.0	192	190	192	189	180	194
5	Turbidity	NTU	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
6	Total Dissolved Solids	mg/l	336	341	330	340	322	316	331
7	Chloride as Cl	mg/l	32.9	30.8	30.4	29.5	31.9	31.2	31.1
8	Dissolve Oxygen	mg/l	5.0	4.6	4.8	5.0	4.8	4.6	4.8
9	Calcium as Ca	mg/l	38.4	37.1	34.8	34.2	34.8	34.1	35.6
10	Magnesium as Mg	mg/l	30.10	24.14	25.05	25.9	24.81	23.0	25.5
11	Sulphate as SO4	mg/l	6.2	5.6	5	5.2	5.1	5.2	5.4
12	Fluoride as F	mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
13	Iron as Fe	mg/l	0.22	0.21	0.21	0.23	0.21	0.23	0.22
14	Total Chromium as Cr	mg/l	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
15	Hexavalent Chromium as Cr+6	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
16	Mercury as Hg	mg/l	<0.001	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
17	Pesticide	mg/l	Absent	Absent	Absent	Absent	Absent	Absent	Absent
18	Total Coli form	MPN/100 ml	ND	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1
19	Nickel (as Ni)	mg/l	<0.02	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
20	Total alkalinity as CaCO3	mg/l	113	104	102	100	94	102	103
21	Manganese as Mn	mg/l	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
22	Free Residual Chlorine	mg/l	ND	ND	ND	ND	ND	ND	ND
23	Anionic Detergents	mg/l	ND	ND	ND	ND	ND	ND	ND
24	Ammonia (as total ammonia-N)	mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
25	Aluminium (as Al)	mg/l	<0.03	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
26	Taste	mg/l	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable

  
Reviewed By:



  
Approved By:





Report. No: Envlab/25-26/TR-02674

Date: 07.04.2025

## SIX MONTHLY COMPLIANCE REPORT (OCT-2024 TO MAR-2025)

### DRINKING WATER QUALITY ANALYSIS REPORT

Name & Address of the Client : Sukinda Chromite Block,  
M/s TATA Steel Limited, Kalarangiatta, Dist. Jajpur, Odisha

#### DW3- Water near Jagannath Temple

Sl. No	Parameter	Unit	OCT-24	NOV-24	DEC-24	JAN-25	FEB-25	MAR-25	AVERAG E
1	pH at 250C	--	7.23	7.26	7.22	7.26	7.29	7.29	7.26
2	Colour	Hazen	<5	<5	<5	<5	<5	<5	<5
3	Odour	--	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
4	Total Hardness	mg/l	202.0	188	182	198	192	188	192
5	Turbidity	NTU	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
6	Total Dissolved Solids	mg/l	322	346	319	321	361	342	335
7	Chloride as Cl	mg/l	32.1	31.6	32.8	33.1	28.5	29.8	31.3
8	Dissolve Oxygen	mg/l	5	4.3	4.2	4.4	4.2	4.0	4.4
9	Calcium as Ca	mg/l	32.6	30.9	29.8	30.6	31.9	33.9	31.6
10	Magnesium as Mg	mg/l	29.31	26.93	26.14	29.5	27.30	25.1	27.4
11	Sulphate as SO4	mg/l	5.1	5.3	5.1	3.9	4.4	5.0	4.8
12	Fluoride as F	mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
13	Iron as Fe	mg/l	0.24	0.23	0.25	0.21	0.19	0.21	0.22
14	Total Chromium as Cr	mg/l	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
15	Hexavalent Chromium as Cr+6	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
16	Mercury as Hg	mg/l	<0.001	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
17	Pesticide	mg/l	Absent	Absent	Absent	Absent	Absent	Absent	Absent
18	Total Coli form	MPN/100 ml	ND	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1
19	Nickel (as Ni)	mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
20	Total alkalinity as CaCO3	mg/l	93	90	98	93	90	98	94
21	Manganese as Mn	mg/l	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
22	Free Residual Chlorine	mg/l	ND	ND	ND	ND	ND	ND	ND
23	Anionic Detergents	mg/l	ND	ND	ND	ND	ND	ND	ND
24	Ammonia (as total ammonia-N)	mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
25	Aluminium (as Al)	mg/l	<0.03	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
26	Taste	mg/l	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable



Reviewed By:





Approved By:



Report. No: Envlab/25-26/TR-02675

Date: 07.04.2025

## SIX MONTHLY COMPLIANCE REPORT (OCT-2024 TO MAR-2025) DRINKING WATER QUALITY ANALYSIS REPORT

Name & Address of the Client : Sukinda Chromite Block,  
M/s TATA Steel Limited, Kalarangiatta, Dist. Jajpur, Odisha

DW4-Water near Stack Yard									
Sl. No	Parameter	Unit	OCT-24	NOV-24	DEC-24	JAN-25	FEB-25	MAR-25	AVERAG E
1	pH at 250C	--	7.41	7.40	7.26	7.33	7.31	7.35	7.34
2	Colour	Hazen	<5	<5	<5	<5	<5	<5	<5
3	Odour	--	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
4	Total Hardness	mg/l	195.0	176	168	174	167	162	174
5	Turbidity	NTU	1.2	<1.0	<1.0	<1.0	<1.0	<1.0	1.2
6	Total Dissolved Solids	mg/l	330	328	322	348	340	323	332
7	Chloride as Cl	mg/l	31.9	32.5	31.6	31.8	29.6	30.5	31.3
8	Dissolve Oxygen	mg/l	5.2	4.8	4.6	4.2	4	4.2	4.5
9	Calcium as Ca	mg/l	33.2	32.5	30.6	29.8	30.5	33.5	31.7
10	Magnesium as Mg	mg/l	27.24	23.05	22.26	24.2	22.07	19.0	23.0
11	Sulphate as SO4	mg/l	5	4.8	4.6	5.5	4.9	4.8	4.9
12	Fluoride as F	mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
13	Iron as Fe	mg/l	0.21	0.2	0.2	0.19	0.2	0.19	0.20
14	Total Chromium as Cr	mg/l	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
15	Hexavalent Chromium as Cr+6	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
16	Mercury as Hg	mg/l	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
17	Pesticide	mg/l	Absent	Absent	Absent	Absent	Absent	Absent	Absent
18	Total Coli form	MPN/100 ml	ND	ND	ND	ND	<1.1	<1.1	<1.1
19	Nickel (as Ni)	mg/l	<0.02	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
20	Total alkalinity as CaCO3	mg/l	95	92	93	88	88	89	91
21	Manganese as Mn	mg/l	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
22	Free Residual Chlorine	mg/l	ND	ND	ND	ND	ND	ND	ND
23	Anionic Detergents	mg/l	ND	ND	ND	ND	ND	ND	ND
24	Ammonia (as total ammonia-N)	mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
25	Aluminium (as Al)	mg/l	<0.03	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
26	Taste	mg/l	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable

  
Reviewed By:



  
Approved By:



Report. No: Envlab/25-26/TR-02676

Date: 07.04.2025

## SIX MONTHLY COMPLIANCE REPORT (OCT-2024 TO MAR-2025) DRINKING WATER QUALITY ANALYSIS REPORT

Name & Address of the Client : Sukinda Chromite Block,  
M/s TATA Steel Limited, Kalarangiatta, Dist. Jajpur, Odisha

### DW5- Water near COB Plant

Sl. No	Parameter	Unit	OCT-24	NOV-24	DEC-24	JAN-25	FEB-25	MAR-25	AVERAGE
1	pH at 250C	--	7.34	7.34	7.31	7.35	7.36	7.31	7.34
2	Colour	Hazen	<5	<5	<5	<5	<5	<5	<5
3	Odour	--	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
4	Total Hardness	mg/l	189.0	180	172	163	180	178	177
5	Turbidity	NTU	1.1	1	<1.0	<1.0	<1.0	1.2	1.1
6	Total Dissolved Solids	mg/l	345	344	336	326	324	310	331
7	Chloride as Cl	mg/l	30.9	31.1	32.8	30.9	30.2	31.3	31.2
8	Dissolve Oxygen	mg/l	5.2	5	4.8	4.6	4.2	4.4	4.7
9	Calcium as Ca	mg/l	32.9	32.6	31.7	32.3	33.6	32.8	32.7
10	Magnesium as Mg	mg/l	25.96	23.96	22.56	20.0	23.35	23.4	23.2
11	Sulphate as SO4	mg/l	5.2	5	4.8	4.9	4.3	4.6	4.8
12	Fluoride as F	mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
13	Iron as Fe	mg/l	0.25	0.21	0.23	0.22	0.21	0.22	0.22
14	Total Chromium as Cr	mg/l	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
15	Hexavalent Chromium as Cr+6	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
16	Mercury as Hg	mg/l	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
17	Pesticide	mg/l	Absent	Absent	Absent	Absent	Absent	Absent	Absent
18	Total Coli form	MPN/100 ml	ND	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1
19	Nickel (as Ni)	mg/l	<0.02	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
20	Total alkalinity as CaCO3	mg/l	96	98	96	94	90	92	94
21	Manganese as Mn	mg/l	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
22	Free Residual Chlorine	mg/l	ND	ND	ND	ND	ND	ND	ND
23	Anionic Detergents	mg/l	ND	ND	ND	ND	ND	ND	ND
24	Ammonia (as total ammonia-N)	mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
25	Aluminium (as Al)	mg/l	<0.03	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
26	Taste	mg/l	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable

  
Reviewed By:



  
Approved By:



Report. No: Envlab/25-26/TR-02677

Date: 07.04.2025

## SIX MONTHLY COMPLIANCE REPORT (OCT-2024 TO MAR-2025) DRINKING WATER QUALITY ANALYSIS REPORT

Name & Address of the Client : Sukinda Chromite Block,  
M/s TATA Steel Limited, Kalarangiatta, Dist. Jajpur, Odisha

DW6- Water from TSL Canteen									
Sl. No	Parameter	Unit	OCT-24	NOV-24	DEC-24	JAN-25	FEB-25	MAR-25	AVERAG E
1	pH at 250C	--	7.30	7.35	7.19	7.22	7.24	7.33	7.27
2	Colour	Hazen	<5	<5	<5	<5	<5	<5	<5
3	Odour	--	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
4	Total Hardness	mg/l	198.0	191	180	190	182	180	187
5	Turbidity	NTU	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
6	Total Dissolved Solids	mg/l	332	336	327	320	318	308	324
7	Chloride as Cl	mg/l	30.3	30.9	30.2	26.8	27.6	30.6	29.4
8	Dissolve Oxygen	mg/l	5.6	5.2	4.2	4.4	4.4	4.8	4.8
9	Calcium as Ca	mg/l	35.2	34.5	32.6	33.1	34.1	35.1	34.1
10	Magnesium as Mg	mg/l	26.76	25.48	23.96	26.1	23.54	22.4	24.7
11	Sulphate as SO4	mg/l	5.6	5.2	4.8	5.3	5	5.1	5.2
12	Fluoride as F	mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
13	Iron as Fe	mg/l	0.27	0.24	0.21	0.24	0.23	0.23	0.24
14	Total Chromium as Cr	mg/l	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
15	Hexavalent Chromium as Cr+6	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
16	Mercury as Hg	mg/l	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
17	Pesticide	mg/l	Absent	Absent	Absent	Absent	Absent	Absent	Absent
18	Total Coli form	MPN/100 ml	ND	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1
19	Nickel (as Ni)	mg/l	<0.02	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
20	Total alkalinity as CaCO3	mg/l	126	112	108	104	96	90	106
21	Manganese as Mn	mg/l	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
22	Free Residual Chlorine	mg/l	ND	ND	ND	ND	ND	ND	ND
23	Anionic Detergents	mg/l	ND	ND	ND	ND	ND	ND	ND
24	Ammonia (as total ammonia-N)	mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
25	Aluminium (as Al)	mg/l	<0.03	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
26	Taste	mg/l	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable

  
Reviewed By:



  
Approved By:





