

EC Conditions Six Monthly Compliance Report

(by Project Proponent)



Proposal No : J-11015/215/2008-IA.II(M)

1. Name of the Entity / Corporate Office :


2. Proponent Details :





3. Compliance Letter/Report (Proponent):



4. Summary Status of Compliance :


Total Condition :	50		
Complied :	21	Being Complied :	27
Not Complied :	0	Partially Complied :	0
Agreed to Comply :	2		




5. Details of Production and Project Area : 6. Specific Conditions (Proponent) :


S.No	Condition	Self Declaration	Remarks / Reason	Supporting Documents	Observation of IRO
1	The project proponent shall seek and obtain approval under the FC Act for diversion of the entire forest land located within the mining lease within a period of two years w.e.f. 01.02.2013, failing which the mining lease area will be reduced to the non-forest area plus the forest area for which the project proponent has 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	Complied	Mining operation is restricted within 567.087 ha of forest area for which diversion approval has been obtained. In addition, we have also submitted fresh DRP for remaining forest area of 32.425 ha	N/A	
2	Catch drains and siltation ponds of appropriate size should be constructed to arrest silt and sediment flows from mine working, soil, OB and mineral dumps. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains should be regularly de-silted particularly after monsoon and maintained properly. Garland drain of appropriate size, gradient and length shall be constructed for both mine pit and OB dump and sump capacity should be designed kee	Being Complied	Adequate catch drains and siltation ponds were provided. The photographs are attached		

3	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.	Being Complied	Pre-placement medical examination and periodical examination of the workers engaged are being conducted & record maintained.	N/A	
4	The filter cake shall be disposed at the earmarked site, which shall be above highest water table and shall be lined to prevent any leaching from the filter cake disposal site into groundwater. Efforts shall also be made to gainfully utilize the filter cake so generated in an environmentally compatible manner.	Agreed to Comply	There is no filter cake generation in our operations.	N/A	
5	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	Joda East Iron mine has current surface water drawl permission of 8531 KLD which was granted from Office of Tahasildar: Barbil via Order No. 423/ Dated Barbil the 16th Feb'1996	N/A	
6	The project proponent shall abide by the guidelines dated 01.02.2013 vide no. 1 362/12012-FC put in place by the FC Division of MoEF in respect of cases of mines where at- present the forest clearance is available to only a part of the forest land involved in the mine	Complied	MoEF & CC has issued a Guideline F. No. 11-599/ 2014-FC, dated: 01.04.2015 in supersession of the Guideline F.No. 11-362/2012-FC, dated: 01.02.2013.	N/A	
7	Dimension of the retaining wall at the toe of dumps and OB benches within the mine to check run-off and siltation should be based on the rainfall data.	Being Complied	Toewall of adequate length and height has been constructed at all dumps and product stockpile to prevent any runoff. This is being effective to meet the purpose even during peak rain fall		
8	The project authority should implement suitable conservation measures to augment ground water resources in the area in consultation with Regional Director, Central Ground Water Board.	Complied	The detail compliance to the condition is attached		
9	The project proponent shall practice suitable rainwater harvesting measures on long term basis and work out a detailed scheme for rainwater harvesting, in consultation with the Central Ground Water Authority and submit a copy of the same to the Ministry of Environment and Forests and its Regional Office, Bhubneswar.	Complied	The detail compliance is attached		
10	The water recovery and spill way system shall be so designed that the natural water resources are not affected and that no spill	Being Complied	The slime is stored in the zero-discharge slime pond. The		

	water from the plant goes into the Kundra nallah or any other water body		decanted water from the slime pond is completely recycled back to beneficiation plant within the mine, ensuring zero outside discharge.		
11	Effective safeguard measures such as conditioning of ore with water, 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. It should be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.	Being Complied	The detail report on the compliance is attached		
12	The critical parameters such as RSPM (Particulate matter with size less than 10 micron i.e., PM10) and NO 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 display on a display board at the pr	Being Complied	The detail compliance is attached		
13	The Company shall submit Within 3 months their policy towards Corporate Environment. Responsibility which should inter-alia provide for (i) Standard operating process /process to bring into focus any infringement /deviation /violation of the environmental or forest norms/conditions, (ii) Hierarchical system or Administrative order of the Company to deal with the environmental issues and for ensuring compliance With the EC conditions and (iii)System of reporting of non-compliances /	Complied	Details on Tata Steel's Policy on corporate Environment Responsibility and other requirements have been submitted to the MoEF vide letter no. MD/ENV/233A/102/2 Dated. 8th June, 2013	N/A	
14	A Final Mine closure Plan along with detail of Corpus fund shall be submitted to the Ministry of Environment & Forests 5 years in advance of final mine closure for approval.	Being Complied	A progressive mine closure plan approved by IBM is in place. The final mine closure plan along with details of Corpus fund shall be submitted to the Ministry 5 years in advance	N/A	
15	Plantation shall be raised in an area of 11 ha including a 7.5m wide green belt in the safety zone around the mining lease by planting the native species around OB dump, reclaimed area, mine benches, along the roads etc. in consultation with the local DFO/Agriculture Department.	Being Complied	Plantation has already been raised in an area of 11 ha including a 7.5m wide green belt in the safety zone around the mining lease by planting the native species	N/A	



