EC Conditions Six Monthly Compliance Report

(by Project Proponent)



Proposal No: IA/OR/MIN/9648/2007

1. Name of the Entity / Corporate Office:

2. Proponent Details:

3. <u>Compliance Letter/Report (Proponent)</u>:

4. Summary Status of Compliance:

Total Condition :	58		
Complied:	47	Being Complied:	5
Not Complied:	0	Partially Complied :	0
Agreed to Comply :	6		

5. <u>Details of Production and Project Area</u>: 6. <u>Specific Conditions (Proponent)</u>:

S.No	Condition	Self Declaration	Remarks / Reason	Supporting Documents	Observation of IRO
1	Sewage treatment plant shall be installed for the colony. ETP shall also be provided for the workshop and wastewater generated during the mining operation.	Being Complied	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. Oil catchment is there for workshop.	N/A	
2	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 points. 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.	Complied	The detail compliance to the condition is attached	PDF	
3	The project proponent shall practice suitable rainwater harvesting measures on long term basis and work out a detailed scheme for rainwater harvesting	Complied	The detail of ground water recharge potential is enclosed	PDF	

	in consultation with the Central Groundwater Authority and submit a copy of the same to the Ministry of Environment and Forests and its Regional Office, Bhubneswar.				
4	Appropriate mitigative measures shall be taken to prevent pollution of the Baitarni River, the Suna Nadi and the Karo Nadi in consultation with the State Pollution Control Board.	Complied	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.	N/A	
5	Regular monitoring of ground water level and quality shall be carried out in and around the mine lease, including beneficiation plant and tailing ponds by establishing a network of existing wells and installing new piezometers during the 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 Grou	Complied	Regular monitoring is done as per condition. The detail monitoring report is attached	PDF	
6	The critical parameters such as RSPM (Particulate matter with size less than 10micron 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 t	Complied	The detail compliance is attached	PDF	
7	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.	Being Complied	The detail status of the compliance condition is attached	₽DF	
8	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(Kundra nallah) and the Kakrapani nallah flowing adjacent to the mine lease area.	Being Complied	The detail status to the condition is attached	PDF	
9	Catch drains and siltation ponds of appropriate size shall be 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 nallah), the Jalpa Nadi, the Baitarni River, the Karo Nadi, the Kakrapani nallah, the	Complied	The detail status of compliance to the condition is attached	₽DF	

	Kundru nallah, the Dalko nallah, the Kashi nallah, the Tapodihi nallah, the Teherei nallah, the Archanda nallah and other water bodies. The water so collected should be utilized for wate				
10	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.	Complied	The detail report on the compliance to the condition is attached	PDF	
11	Appropriate technology shall be used for maximum recovery of ore in order to reduce slurry discharge and to increase the life of the tailing ponds.	Being Complied	Construction of paste thickener is under process. Once completed it will reduce the slurry discharge in the tailing dam and increase the life of the tailing ponds	N/A	
12	The tailing ponds shall be lined HDPE lining.	Complied	HDPE liners have been installed in the slime Dam.	N/A	
13	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 1st and 2nd order streams, if any emanating or passing through the mine lease during the course of mining operation.	Complied	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	N/A	
14	The project proponent shall obtain Consent to Establish and Consent to Operate from the State Pollution Control Board, Orissa and effectively implement all the conditions stipulated therein.	Complied	Khondbond Iron & Manganese mine has valid Consent to Establish & Consent to Operate from State Pollution Control Board till 31.03.2026.	N/A	
15	The mining operations shall be restricted to above ground water table in the iron ore zone and it should not intersect the groundwater 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 hydro-geological study shall be carried out.	Complied	The detail status of the compliance to the condition is attached	→ PDF	
16	Dimension of the retaining wall at the toe of the over burden dumps and the OB benches within the mine to check run-off and siltation shall be based on the rain fall data.	Complied	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.	N/A	
17	The groundwater quality around the tailing pond shall be monitored regularly and time	Complied	Noted and complied.	N/A	

	series data generated. It shall be ensured that the groundwater quality is not affected adversely due to the project				
18	During operation of the project, special emphasis shall be given to minimize risk and hazards due to manganese poisoning.	Complied	Noted and shall be complied as directed	N/A	
19	The Company shall submit within 3 month their policy towards Corporate Environment Responsibility which should interalia 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 non compliance/violation environmental norms to the Board	Complied	Noted & 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.	N/A	
20	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.	Agreed to Comply	Noted and shall be complied. Fresh EC shall be obtained at the time of next lease renewal as per EIA Notification, 2006 as amended subsequently.	N/A	
21	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 and plantation done to stabilize the slopes. The slope 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.	Agreed to Comply	Noted and shall be complied at end of mine life. This being the activity at the end of mine life is been incorporated in progressive mine closure plan.	N/A	
22	The top soil, 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.	Complied	An area of 0.50 ha has been identified for storage of top soil. Topsoil that is generated is used for plantation.	N/A	
23	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.	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	N/A	
24	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	Complied	Pre-placement medical examination and periodical examination of the workers engaged are being conducted & record maintained	N/A	