Report. No: Envlab/25-26/TR-02678

Date: 07.04.2025

## SIX MONTHLY COMPLIANCE REPORT (OCT-2024 TO MAR-2025)

### WASTE WATER QUALITY ANALYSIS REPORT

Name & Address of the Client : Sukinda Chromite Block,

M/s TATA Steel Limited, Kalarangiatta, Dist. Jajpur, Odisha

#### WW-1: ETP Inlet

Sl No	Parameter	Unit	OCT-24	NOV-24	DEC-24	JAN-25	FEB-25	MAR-25	AVERAGE
1	pH at 25.0C	-	7.35	7.34	7.56	7.75	7.69	7.56	7.54
2	Colour	Hazen	<15	<15	<15	<15	<15	<15	<15
3	Odour	--	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
4	Temperature	°C	24.2	23.6	21.9	22.9	26.8	27.3	24.5
5	Suspended Solids	mg/l	39.02	39.12	39.22	38.67	38.64	38.44	38.9
6	Total Residual Chlorine	mg/l	0.22	0.21	0.22	0.2	0.23	0.25	0.22
7	Oil & Grease	mg/l	3.6	3.5	4.2	3.8	4.2	4.4	4.0
8	Biochemical Oxygen Demand as BOD at 270C for 3 days	mg/l	28.0	25	26	28	26	30	27.2
9	Chemical Oxygen Demand as COD	mg/l	110.0	107	110	112	108	132	113.2
10	Amm. Nitrogen (as N)	mg/l	2.19	2.04	2.08	2.07	2.11	2.16	2.1
11	Total Kjeldhal Nitrogen	mg/l	5.6	5.5	5.6	5.2	4.6	5	5.3
12	Free Ammonia	mg/l	0.022	0.02	0.023	0.021	0.023	0.021	0.022
13	Nitrate as NO3	mg/l	1.24	1.21	1.23	1.23	1.25	1.26	1.24
14	Diss. Phosphate (as P)	mg/l	0.53	0.53	0.5	0.52	0.54	0.58	0.53
15	Fluoride (as F)	mg/l	0.33	0.3	0.26	0.32	0.34	0.36	0.32
16	Sulphide (as S2-)	mg/l	<0.05	ND	ND	ND	ND	ND	ND
17	Phenolic Compound	mg/l	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
18	Cyanide (as CN)	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
19	Hexavalent Chromium as Cr +6	mg/l	2.28	2.43	2.37	2.44	2.33	2.35	2.37
20	Mercury (as Hg)	mg/l	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
21	Arsenic (as As)	mg/l	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
22	Lead (as Pb)	mg/l	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
23	Cadmium (as Cd)	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
24	Total Chromium (as Cr)	mg/l	3.14	3.04	2.96	3.12	3.02	3.16	3.07
25	Copper (as Cu)	mg/l	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
26	Zinc (as Zn)	mg/l	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
27	Selenium (as Se)	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
28	Nickel (as Ni)	mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
29	Manganese (as Mn)	mg/l	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
30	Iron (as Fe)	mg/l	0.32	0.3	0.27	0.31	0.33	0.36	0.32
31	Vanadium (as V)	mg/l	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
32	Bio-assay Test	%	91%	92%	91	92%	91%	92%	92
33	Particle Size of Suspended Solids	μ	< 850	< 850	< 850	< 850	< 850	< 850	< 850
34	Pesticide	mg/l	Absent	Absent	Absent	Absent	Absent	Absent	Absent

Reviewed By:



Approved By:





# Visiontek Consultancy Services Pvt. Ltd.

(Committed For Better Environment)

Report. No: Envlab/25-26/TR-02679

Date: 07.04.2025

## WW-2: ETP Outlet

Sl No	Parameter	Unit	OCT-24	NOV-24	DEC-24	JAN-25	FEB-25	MAR-25	AVERAGE
1	pH at 25.0C	-	7.86	7.77	7.73	7.63	7.81	7.86	7.78
2	Colour	Hazen	<5	<5	<5	<5	<5	<5	<15
3	Odour	--	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
4	Temperature	°C	25.9	24.8	23.5	23.5	27.1	28.5	25.6
5	Suspended Solids	mg/l	1.64	1.56	1.46	1.36	1.41	1.26	1.4
6	Total Residual Chlorine	mg/l	0.21	0.19	0.18	0.21	0.25	0.21	0.21
7	Oil & Grease	mg/l	3.0	3.1	3.3	3.2	3.4	3.8	3.3
8	Biochemical Oxygen Demand as BOD at 270C for 3 days	mg/l	<1	<1	<1	<1	<1	<1	<1
9	Chemical Oxygen Demand as COD	mg/l	<4	<4	<4	<4	<4	<4	<4
10	Amm. Nitrogen (as N)	mg/l	0.51	0.52	0.51	0.55	0.54	0.61	0.54
11	Total Kjeldhal Nitrogen	mg/l	3.0	3.1	3.2	3	3.1	3.2	3.1
12	Free Ammonia	mg/l	0.021	0.018	0.019	0.016	0.018	0.019	0.019
13	Nitrate as NO3	mg/l	0.21	0.19	0.21	0.18	0.19	0.2	0.20
14	Diss. Phosphate (as P)	mg/l	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
15	Fluoride (as F)	mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
16	Sulphide(as S2-)	mg/l	<0.05	ND	ND	ND	ND	ND	ND
17	Phenolic Compound	mg/l	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
18	Cyanide (as CN)	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
19	Hexavalent Chromium as Cr+6	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
20	Mercury (as Hg)	mg/l	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
21	Arsenic (as As)	mg/l	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
22	Lead (as Pb)	mg/l	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
23	Cadmium (as Cd)	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
24	Total Chromium (as Cr)	mg/l	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
25	Copper (as Cu)	mg/l	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
26	Zinc (as Zn)	mg/l	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
27	Selenium (as Se)	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
28	Nickel (as Ni)	mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
29	Manganese (as Mn)	mg/l	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
30	Iron (as Fe)	mg/l	0.28	0.28	0.25	0.25	0.28	0.3	0.27
31	Vanadium( as V)	mg/l	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
32	Bio-assay Test	%	92%	90%	0.9	91%	90%	90%	91%
33	Particle Size of Suspended Solids	μ	< 850	< 850	< 850	< 850	< 850	< 850	< 850
34	Pesticide	mg/l	Absent	Absent	Absent	Absent	Absent	Absent	Absent

*B. Babu*

Reviewed By:



*P. Patil*

Approved By:



Report. No: Envlab/25-26/TR-02680

Date: 07.04.2025

## SIX MONTHLY COMPLIANCE REPORT (OCT-2024 TO MAR-2025)

### WASTE WATER QUALITY ANALYSIS REPORT

Name & Address of the Client : Sukinda Chromite Block,

M/s TATA Steel Limited, Kalarangiatta, Dist. Jajpur, Odisha

WW3-Oil Separation Pit Inlet									
Sl. No	Parameter	Unit	OCT-24	NOV-24	DEC-24	JAN-25	FEB-25	MAR-25	AVERAG E
1	pH at 25.0C	-	7.28	7.23	7.31	7.21	7.35	7.28	7.28
2	Colour	Hazen	<15	<20	<20	<20	<20	<20	<15
3	Odour	--	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
4	Temperature	°C	25.1	22.8	22.5	22.3	26.2	27.8	24.5
5	Suspended Solids	mg/l	172	163	158	158	149	153	158.8
6	Total Residual Chlorine	mg/l	0.23	0.2	0.19	0.19	0.2	0.23	0.21
7	Oil & Grease	mg/l	6.4	5.9	2.6	5.6	5.4	5.6	5.3
8	Biochemical Oxygen Demand as BOD at 270C for 3 days	mg/l	26.0	24	22	23	22	26	23.8
9	Chemical Oxygen Demand as COD	mg/l	106.0	98	84	96	92	98	95.7
10	Amm. Nitrogen (as N)	mg/l	1.21	1.16	1.12	1.2	1.3	1.4	1.23
11	Total Kjeldhal Nitrogen	mg/l	4.0	4.2	4.4	4.4	4.5	4.8	4.4
12	Free Ammonia	mg/l	0.022	0.023	0.021	0.022	0.023	0.025	0.023
13	Nitrate as NO <sub>3</sub>	mg/l	1.17	1.12	1.08	1.13	1.15	1.19	1.14
14	Diss. Phosphate (as P)	mg/l	0.54	0.55	0.46	0.54	0.55	0.56	0.53
15	Fluoride (as F)	mg/l	0.28	0.26	0.27	0.3	0.29	0.31	0.29
16	Sulphide(as S <sub>2</sub> -)	mg/l	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	ND
17	Phenolic Compound	mg/l	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
18	Cyanide (as CN)	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
19	Hexavalent Chromium as Cr +6	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
20	Mercury (as Hg)	mg/l	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
21	Arsenic (as As)	mg/l	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
22	Lead (as Pb)	mg/l	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
23	Cadmium (as Cd)	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
24	Total Chromium (as Cr)	mg/l	0.29	0.27	0.29	0.28	0.31	0.33	0.30
25	Copper (as Cu)	mg/l	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
26	Zinc (as Zn)	mg/l	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
27	Selenium (as Se)	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
28	Nickel (as Ni)	mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
29	Manganese (as Mn)	mg/l	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
30	Iron (as Fe)	mg/l	0.27	0.28	0.29	0.26	0.28	0.29	0.28
31	Vanadium ( as V)	mg/l	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
32	Bio-assay Test	%	91%	90%	92	90%	89%	91%	91%
33	Particle Size of Suspended Solids	μ	< 850	<850	<850	<850	<850	<850	< 850
34	Pesticide	mg/l	Absent	Absent	Absent	Absent	Absent	Absent	Absent

Reviewed By:



Approved By:



# Visiontek Consultancy Services Pvt. Ltd.

(Committed For Better Environment)

Report. No: Envlab/25-26/TR-02681

Date: 07.04.2025

WW4-Oil Separation Pit Outlet									
Sl No	Parameter	Unit	OCT-24	NOV-24	DEC-24	JAN-25	FEB-25	MAR-25	AVERAGE
1	pH at 25.0C	Unit	7.35	7.38	7.42	7.35	7.23	7.31	7.34
2	Colour	-	<5	<5	<5	<5	<5	<5	<15
3	Odour	Hazen	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
4	Temperature	--	26.6	23.4	23.1	23.1	28.5	27.9	25.4
5	Suspended Solids	°C	31.2	30.8	31.2	30.3	31.8	32.4	31.3
6	Total Residual Chlorine	mg/l	ND	ND	ND	ND	ND	ND	ND
7	Oil & Grease	mg/l	2.4	2.2	2.1	2.4	2.2	2.4	2.3
8	Biochemical Oxygen Demand as BOD at 270C for 3 days	mg/l	<1	<1	<1	<1	<1	<1	<1
9	Chemical Oxygen Demand as COD	mg/l	<4	<4	<4	<4	<4	<4	<4
10	Amm. Nitrogen (as N)	mg/l	0.46	0.45	0.48	0.47	0.52	0.56	0.49
11	Total Kjeldhal Nitrogen	mg/l	2.6	2.8	2.9	2.9	3	3.1	2.9
12	Free Ammonia	mg/l	0.018	0.019	0.02	0.018	0.019	0.021	0.019
13	Nitrate as NO3	mg/l	0.32	0.35	0.33	0.33	0.31	0.33	0.33
14	Diss. Phosphate (as P)	mg/l	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
15	Fluoride (as F)	mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
16	Sulphide (as S2-)	mg/l	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
17	Phenolic Compound	mg/l	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
18	Cyanide (as CN)	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
19	Hexavalent Chromium as Cr+6	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
20	Mercury (as Hg)	mg/l	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
21	Arsenic (as As)	mg/l	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
22	Lead (as Pb)	mg/l	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
23	Cadmium (as Cd)	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
24	Total Chromium (as Cr)	mg/l	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
25	Copper (as Cu)	mg/l	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
26	Zinc (as Zn)	mg/l	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
27	Selenium (as Se)	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
28	Nickel (as Ni)	mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
29	Manganese (as Mn)	mg/l	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
30	Iron (as Fe)	mg/l	0.25	0.25	0.24	0.28	0.31	0.33	0.28
31	Vanadium (as V)	mg/l	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
32	Bio-assay Test	mg/l	90%	91%	0.91	91%	92%	95%	92%
33	Particle Size of Suspended Solids	%	< 850	<850	<850	<850	<850	<850	< 850
34	Pesticide	μ	Absent	Absent	Absent	Absent	Absent	Absent	Absent

  
Reviewed By:



  
Approved By:





Report. No: Envlab/25-26/TR-02682

Date: 07.04.2025

## SIX MONTHLY COMPLIANCE REPORT (OCT-2024 TO MAR-2025)

### WASTE WATER QUALITY ANALYSIS REPORT

Name & Address of the Client : Sukinda Chromite Block,

M/s TATA Steel Limited, Kalarangiatta, Dist. Jajpur, Odisha

#### WW-5 : STP Inlet

Sl. No	Parameter	Unit of Measurement	OCT-24	NOV-24	DEC-24	JAN-25	FEB-25	MAR-25	AVERAGE
1	pH at 25°C	-	7.29	7.25	7.25	7.25	7.28	7.26	7.26
2	Temperature	°C	-	-	-	-	26.5	27.5	27.0
3	Colour	Hazen	-	-	-	-	15	15	15.0
4	Odour	--	-	-	-	-	Agreeable	Agreeable	Agreeable
5	Turbidity	NTU	-	-	-	-	16.8	18.5	17.65
6	Suspended Solids	mg/l	54	48	7.25	44	46	48	36
7	Oil & Grease	mg/l	5.6	5.3	5.3	5.3	5.5	5.1	5.3
8	Biochemical Oxygen Demand as BOD at 27°C For 3 days	mg/l	24.0	22	22	22	25	30	24.8
9	Chemical Oxygen Demand as COD	mg/l	98.0	90	90	90	108	124	103
10	Total Dissolved Solid as TDS	mg/l	-	-	-	-	182	176	179
11	Total Nitrogen as N	mg/l	-	-	-	-	7.5	7.2	7.35
12	Total Phosphorus	mg/l	-	-	-	-	0.53	0.54	0.54
13	Total Residual Chlorine	mg/l	-	-	-	-	<0.1	<0.1	<1.0
14	Fecal Coli form	MPN/100 ml	ND	ND	240	280	1140	1080	685
15	Hexavalent Chromium as Cr <sup>+6</sup>	mg/l	<0.01	<0.01	<0.01	<0.01	-	-	<0.01
16	Total Chromium (as Cr)	mg/l	<0.1	<0.1	<0.1	<0.1	-	-	<0.1

#### WW-6 : STP Outlet

Sl. No	Parameter	Unit of Measurement	OCT-24	NOV-24	DEC-24	JAN-25	FEB-25	MAR-25	AVERAGE
1	pH at 25°C	-	7.34	7.3	7.3	7.32	7.41	7.48	7.38
2	Temperature	°C	-	-	-	-	25.1	26.9	26.0
3	Colour	Hazen	-	-	-	-	<5	<10	<10
4	Odour	--	-	-	-	-	Agreeable	Agreeable	Agreeable
5	Turbidity	NTU	-	-	-	-	4.2	4.9	4.55
6	Suspended Solids	mg/l	1.52	1.45	7.3	1.53	1.58	1.42	2.96
7	Oil & Grease	mg/l	ND	ND	ND	ND	ND	ND	ND
8	Biochemical Oxygen Demand as BOD at 27°C For 3 days	mg/l	5.0	5	5	5	5.4	5.2	5.2
9	Chemical Oxygen Demand as COD	mg/l	22.0	21	21	21	24	22	22
10	Total Dissolved Solid as TDS	mg/l	-	-	-	-	149	138	143.5
11	Total Nitrogen as N	mg/l	-	-	-	-	6.8	6.5	6.65
12	Total Phosphorus	mg/l	-	-	-	-	0.49	0.43	0.46
13	Total Residual Chlorine	mg/l	-	-	-	-	<0.1	<0.1	<0.1
14	Fecal Coli form	MPN/100 ml	ND	ND	ND	ND	ND	ND	ND
15	Hexavalent Chromium as Cr <sup>+6</sup>	mg/l	<0.01	<0.01	<0.01	<0.01	-	-	<0.01
16	Total Chromium (as Cr)	mg/l	<0.1	<0.1	<0.1	<0.1	-	-	<0.1

Reviewed By:



Approved By:



Report. No: Envlab/25-26/TR-02683

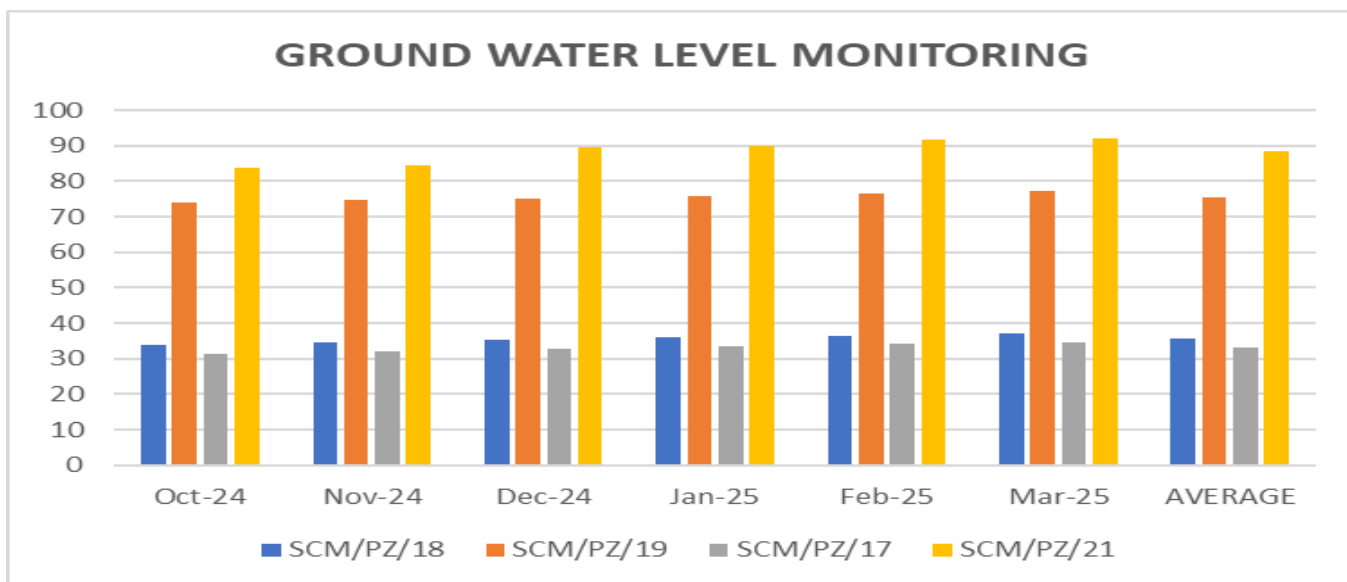
Date: 07.04.2025

## SIX MONTHLY COMPLIANCE REPORT (OCT-2024 TO MAR-2025)

### GROUND WATER LEVEL MONITORING REPORT

Name & Address of the Client : Sukinda Chromite Block,  
M/s TATA Steel Limited, Kalarangiatta, Dist. Jajpur, Odisha

Sl. No	Location	OCT-24	NOV-24	DEC-24	JAN-25	FEB-25	MAR-25	AVERAGE
1	SCM/PZ/18	33.95	34.58	35.32	35.92	36.54	37.13	35.57
3	SCM/PZ/19	73.98	74.62	75.25	75.89	76.58	77.08	75.57
4	SCM/PZ/17	31.32	31.97	32.76	33.46	34.12	34.65	33.05
5	SCM/PZ/21	83.87	84.52	89.43	89.95	91.67	92.22	88.61



*[Signature]*  
Reviewed By:



*[Signature]*  
Approved By:



# Visiontek Consultancy Services Pvt. Ltd.

(Committed For Better Environment)

Report. No: Envlab/25-26/TR-02684

Date: 07.04.2025

## SIX MONTHLY COMPLIANCE REPORT (OCT-2024 TO MAR-2025) PERSONAL DUST LEVEL MONITORING

Name & Address of the Client : Sukinda Chromite Block,  
M/s TATA Steel Limited, Kalarangiatta, Dist. Jajpur, Odisha

Personal Respirable Dust (mg/m <sup>3</sup> )								
Sl. No	Monitoring Location	OCT-24	NOV-24	DEC-24	JAN-25	FEB-25	MAR-25	AVERAGE
1	Bijay Behera	0.42	0.45	0.48	-	0.55	0.61	0.50
2	Samir Ranjan Lenka	0.46	0.41	0.43	-	-	-	0.43
3	Rudra narayan Naik	0.45	0.43	0.45	-	0.51	0.58	0.48
4	Bhagirathi Mahanta	0.40	0.45	0.47	-	-	-	0.44
5	Sridhar Behera	0.45	0.44	0.45	-	-	-	0.45

Respirable free Silica (%)								
Sl. No	Monitoring Location	OCT-24	NOV-24	DEC-24	JAN-25	FEB-25	MAR-25	AVERAGE
1	Bijay Behera	2.6	2.3	2.5	-	3.0	3.3	2.74
2	Samir Ranjan Lenka	2.3	2.1	2.2	-	-	-	2.20
3	Rudra narayan Naik	2.1	2.4	2.4	-	2.8	3.1	2.56
4	Bhagirathi Mahanta	2.5	2.3	2.3	-	-	-	2.37
5	Sridhar Behera	2.3	2.6	2.8	-	-	-	2.57

Reviewed By:



Approved By:





# Visiontek Consultancy Services Pvt. Ltd.

(Committed For Better Environment)

Report. No: Envlab/25-26/TR-02685

Date: 07.04.2025

## SIX MONTHLY COMPLIANCE REPORT (OCT-2024 TO MAR-2025) PERSONAL NOISE LEVEL MONITORING

Name & Address of the Client : Sukinda Chromite Block,  
M/s TATA Steel Limited, Kalarangiatta, Dist. Jajpur, Odisha

### Day Time (6.00am to 10.00pm) Noise Level in dB(A)

Sl. No	Monitoring Location	OCT-24	NOV-24	DEC-24	JAN-25	FEB-25	MAR-25	AVERAGE
1	Bijay Behera	52.5	51.9	54.3	55.9	60.3	63.7	56.4
2	Samir Ranjan Lenka	56.9	54.5	52.9	-	-	-	54.8
3	Rudra narayan Naik	57.1	56.2	55.6	55.6	58.1	61.9	57.4
4	Bhagirathi Mahanta	55.3	55.7	56.1	-	-	-	55.7
5	Sridhar Behera	54.2	54.8	57.2	-	-	-	55.4

  
Reviewed By:



  
Approved By:





# Visiontek Consultancy Services Pvt. Ltd.

(Committed For Better Environment)

Report. No: Envlab/25-26/TR-02686

Date: 07.04.2025

## SIX MONTHLY COMPLIANCE REPORT (OCT-2024 TO MAR-2025)

### AMBIENT NOISE MONITORING REPORT

Name & Address of the Client : Sukinda Chromite Block,

M/s TATA Steel Limited, Kalarangiatta, Dist. Jajpur, Odisha

Noise Level in dB(A), Day Time								
COLONY AREA								
Sl. No	Location	OCT-24	NOV-24	DEC-24	JAN-25	FEB-25	MAR-25	AVERAGE
1	Main Gate	55.7	54.6	53.4	52.9	54.6	52.7	54.0
2	Market Complex	54.2	45.4	45.1	44.2	43.1	42.5	45.8
3	Security Control Room	46.5	39.8	38.8	39.5	38.5	39.7	40.5
4	Post office	40.9	36.4	37.4	36.2	35.9	37.4	37.4
5	Study Center	35.2	41.2	35.2	33.6	33.1	34.3	35.4
6	WTP	40.7	40.2	40.8	42.3	43.4	45.2	42.1
7	STP	41.3	40.6	41.3	40.9	42.1	40.8	41.2
8	Shishu Mandir	35.8	37.4	38.4	36.7	35.4	36.5	36.7
9	Children Park	38.5	39.2	38.6	39.1	33.2	39.2	38.0
10	3 RSF Quarters	36.4	35.6	36.7	35.4	36.1	36.5	36.1

