By speed post

No.J-11015/888/2007-IA.II (M) Government of India Ministry of Environment & Forests

> Paryavaran Bhawan, C.G.O. Complex, Lodi Road, New Delhi - 110 003

Dated the 21st December, 2011

To

M/s Tata Steel Limited Jeevan Bharti Bullding Tower 1, 10th Floor, 124 Cannaught Circus, . New Delhi-110 001.

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Subject:

Expansion of Khondbond Iron & Manganese Ore Mining Project along with an Iron ore beneficiation plant by M/s Tata Steel Limited located in Village Khondbandh, Tehsil Barbil, District Keonjhar, Orlssa - Environmental clearance regarding.

Sir.

This has reference to your letter No. TSLDEL/27/2011 dated 14.02.2011 and subsequent letter dated 30.05.2011 on the subject mentioned above. The project was earlier prescribed Terms of Reference (TORs) by the Ministry of Environment and Forests on 25.06.2008 for undertaking detailed EIA study for the purpose of obtaining environmental clearance. The proposal is for enhancement of production of iron ore from 5.4million tonnes per annum (million TPA) (ROM) to 8million TPA (ROM), manganese ore from 0.036mlillon TPA to 0.1mlllion TPA(ROM) and an Iron ore beneficiation plant of 8million TPA throughput. The project was earlier accorded environmental clearance by the Ministry vide letter No.J-11015/50/2003-IA.II(M) dated 28.03.2005 for enhancement of production of Iron ore from 0.35million TPA to 2million TPA(Sponge grade) and manganese ore from 14,400TPA to 36,000TPA over mine lease area of 978ha.

The total project area is 1019.472ha, which includes mine lease area of 978ha and an area of 41.472ha is for transportation corridor, outside the mine lease. The mine lease area of the project is 978ha, out of which 104.32ha is an agricultural land, 836.757ha is forestland (681.715ha Reserve forest, 44.653ha Khesra Forest and 110.386ha DLC) and 36.923ha is others. In the transportation corridor area of 41.472ha, it has been envisaged that 30.88ha area falls under other mining leases of TSL and remaining 10.584ha area falls outside the lease area and application for acquiring said land is under process. Out of this 10.584ha, an area of 8.19ha is reported under reserve forest. Area proposed for excavation is 763.665ha, an area is 0.5ha is kept for storage of top soil, 56.7ha for over burden dumps, 8.3ha for mineral storage, 9.85ha for infrastructure, 36.735ha for roads, conveyor route, pipeline; 8.762ha for green belt, 33.25ha for talling pond, 46ha for mineral separation plant, tha for township area, 5.25ha is magazine and 7.988ha is others(unutilized area). The land requirement for the new beneficiation plant is 79.25 ha, which includes 33.25 ha for the talling pond. The Suna Nadi(Kundra nallah) flows along

FOR AND ON BEHALF OF TATA STEEL LIMITED BY THEIR CONSTITUTED ATTORNEY

the NW boundary of the mine lease and the Jalpa Nadi (5km S), the Baitarni River (5km E) and the Karo Nadi (8.7km NW) are also flowing in the buffer zone of the mine. In addition, it has been mentioned that the seven nallahs namely the Kakrapani nallah(adjacent to ML-NW), Kundru nallah(3.2km N), the Dalko nallah(3.5km), the Kakrapani nallah(5.5km SE), the Tapodihi nallah(5.5km NW), the Teherel nallah(6km WSW) and Archanda nallah(7km SW) are flowing in the buffer zone of the mine. No modification/diversion in the existing natural drainage pattern at any stage has been envisaged.

