



**Deputy Director General of Forests (C),  
Ministry of Env., Forest and Climate Change,  
Integrated Regional Office,  
A/3, Chandrasekharapur,  
Bhubaneswar – 751023  
Email: [roez.bsr-mef@nic.in](mailto:roez.bsr-mef@nic.in)**

MD/ENV/ 888 /106 / 2023

Date: 24.11.2023

Ref: Environmental Clearance letter no. J-11015/888/2007-IA. II (M), dated: 21.12.2011 & its amendment dated 7<sup>th</sup> September 2018.

**Sub: Submission of Half-yearly compliance status report of Environmental Clearance conditions for the period April 2023 – September 2023 in respect of Khondbond Iron & Manganese Mine, M/s Tata Steel Limited.**

Dear Sir,

Kindly find attached herewith the half-yearly compliance status report in respect of the stipulated Environmental Clearance conditions of Khondbond Iron & Manganese Mine, M/s Tata Steel Limited for the period from **April 2023 – September 2023**. Also the compliance for the same period vide office memorandum no. Z-11013/57/2014-IA. II (M), dated 29.10.2014, is also attached herewith as Annexure - A.

We trust that the measures taken towards environmental safeguards comply with the stipulated environmental conditions. We look forward to your further guidance which shall certainly help us in our endeavor for further improve upon our Environmental Management practices.

Thanking you,

Yours faithfully,  
f: M/s Tata Steel Limited

**Chief (Planning), OMQ**

Encl.: As above

Copy to : The Chairman, Central Pollution Control Board, Southern Conclave, Block 502, 5<sup>th</sup> & 6<sup>th</sup> Floors, 1582 Rajdanga Main Road, Kolkata - 700107 (W. B.)  
: The Member Secretary, State Pollution Control Board, Paribesh Bhawan, A/118, Nilakantha Nagar, Unit – VIII, Bhubaneswar – 751012 (Odisha)  
: The Regional Officer, SPCB, College Road, Baniapata, Keonjhar – 758001 (Odisha)

**TATA STEEL LIMITED**

Mines Division Noamundi 833 217 India

Tel 91 9234301340 Fax 91 6596 290737

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

Tel 91 22 66658282 Fax 91 22 66657724

Corporate Identity Number L27100MH1907PLC000260 Website [www.tatasteel.com](http://www.tatasteel.com)

Your application has been **Submitted** with following details

<b>Proposal No</b>	IA/OR/MIN/9648/2007
<b>Compliance ID</b>	28161213
<b>Compliance Number(For Tracking)</b>	EC/M/COMPLIANCE/28161213/2023
<b>Reporting Year</b>	2023
<b>Reporting Period</b>	01 Dec(01 Apr - 30 Sep)
<b>Submission Date</b>	30-11-2023
<b>IRO Name</b>	ARTATRANA MISHRA
<b>IRO Email</b>	jhk109@ifs.nic.in
<b>State</b>	ODISHA
<b>IRO Office Address</b>	Budgam
<b>Note:-</b> SMS and E-Mail has been sent to ARTATRANA MISHRA, ODISHA with Notification to Project Proponent.	



परिवेश  
PARIVESH  
(CPC GREEN)

पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय

Ministry of Environment, Forest and Climate Change



Back

## View Compliance Report at Project Proponent

### Proposal Details

**Proposal No**

IA/OR/MIN/9648/2007

**Category**

Non-Coal Mining

**Proposal Name**

Khondbond Iron & Manganese Mine of M/s Tata Steel LTD

**Plot / Survey/ Khasra No.****Village(s)****Sub-District(s)****State**

ODISHA

**District**

KENDUJHAR

**MoEF File No**

J-11015/888/2007-IA.II(M)

**Name of the Entity/  
Corporate Office**

Tata Steel Limited

**Entity's PAN**

NA

**Entity Name as per PAN**

NA

**Entity details mentioned above is correct ?**

Agree

**Project KML**

[View on DSS](#)

## Covering Letter

### Covering Letter

[Click to View](#)

## Compliance Reporting Details

### Reporting Year

2023

### Reporting Period

01 Dec(01 Apr - 30 Sep)

### Remark(if any)

## Details of Production and Project Area

### Date of Commencement of Project/Activity

11-03-2022

	Project Area as per EC Granted(ha.)	Actual Project Area in Possession(ha.)
Private	104.32	0
Revenue Land	0	0
Forest	836.757	0
Others	36.923	0
Total	978	0