			around OB dump, reclaimed area etc		
16	The project proponent shall take all precautionary measures during mining operation for conservation and Protection of endangered fauna namely elephant, sloth bear etc. spotted in the study area. All the safeguard measures brought out in the Wildlife Conservation Plan so prepared specific to this project site and approved by the Chief Conservator of Forest, (Wildlife) shall be effectively implemented. A copy of Wildlife Conservation Plan shall be submitted to the Ministry of Environment and Fore	Being Complied	The detail report of the compliance is attached		
17	No mining activities will be allowed in forest area for which the FC is not available.	Being Complied	The present mining operation is restricted within 567.087 ha of forest land for which Forest Clearance has been obtained vide letter no. F. No. 8-32/1993-FC(vol- II), date: 24.09.2007.	N/A	
18	Drills shall either be operated with the dust extractors or equipped with water injection system.	Complied	Wet drilling is in practice and All drills are also provided with dust suppression system	N/A	
19	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.	Being Complied	Since there is very little lateral expansion of mining operations topsoil generation is minimal. Topsoil generated before was stacked at earmarked place and has already been used for plantation purpos	N/A	
20	No blasting shall be carried out after the sunset. Blasting operation shall be carried out only during the daytime. Controlled blasting shall be practices. The mitigative measures for control of ground vibrations and to arrest fly rocks and boulders should be implemented.	Being Complied	Blasting is carried out during daytime only. Controlled Blasting is carried out for control of ground vibrations and to arrest fly rocks, as per the recommendations of CIMFR, Dhanbad.	N/A	
21	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	CTE has been obtained from OSPCB vide letter no. 21271/IND-II-NOC-5144, dated: 08.07.2011. CTO has also been obtained from SPCB, Orissa vide letter No. 3521/IND-I-CON-184, dtd: 08.03.2022	N/A	
22	As part of Ambient Air Quality monitoring during operational phase of the project the air samples shall also be analysed for	Complied	As a part of Ambient Air Quality monitor during operational phase of the project the	N/A	

	their mineralogical composition and records maintained.		air is also analyzed for mineralogical composition. The report is maintained		
23	The mining operations shall be restricted to above ground water table and it should not intersect the groundwater table. In case of working below the ground water table, 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.	Complied	The mining operation is restricted to above ground water table. The lowest working depth of our mine pits is at 580m RL, whereas the presence of ground water table has been estimated to be at 498.30mRL	N/A	
24	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 (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 regul	Being Complied	Regular monitoring is done and reports are submitted. The report is attached		
25	The over burden (OB) generated during the mining operation shall be stacked at earmarked dump site(s) only and should not be kept active for long period. There shall be one external OB dump having maximum projected height of 30m with three terraces of 10m each. The overall slope of the dump shall not exceed 27° . The OB dump should 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 stabili	Being Complied	The detail compliance to the condition is attached		
26	Mineral handling area shall be provided with adequate number of high efficiency dust extraction system. Loading and Unloading area including all the transfer points should also have efficient dust control arrangements. These should be properly maintained and operated.	Being Complied	Effective and high efficiency dust extraction systems are in place at the mineral handling plant. Loading and unloading areas including transfer points have been provided with dust suppression facilit	N/A	
27	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	Being Complied	Effective measures taken. The monitoring report attached		