Noise Level in dB(A), Night Time								
COLONY AREA								
Sl. No	Location	OCT-24	NOV-24	DEC-24	JAN-25	FEB-25	MAR-25	AVERAGE
1	Main Gate	52.4	51.7	50.6	47.2	48.2	39.2	48.2
2	Market Complex	50.8	49.6	39.8	38.3	39.4	32.5	41.7
3	Security Control Room	43.5	44.7	44.2	34.7	33.2	30.7	38.5
4	Post office	37.7	38.5	39.6	30.9	30.1	31.5	34.7
5	Study Center	32.3	31.6	32.3	30.2	30.2	30.1	31.1
6	WTP	37.5	36.3	37.4	38.5	39.2	32.3	36.9
7	STP	38.2	39.4	38.7	36.6	38.5	33.7	37.5
8	Shishu Mandir	31.7	30.8	30.5	31.4	31.2	29.5	30.9
9	Children Park	35.4	36.3	37.6	35.8	30.1	31.8	34.5
10	3 RSF Quarters	32.8	31.8	32.5	31.5	32.2	31.2	32.0

*B. Pat.*

Reviewed By:



*P. Pat.*

Approved By:



Report. No: Envlab/25-26/TR-02687

Date: 07.04.2025

## SIX MONTHLY COMPLIANCE REPORT (OCT-2024 TO MAR-2025)

### AMBIENT NOISE MONITORING REPORT

Name & Address of the Client : Sukinda Chromite Block,  
M/s Tata Steel Limited, Kalarangiatta, Dist. Jajpur, Odisha

Noise Level in dB(A), Day Time								
MINING AREA								
Sl. No	Location	OCT-24	NOV-24	DEC-24	JAN-25	FEB-25	MAR-25	AVERAGE
1	COB Plant Gate	61.7	60.2	61.2	60.8	61.1	56.2	60.2
2	Canteen	57.4	56.3	57.2	55.6	51.2	46.2	54.0
3	Work shop	67.1	68.4	69.5	62.4	63.1	60.7	65.2
4	Stack Yard Office	55.6	56.7	57.8	56.2	56.4	50.6	55.6
5	DG Shed	63.1	62.4	61.7	52.7	53.3	52.5	57.6
6	Mining Gate	62.8	63.2	64.6	62.5	62.5	59.7	62.6
7	View Point	61.5	60.8	60.2	55.9	56.1	52.5	57.8
8	Paradeep Gate	60.2	61.5	62.4	63.2	61.8	58.4	61.3
9	Near ETP	56.3	57.8	58.4	60.4	59.2	56.2	58.1
10	DECO Parking Area	60.8	59.4	58.8	50.9	48.1	46.7	54.1

Noise Level in dB(A), Night Time								
MINING AREA								
Sl. No	Location	OCT-24	NOV-24	DEC-24	JAN-25	FEB-25	MAR-25	AVERAGE
1	COB Plant Gate	58.2	59.4	58.4	55.2	55.8	50.2	56.2
2	Canteen	53.9	52.6	53.4	50.5	45.3	38.5	49.0
3	Work shop	64.4	65.6	66.7	57.2	58.1	56.2	61.4
4	Stack Yard Office	52.6	50.4	50.1	51.7	52.3	35.2	48.7
5	DG Shed	60.2	61.3	62.9	47.6	48.5	48.2	54.8
6	Mining Gate	58.9	59.7	58.6	58.3	57.4	50.7	57.3
7	View Point	58.3	57.6	58.4	50.4	52.5	46.6	54.0
8	Paradeep Gate	57.1	58.4	59.7	57.6	55.7	51.8	56.7
9	Near ETP	53.6	52.3	51.2	54.8	53.4	50.1	52.6
10	DECO Parking Area	56.5	55.8	54.6	46.5	43.9	40.9	49.7

  
Reviewed By:



  
Approved By:



Report. No: Envlab/25-26/TR-02688

Date: 07.04.2025

## SIX MONTHLY COMPLIANCE REPORT (OCT-2024 TO MAR-2025)

### AMBIENT NOISE MONITORING REPORT (BUFFER ZONE)

Name & Address of the Client : Sukinda Chromite Block,  
M/s TATA Steel Limited, Kalarangiatta, Dist. Jajpur, Odisha

Location	Noise Level in dB(A)		
	Day Time		
	DEC-2024	MAR-25	AVERAGE
Kakudia Village	53.7	42.8	48.3
Kalarangi Village	44.6	35.2	39.9
Kharkhari Village	38.7	44.2	41.5
Kaliapani Village	37.4	46.4	41.9
Sukrangi Village	40.1	41.6	40.9
Laxmidharpur Village	34.7	41.5	38.1
Maruabil Village	37.6	46.7	42.2
Sendheswar Village	48.4	48.2	48.3
Birasal Village	47.8	43.4	45.6
Kanheipal Village	42.7	39.7	41.2

Location	Noise Level in dB(A)		
	Night Time		
	DEC-2024	MAR-25	AVERAGE
Kakudia Village	52.8	32.3	42.6
Kalarangi Village	39.8	30.5	35.2
Kharkhari Village	43.4	32.9	38.2
Kaliapani Village	39.2	34.7	37.0
Sukrangi Village	42.6	31.3	37.0
Laxmidharpur Village	30.2	30.7	30.5
Maruabil Village	33.8	31.4	32.6
Sendheswar Village	44.2	32.6	38.4
Birasal Village	41.1	32.4	36.8
Kanheipal Village	39.7	33.8	36.8

  
Reviewed By:



  
Approved By:



# Visiontek Consultancy Services Pvt. Ltd.

(Committed For Better Environment)

Report. No: Envlab/25-26/TR-02689

Date: 07.04.2025

## SIX MONTHLY COMPLIANCE REPORT (OCT-2024 TO MAR-2025)

### FUGITIVE EMISSION MONITORING REPORT

Name & Address of the Client : Sukinda Chromite Block,  
M/s TATA Steel Limited, Kalarangiatta, Dist. Jajpur, Odisha

Sampling Location	Parameter						
	SPM ( $\mu\text{g}/\text{m}^3$ )						
	OCT-24	NOV-24	DEC-24	JAN-25	FEB-25	MAR-25	AVERAGE
F1: VIEW POINT	526	586	606	638	659	756	629
F2: STACK YARD	508	603	621	652	671	698	626
F3: COB PLANT	540	575	597	611	642	702	611
MoEF & CC Notification 03 <sup>rd</sup> Feb, 2006	1200 $\mu\text{g}/\text{m}^3$						
Testing Method	Gravimetric Method						



Reviewed By:



  
Approved by:



# Visiontek Consultancy Services Pvt. Ltd.

(Committed For Better Environment)

Report. No: Envlab/25-26/TR-02690

Date: 07.04.2025

## SIX MONTHLY COMPLIANCE REPORT (OCT-2024 TO MAR-2025) GROUND WATER LEVEL MONITORING REPORT (BUFFER ZONE)

Name & Address of the Client

: Sukinda Chromite Block,  
M/s. TATA Steel Ltd, Kalarangiatta, Dist. Jajpur, Odisha

Sample Type

: Ground Water Level

Monitoring Location	Degree Direction	DEC-2024	MAR-25	AVERAGE
KAKUDIA	21°00'24.5"N 85°46'17.9"E	3.02	5.56	4.3
KALARANGI	21°0'53.89"N 85°43'43.56"E	2.54	5.11	3.8
KHARKHARI	21°2'53.825"N 85°43'36.166"E	3.42	5.35	4.4
KALIAPANI	21°2'37.7"N 85°46'24.5"E	2.93	5.02	4.0
SUKURANGI	21°03'22.1"N 85°47'47.2"E	3.16	5.24	4.2
LAXMIDHARPUR	20°59'15.8"N 85°45'38.3"E	2.68	4.72	3.7
MARUABIL	21°02'59.6"N 85°42'38.9"E	2.98	4.94	4.0
SANDHESWAR	21°1'23.4"N 85°40'53.7"E	3.23	5.47	4.4
BIRASAL	20°59'60.5"N 85°40'04.3"E	2.84	4.98	3.9
KANHEIPAL	20°57'4.0"N 85°43'09.1"E	3.09	4.56	3.8



Reviewed By:



  
Approved by:





Report. No: Envlab/25-26/TR-02691

Date: 07.04.2025

## SIX MONTHLY COMPLIANCE REPORT (OCT-2024 TO MAR-2025)

### MINERALOGICAL COMPOSITION REPORT

Name & Address of the Client : M/s. Sukinda Chromite Block,

Tata Steel Kalarangiatta, Dist. Jajpur, Odisha

Sample Type : Mineralogical Composition

Sl. No.	Test Results in %	View Point		
		DEC-2024	MAR-25	AVERAGE
1	Cr <sub>2</sub> O <sub>3</sub>	24.2	26.5	25.4
2	Fe <sub>2</sub> O <sub>3</sub>	10.1	10.3	10.2
3	MnO <sub>2</sub>	4.3	4.1	4.2
4	SiO <sub>2</sub>	27.3	26.5	26.9
5	Al <sub>2</sub> O <sub>3</sub>	11.1	11.9	11.5
6	MgO	13.2	13.9	13.6
7	CaO	4.3	4.1	4.2

Sl. No.	Test Results in %	COB Plant		
		DEC-2024	MAR-25	AVERAGE
1	Cr <sub>2</sub> O <sub>3</sub>	25.8	25.9	25.9
2	Fe <sub>2</sub> O <sub>3</sub>	11.1	10.1	10.6
3	MnO <sub>2</sub>	3.5	3.9	3.7
4	SiO <sub>2</sub>	28.2	25.8	27.0
5	Al <sub>2</sub> O <sub>3</sub>	12.1	12.5	12.3
6	MgO	11.2	14.2	12.7
7	CaO	3.1	3.2	3.2

Sl. No.	Test Results in %	Paradeep Gate		
		DEC-2024	MAR-25	AVERAGE
1	Cr <sub>2</sub> O <sub>3</sub>	27.6	28.2	27.9
2	Fe <sub>2</sub> O <sub>3</sub>	10.9	10.8	10.9
3	MnO <sub>2</sub>	3.1	3.3	3.2
4	SiO <sub>2</sub>	27.9	23.9	25.9
5	Al <sub>2</sub> O <sub>3</sub>	12.9	13.1	13.0
6	MgO	10.9	13.2	12.1
7	CaO	4.2	4.3	4.3

Sl. No.	Test Results in %	Stack Yard		
		DEC-2024	MAR-25	AVERAGE
1	Cr <sub>2</sub> O <sub>3</sub>	25.3	26.7	26.0
2	Fe <sub>2</sub> O <sub>3</sub>	12.4	11.4	11.9
3	MnO <sub>2</sub>	4.4	3.2	3.8
4	SiO <sub>2</sub>	26.5	27.4	27.0
5	Al <sub>2</sub> O <sub>3</sub>	13.1	13.2	13.2
6	MgO	12.3	12.9	12.6
7	CaO	4.5	4.6	4.6



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Sl. No.	Test Results in %	Nickel Gate		
		DEC-2024	MAR-25	AVERAGE
1	Cr <sub>2</sub> O <sub>3</sub>	26.4	29.4	27.9
2	Fe <sub>2</sub> O <sub>3</sub>	11.5	10.6	11.1
3	MnO <sub>2</sub>	4.0	4.2	4.1
4	SiO <sub>2</sub>	27.4	22.5	25.0
5	Al <sub>2</sub> O <sub>3</sub>	12.7	12.9	12.8
6	MgO	12.4	13.5	13.0
7	CaO	3.7	3.5	3.6

Sl. No.	Test Results in %	Laboratory Top		
		DEC-2024	MAR-25	AVERAGE
1	Cr <sub>2</sub> O <sub>3</sub>	24.9	27.8	26.4
2	Fe <sub>2</sub> O <sub>3</sub>	11.1	10.9	11.0
3	MnO <sub>2</sub>	4.2	3.8	4.0
4	SiO <sub>2</sub>	29.8	28.6	29.2
5	Al <sub>2</sub> O <sub>3</sub>	13.2	13.7	13.5
6	MgO	10.9	10.2	10.6
7	CaO	3.5	3.9	3.7

*B. Babu*

Reviewed By:



*P. Patil*  
Approved by:





Report. No: Envlab/25-26/TR-02691

Date: 07.04.2025

## SIX MONTHLY COMPLIANCE REPORT (OCT-2024 TO MAR-2025) GROUND WATER LEVEL ANALYSIS REPORT (PIEZOMETER)

Name & Address of the Client : Sukinda Chromite Block,  
M/s Tata Steel Ltd., Kalarangiatta, Dist. Jajpur, Odisha