### PRODUCTION CAPACITY

Sr.No.	Name of the Product	Units	As per EC Granted	As per CTO Granted	CTO ID	Valid Up To	Production during last financial year
1	Manganes ore	Tons per Annum (TPA)	100000	100000	3570/IND-I-CON-1127	31-03-2026	89879.000
2	Iron ore	Tons per Annum (TPA)	8000000	8000000	3570/IND-I-CON-1127	31-03-2026	7523352.540

## Conditions

### Specific Conditions

Sr.No.	Condition Type	Condition Details	Status of Compliance,Remarks/Reason and Supporting Documents	
1	Statutory compliance	No mining shall be carried out in the forestland without obtaining requisite prior forestry clearance under the Forest (Conservation) Act, 1980 for forestland involved in the project. The environmental clearance is subject to grant of forestry clearance.	PPs Submission	<p>Complied. The mining is restricted to only 453.150 ha. 136.15 ha broken prior to enactment of the Forest (Conservation) Act,1980 and mining in remaining 453.150ha started only after issuance of final order by the Govt. of Odisha vide letter no. F. No. 8-98/2004/FC dated: 09.08.2006 (317 ha. fresh + 136.15 ha broken prior to 1980) after prior approval from the Central Government vide letter no. F. No. 8-98/2004/FC dated: 09.08.2006. The total project area of Khondbond is 1019.472 ha, which includes mine lease area of 978ha. Out of which the mine has obtained the Stage -II forest clearance of 453.150ha vide letter no. F. No. 8-98/2004/FC dated: 09.08.2006 (317 ha. fresh + 136.15 ha broken prior to 1980). All the mining operations are restricted within same. For the rest of area, forest diversion proposal is applied &amp; are at advanced stage of approval. Complied</p> <p>Attachment: <a href="#">Click to View</a></p>
2	Statutory compliance	The project proponent shall obtain Consent to Establish and Consent to Operate from the State Pollution	PPs Submission	<p>Complied The Consent to Established was obtained from the State Pollution Control Board, Odisha vide letter no. 18102/IND-II/CTE-6725 dated 28.09.2022. The</p>

		Control Board, Orissa and effectively implement all the conditions stipulated therein.		latest Consent to operate issued by letter no. 3570/IND-I-CON-1127 dated 11.03.2022 is valid till 31.03.2026. Complied Attachment: <a href="#">Click to View</a>
3	Statutory compliance	The environmental clearance is co-terminus to mining lease and the proponent shall obtain fresh Environmental Clearance at the time of renewal of mine lease in accordance with the provisions of the EIA Notification, 2006 as amended subsequently.	PPs Submission	Will obtain fresh Environmental Clearance at the time of renewal of lease in accordance with prevailing laws at the time of making application. Complied Attachment: NA
4	Statutory compliance	The mining operations shall be restricted to above ground water table in the iron ore zone and it should not intersect the ground water table. In case of working below the ground water table in the iron ore zone, prior approval of the Ministry of Environment and Forests and the Central Ground Water Authority shall be obtained, for which a detailed hydrogeological study shall be carried out.	PPs Submission	Noted & complied with. However, in iron mine, the lowest working depth of the mine is 654 RL which is above the ground water table 555AMSL - 553AMSL. But in manganese mine the ground water table has been breached during the life of mine for which dewatering NOC had been granted from CGWA vide letter no. CGWA/NOC/MIN/REN/1/2021/6494 and its second renewal is under process. A detailed Hydro-Geological study was submitted prior to obtaining NoC. Complied Attachment: NA

5	Statutory compliance	<p>The Company shall submit within 3 month their policy towards Corporate Environment Responsibility which should inter-alia address (i) Standard Operating process/ procedure to bring into focus any infringements/ deviation/ violation of environmental or forest norms /conditions, (ii) Hierarchical system or Administrative order of the company to deal with environmental issues and ensuring compliance EC conditions and (iii) System of reporting of noncompliance / violation environmental norms to the Board of Director of the company and/ or stake holders or shareholders.</p>	PPs Submission	<p>Noted &amp; complied vide letter No. MD/ENV/775 /106/2012, Dated. 20.03.2012. Tata steel Ltd. has various committee to address all the environmental issues adequately. (i) Standard Operating Procedures have been stipulated &amp; is being followed stringently. (ii) An environment cell has been established with senior leadership at apex to drive towards sustainability &amp; to deal with environmental issues and ensuring compliance EC conditions. (iii) LEGATRIX, an online system to monitor timely completion of compliance is utilized for tracking &amp; reporting non-compliance / violation environmental norms to the Board of Director of the company and/ or stake holders or shareholders. Complied Attachment: NA</p>
6	Risk Mitigation and Disaster Management	<p>A safety zone of 50m shall be left as no mining zone and no waste shall be dumped within this safety zone along the side of Suna Nadi</p>	PPs Submission	<p>Before this condition was given, there exists an old waste dump within the 50m distance from Kundra nallah and that has been stabilized by plantation along with garland drains and Toe walls. However, at present no</p>