	Pollution Control Board in this regard.				
28	Provision shall be made for the housing of construction labour within the site with necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may in the form of temporary structures to be removed after the completion of the project.	Complied	All constructional activities for the project have been completed and there was no requirement for construction of temporary housing since the mine has permanent infrastructural facilities.	N/A	
29	The safeguard measures as suggested by the Central Ground Water Board vide letter No. 21-4(231)/CGWA/SER/2010-1010 dated 11.06.2010 shall be effectively implemented.	Complied	The safeguard measures as suggested by the Central Ground Water Board vide letter No. 21-4(231)/CGWA/SER/2010-1010, dated:11.06.2010 has been effectively implemented.	N/A	
30	Vehicular emission shall be kept under control and regularly monitored. Measures shall be taken for maintenance of vehicles used in mining operations and in transportation of minerals. The vehicles should be covered with a tarpaulin and shall not be overloaded.	Being Complied	Regular vehicular emission testing is being conducted once in every 6 months. The vehicles those who do not meet the emission standard, are withdrawn from operation and maintained properly.	N/A	
31	Environmental clearance is subject to obtaining Clearance as may be necessary under the Wildlife (Protection) Act, 1972 from the competent authority	Complied	No specific clearance under the Wildlife (Protection) Act, 1972 is required for the project	N/A	
32	The project proponent shall ensure that no natural watercourse and/or water resources shall be obstructed due to any mining operations.	Being Complied	No natural watercourse or water resources are obstructed due to our mining operations. Further, no first order or the second order streams are emanating.	N/A	
33	Sewage treatment plant shall be installed for the colony. ETP shall also be provided for the Workshop and wastewater generated during the mining Operation.	Complied	The detail compliance is attached		

7. General Conditions (Proponent) :

S.No	Condition	Self Declaration	Remarks / Reason	Supporting Documents	Observation of IRO
1	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	Agreed to Comply	This is a running mine. No specific date for start of land development work can be assigned. However,	N/A	

	date of start of land development work.		the copy of the EC has been sent to the, RO, MoEF&CC, BBSR for kind information		
2	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, Bhubane	Being Complied	The AES is submitted religiously and also displayed on company website	N/A	
3	Data on Ambient Air Quality (RSPM(particulate matter with size less than 10 micron i.e. PM10) and NOx] should be regularly submitted to the Ministry including its Regional office located at Bhubneswar and the State Pollution Control Board / Central Pollution Control Board once in six months	Being Complied	The Ambient Air Quality reports are submitted to Regional office, MoEF, Bhubaneswar and SPCB, Orissa, monthly and also once in every six months with this report		
4	No change in the calendar plan including excavation, quantum of mineral iron ore and waste should be made.	Being Complied	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.	N/A	
5	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	Compiled from State Pollution Control Board, Odisha.	N/A	
6	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.	Complied	Ambient air quality monitoring is regularly being carried out at four different stations within the core zone. The stations were located in consultation with the visiting officers of SPCB		
7	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.	Being Complied	Effective water sprinkling is being done on haul roads and at loading and unloading points. Dust suppression systems in the drills have been provided for	N/A	

			effective functioning.		
8	The project authority should advertise at least in two local newspapers 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 Forests at http://envfor.nic.in and a copy of the same should be forwa	Complied	Details of Environmental Clearance about Joda East Iron Mine was published in local newspapers (English Daily, New Indian Express & in oriya (Dainik Jagran) on 16.03.2013.	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	Funds allocated for environmental management are spent only for environment related purposes and not diverted to any other purpose. During the year 2021- 22 an amount of Rs.663.3lakhs (approx.) spent	N/A	
10	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	A copy of EC was given to MS,OSPCB and Addl. PCCF was given vide letter .MD/ENV/104/102/2 & MD/ENV/105/102/20 respectively. EC also given to President, ZP Keonjhar and Chairman, Joda	N/A	
11	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	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	
12	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.	Being Complied	We extend full co-operation to the officers of the Regional Office during their visit and furnish the required data, information and monitoring reports.	N/A	
13	No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment & Forests	Being Complied	We are operating as per the approved mining technology and scope of working mentioned in EC granted to us and	N/A	

			No change in mining technology and scope shall be done		
14	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	Being Complied	High noise areas are earmarked and people working there are provided with ear protection equipment's and the system is ensured by certification to ISO 45001 and regular field audits.	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.	Being 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	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 measures, if needed.	Being Complied	Adequate dust masks are provided to employees engaged in dusty areas. The employees are also given regular awareness training on safety and health aspects as part of implementation process of ISO 4500	N/A	
17	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 environment clearance conditions, including resu	Complied	The re[prts on six monthly compliance is submitted religiously	N/A	

****Note : N/A - Not Available**

PRINT

EC Conditions Six Monthly Compliance Report

(by Project Proponent)