GW1: SCM/PZ/18									
Sl. No	Parameter	Unit of Measurement	OCT-24	NOV-24	DEC-24	JAN-25	FEB-25	MAR-25	AVERAGE
1	pH at 250C	--	7.22	7.16	7.2	7.21	7.23	7.23	7.21
2	Turbidity	NTU	1.1	<1.0	<1.0	<1.0	<1.0	<1.0	1.10
3	Total Hardness	mg/l	130	123	128	126	128	128	127
4	Alkalinity	mg/l	102	96	90	78	76	76	86
5	Total Dissolved Solids	mg/l	264	250	238	228	220	220	237
6	Chloride as Cl	mg/l	32.9	31.2	29.8	29.5	30.5	30.5	30.7
7	Residual free Chlorine	mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
8	Dissolve Oxygen	mg/l	4.1	4.4	4.1	4.2	4.4	4.4	4.27
9	Calcium as Ca	mg/l	31.9	30.6	31.8	32.4	30.5	30.5	31.3
10	Magnesium as Mg	mg/l	11.1	11.3	11.8	11.0	12.6	12.6	11.7
11	Sulphate as SO <sub>4</sub>	mg/l	9.1	8.5	8.2	7.2	6.8	6.8	7.77
12	Fluoride as F	mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
13	Nitrate as NO <sub>3</sub>	mg/l	1.22	1.20	1.21	1.23	1.20	1.20	1.21
14	Hexavalent Chromium as Cr+6	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
15	Cyanide (as CN)	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
16	Arsenic (as As)	mg/l	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
17	Iron as Fe	mg/l	0.23	0.22	0.20	0.21	0.24	0.24	0.22
18	Lead (as Pb)	mg/l	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
19	Zinc (as Zn)	mg/l	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
20	Copper (as Cu)	mg/l	<0.05	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
21	Manganese (as Mn)	mg/l	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
22	Mercury as Hg	mg/l	<0.001	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
23	Cadmium (as Cd)	mg/l	<0.003	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
24	Boron (as B)	mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
25	Selenium (as Se)	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
26	Mineral Oil	mg/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

*B. Raj*

Reviewed By:



*P. Pati*

Approved by:



# Visiontek Consultancy Services Pvt. Ltd.

(Committed For Better Environment)

Report. No: Envlab/25-26/TR-02692

Date: 07.04.2025

GW2: SCM/PZ/19									
Sl. No	Parameter	Unit of Measurement	OCT-24	NOV-24	DEC-24	JAN-25	FEB-25	MAR-25	AVERAGE
1	pH at 25°C	--	7.18	7.2	7.16	7.20	7.24	7.24	7.20
2	Turbidity	NTU	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
3	Total Hardness	mg/l	138	114	120	112	114	114	119
4	Alkalinity	mg/l	90	78	76	80	72	72	78
5	Total Dissolved Solids	mg/l	258	244	241	219	208	208	230
6	Chloride as Cl	mg/l	30.8	31.9	30.4	30.3	34.2	34.2	32.0
7	Residual free Chlorine	mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
8	Dissolve Oxygen	mg/l	4.3	4.0	4.6	4.4	4.6	4.6	4.42
9	Calcium as Ca	mg/l	30.4	31.2	32.4	31.6	33.6	33.6	32.1
10	Magnesium as Mg	mg/l	12.4	8.8	9.5	8.0	7.3	7.3	8.9
11	Sulphate as SO <sub>4</sub>	mg/l	8.6	8.0	8.0	7.6	7.3	7.3	7.80
12	Fluoride as F	mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
13	Nitrate as NO <sub>3</sub>	mg/l	1.26	1.24	1.16	1.08	1.04	1.04	1.14
14	Hexavalent Chromium as Cr+6	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
15	Cyanide (as CN)	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
16	Arsenic (as As)	mg/l	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
17	Iron as Fe	mg/l	0.27	0.25	0.23	0.25	0.22	0.22	0.24
18	Lead (as Pb)	mg/l	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
19	Zinc (as Zn)	mg/l	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
20	Copper (as Cu)	mg/l	<0.05	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
21	Manganese (as Mn)	mg/l	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
22	Mercury as Hg	mg/l	<0.001	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
23	Cadmium (as Cd)	mg/l	<0.003	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
24	Boron (as B)	mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
25	Selenium (as Se)	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
26	Mineral Oil	mg/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

*Bab*

Reviewed By:



*P. Patil*

Approved by:



# Visiontek Consultancy Services Pvt. Ltd.

(Committed For Better Environment)

Report. No: Envlab/25-26/TR-02693

Date: 07.04.2025

GW3: SCM/PZ/17									
Sl. No	Parameter	Unit of Measurement	OCT-24	NOV-24	DEC-24	JAN-25	FEB-25	MAR-25	AVERAGE
1	pH at 250C	--	7.25	7.21	7.23	7.23	7.21	7.21	7.22
2	Turbidity	NTU	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
3	Total Hardness	mg/l	105	109	112	118	120	120	114
4	Alkalinity	mg/l	98	90	94	92	84	84	90
5	Total Dissolved Solids	mg/l	243	239	232	236	216	216	230
6	Chloride as Cl	mg/l	31.7	32.4	26.9	26.4	30.6	30.6	29.8
7	Residual free Chlorine	mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
8	Dissolve Oxygen	mg/l	4.4	4.2	4.4	4.1	4.2	4.2	4.25
9	Calcium as Ca	mg/l	31.2	30.8	30.4	30.8	32.4	32.4	31.3
10	Magnesium as Mg	mg/l	8.9	7.8	8.8	10.0	9.5	9.5	9.1
11	Sulphate as SO <sub>4</sub>	mg/l	8.0	7.6	7.5	6.8	7.0	7.0	7.32
12	Fluoride as F	mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
13	Nitrate as NO <sub>3</sub>	mg/l	1.24	1.18	1.09	1.12	1.12	1.12	1.15
14	Hexavalent Chromium as Cr+6	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
15	Cyanide (as CN)	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
16	Arsenic (as As)	mg/l	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
17	Iron as Fe	mg/l	0.25	0.23	0.19	0.19	0.18	0.18	0.20
18	Lead (as Pb)	mg/l	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
19	Zinc (as Zn)	mg/l	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
20	Copper (as Cu)	mg/l	<0.05	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
21	Manganese (as Mn)	mg/l	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
22	Mercury as Hg	mg/l	<0.001	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
23	Cadmium (as Cd)	mg/l	<0.003	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
24	Boron (as B)	mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
25	Selenium (as Se)	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
26	Mineral Oil	mg/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

*B. Babu*

Reviewed By:



*P. Patra*  
Approved by:

Report. No: Envlab/25-26/TR-02694

Date: 07.04.2025

GW4: SCM/PZ/21									
Sl. No	Parameter	Unit of Measure ment	OCT-24	NOV-24	DEC-24	JAN-25	FEB-25	MAR-25	AVERAGE
1	pH at 25°C	--	7.2	7.18	7.21	7.24	7.25	7.25	7.22
2	Turbidity	NTU	1.2	1.1	<1.1	<1.1	<1.1	<1.1	1.15
3	Total Hardness	mg/l	112	110	114	120	122	122	117
4	Alkalinity	mg/l	108	93	90	86	80	80	90
5	Total Dissolved Solids	mg/l	255	240	228	224	220	220	231
6	Chloride as Cl	mg/l	31.2	30.7	30.1	30.1	28.6	28.6	29.9
7	Residual free Chlorine	mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
8	Dissolve Oxygen	mg/l	4.2	4.1	4.2	4.0	4.1	4.1	4.12
9	Calcium as Ca	mg/l	31.4	32.1	31.3	31.5	32.8	32.8	32.0
10	Magnesium as Mg	mg/l	9.5	7.3	8.7	10.0	9.7	9.7	9.2
11	Sulphate as SO <sub>4</sub>	mg/l	8.2	7.1	6.8	6.2	5.4	5.4	6.52
12	Fluoride as F	mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
13	Nitrate as NO <sub>3</sub>	mg/l	1.23	1.20	1.11	1.16	1.10	1.10	1.15
14	Hexavalent Chromium as Cr+6	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
15	Cyanide (as CN)	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
16	Arsenic (as As)	mg/l	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
17	Iron as Fe	mg/l	0.24	0.2	0.22	0.23	0.22	0.22	0.22
18	Lead (as Pb)	mg/l	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
19	Zinc (as Zn)	mg/l	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
20	Copper (as Cu)	mg/l	<0.05	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
21	Manganese (as Mn)	mg/l	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
22	Mercury as Hg	mg/l	<0.001	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
23	Cadmium (as Cd)	mg/l	<0.003	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
24	Boron (as B)	mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
25	Selenium (as Se)	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
26	Mineral Oil	mg/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

*Bab*

Reviewed By:



*P. Patu*  
Approved by:



Report. No: Envlab/25-26/TR-02695

Date: 07.04.2025

## SIX MONTHLY COMPLIANCE REPORT (OCT-2024 TO MAR-2025) GROUND WATER QUALITY ANALYSIS REPORT (BUFFER ZONE)

Name & Address of the Client : Sukinda Chromite Block,  
M/s Tata Steel Ltd., Kalarangiatta, Dist. Jajpur, Odisha

GW1: Kaliapani Village					
Sl. No	Parameter	Unit of Measurement	DEC-2024	MAR-2025	AVERAGE
01	Colour	Hazen	CL	CL	CL
02	Odour	--	Agreeable	Agreeable	Agreeable
03	Taste	mg/l	Agreeable	Agreeable	Agreeable
04	Turbidity	NTU	1.1	1.3	1.2
05	Total Dissolved Solids as TDS	mg/l	126	132	129
06	pH at 250C	--	7.26	7.31	7.29
07	Aluminium (as Al)	mg/l	<0.1	<0.1	<0.1
08	Ammonia (as total ammonia-N)	mg/l	<0.1	<0.1	<0.1
09	Anionic Detergents	mg/l	<0.2	<0.2	<0.2
10	Barium as Ba	mg/l	<0.05	<0.05	<0.05
11	Boron as B	mg/l	<0.1	<0.1	<0.1
12	Calcium as Ca	mg/l	31.3	33.6	32.5
13	Chloride as Cl	mg/l	24.2	26.9	25.6
14	Copper as Cu	mg/l	<0.02	<0.02	<0.02
15	Fluoride as F	mg/l	0.21	0.23	0.22
16	Free Residual Chlorine	mg/l	ND	ND	ND
17	Iron as Fe	mg/l	0.21	0.22	0.22
18	Magnesium as Mg	mg/l	12.5	13.8	13.2
19	Manganese as Mn	mg/l	<0.025	<0.025	<0.025
20	Mineral Oil	mg/l	<0.5	<0.5	<0.5
21	Nitrate as NO3	mg/l	3.1	3.5	3.3
22	Phenolic Compound	mg/l	<0.05	<0.05	<0.05
23	Selenium as Se	mg/l	<0.001	<0.001	<0.001
24	Silver as Ag	mg/l	<0.1	<0.1	<0.1
25	Sulphate as SO4	mg/l	7.42	7.36	7.39
26	Sulphide	mg/l	<0.05	<0.05	<0.05
27	Total alkalinity as CaCO3	mg/l	80	86	83
28	Total Hardness	mg/l	112	124	118
29	Zinc as Zn	mg/l	<0.03	<0.03	<0.03
30	Cadmium as Cd	mg/l	<0.01	<0.01	<0.01
31	Cyanide as CN	mg/l	<0.01	<0.01	<0.01
32	Lead as Pb	mg/l	<0.02	<0.02	<0.02
33	Mercury as Hg	mg/l	<0.004	<0.004	<0.004
34	Molybdenum as Mo	mg/l	<0.05	<0.05	<0.05
35	Nickel (as Ni)	mg/l	<0.1	<0.1	<0.1
36	Pesticide	mg/l	Absent	Absent	Absent
37	Poly aromatic Hydrocarbon as PAH	mg/l	<0.0001	<0.0001	<0.0001
38	Arsenic as As	mg/l	<0.004	<0.004	<0.004
39	Total Chromium as Cr	mg/l	<0.05	<0.05	<0.05
40	Hexavalent Chromium as Cr+6	mg/l	<0.01	<0.01	<0.01
41	Total Coliform	MPN /100 ml	<1.8	<1.8	<1.8