		(Kundra Nallah) & the Kakrapani nallah flowing adjacent to the mine lease area.		mining activity is being carried out within the safety zone of 50m along the side of Kundra nallah. Complied Attachment: <a href="#">Click to View</a>
7	MISCELLANEOUS	The project proponent shall ensure that no natural watercourse and/or water resources shall be obstructed due to any mining operations. Adequate measures shall be taken for conservation and protection of the first order and the second order streams, if any emanating from the mine lease area during the course of mining operation.	PPs Submission	Complied with. No natural watercourse or water resources are obstructed due to our mining operations. Further, no first order and the second order streams are emanating from the mine lease area. Complied Attachment: NA
8	MINING PLAN	The topsoil, if any shall temporarily be stored at earmarked site(s) only and it should not be kept unutilized for long. The topsoil shall be used for land reclamation and plantation.	PPs Submission	Noted and complied. An area of 0.50 ha has been identified for storage of topsoil. Topsoil that is generated is used for plantation of saplings & vetiver plantation. Complied Attachment: <a href="#">Click to View</a>
9	AIR QUALITY MONITORING AND PRESERVATION	The project proponent shall carry out conditioning of the ore with water to mitigate fugitive dust emission, without	PPs Submission	Noted and complied. The 8 MTPA Wet Processing plant is equipped with adequate number of dust suppression systems along the conveyor belt system & transfer points. The Crushing &



		effecting flow of ore in the ore processing and handling areas.		Screening Plants are also equipped with dust suppression systems to reduce fugitive dust. Complied Attachment: <a href="#">Click to View</a>
10	MINING PLAN	The effluent from the ore beneficiation plant shall be treated in the tailing thickener and the tailings slurry shall be transported through a closed pipeline to the tailing ponds.	PPs Submission	Noted and complied. The effluent from the ore beneficiation plant is first sent to thickener where the excess water is recovered and re circulated into the plant for processing purpose and the remaining slurry with tailing is then sent to Paste Thickener which further reduces the water content of the slime before final disposal of the slime in the tailing dam through closed pipeline. Complied Attachment: <a href="#">Click to View</a>
11	Human Health Environment	The tailing ponds shall be lined HDPE lining.	PPs Submission	Noted and complied. HDPE liners have been installed in the slime Dam. Complied Attachment: <a href="#">Click to View</a>
12	WATER QUALITY MONITORING AND PRESERVATION	The decanted water from the tailing dam shall be re- circulated and there should be zero discharge from the tailing dam.	PPs Submission	Noted and complied. The decanted water from the tailing dam is recovered and re-circulated in the processing plant. High-rate thickener & Paste thickener are utilized for increased re-circulation of water from slime & reduce freshwater dependability. Complied Attachment: <a href="#">Click to View</a>
13	WATER QUALITY MONITORING	Appropriate technology shall be used for	PPs Submission	Noted & shall be complied. Paste Thickener has been installed near the slime dam

	AND PRESERVATION	maximum recovery of ore in order to reduce slurry discharge and to increase the life of the tailing ponds		before slime disposal. As the name suggests, it is used to remove excess water from slime coming from High-rate thickener. Complied Attachment: <a href="#">Click to View</a>
14	Risk Mitigation and Disaster Management	The project proponent shall constitute on emergency management Team under the control of project in charge to deal with the emergency situation pertaining to the tailing pond for the timely & effective control of emergency situation, it shall be ensured that training programme and mock drill shall be organized for the employees	PPs Submission	Noted & complied. Emergency management team which consists of security personnel's do continuous patrolling of the area for observation of any emergency pertaining to the tailing ponds. Also, mock drills are organised for the employees for control of emergency situation in regard with tailing dam. Complied Attachment: NA
15	MINING PLAN	The Over burden (OB) generated during the mining operations shall be stacked at earmarked dump site (s) only and it should not be kept active for a long period of time and its phase-wise stabilisation shall be carried out. Backfilling shall commence from the fifth year onwards. There shall be six over burden (four for	PPs Submission	Currently all Over burden (OB) is being handled as per approved mine plan. The land use and land cover shall be abided which includes the earmarked storage of OB. Total backfilling for FY 22 – 2.82 Ha & FY 23 – 1.78 Ha. OB dumps are scientifically being vegetated with suitable native species. Total number of plantation for FY 24 is 11500 upto date covering an area of 4.6 Ha. Total plantation upto date is 395996 upto FY 23 covering an area of 37 Ha. Also, coir matting has been made in some fine stock yards and