Proposal No : IA/OR/MIN/99283/2019

1. Name of the Entity / Corporate Office :

2. Proponent Details :


3. Compliance Letter/Report (Proponent):


4. Summary Status of Compliance :




Total Condition :	29		
Complied :	15	Being Complied :	8
Not Complied :	0	Partially Complied :	0
Agreed to Comply :	6		


5. Details of Production and Project Area :6. Specific Conditions (Proponent) :



S.No	Condition	Self Declaration	Remarks / Reason	Supporting Documents	Observation of IRO
1	Project Proponent shall monitor the environmental quality parameters as per EC and CTE/CTO conditions, and implementation of suggested measures for control of road dust and air pollution. Odisha State Pollution Control Board has to ensure the compliance of CTE/CTO. Regional office of the MoEF&CC, Bhubaneswar shall monitor the compliance of the EC conditions. Regional office of the Indian Bureau of Mines (IBM) shall monitor the compliance of mining plan and progressive mine closure plan. Any viol	Complied	Monitoring of different environmental quality parameters as per EC and CTE/CTO conditions w.r.t air, noise, water soil quality is already being done and monthly reports are submitted to OSPCB	N/A	
2	R&D studies towards utilization of low-grade iron ore should be conducted through research/academic institutes like IMMT Bhubaneswar, NML Jamshedpur and concerned metallurgical departments in IITs, NITs etc., targeting full utilization of low-grade iron ore (Fe content upto 45% by 2020 and upto 40% by 2025). In fact, life cycle assessment of whole process including environmental considerations should be done for techno-economic and environmental viability. R&D	Complied	R&D studies are already going for commercial utilization of low grade ore. We are also in process of installation of 4.6 MTPA Low Grade iron ore Beneficiation plant for which the EC has been granted	N/A	

	studies on utilization of mine wast				
3	Project Proponent shall develop the parking plazas for trucks with proper basic amenities/ facilities inside the mine. This should be done within one year for existing mines and new mines should have since beginning. This Environmental Clearance for the expansion project shall be operated only after the compliance of the above mentioned specific condition.	Complied	Not applicable as we don't have truck dispatch. All the dispatch is through railway siding only.	N/A	
4	The mining activity in Joda-Koira sector is expected to continue for another 100 years, therefore, it will be desirable to develop proper rail network in the region. Rail transport shall not only be pollution free mode but also will be much economical option for iron ore transport. The rail network and/or conveyor belt system upto public railway siding needs to be created. The total length of the conveyor belt system/ rail network to be developed from mines to nearest railway sidings by 11 mines	Agreed to Comply	Noted and shall be done as per directive	N/A	
5	Air Environment Related: Project Proponent shall implement the following mitigation measures: (i) Fugitive dust emissions from all the sources should be controlled regularly on daily basis. Water spraying arrangement on haul roads, loading and unloading and at other transfer points should be provided and properly maintained. Further, it will be desirable to use water fogging system to minimize water consumption. It should be ensured that the ambient air quality parameters conform to the norms pr	Being Complied	The detail compliance to the condition is attached		
6	Department of Steel & Mines, Govt. of Odisha should prepare 5 years regional plan for annual iron ore requirement from the state, which in turn shall be met from different mines/zones (e.g. Joda, Koira.) in the state. Accordingly, sustainable annual production (SAP) for each zone/mine may be followed adopting necessary environmental protection measures.	Agreed to Comply	Noted	N/A	
7	The State Govt. of Odisha shall ensure dust free roads in mining areas wherever the road transportation of mineral is involved. The road shoulders shall be paved with fence besides compliance with IRC guidelines. All the roads should have proper drainage system and apart from paving of entire carriage width the remaining right of way should have native plantation (dust capturing species). Further, regular maintenance should also be ensured by the Govt. of Odisha. Progress on development of dust	Complied	Noted	N/A	