  
Reviewed By:



  
Approved by:





# Visiontek Consultancy Services Pvt. Ltd.

(Committed For Better Environment)

Report. No: Envlab/25-26/TR-02696

Date: 07.04.2025

## GW2: Sukurangi Village

Sl. No	Parameter	Unit of Measurement	DEC-2024	MAR-2025	AVERAGE
01	Colour	Hazen	CL	CL	CL
02	Odour	--	Agreeable	Agreeable	Agreeable
03	Taste	mg/l	Agreeable	Agreeable	Agreeable
04	Turbidity	NTU	1.1	<1.0	1.1
05	Total Dissolved Solids as TDS	mg/l	124	108	116
06	pH at 25°C	--	7.14	7.24	7.19
07	Aluminium (as Al)	mg/l	<0.1	<0.1	<0.1
08	Ammonia (as total ammonia-N)	mg/l	<0.1	<0.1	<0.1
09	Anionic Detergents	mg/l	<0.2	<0.2	<0.2
10	Barium as Ba	mg/l	<0.05	<0.05	<0.05
11	Boron as B	mg/l	<0.1	<0.1	<0.1
12	Calcium as Ca	mg/l	30.3	32.9	31.6
13	Chloride as Cl	mg/l	22.7	27.4	25.1
14	Copper as Cu	mg/l	<0.02	<0.02	<0.02
15	Fluoride as F	mg/l	0.22	0.23	0.23
16	Free Residual Chlorine	mg/l	ND	ND	ND
17	Iron as Fe	mg/l	0.2	0.21	0.21
18	Magnesium as Mg	mg/l	8.6	13.51	11.1
19	Manganese as Mn	mg/l	<0.025	<0.025	<0.025
20	Mineral Oil	mg/l	<0.5	<0.5	<0.5
21	Nitrate as NO <sub>3</sub>	mg/l	3.1	3.2	3.15
22	Phenolic Compound	mg/l	<0.05	<0.05	<0.05
23	Selenium as Se	mg/l	<0.001	<0.001	<0.001
24	Silver as Ag	mg/l	<0.1	<0.1	<0.1
25	Sulphate as SO <sub>4</sub>	mg/l	6.98	7.52	7.25
26	Sulphide	mg/l	<0.05	<0.05	<0.05
27	Total alkalinity as CaCO <sub>3</sub>	mg/l	62	112	87
28	Total Hardness	mg/l	92	124	108
29	Zinc as Zn	mg/l	<0.03	<0.03	<0.03
30	Cadmium as Cd	mg/l	<0.01	<0.01	<0.01
31	Cyanide as CN	mg/l	<0.01	<0.05	<0.01
32	Lead as Pb	mg/l	<0.02	<0.02	<0.02
33	Mercury as Hg	mg/l	<0.004	<0.004	<0.004
34	Molybdenum as Mo	mg/l	<0.05	<0.05	<0.05
35	Nickel (as Ni)	mg/l	<0.1	<0.1	<0.1
36	Pesticide	mg/l	Absent	Absent	Absent
37	Poly aromatic Hydrocarbon as PAH	mg/l	<0.0001	<0.0001	<0.0001
38	Arsenic as As	mg/l	<0.004	<0.004	<0.004
39	Total Chromium as Cr	mg/l	<0.05	<0.05	<0.05
40	Hexavalent Chromium as Cr+6	mg/l	<0.01	<0.01	<0.01
41	Total Coliform	MPN /100 ml	<1.8	<1.8	<1.8

*B. B. B.*

Reviewed By:



*P. Patu.*

Approved by:



# Visiontek Consultancy Services Pvt. Ltd.

(Committed For Better Environment)

Report. No: Envlab/25-26/TR-02697

Date: 07.04.2025

## GW3: Kharkhari Village

Sl. No	Parameter	Unit of Measurement	DEC-2024	MAR-2025	AVERAGE
01	Colour	Hazen	CL	CL	CL
02	Odour	--	Agreeable	Agreeable	Agreeable
03	Taste	mg/l	Agreeable	Agreeable	Agreeable
04	Turbidity	NTU	1.3	1.1	1.2
05	Total Dissolved Solids as TDS	mg/l	118	116	117
06	pH at 250C	--	7.25	7.22	7.24
07	Aluminium (as Al)	mg/l	<0.1	<0.1	<0.1
08	Ammonia (as total ammonia-N)	mg/l	<0.1	<0.1	<0.1
09	Anionic Detergents	mg/l	<0.2	<0.2	<0.2
10	Barium as Ba	mg/l	<0.05	<0.05	<0.05
11	Boron as B	mg/l	<0.1	<0.1	<0.1
12	Calcium as Ca	mg/l	29.5	30.1	29.8
13	Chloride as Cl	mg/l	21.5	30.7	26.1
14	Copper as Cu	mg/l	<0.02	<0.02	<0.02
15	Fluoride as F	mg/l	0.23	0.21	0.22
16	Free Residual Chlorine	mg/l	ND	ND	ND
17	Iron as Fe	mg/l	0.21	0.22	0.22
18	Magnesium as Mg	mg/l	10.8	9.1	10.0
19	Manganese as Mn	mg/l	<0.025	<0.025	<0.025
20	Mineral Oil	mg/l	<0.5	<0.5	<0.5
21	Nitrate as NO3	mg/l	3.2	3.1	3.15
22	Phenolic Compound	mg/l	<0.05	<0.05	<0.05
23	Selenium as Se	mg/l	<0.001	<0.001	<0.001
24	Silver as Ag	mg/l	<0.1	<0.1	<0.1
25	Sulphate as SO4	mg/l	7.45	7.11	7.28
26	Sulphide	mg/l	<0.05	<0.05	<0.05
27	Total alkalinity as CaCO3	mg/l	75	92	83.5
28	Total Hardness	mg/l	98	114	106
29	Zinc as Zn	mg/l	<0.03	<0.03	<0.03
30	Cadmium as Cd	mg/l	<0.01	<0.01	<0.01
31	Cyanide as CN	mg/l	<0.01	<0.05	<0.01
32	Lead as Pb	mg/l	<0.02	<0.02	<0.02
33	Mercury as Hg	mg/l	<0.004	<0.004	<0.004
34	Molybdenum as Mo	mg/l	<0.05	<0.05	<0.05
35	Nickel (as Ni)	mg/l	<0.1	<0.1	<0.1
36	Pesticide	mg/l	Absent	Absent	Absent
37	Poly aromatic Hydrocarbon as PAH	mg/l	<0.0001	<0.0001	<0.0001
38	Arsenic as As	mg/l	<0.004	<0.004	<0.004
39	Total Chromium as Cr	mg/l	<0.05	<0.05	<0.05
40	Hexavalent Chromium as Cr+6	mg/l	<0.01	<0.01	<0.01
41	Total Coliform	MPN /100 ml	<1.8	<1.8	<1.8

Reviewed By:



Approved by:







# Visiontek Consultancy Services Pvt. Ltd.

(Committed For Better Environment)

Report. No: Envlab/25-26/TR-02698

Date: 07.04.2025

GW4: Kalarangi Village					
Sl. No	Parameter	Unit of Measurement	DEC-2024	MAR-2025	AVERAGE
01	Colour	Hazen	CL	CL	CL
02	Odour	--	Agreeable	Agreeable	Agreeable
03	Taste	mg/l	Agreeable	Agreeable	Agreeable
04	Turbidity	NTU	<1.0	<1.0	<1.0
05	Total Dissolved Solids as TDS	mg/l	122	128	125
06	pH at 250C	--	7.14	7.18	7.16
07	Aluminium (as Al)	mg/l	<0.1	<0.1	<0.1
08	Ammonia (as total ammonia-N)	mg/l	<0.1	<0.1	<0.1
09	Anionic Detergents	mg/l	<0.2	<0.2	<0.2
10	Barium as Ba	mg/l	<0.05	<0.05	<0.05
11	Boron as B	mg/l	<0.1	<0.1	<0.1
12	Calcium as Ca	mg/l	32.1	35.9	34.0
13	Chloride as Cl	mg/l	23.2	28.3	25.8
14	Copper as Cu	mg/l	<0.02	<0.02	<0.02
15	Fluoride as F	mg/l	0.17	0.19	0.18
16	Free Residual Chlorine	mg/l	ND	ND	ND
17	Iron as Fe	mg/l	0.17	0.18	0.18
18	Magnesium as Mg	mg/l	11.7	8.6	10.2
19	Manganese as Mn	mg/l	<0.025	<0.025	<0.025
20	Mineral Oil	mg/l	<0.5	<0.5	<0.5
21	Nitrate as NO3	mg/l	2.5	2.9	2.7
22	Phenolic Compound	mg/l	<0.05	<0.05	<0.05
23	Selenium as Se	mg/l	<0.001	<0.001	<0.001
24	Silver as Ag	mg/l	<0.1	<0.1	<0.1
25	Sulphate as SO4	mg/l	6.31	6.68	6.50
26	Sulphide	mg/l	<0.05	<0.05	<0.05
27	Total alkalinity as CaCO3	mg/l	81	90	85.5
28	Total Hardness	mg/l	106	106	106
29	Zinc as Zn	mg/l	<0.03	<0.03	<0.03
30	Cadmium as Cd	mg/l	<0.01	<0.01	<0.01
31	Cyanide as CN	mg/l	<0.01	<0.01	<0.01
32	Lead as Pb	mg/l	<0.02	<0.02	<0.02
33	Mercury as Hg	mg/l	<0.004	<0.004	<0.004
34	Molybdenum as Mo	mg/l	<0.05	<0.05	<0.05
35	Nickel (as Ni)	mg/l	<0.1	<0.1	<0.1
36	Pesticide	mg/l	Absent	Absent	Absent
37	Poly aromatic Hydrocarbon as PAH	mg/l	<0.0001	<0.0001	<0.0001
38	Arsenic as As	mg/l	<0.004	<0.004	<0.004
39	Total Chromium as Cr	mg/l	<0.05	<0.05	<0.05
40	Hexavalent Chromium as Cr+6	mg/l	<0.01	<0.01	<0.01
41	Total Coliform	MPN /100 ml	<1.8	<1.8	<1.8

*B. B. B.*

Reviewed By:



*P. Patil*

Approved by:



# Visiontek Consultancy Services Pvt. Ltd.

(Committed For Better Environment)

Report. No: Envlab/25-26/TR-02699

Date: 07.04.2025

GW5: Kakudia Village					
Sl. No	Parameter	Unit of Measurement	DEC-2024	MAR-2025	AVERAGE
01	Colour	Hazen	CL	CL	CL
02	Odour	--	Agreeable	Agreeable	Agreeable
03	Taste	mg/l	Agreeable	Agreeable	Agreeable
04	Turbidity	NTU	1.1	1.3	1.2
05	Total Dissolved Solids as TDS	mg/l	126	132	129
06	pH at 250C	--	7.26	7.31	7.29
07	Aluminium (as Al)	mg/l	<0.1	<0.1	<0.1
08	Ammonia (as total ammonia-N)	mg/l	<0.1	<0.1	<0.1
09	Anionic Detergents	mg/l	<0.2	<0.2	<0.2
10	Barium as Ba	mg/l	<0.05	<0.05	<0.05
11	Boron as B	mg/l	<0.1	<0.1	<0.1
12	Calcium as Ca	mg/l	31.3	33.6	32.5
13	Chloride as Cl	mg/l	24.2	26.9	25.6
14	Copper as Cu	mg/l	<0.02	<0.02	<0.02
15	Fluoride as F	mg/l	0.21	0.23	0.22
16	Free Residual Chlorine	mg/l	ND	ND	ND
17	Iron as Fe	mg/l	0.21	0.22	0.22
18	Magnesium as Mg	mg/l	12.5	13.8	13.2
19	Manganese as Mn	mg/l	<0.025	<0.025	<0.025
20	Mineral Oil	mg/l	<0.5	<0.5	<0.5
21	Nitrate as NO3	mg/l	3.1	3.5	3.3
22	Phenolic Compound	mg/l	<0.05	<0.05	<0.05
23	Selenium as Se	mg/l	<0.001	<0.001	<0.001
24	Silver as Ag	mg/l	<0.1	<0.1	<0.1
25	Sulphate as SO4	mg/l	7.42	7.36	7.39
26	Sulphide	mg/l	<0.05	<0.05	<0.05
27	Total alkalinity as CaCO3	mg/l	80	86	83
28	Total Hardness	mg/l	112	124	118
29	Zinc as Zn	mg/l	<0.03	<0.03	<0.03
30	Cadmium as Cd	mg/l	<0.01	<0.01	<0.01
31	Cyanide as CN	mg/l	<0.01	<0.01	<0.01
32	Lead as Pb	mg/l	<0.02	<0.02	<0.02
33	Mercury as Hg	mg/l	<0.004	<0.004	<0.004
34	Molybdenum as Mo	mg/l	<0.05	<0.05	<0.05
35	Nickel (as Ni)	mg/l	<0.1	<0.1	<0.1
36	Pesticide	mg/l	Absent	Absent	Absent
37	Poly aromatic Hydrocarbon as PAH	mg/l	<0.0001	<0.0001	<0.0001
38	Arsenic as As	mg/l	<0.004	<0.004	<0.004
39	Total Chromium as Cr	mg/l	<0.05	<0.05	<0.05
40	Hexavalent Chromium as Cr+6	mg/l	<0.01	<0.01	<0.01
41	Total Coliform	MPN /100 ml	<1.8	<1.8	<1.8