	should be drawn and followed accordingly.				
25	Plantation shall be raised in an area of 965.018ha including a 7.5m 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 trees should be around 2500 plants per hectare. Greenbelt shall be developed all along the mine lease area in a phased manner and shall be completed within first five years.	Complied	Noted and being complied.	N/A	
26	No transportation of ore outside the mine lease area shall be carried out after sunset.	Being Complied	Transportation of ore is being made as per District Collector, Keonjhar, order.	N/A	
27	The project proponent shall carry out conditioning of the ore with water to mitigate fugitive dust emission, without affecting flow of ore in the ore processing and handling areas.	Complied	The detail compliance status to the condition is attached	PDF	
28	Digital processing of the entire lease area using remote sensing technique should be done regularly once in three years for monitoring land use pattern and report submitted to MOEF and its Regional Office.	Complied	Digital processing of the entire lease area was carried by high resolution satellite imagery. And M/s Geo Consultants Pvt. Ltd., (Authorized organisation of ORSAC) was engaged for the work	PDF	
29	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.	Complied	Complied. All amenities provided	N/A	
30	No blasting shall be carried out after the sunset. 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.	Complied	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.	N/A	
31	Mineral handling area 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.	Complied	The Mineral Handling plant has been equipped with dry fog system along with closed conveyor at all loading and unloading points including transfer points.	N/A	

32	Regular monitoring of the flow rate of the springs and perennial nallahs flowing in and around the mine lease area shall be carried out and records maintained.	Complied	Noted & complied. Regular monitoring of Kundra Nallah is being out and records are maintained.	N/A	
33	The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna namely sloth bear, elephant, godhi 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 consultation with the State Forest and Wildlife Department should effectively address the same. All the safeguard measures brought out in the Wildl	Complied	The detail compliance status is attached	PDF	
34	The over burden generated during the mining operation 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 stabilization shall be carried out. Backfilling shall commence from the fifth year onwards. There shall be six over burden (four for 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 over burden dumps shall be sc	Complied	The detail compliance status is attached	PDF	
35	The decanted water from the tailing dam shall be re-circulated and there should be zero discharge from the tailing dam.	Complied	Noted and complied. The decanted water from the tailing dam is recovered and re-circulated in the processing plant.	N/A	
36	Drills shall either be operated with the dust extractors or equipped with water injection system.	Complied	Wet drilling is in practice. Drills have been provided with dust suppression system	N/A	
37	The project proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of surface water required for the project.	Complied	The mine has valid surface water drawl permission from water resource division vide letter no 3300, dated: 11.02.2016.	N/A	
38	The project proponent shall constitute on emergency management team under the control of project incharge to deal with the emergency situation pertaining to the tailing ponds for the timely and effective control of emergency situation. It shall be ensured that training programme & mock drills shall be organized for the employees.	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. Mock drills are also conducted.	N/A	

39	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.	Agreed to Comply	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	N/A	
40	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. The mineral transportation shall be carried out through the covered trucks only and the vehicles carrying the mineral shall not be overloaded.	Complied	Emission checks for all the vehicles are carried out once in every six months. Effective water sprinkling is done on haul roads to control fugitive dust. Covering of trucks with tarpaulin is ensured	N/A	
41	The entire mining lease area shall be fenced by erecting solar powered electric fencing all around it. The fencing so erected shall be maintained properly and the cost towards erection and maintenance of the solar powered electric fencing shall be borne by the project proponent out of the project cost.	Complied	The detail compliance status is attached	PDF	

7. <u>General Conditions (Proponent)</u>:

S.No	Condition	Self Declaration	Remarks / Reason	Supporting Documents	Observation of IRO
1	Atleast 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 10micron 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.	Complied	Detail report is attached	PDF	
2	Data on ambient air quality [(RSPM(Particulate matter with size less than 10micron i.e., PM10) and NOX] 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	Complied	Reports are submitted on monthly basis to SPCB, Odisha and half yearly to MoEFCC	PDF	
3	No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment & Forests.	Agreed to Comply	We are operating as per the approved mining technology and scope of working mentioned in Environmental	N/A	

			Clearance granted to us	
4	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.	Complied	Shall always complied as per directive	N/A
5	A separate environmental management cell with suitable qualified personnel should be setup under the control of a Senior Executive, who will report directly to the Head of the Organization.	Complied	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	N/A
6	The State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industry Centre and the Collector's office/ Tehsildar's Office for 30 days	Complied	Noted	N/A
7	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 Bhubneswar, 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 re	Complied	Six monthly reports are submitted regularly to the Regional Office, MoEF&CC, BBSR, CPCB and SPCB and also display on TSL website	N/A
8	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.	Agreed to Comply	Noted shall be done as per directive	N/A
9	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.	Complied	The detail expenditure in Fy:22 is enclosed	PDF
10	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.	Agreed to Comply	Shall be complied as per directive	N/A
11	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	Complied	Annual n statement is submitted regularly as per direction	N/A

	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, Bh				
12	Fugitive dust emissions from all the sources should be controlled regularly. Water spraying arrangement on haul roads, loading and unloading and at transfer points should be provided and properly maintained.	Complied	Fugitive dust emissions from all the sources are controlled regularly. Effective water sprinkling is being done on haul roads, loading and unloading and at transfer points Dry fog system is being use	N/A	
13	No change in the calendar plan including excavation, quantum of mineral iron ore, manganese ore and waste should be made.	Complied	Complied and shall always follow the directive	N/A	
14	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.	Complied	EC displayed on TSL website and submitted as per directive	N/A	
15	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.	Complied	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.	N/A	
16	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 has 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 F	Complied	COmplied and advertisement done	N/A	
17	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	Complied	Adequate dust masks are provided to employees engaged in dusty areas. It is also ensured that they use the same.	N/A	

surveillance program of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed Respirable dust survey at different locations is done regularly.

**Note: N/A - Not Available

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