8	<p>Department of Steel & Mines shall ensure the construction of NH 215 as minimum 4 lane road with proper drainage system and plantation and subsequent regular maintenance of the road as per IRC guidelines.</p> <p>Construction of other mineral carrying roads with proper width and drainage system along with road side plantation to be carried out. This shall be completed within 2 Years.</p>	Agreed to Comply	Noted	N/A	
9	<p>Project Proponent shall construct the cement concrete road from mine entrance and exit to the main road with proper drainage system and green belt development along the roads and also construction of road with minimum 300 m inside the mine. This should be done within one year for existing mines and new mine should have since beginning. The Department of Steel & Mines, Govt. of Odisha should ensure the compliance and should not issue the Mining Permits, if mine lease holder has not constructed pr</p>	Complied	Black top road from mine entrance and exit to the main road with proper drainage system and green belt development along the roads has already been constructed and also road minimum 300 m inside	N/A	
10	<p>In case the total requirement of iron ore exceeds the suggested limit for that year, permission for annual production by an individual mine may be decided depending on approved EC capacity (for total actual dispatch) and actual production rate of individual mine during last year or any other criteria set by the State Govt., i.e. Dept. of Steel & Mines. Department of Steel and Mines in consultation with Indian Bureau of Mines-RO should prepare in advance mine-wise annual production scenario so th</p>	Agreed to Comply	Noted	N/A	
11	<p>Ecology/Biodiversity (Flora-Fauna) Related: Project Proponent shall implement the following mitigation measures: (i) All precautionary measures should be taken during mining operation for conservation and protection of endangered fauna namely elephant, sloth bear etc. spotted in the study area. Action plan for conservation of flora and fauna should be prepared and implemented in consultation with the State Forest and Wildlife Department within the mine lease area, whereas outside the mine lease</p>	Being Complied	The detail compliance to the condition is attached		
12	<p>State Govt. of Odisha shall make all efforts to ensure exhausting all the iron & manganese ore resources in the existing working mines and from disturbed mining leases/zones in Joda and Koira region. The criteria suggested shall be applicable while suggesting appropriate lease area and sustainable mining rate. Responsibility: Dept. of Steel & Mines, Govt. of Odisha.</p>	Agreed to Comply	Noted and agreed upon	N/A	

13	The amendment in EC shall be operational after submission of an undertaking through affidavit to MoEF&CC within 15 days of receipt of this letter, for compliance of all the conditions prescribed herein and mentioned in EC dated 11.03.2013 and 07.09.2018.	Complied	An undertaking through affidavit has been sent to MoEF&CC.	N/A	
14	Water/Wastewater Related: Project Proponent shall implement the following mitigation measures: (i) In general, the mining operations should be restricted to above ground water table and it should not intersect groundwater table. However, if enough resources are estimated below the ground water table, the same may be explored after conducting detailed geological studies by GSI and hydro geological studies by CGWB or NIH or institute of national repute, and ensuring that no damage to the land sta	Being Complied	The detail compliance is attached		
15	Socio-Economic Related: Project Proponent shall implement the following mitigation measures: (i) Public interaction should be done on regular basis and social welfare activities should be done to meet the requirements of the local communities. Further, basic amenities and infrastructure facilities like education, medical, roads, safe drinking water, sanitation, employment, skill development, training institute etc. should be developed to alleviate the quality of life of the people of the regio	Being Complied	The detail compliance is attached		
16	Land/ Soil/ Overburden Related: Project Proponent shall implement the following mitigation measures: (i) The top soil should temporarily be stored at earmarked site(s) only and it should not be kept unutilized for long (not more than 3 years or as per provisions mentioned in the mine plan/ scheme). The topsoil should be used for land reclamation and plantation appropriately. (ii) Fodder plots should be developed in the non-mineralised area in lieu of use of grazing land, if any. (iii) Over burde	Being Complied	The detail compliance report is attached		
17	State Pollution Control Board should ensure that the processing capacity of beneficiation plants (all three units) should not exceed the granted EC capacity of 12 MTPA at any given time.	Agreed to Comply	Noted and agreed upon	N/A	
18	PP should submit an undertaking through affidavit that the total beneficiation capacity from all the three units shall not exceed the granted EC capacity of 12 MTPA at any given time. The operation of this EC amendment is subjected to submission of said affidavit.	Complied	This has been noted and complied. The undertaking through affidavit that the total beneficiation capacity from all the three units shall not exceed	N/A	