*B. Babu*

Reviewed By:



*P. Patil*

Approved by:



# Visiontek Consultancy Services Pvt. Ltd.

(Committed For Better Environment)

Report. No: Envlab/25-26/TR-02700

Date: 07.04.2025

GW6: Maruabil Village					
Sl. No	Parameter	Unit of Measurement	DEC-2024	MAR-2025	AVERAGE
01	Colour	Hazen	CL	CL	CL
02	Odour	--	Agreeable	Agreeable	Agreeable
03	Taste	mg/l	Agreeable	Agreeable	Agreeable
04	Turbidity	NTU	1.2	1.3	1.25
05	Total Dissolved Solids as TDS	mg/l	120	120	120
06	pH at 25°C	--	7.22	7.11	7.17
07	Aluminium (as Al)	mg/l	<0.1	<0.1	<0.1
08	Ammonia (as total ammonia-N)	mg/l	<0.1	<0.1	<0.1
09	Anionic Detergents	mg/l	<0.2	<0.2	<0.2
10	Barium as Ba	mg/l	<0.05	<0.05	<0.05
11	Boron as B	mg/l	<0.1	<0.1	<0.1
12	Calcium as Ca	mg/l	31.2	34.2	32.7
13	Chloride as Cl	mg/l	23.9	24.9	24.4
14	Copper as Cu	mg/l	<0.02	<0.02	<0.02
15	Fluoride as F	mg/l	0.19	0.24	0.22
16	Free Residual Chlorine	mg/l	ND	ND	ND
17	Iron as Fe	mg/l	0.19	0.25	0.22
18	Magnesium as Mg	mg/l	13.2	9.9	11.6
19	Manganese as Mn	mg/l	<0.025	<0.025	<0.025
20	Mineral Oil	mg/l	<0.5	<0.5	<0.5
21	Nitrate as NO <sub>3</sub>	mg/l	3.3	2.6	2.95
22	Phenolic Compound	mg/l	<0.05	<0.05	<0.05
23	Selenium as Se	mg/l	<0.001	<0.001	<0.001
24	Silver as Ag	mg/l	<0.1	<0.1	<0.1
25	Sulphate as SO <sub>4</sub>	mg/l	7.12	6.99	7.06
26	Sulphide	mg/l	<0.05	<0.05	<0.05
27	Total alkalinity as CaCO <sub>3</sub>	mg/l	68	76	72
28	Total Hardness	mg/l	114	103	108.5
29	Zinc as Zn	mg/l	<0.03	<0.03	<0.03
30	Cadmium as Cd	mg/l	<0.01	<0.01	<0.01
31	Cyanide as CN	mg/l	<0.01	<0.05	<0.01
32	Lead as Pb	mg/l	<0.02	<0.004	<0.02
33	Mercury as Hg	mg/l	<0.004	<0.002	<0.004
34	Molybdenum as Mo	mg/l	<0.05	<0.05	<0.05
35	Nickel (as Ni)	mg/l	<0.1	<0.1	<0.1
36	Pesticide	mg/l	Absent	Absent	Absent
37	Poly aromatic Hydrocarbon as PAH	mg/l	<0.0001	<0.0001	<0.0001
38	Arsenic as As	mg/l	<0.004	<0.004	<0.004
39	Total Chromium as Cr	mg/l	<0.05	<0.05	<0.05
40	Hexavalent Chromium as Cr+6	mg/l	<0.01	<0.01	<0.01
41	Total Coliform	MPN /100 ml	<1.8	<1.8	<1.8

*B. Babu*

Reviewed By:



*P. Patil*

Approved by:



Report. No: Envlab/25-26/TR-02701

Date: 07.04.2025

## GW7: Sendheswar Village

Sl. No	Parameter	Unit of Measurement	DEC-2024	MAR-2025	AVERAGE
01	Colour	Hazen	CL	CL	CL
02	Odour	--	Agreeable	Agreeable	Agreeable
03	Taste	mg/l	Agreeable	Agreeable	Agreeable
04	Turbidity	NTU	<1	<1.0	<1.0
05	Total Dissolved Solids as TDS	mg/l	118	116	117
06	pH at 250C	--	7.2	7.23	7.22
07	Aluminium (as Al)	mg/l	<0.1	<0.1	<0.1
08	Ammonia (as total ammonia-N)	mg/l	<0.1	<0.1	<0.1
09	Anionic Detergents	mg/l	<0.2	<0.2	<0.2
10	Barium as Ba	mg/l	<0.05	<0.05	<0.05
11	Boron as B	mg/l	<0.1	<0.1	<0.1
12	Calcium as Ca	mg/l	28.6	30.6	29.6
13	Chloride as Cl	mg/l	24.1	26.1	25.1
14	Copper as Cu	mg/l	<0.02	<0.02	<0.02
15	Fluoride as F	mg/l	0.21	0.25	0.23
16	Free Residual Chlorine	mg/l	ND	ND	ND
17	Iron as Fe	mg/l	0.21	0.22	0.22
18	Magnesium as Mg	mg/l	7.2	7.5	7.35
19	Manganese as Mn	mg/l	<0.025	<0.025	<0.025
20	Mineral Oil	mg/l	<0.5	<0.5	<0.5
21	Nitrate as NO3	mg/l	2.7	2.9	2.8
22	Phenolic Compound	mg/l	<0.05	<0.05	<0.05
23	Selenium as Se	mg/l	<0.001	<0.001	<0.001
24	Silver as Ag	mg/l	<0.1	<0.1	<0.1
25	Sulphate as SO4	mg/l	9.42	9.56	9.49
26	Sulphide	mg/l	<0.05	<0.05	<0.05
27	Total alkalinity as CaCO3	mg/l	74	85	79.5
28	Total Hardness	mg/l	90	96	93
29	Zinc as Zn	mg/l	<0.03	<0.03	<0.03
30	Cadmium as Cd	mg/l	<0.01	<0.01	<0.01
31	Cyanide as CN	mg/l	<0.05	<0.05	<0.01
32	Lead as Pb	mg/l	<0.004	<0.004	<0.02
33	Mercury as Hg	mg/l	<0.002	<0.002	<0.004
34	Molybdenum as Mo	mg/l	<0.05	<0.05	<0.05
35	Nickel (as Ni)	mg/l	<0.1	<0.1	<0.1
36	Pesticide	mg/l	Absent	Absent	Absent
37	Poly aromatic Hydrocarbon as PAH	mg/l	<0.0001	<0.0001	<0.0001
38	Arsenic as As	mg/l	<0.004	<0.004	<0.004
39	Total Chromium as Cr	mg/l	<0.05	<0.05	<0.05
40	Hexavalent Chromium as Cr+6	mg/l	<0.01	<0.01	<0.01
41	Total Coliform	MPN /100 ml	<1.8	<1.8	<1.8

*B. J. Patil*

Reviewed By:



*P. Patil*  
Approved by:



# Visiontek Consultancy Services Pvt. Ltd.

(Committed For Better Environment)

Report. No: Envlab/25-26/TR-02702

Date: 07.04.2025

GW8: Birasal Village					
Sl. No	Parameter	Unit of Measurement	DEC-2024	MAR-2025	AVERAGE
01	Colour	Hazen	CL	CL	CL
02	Odour	--	Agreeable	Agreeable	Agreeable
03	Taste	mg/l	Agreeable	Agreeable	Agreeable
04	Turbidity	NTU	<1.0	<1.0	<1.0
05	Total Dissolved Solids as TDS	mg/l	124	120	122
06	pH at 250C	--	7.16	7.18	7.17
07	Aluminium (as Al)	mg/l	<0.1	<0.1	<0.1
08	Ammonia (as total ammonia-N)	mg/l	<0.1	<0.1	<0.1
09	Anionic Detergents	mg/l	<0.2	<0.2	<0.2
10	Barium as Ba	mg/l	<0.05	<0.05	<0.05
11	Boron as B	mg/l	<0.1	<0.1	<0.1
12	Calcium as Ca	mg/l	30.4	31.93	31.2
13	Chloride as Cl	mg/l	23.6	29.8	26.7
14	Copper as Cu	mg/l	<0.02	<0.02	<0.02
15	Fluoride as F	mg/l	0.24	0.26	0.25
16	Free Residual Chlorine	mg/l	ND	ND	ND
17	Iron as Fe	mg/l	0.2	0.19	0.20
18	Magnesium as Mg	mg/l	11.2	7.2	9.20
19	Manganese as Mn	mg/l	<0.025	<0.025	<0.025
20	Mineral Oil	mg/l	<0.5	<0.5	<0.5
21	Nitrate as NO3	mg/l	3.0	3.2	3.1
22	Phenolic Compound	mg/l	<0.05	<0.05	<0.05
23	Selenium as Se	mg/l	<0.001	<0.001	<0.001
24	Silver as Ag	mg/l	<0.1	<0.1	<0.1
25	Sulphate as SO4	mg/l	6.8	7.05	6.93
26	Sulphide	mg/l	<0.05	<0.05	<0.05
27	Total alkalinity as CaCO3	mg/l	76	88	82
28	Total Hardness	mg/l	105	104	105
29	Zinc as Zn	mg/l	<0.03	<0.03	<0.03
30	Cadmium as Cd	mg/l	<0.01	<0.01	<0.01
31	Cyanide as CN	mg/l	<0.01	<0.01	<0.01
32	Lead as Pb	mg/l	<0.02	<0.02	<0.02
33	Mercury as Hg	mg/l	<0.004	<0.004	<0.004
34	Molybdenum as Mo	mg/l	<0.05	<0.05	<0.05
35	Nickel (as Ni)	mg/l	<0.1	<0.1	<0.1
36	Pesticide	mg/l	Absent	Absent	Absent
37	Poly aromatic Hydrocarbon as PAH	mg/l	<0.0001	<0.0001	<0.0001
38	Arsenic as As	mg/l	<0.004	<0.004	<0.004
39	Total Chromium as Cr	mg/l	<0.05	<0.05	<0.05
40	Hexavalent Chromium as Cr+6	mg/l	<0.01	<0.01	<0.01
41	Total Coliform	MPN /100 ml	<1.8	<1.8	<1.8

*B. Babu*

Reviewed By:



*P. Patil*

Approved by:





# Visiontek Consultancy Services Pvt. Ltd.

(Committed For Better Environment)