iron and two for manganese ore). proper terracing of the OB dumps shall be carried out so that the overall slope of the dumps shall be maintained to 28°. The overburden dumps shall be scientifically vegetated with suitable native species to prevent erosion and surface run off. In critical areas, use of geo textiles shall be undertaken for stabilization of the dump. Out of the total excavated area of 763.665ha, an area of 758.665 ha shall be reclaimed and afforested. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment & Forest and its regional office located at Bhubaneswar on six monthly basis.

subgrade dumps. The pictures of which is attached.  
 Complied  
 Attachment: [Click to View](#)

16	MINING PLAN	Catch drains and siltation ponds of appropriate size should be	PPs Submission	Catch drains, siltation ponds are made along with toe wall and garland drains in and around mine dumps
----	-------------	--	----------------	--

constructed around the tailing ponds, mine working, soil, OB and mineral dump(s) to prevent run off of water and flow of sediments directly into the Suna Nadi (Kundra Nalla), the Jalpa Nadi, the Baitarni River, the Karo Nadi, the kakrapani nalla, the kundru nalla, the Dalko nalla, the kashi nalla, the Tapodihi nalla, the Teherei nalla, the Achanda nalla and other water bodies. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains should be regularly desilted particularly after the monsoon and maintained properly. Garland drains, settling tanks and check dams of appropriate size, gradient and length shall be constructed around the tailing ponds, mine pit, soil, OB and mineral dump(s) to prevent run off of water and flow of sediments

areas to prevent surface runoff. The catch drains are constructed based on peak sudden rainfall data along with 50% safety margin to prevent overflow of any kind. Timely cleaning and de-siltation of these check dams and siltation ponds are done prior to monsoon for checking flow of sedimentation. Siltation pond and catch drains in iron mines area  
Complied  
Attachment: [Click to View](#)

		<p>directly into the Suna Nadi (Kundra Nalla), the Jalpa Nadi, the Baitarni River, the Karo Nadi, the kakrapani nalla, the kundru nalla, the Dalko nalla, the kashi nalla, the Tapodihi nalla, the Teherei nalla, the Achanda nalla and other water bodies and sump capacity should be designed keeping 50% safety margin over and above the peak sudden rainfall (based on 50 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.</p>			
17	MINING PLAN	<p>Dimension of retaining wall at the toe of the OB dumps and benches within the mine to check run-off and siltation should</p>	<table border="1"> <tr> <td>PPs Submission</td> <td> <p>All the retaining walls at the toe of OB dumps are made adequately. All the siltation ponds and garland drains are made based on rainfall data for adequate surface runoff management.</p> </td> </tr> </table>	PPs Submission	<p>All the retaining walls at the toe of OB dumps are made adequately. All the siltation ponds and garland drains are made based on rainfall data for adequate surface runoff management.</p>
PPs Submission	<p>All the retaining walls at the toe of OB dumps are made adequately. All the siltation ponds and garland drains are made based on rainfall data for adequate surface runoff management.</p>				

		be based on the rainfall data.		Complied Attachment: NA
18	MINING PLAN	The void left unfilled in an area of 5ha shall be converted into water body. The higher benches of excavated void/ mining pit shall be terraced, plantation done to stabilize the slopes. The slopes of higher benches shall be made gentler for easy accessibility by local people to use the water body. Peripheral fencing shall be carried out all along the excavated area.	PPs Submission	Noted and shall be complied at end of mine life. This being the activity at the end of mine life has been incorporated in progressive mine closure plan. Complied Attachment: NA
19	MINING PLAN	Plantation shall be raised in an area of 965.018 ha including a 7.5 wide green belt in the safety zone around the mining lease by planting the native species around reclaimed area, mine benches, water body, tailing ponds, along the roads etc. In consultation with the local DFO/Agriculture Department. The density of the tree should be around 2500 plants per hectare. Greenbelt shall	PPs Submission	Noted and being complied. Plantation in safety zone is done with native species of plants. Total number of plantation for FY 24 is 10500 upto date covering an area of 4.2 Ha. Total plantation upto date is 395996 upto FY 23 covering an area of 37 Ha. Additionally, a 0.08 ha plot with Miyawaki Plantation & 200 nos. of Sal plantation been done for biodiversity conservation. Complied Attachment: <a href="#">Click to View</a>