			the granted EC capacity of 12 MTPA at any given time		
19	The mining activity will be restricted to the mine lease area for which the earlier EC is granted (i.e. (567.9087 ha (Forest Clearance available) + 62.187 ha= 629.274 ha.). Furthermore, no mining activity will be allowed in remaining forest land (41.819 ha) till PP get the forest clearance.	Complied	The present mining operation is restricted within 567.087 ha of forest land for which Forest Clearance has been obtained vide letter no. F. No. 8-32/1993-FC (vol-II), date: 24.09.2007	N/A	
20	Project Proponent and Department of Steel & Mines, Govt. of Odisha shall ensure the implementation of recommendations of carrying capacity study report conducted by CSIR-NEERI w.r.t. mining proposal of Iron Ore and/or manganese in the State of Odisha.	Being Complied	All efforts are being made to ensure the implementation of recommendations of carrying capacity study report conducted by CSIR-NEERI. Compliance status has been uploaded to i3ms website as well.	N/A	
21	PP mentioned that the processing of ore at beneficiation plant (old and proposed) will be same as the existing EC capacity (12 MTPA). Three beneficiation units shall be operated at maximum capacity of 5 MTPA for dry processing and 7 MTPA for wet processing (i.e. existing 2.4 MTPA capacity for processing high quality grade of ROM and proposed 4.6 MTPA capacity for processing low quality grade of ROM), respectively, in order, ensure that at any given time, the total beneficiation capacity from al	Complied	It is being ensured that at any given time, the total beneficiation capacity from all three plants (old dry + old wet + proposed) should not exceed the granted EC capacity of 12 MTPA.	N/A	
22	Regular vacuum cleaning of all mineral carrying roads aiming at "Zero Dust Re suspension" shall be adopted by PWD / NHAI/ Mine Lease Holders within a time Period of 3 months for existing roads. This Environmental Clearance for the expansion project shall be operated only after the compliance of the above mentioned specific condition.	Complied	the Ore dispatch from mining lease is 100% through railway siding only hence we don't have any mineral carrying road other than the mining haul road. However regular water sprinkling is done	N/A	
23	Road Transport Related: Project Proponent shall implement the following mitigation measures: (i) All the mine lease holders should follow the suggested ore transport mode (SOTM), based on its EC capacity within next 5 years. (ii) The mine lease holders should ensure construction of cement road of appropriate width from and to the entry and exit gate of the mine. Further, maintenance of all the roads should be carried out as per the requirement to ensure dust free road transport. (iii) Tran	Complied	100% SOTM is followed, appropriate black topped road constructed	N/A	
24	Occupational Health Related: Project Proponent shall implement the following	Being Complied	The detail compliance is attached		

	<p>mitigation measures: (i) 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 periodically. (ii) Occupational health surveillance program for all the employees/workers (including casual workers) should be undertaken periodically (on annual basis) to observe any changes due to exposure to dust, and</p>				
25	<p>Mining Operations/Process Related: Project Proponent shall implement the following mitigation measures: (i) Appropriate mining process and machinery (viz. right capacity, fuel efficient) should be selected to carry out various mining operations that generate minimal dust/air pollution, noise, wastewater and solid waste. e.g. drills should either be operated with dust extractors or equipped with water injection system. (ii) After commencement of mining operation, a study should be conducted to as</p>	Complied	The detail compliance is attached		
26	<p>Noise and Vibration Related: Project Proponent shall implement the following mitigation measures: (i) Blasting operation should be carried out only during daytime. Controlled blasting such as Nonel, should be practiced. The mitigation measures for control of ground vibrations and to arrest fly rocks and boulders should be implemented. (ii) Appropriate 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 p</p>	Being Complied	The detail report is attached		
27	<p>The Committee observed that as per the recommendations of NEERI report, the PP needs to do regular vacuum cleaning of all mineral carrying roads aiming at "zero dust re-suspension" within 3 months. This Environmental Clearance for the expansion project shall be operated only after the compliance of the above mentioned specific condition.</p>	Complied	100% ore transport through railway sidings hence there is no mineral carrying road. Regular water sprinkling is done through fixed and mobile water sprinklers	N/A	
28	<p>Project Proponent shall ensure the compliance of Suggested Ore Transport Mode (SOTM) with association of the State Government of Odisha. All existing mines should ensure adoption of SOTM within next 5 years. New mines or mines seeking expansion should incorporate provision of SOTM in the beginning itself, and should have system in place within next 5 years.</p>	Complied	EC Capacity based Suggested Ore Transport Mode (SOTM) is 100% by private railway siding which is already in action.	N/A	

7. General Conditions (Proponent):

S.No	Condition	Self Declaration	Remarks / Reason	Supporting Documents	Observation of IRO
1	Project Proponent shall monitor the environmental quality parameters as per EC and CTE/CTO conditions, and implementation of suggested measures for control of road dust and air pollution. Odisha State Pollution Control Board has to ensure the compliance of CTE/CTO. Regional office of the MoEF&CC, Bhubaneswar shall monitor the compliance of the EC conditions. Regional office of the Indian Bureau of Mines (IBM) shall monitor the compliance of mining plan and progressive mine closure plan. Any viol	Complied	Complied and report submitted accordingly	N/A	

****Note : N/A - Not Available**

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