Report. No: Envlab/25-26/TR-02703

Date: 07.04.2025

## GW9: Kanheipal Village

Sl. No	Parameter	Unit of Measurement	DEC-2024	MAR-2025	AVERAGE
01	Colour	Hazen	CL	CL	CL
02	Odour	--	Agreeable	Agreeable	Agreeable
03	Taste	mg/l	Agreeable	Agreeable	Agreeable
04	Turbidity	NTU	<1	<1.0	<1.0
05	Total Dissolved Solids as TDS	mg/l	122	118	120
06	pH at 25°C	--	7.2	7.24	7.22
07	Aluminium (as Al)	mg/l	<0.1	<0.1	<0.1
08	Ammonia (as total ammonia-N)	mg/l	<0.1	<0.1	<0.1
09	Anionic Detergents	mg/l	<0.2	<0.2	<0.2
10	Barium as Ba	mg/l	<0.05	<0.05	<0.05
11	Boron as B	mg/l	<0.1	<0.1	<0.1
12	Calcium as Ca	mg/l	31.2	33.5	32.4
13	Chloride as Cl	mg/l	25.1	30.2	27.7
14	Copper as Cu	mg/l	<0.02	<0.02	<0.02
15	Fluoride as F	mg/l	0.2	0.23	0.22
16	Free Residual Chlorine	mg/l	ND	ND	ND
17	Iron as Fe	mg/l	0.21	0.23	0.22
18	Magnesium as Mg	mg/l	7.9	5.5	6.70
19	Manganese as Mn	mg/l	<0.025	<0.025	<0.025
20	Mineral Oil	mg/l	<0.5	<0.5	<0.5
21	Nitrate as NO <sub>3</sub>	mg/l	2.6	3.1	2.9
22	Phenolic Compound	mg/l	<0.05	<0.05	<0.05
23	Selenium as Se	mg/l	<0.001	<0.001	<0.001
24	Silver as Ag	mg/l	<0.1	<0.1	<0.1
25	Sulphate as SO <sub>4</sub>	mg/l	9.23	10.4	9.8
26	Sulphide	mg/l	<0.05	<0.05	<0.05
27	Total alkalinity as CaCO <sub>3</sub>	mg/l	66	74	70
28	Total Hardness	mg/l	95	98	97
29	Zinc as Zn	mg/l	<0.03	<0.03	<0.03
30	Cadmium as Cd	mg/l	<0.01	<0.01	<0.01
31	Cyanide as CN	mg/l	<0.01	<0.01	<0.01
32	Lead as Pb	mg/l	<0.02	<0.02	<0.02
33	Mercury as Hg	mg/l	<0.004	<0.004	<0.004
34	Molybdenum as Mo	mg/l	<0.05	<0.05	<0.05
35	Nickel (as Ni)	mg/l	<0.1	<0.1	<0.1
36	Pesticide	mg/l	Absent	Absent	Absent
37	Poly aromatic Hydrocarbon as PAH	mg/l	<0.0001	<0.0001	<0.0001
38	Arsenic as As	mg/l	<0.004	<0.004	<0.004
39	Total Chromium as Cr	mg/l	<0.05	<0.05	<0.05
40	Hexavalent Chromium as Cr+6	mg/l	<0.01	<0.01	<0.01
41	Total Coliform	MPN /100 ml	<1.8	<1.8	<1.8

*[Signature]*

Reviewed By:



*[Signature]*

Approved by:





# Visiontek Consultancy Services Pvt. Ltd.

(Committed For Better Environment)

Report. No: Envlab/25-26/TR-02704

Date: 07.04.2025

## GW10: Laxmidharpur Village

Sl. No	Parameter	Unit of Measurement	DEC-2024	MAR-2025	AVERAGE
01	Colour	Hazen	CL	CL	CL
02	Odour	--	Agreeable	Agreeable	Agreeable
03	Taste	mg/l	Agreeable	Agreeable	Agreeable
04	Turbidity	NTU	1.1	1.2	1.2
05	Total Dissolved Solids as TDS	mg/l	106	114	110
06	pH at 250C	--	7.16	7.16	7.16
07	Aluminium (as Al)	mg/l	<0.1	<0.1	<0.1
08	Ammonia (as total ammonia-N)	mg/l	<0.1	<0.1	<0.1
09	Anionic Detergents	mg/l	<0.2	<0.2	<0.2
10	Barium as Ba	mg/l	<0.05	<0.05	<0.05
11	Boron as B	mg/l	<0.1	<0.1	<0.1
12	Calcium as Ca	mg/l	30.3	33.5	31.9
13	Chloride as Cl	mg/l	25.3	25.3	25.3
14	Copper as Cu	mg/l	<0.02	<0.02	<0.02
15	Fluoride as F	mg/l	0.21	0.16	0.19
16	Free Residual Chlorine	mg/l	ND	ND	ND
17	Iron as Fe	mg/l	0.2	0.2	0.20
18	Magnesium as Mg	mg/l	13.81	11.9	12.9
19	Manganese as Mn	mg/l	<0.025	<0.025	<0.025
20	Mineral Oil	mg/l	<0.5	<0.5	<0.5
21	Nitrate as NO3	mg/l	2.9	3.5	3.2
22	Phenolic Compound	mg/l	<0.05	<0.05	<0.05
23	Selenium as Se	mg/l	<0.001	<0.001	<0.001
24	Silver as Ag	mg/l	<0.1	<0.1	<0.1
25	Sulphate as SO4	mg/l	7.63	7.3	7.5
26	Sulphide	mg/l	<0.05	<0.05	<0.05
27	Total alkalinity as CaCO3	mg/l	80	98	89
28	Total Hardness	mg/l	120	112	116
29	Zinc as Zn	mg/l	<0.03	<0.03	<0.03
30	Cadmium as Cd	mg/l	<0.01	<0.01	<0.01
31	Cyanide as CN	mg/l	<0.01	<0.05	<0.01
32	Lead as Pb	mg/l	<0.02	<0.02	<0.02
33	Mercury as Hg	mg/l	<0.004	<0.004	<0.004
34	Molybdenum as Mo	mg/l	<0.05	<0.05	<0.05
35	Nickel (as Ni)	mg/l	<0.1	<0.1	<0.1
36	Pesticide	mg/l	Absent	Absent	Absent
37	Poly aromatic Hydrocarbon as PAH	mg/l	<0.0001	<0.0001	<0.0001
38	Arsenic as As	mg/l	<0.004	<0.004	<0.004
39	Total Chromium as Cr	mg/l	<0.05	<0.05	<0.05
40	Hexavalent Chromium as Cr+6	mg/l	<0.01	<0.01	<0.01
41	Total Coliform	MPN /100 ml	<1.8	<1.8	<1.8

*B. Babu*

Reviewed By:



*P. Patil*  
Approved by:



Report. No: Envlab/25-26/TR-02705

Date: 07.04.2025

## SIX MONTHLY COMPLIANCE REPORT (OCT-2024 TO MAR-2025)

### SOIL QUALITY ANALYSIS REPORT

Name & Address of the Client : Sukinda Chromite Block,  
M/s Tata Steel Ltd., Kalarangiatta, Dist. Jajpur, Odisha

#### S-1: Dump No-3 (Lease inside)

Sl.No	Parameters	Unit	Analysis Results						
			OCT	NOV	DEC	JAN	FEB	MAR	AVERAGE
1	pH at 250° C	--	7.09	7.15	7.32	7.29	7.42	7.19	7.24
2	Texture	--	Sandy Clay	Sandy Clay	Sandy Clay	Sandy Clay	Sandy Clay	Sandy Clay	Sandy Clay
	Sand	%	59.2	60.5	62.3	60.9	63.2	62.8	61.48
	Silt	%	2.2	2.1	2.5	2.6	2.3	2.7	2.40
	Clay	%	38.6	37.4	36.4	35.8	33.9	34.6	36.12
3	Bulk Density	gm/cc	1.33	1.32	1.12	1.15	1.16	1.21	1.22
4	Water Holding Capacity	%	31.9	32.9	32.3	33.8	35.2	33.9	33.3
5	Electrical Conductivity	µs/cm	90.5	92.4	89.6	90.3	94.5	98.5	92.6
6	Available Nitrogen	mg/kg	24.1	23.8	22.4	22.4	23.6	24.6	23.5
7	Available Potassium as K	mg/kg	14.9	14.3	13.6	14.3	14.7	14.4	14.4
8	Available Phosphorous as p	mg/kg	10.3	9.8	9.4	9.6	10.2	10.9	10.0
9	Chloride as Cl	mg/kg	15.2	14.4	14.2	15.7	14.3	13.8	14.6
10	Iron as Fe	mg/kg	33.6	32.3	31.5	31.8	36.8	39.2	34.2
11	Copper as Cu	mg/kg	18.2	17.6	16.4	16.9	15.7	16.7	16.9
12	Nickel as Ni	mg/kg	22.4	23.8	23.6	24.5	25.1	26.9	24.4
13	Manganese as Mn	mg/kg	30.9	30.3	31.4	32.6	33.6	34.7	32.3
14	Zinc as Zn	mg/kg	33.6	32.9	30.9	30.2	30.9	31.2	31.6
15	Cobalt as Co	mg/kg	5.1	5.5	5.2	5.5	5.6	4.9	5.3
16	Lead as Pb	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
17	Cadmium as Cd	mg/kg	9.7	9.2	9	9.2	9.6	10.1	9.47
18	Mercury as Hg	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
19	Chromium as Cr	mg/kg	41.4	40.7	40.2	39.6	40.1	41.4	40.6
20	Arsenic as As	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
21	Hexavalent Chromium as Cr+6	mg/kg	21.3	23.6	24.5	24.9	23.3	22.7	23.4

*Bab*

Reviewed By:



*P. Patu*

Approved by:

## S-2: Durga Puja field (Lease Outside)

Sl.No	Parameters	Unit	Analysis Results						
			OCT	NOV	DEC	JAN	FEB	MAR	AVERAGE
1	pH at 250 C	--	7.21	7.21	6.98	7.01	7.18	7.54	7.19
2	Texture	--	Sandy Clay	Sandy Clay	Sandy Clay	Sandy Clay	Sandy Clay	Sandy Clay	Sandy Clay
	Sand	%	58.4	59.2	56.3	58.4	60.5	60.9	58.95
	Silt	%	1.6	1.8	2.1	2.2	2.1	1.9	1.95
	Clay	%	40	39	40.4	41.7	40.2	40.8	40.35
3	Bulk Density	gm/cc	1.28	1.22	1.2	1.23	1.2	1.23	1.23
4	Water Holding Capacity	%	30.5	30.1	29.8	31.2	31.9	31.8	30.9
5	Electrical Conductivity	µs/cm	93.7	90.3	90.1	91.4	92.8	91.5	91.6
6	Available Nitrogen	mg/kg	22.6	21.5	21.8	21.8	22.1	25.1	22.5
7	Available Potassium as K	mg/kg	16.2	15.7	15.4	15.1	15.3	15.1	15.5
8	Available Phosphorous as p	mg/kg	9.5	9.2	9.1	9.2	8.5	8.9	9.1
9	Chloride as Cl	mg/kg	14.5	13.8	13.6	14.3	15.1	14.2	14.3
10	Iron as Fe	mg/kg	41.7	38.4	36.4	35.2	40.4	41.8	39.0
11	Copper as Cu	mg/kg	24.9	20.1	20.2	20.7	21.2	22.5	21.6
12	Nickel as Ni	mg/kg	34.1	31.4	27.4	26.9	27.8	28.1	29.3
13	Manganese as Mn	mg/kg	28.7	25.2	22.9	23.4	24	29.5	25.6
14	Zinc as Zn	mg/kg	37.4	35.1	34.2	33.7	34.2	35.1	35.0
15	Cobalt as Co	mg/kg	4.3	4.7	4.6	4.8	4.4	4.2	4.5
16	Lead as Pb	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
17	Cadmium as Cd	mg/kg	8.6	8.5	8.4	8.7	8.2	9.8	8.7
18	Mercury as Hg	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
19	Chromium as Cr	mg/kg	45.5	42.8	41.6	45.4	46.5	48.5	45.1
20	Arsenic as As	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
21	Hexavalent Chromium as Cr+6	mg/kg	25.1	24.7	23.9	25.1	24.8	24.2	24.6

*Bab*  
Reviewed By:



*P. Patil*  
Approved by:



## ANNEXURE-II

## Environment Expenditure made during (Oct' 2024 – March' 2025)

Sl. No.	Expenditure	Amount (In Lakh)
1	ETP operation cost	
	a) Manpower , chemical and maintenance	181.43
	b) ETP Electricity cost	20.13
4	Monitoring & Analysis cost of Air, Water & Noise	19.06
5	Plantation expenditure	96
6	EQMS Online Analysis	1.50
7	EQMS Online Data Transmission	0.6
	<b>Total</b>	<b>318.72</b>