		be developed all along the mine lease area in a phased manner and shall be completed within first five years.		
20	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 particulate matter such as around crushing and screening plant, loading and unloading point and transfer point. Extensive water sprinkling shall be carried out on haul roads. It should be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.	PPs Submission	Noted & being complied. Regular water sprinkling is being carried out by use of mobile water sprinklers around the crushing and screening plant, loading & unloading area and haul roads. Regular monitoring of ambient air quality is being done and the results are within the permissible limits as prescribed by the Central Pollution Control Board. Fog cannons are being used for arresting fugitive dust emissions. Also, the wet plant is equipped with dry fog system for control of dust emission. Regular Ambient Air Monitoring is being done through three Nos. of CAAQM stations installed at strategic locations of mines. The data is being continuously shared with Pollution Control Board on real time basis. Complied Attachment: <a href="#">Click to View</a>
			PPs Submission	Noted & being complied. Regular water sprinkling is being carried out by use of mobile water sprinklers around the crushing and screening plant, loading & unloading area and haul roads. Regular monitoring of ambient air quality is being done and the results are within the permissible limits as prescribed by the Central Pollution Control Board. Fog cannons are being used for arresting fugitive dust

				emissions. Also, the wet plant is equipped with dry fog system for control of dust emission. Complied Attachment: NA
21	WATER QUALITY MONITORING AND PRESERVATION	Regular monitoring of the flow rate of the springs and perennial nallahs flowing in and around the mine lease shall be carried out and records maintained.	PPs Submission	Noted & complied. Regular monitoring of Kundra Nallah is being carried out and records are maintained. Complied Attachment: NA
22	WATER QUALITY MONITORING AND PRESERVATION	The project authority should implement suitable conservation measures to augment ground water resources in the area in consultation with the Regional Director, Central Ground Water Board.	PPs Submission	Noted & complied. Four nos. of Rainwater Harvesting Ponds and Two nos. of Ground Water Recharge structures have been constructed after conducting a hydrogeology study. The water recharge potential of the RWH structures are as follows: - Complied Attachment: <a href="#">Click to View</a>
23	WATER QUALITY MONITORING AND PRESERVATION	Regular monitoring of ground water level and quality should be carried out by establishing a network of existing wells and constructing new piezometers during the mining operation. The periodic monitoring (at least four times in a year – pre-monsoon	PPs Submission	Noted & complied. Regular ground water level with quality as per defined frequency is being submitted to CGWA. Complied Attachment: <a href="#">Click to View</a>



(April/May), monsoon (August), post-monsoon (November) and winter (January) once in 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 Director, Central Ground Water Board. If at any stage, it is observed that the ground water table is getting depleted due to the mining activity, necessary corrective measures shall be carried out.

24	WATER QUALITY MONITORING AND PRESERVATION	The ground water quality around the tailing pond shall be monitored regularly and time series data generated. It shall be ensured that the groundwater quality is not affected adversely due to the project.	PPs Submission	Noted and complied. Complied Attachment: NA
25	Statutory compliance	The project proponent shall	PPs Submission	Noted and complied. The mine has valid surface water

		obtain necessary prior permission of the competent authorities for drawl of requisite quantity of surface water required for the project.		drawl permission of 19020 KLD from water resource division vide letter no 3300, dated: 11.02.2016. Complied Attachment: NA
26	WATER QUALITY MONITORING AND PRESERVATION	Appropriate mitigative measures should be taken to prevent pollution of the Baitarni River, the Suna Nadi & the Karo Nadi in consultation with State Pollution Control Board.	PPs Submission	Noted & complied. To prevent pollution of surrounding rivers during rains, all the mitigative measures are taken such as toe wall, garland drains, check dams, settling pits etc. Complied Attachment: <a href="#">Click to View</a>
27	WATER QUALITY MONITORING AND PRESERVATION	The Project proponent shall practice suitable rainwater harvesting measures on long term basis and work out a detailed scheme for rain water harvesting in consultation with the Central Ground Water Authority and submit a copy of the same to the MoEFCC & its Regional Office; Bhubaneswar.	PPs Submission	Four nos. of Rain Water Harvesting Ponds and Two nos. of Ground Water Recharge structures have been constructed after conducting a hydrogeology study. The water recharge potential of the RWH structures are as follows: - Complied Attachment: <a href="#">Click to View</a>
28	AIR QUALITY MONITORING AND PRESERVATION	Vehicular emission shall be kept under control and regular monitored. Measures shall be taken for maintenance of vehicles used in	PPs Submission	Noted & complied. PUC for checking of emission for all the vehicles are carried out once in every six months. Moreover, outside transportation of mineral is carried out through tarpaulin covered trucks after passing through Wheel washing system at dispatch

		mining operations and in transportation of mineral. The mineral transportation shall be carried out through the covered trucks only and the vehicles carrying the mineral shall not be overloaded		gate. Further, overloading of trucks is restricted to prevent spillage of material. Complied Attachment: NA
29	AIR QUALITY MONITORING AND PRESERVATION	No transportation of ore outside the mine lease area shall be carried out after sunset.	PPs Submission	Transportation of ore is being made as per District Collector, Keonjhar, order. Complied Attachment: NA
30	Statutory compliance	No blasting shall be carried out after sunset. Blasting operation shall be carried 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.	PPs Submission	Blasting is being carried out during day time only. Controlled Blasting is being carried out for control of ground vibrations and to arrest fly rocks, as per the recommendations of CIMFR, Dhanbad. Complied Attachment: NA
31	AIR QUALITY MONITORING AND PRESERVATION	Drills shall either be operated with Dust extractors or equipped with water injection system.	PPs Submission	Wet drilling is practiced ensuring no fugitive dust emission takes place. Drills have been provided with dust injection system. Complied Attachment: <a href="#">Click to View</a>

32	AIR QUALITY MONITORING AND PRESERVATION	Mineral handling plant shall be provided with adequate number of high efficiency dust extraction system. Loading and unloading areas including all the transfer points should also have efficient dust control arrangements. These should be properly maintained and operated.	PPs Submission	The Mineral Handling plant has been equipped with dry fog system along with closed conveyor at all loading and unloading points including transfer points. Complied Attachment: <a href="#">Click to View</a>
33	WATER QUALITY MONITORING AND PRESERVATION	Sewage treatment plant shall be installed for the colony. ETP shall also be provided for workshop and wastewater generated during mining operation.	PPs Submission	Sewage Treatment Plant (STP) of 10 KLD installed & operational in mine area for the treatment of waste water generated. Khondbond doesn't have any separate colony. Mine and for waste water from workshop, oil and grease separation pits are provided. Effluent Treatment plant (ETP) of 7 KLD has been installed at workshop. Photographs are attached. Complied Attachment: NA

34	Human Health Environment	During operation of the project, special emphasis shall be given to minimise risks and hazards due to manganese poisoning.	PPs Submission	Noted and shall be complied as directed. Medical tests were conducted for assessing the exposure to Mn poisoning for persons working in the Manganese Pit. Proper training was also provided to the people most vulnerable to manganese exposure. Complied Attachment: NA
35	Human Health Environment	Pre-placement of medical examination and periodical examination of the workers engaged in the project shall be carried out and record maintained. For the purpose, schedule of health examination of the workers should be drawn and followed accordingly.	PPs Submission	Complied Pre-placement medical examination and periodical examination of the workers engaged are being conducted & record maintained. The schedule of Periodical Medical Examination is once in every 3 years for the employees of age more than 40 years and once in 5 years for the employees of age less than 40 years. Complied Attachment: NA

36	Human Health Environment	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	PPs Submission	Noted & complied. During construction & other jobs at Khondbond, local labours are engaged, which are from nearby villages. Thus, residential facility is not required. However, various amenities such as canteens for food, a safe drinking water facility, toilets, medical facility with site medical officer etc are provided. A sewage treatment plant of 10KLD is also operational in area. Complied Attachment: NA
37	MINING PLAN	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.	PPs Submission	Noted & complied. Digital processing of the entire lease area was carried by high resolution satellite imagery. And M/s DCS Consultants, (Authorized organisation of ORSAC) was engaged for the work. Complied Attachment: <a href="#">Click to View</a>
38	GREENBELT	The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna namely sloth bear, elephant, godhi	PPs Submission	Noted & complied. Khondbond is an operational mining area of Tata Steel and various precautionary measures are taken for conservation and protection of endangered flora and fauna like Miyawaki Plantation, Sal Plantation, installation of Niche bird box at

		<p>etc. spotted in the study area. The critical habitats if any within the impact zone shall be individually identified and the conservation plan prepared specific to this project in consolation with the state forest and wildlife deptt. Should effectively address the same. All the safeguard measures brought out in the wildlife conservation plan prepared specific to this project site shall be effectively implemented in consolation with the state forest and wildlife deptt. A copy of approved wildlife conservation plan shall be submitted to the Ministry &amp; its Regional office, Bhubaneswar within three months.</p>	<p>appropriate places etc. Additionally, multiple awareness sessions towards Environment Protection are carried out both internally and with the local populace. The mine has approved wildlife management 843/1 WLSSP-100/2016; dated 28th January 2016 and various measures are taken with state forest and wildlife department as on when required. The approved copy of wildlife management plan is already submitted to Ministry &amp; its Regional office, Bhubaneswar. Complied Attachment: <a href="#">Click to View</a></p>	
39	Statutory compliance	<p>The entire mining lease area shall be fenced by erecting solar power electric fencing all around it. The fencing so erected shall be maintained properly and the cost towards</p>	PPs Submission	<p>Noted &amp; being complied. The Khondbond mine lease comprises of 875.198 ha of forest land including Sabik forest. Area having surface right and forest clearance are being fenced with solar electric fence. Lease boundary of 4 km length has been successfully fenced.</p>

		erection and maintenance of the solar power electric fencing shall be borne by the project proponent out of the project cost.		Complied Attachment: <a href="#">Click to View</a>
40	AIR QUALITY MONITORING AND PRESERVATION	The critical parameters such as RSPM (Particulate matter with size less than 10 microm i.e., PM10 ) and NOx in the ambient Air within the impact zone, peak particle velocity at 300m distance or within the nearest habitation, whichever is closer shall be monitored periodically. Further, quality of discharged water shall also be monitored (TDS, DO,PH, and total suspended Solids (TSS). The monitored data shall be uploaded on the website of the company as well as displayed on a display board at the project site at a suitable location near the main gate of the company in public domain. The circular No. J20012/1/2006-IA.II(M) dated 27.05.2009 issued by Ministry of	PPs Submission	Noted & complied. The critical parameters like RSPM & NOx in ambient air are being monitored regularly. Peak particle velocity at the time of blasting is also monitored regularly at 300m distance as per rules of IBM. Quality of discharged water (TDS, DO, PH, and total suspended Solids (TSS) is also being monitored. All the environmental monitoring data is being uploaded on the Company's website as part of this report and displayed on a display board at the main entrance gate of the mine. Complied Attachment: <a href="#">Click to View</a>



		Environment and Forests, which is available on the website of the Ministry <a href="http://www.envfor.nic.in">www.envfor.nic.in</a> shall also be referred in this regard for its compliance.		
41	MINING PLAN	A final Mine Closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment & Forests 5 years in advance of final mine closure for approval.	PPs Submission	A progressive mine closure plan approved by IBM is in place. The final mine closure plan along with details of Corpus fund will be submitted to the Ministry of Environment & Forests 5 years in advance. Complied Attachment: NA

### General Conditions

Sr.No.	Condition Heading	Condition Details	Status of Compliance,Remarks/Reason and Supporting Documents	
1	MINING PLAN	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	PPs Submission	Ambient Air Quality monitoring is regularly carried out at four different stations within the core & buffer zone. Two continuous ambient air quality monitoring stations with PM10 & PM2.5, CO, SO2 and NOx are installed in core zone and one at buffer zone. Complied Attachment: <a href="#">Click to View</a>

		features and environmentally and ecologically sensitive targets and frequency of monitoring should be undertaken in consultation with the State Pollution Control Board.		
2	MINING PLAN	No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment & Forests.	PPs Submission	There is no change in mining technology and scope of work mentioned while obtaining prior environmental clearance. No change in mining technology and scope of work will be undertaken without prior approval of the Ministry of Environment & Forests in future. Complied Attachment: NA
3	MINING PLAN	No further expansion or modification in the plant shall be carried out without prior approval of the MoEF&CC.	PPs Submission	There is no expansion or modification undertaken in the plant as mentioned while obtaining prior environmental clearance. For any expansion or modification in future prior approval shall be sought from MoEF&CC. Complied Attachment: NA

4	MINING PLAN	No change in the calendar plan including excavation, quantum of mineral iron ore and waste should be made.	PPs Submission	Calendar plan (IBM Approved Mining Plan) prepared for the mine is being strictly adhered to and we are well within the limits specified in Mining Plan as well as EC and CTO granted capacity. Complied Attachment: NA
5	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.	PPs Submission	Noted & complied. Ambient Air Quality monitoring is regularly carried out at four different stations within the core & buffer zone. Two continuous ambient air quality monitoring stations with PM10 & PM2.5, CO, SO2 and NOx are installed in core zone and one at buffer zone. Complied Attachment: <a href="#">Click to View</a>
6	AIR QUALITY MONITORING AND PRESERVATION	Fugitive dust emissions from all the sources should be controlled	PPs Submission	Fugitive dust emissions from all the sources are controlled regularly. Effective water sprinkling is

		regularly. Water spraying arrangement on haul roads, loading and unloading and at transfer points should be provided and properly maintained.		being done on haul roads, loading and unloading and at transfer points Dry fog system is being used in plant areas to avoid generation of fugitive dust. Complied Attachment: <a href="#">Click to View</a>
7	Human Health Environment	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.	PPs Submission	Regular noise monitoring is done at different work areas. High noise areas are earmarked and people working there are provided with ear protection equipment and the system is ensured by certification to ISO 45001 and regular field audits. Complied Attachment: <a href="#">Click to View</a>

8	WATER QUALITY MONITORING AND PRESERVATION	Industrial waste water (workshop and waste water from the mine) should be properly collected, treated so as to conform to the Standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December 1993 or as amended from time to time. Oil and grease trap should be installed before discharge of workshop effluents.	PPs Submission	Oil & Grease separation pits have been provided to take care of effluents from the workshop. The same water quality is monitored regularly, and the parameters meet the prescribed standard. There is no waste water generation from the mines. Complied Attachment: NA
			PPs Submission	Oil & Grease separation pits have been provided to take care of effluents from the workshop. The same water quality is monitored regularly, and the parameters meet the prescribed standard. There is no waste water generation from the mines. Complied Attachment: NA
9	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. Occupational health surveillance program of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective	PPs Submission	Adequate dust masks are provided to employees engaged in dusty areas. It is also ensured that they use the same. Respirable dust survey at different locations is done regularly. The employees are also given regular awareness training on safety and health aspects as part of implementation process of ISO 45001 systems. Further, employees undergo Lung Function Tests during the Periodical Medical Examination. Periodical Medical Examination of employees and contractor workers are organised regularly to observe any contractions due to exposure to dust and other occupational hazards.

		measures, if needed.		Complied Attachment: NA
10	Corporate Environmental Responsibility	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.	PPs Submission	A separate environmental management cell is in place with the people having relevant qualification on environmental science. The Head of the environment department reports to General Manager i.e. the head of the organization. Complied Attachment: NA
11	Corporate Environmental Responsibility	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.	PPs Submission	Funds allocated for environmental management are spent only for environment related purposes and not diverted to any other purpose. During the year FY 23-24 an amount Rs. 1880.51 lakhs (approx..) has been allocated for environment protection and it is being spent towards environmental protection measures at Khondbond. Complied Attachment: <a href="#">Click to View</a>
12	MINING PLAN	The project authorities should inform to the Regional Office located at Bhubaneswar regarding date of financial closing and final approval of the project by the concerned authorities and the date of start of land	PPs Submission	This is a running mine. No specific date of start of land development work can be assigned. However, the copy of the Environmental Clearance has been sent to the Regional Office, MoEF&CC, Bhubaneswar for kind information. Complied Attachment: NA

		development work.		
13	MISCELLANEOUS	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.	PPs Submission	We extend full co-operation to the officers of the Regional Office during their visit and furnish the required data, information and monitoring reports. Complied Attachment: NA
14	MISCELLANEOUS	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.	PPs Submission	Six monthly reports are submitted regularly on the status of implementation of the stipulated environmental safeguards to the Regional Office, MoEF&CC, Bhubaneswar, Central Pollution Control Board and State Pollution Control Board. Further, the six monthly compliance report along with the monitoring results are uploaded in Tata Steel's website and updated periodically. Complied Attachment: <a href="#">Click to View</a>

## Document Upload

**Last Site Visit Report (if available)**

NA

**Last Site Visit Report Date (if available)**

**Additional Attachment (if any)**

NA

**Additional Remarks (if any)**

- I 'Tata Steel Limited' hereby give undertaking that the data and information given in the filed compliance and enclosures are true to be best of my knowledge and belief and I am aware that if any part of the data and information found to be false or misleading at any stage, the clearance given to the project will be revoked at our risk and cost. In addition to above, I hereby give undertaking that no activity such as change in project layout, construction, expansion, etc. has been taken up without due approval.

## Cover Letter From RO & SRO

**Cover Letter From RO & SRO**

NA

Back