- 3. No National Park/ Wildlife Sanctuary/Biosphere reserve/Tiger reserve/ Elephant Corridor etc. are reported to be located in the core and buffer zone of the mine and that the area does not report to form corridor for Schedule-I fauna. In support of this, a map duly authenticated by DFO cum Wildlife Warden, Keonjhar has been submitted. The Karo Karampada Elephant Corridor and the Palahada Elephant Corridor are reported to be located beyond the buffer zone of the mine at a distance of 15km(W) and 49km(S) respectively. Six reserve forests namely the Siddhamath RF(adjacent to NW of ML), the Chamakur RF(5.5km E), the Mendhamaruni RF(6.5km W), the Lakraghat RF(7.5km NW), the Thakurani RF(9km NNE) and the Uliburu RF(9km NW) are located in the buffer zone of the mine. The Baltarni RF reported to fall within the core zone.
- The mine working will be opencast by mechanized method involving drilling and blasting. The targetted production capacity of the mine is 8million TPA of Iron ore(ROM) and 0.1million TPA of manganese ore(ROM). The life of mine is 14years of iron ore and 5years of manganese ore. Mineral will be transported through the road. The proposed wet processing beneficiation plant will be equipped with the latest beneficiation facilities for production of lumps and fines. It will process all the type of high alumina ore. The 8million TPA throughput beneficiation plant will be set up within the lease for up-gradation of low grade material. The blasted ore of -1000mm size will be fed to primary crusher. The primary crushed material will go for scalper screen. Over sized material from the screen will go to secondary crusher and the undersize material will directly go to the conveyor below secondary crusher. The undersize of scalper screen and secondary crusher product will be processed in the scrubber to remove the adhered clay particles. The scrubber material will go to the double deck rinse screen. The material from top deck will go to tertiary crushing system. The lumps generated from the tertiary system will be subjected to lump jigging. The fines from the tertiary system will go to double deck rinse screen. The material from the middle deck will also go for lump jigging to get a desired alumina in lump product. The undersize material will go to screw classifier to remove -150micron particles. The classifier product will be dewatered in a -1mm screen. The dewatered material will be subjected to fines figging. The lump fig product will be stored in a surge pile. The lump jig rejects will be crushed to -10/-8mm size in a crusher and will be screened at 1mm. The -10+1mm/-8+1mm will be subjected to fines jigging. The fine jig product will be stored in a surge pile. The fine fig rejects will be ground to -1mm by a ball mill. All the -1mm generated from different streams will be de-slimed at 45 micron in a cyclone. The cyclone underflow will be treated in a teeter bed separator (TBS). The underflow of TBS will be subjected to spirals to get final desired alumina product. The spiral rejects will be ground to 150micron size. The cyclone overflow, TBS overflow and ground spiral rejects will be de-slimed at 10-15 micron size in a cyclone. The cyclone

underflow will be subjected to magnetic separation and floatation to get final desired alumina product. All the fines product will be filtered and stored in a surge pile or will be transported to final destination. All the rejects from the plant will be dumped to slime dam with 30% solid through thickener. There will be two tailing ponds. The tailing pond 1 will have a life of three years and the talling pond 2 will be used for 6-7 years. Thereafter, the exhausted pit of Q ore body will be available for backfilling of tailings till the life of mine. The talling ponds will be designed with zero discharge and the water recovered will be pumped back to the beneficiation plant for reuse. The topography of the area is undulated and hilly and project site is reported between 21°54′50" to 21°57′47" N Latitude and 85°21'06" to 85°24'17" E Longitude In Survey of India topo sheets No. 73 G/5, at an elevation above mean sea level ranging from 540m-754m. The ultimate working depth in Iron ore zone in the three ore bodies will be 567m AMSL, 660m AMSL and 600m AMSL respectively and in manganese ore body, it will be 515m AMSL. The groundwater table in the core zone Is reported at 553m AMSL (pre-monsoon) and 555m AMSL (post-monsoon). The mine working will not intersect the groundwater table in the Iron ore pits; however, in the manganese ore mining pits, the intersection of groundwater will occur. A hydrogeological study report submitted. The water requirement of the project is estimated as 19200m³ per day (800 m³ per hour), which will be obtained from the Kundra Nala. There is no population in the core zone, therefore, displacement of population and R&R has not been envisaged. A total of 2.5million m3 of OB has already been accumulated and another 21.28 million m3 of OB is proposed to be generated during the life of the mine. The quantity of waste / reject to be handled during the life of the mine is estimated as 59.06million tonnes. Backfilling proposed after the fifth year. It is estimated that 2.4 million TPA of tallings will be generated. There will be six dumps (four for Iron and two for manganese ore). It was stated that waste dump 1 and 2 are in operation and will be sufficient up to 2013-14. The non active areas have been stabilized by plantation. It is also proposed to use part of the waste for land filling. Dumps 2, 3 and 4 will be simultaneously active. Out of the total excavated area of 763.665ha, an area of 758.665 ha will be reclaimed and afforested and remaining 5ha area will be developed as water body. Plantation will be raised in an area of 965.018ha at the end of the mine life and an area of 5ha area will be developed as water body at the post mining stage.

- 5. The public hearing of the project was held on 29.10.2010 for enhancement of production of Iron ore from 5.4MTPA to 8.0MTPA (ROM) and manganese ore production from 0.36LTPA to 1.0LTPA (Manganese Ore) over an area of 978ha. The Indian Bureau of Mines had approved modification in approved mining plan along with PMCP of the project on 09.03.2009 over an area of 978ha. The final mine closure plan for the relinquished area of 315.433ha was approved by the Indian Bureau of Mines on 09.03.2009. The Ministry of Environment and Forests had accorded forestry clearance for diversion of 453.15ha (including 136.15ha of broken up area) forestland on 09.08.2006. The capital cost of the project is Rs.540Crores and the capital cost for the environmental protection measures is proposed as Rs.27.37 crores. The annual recurring cost towards the environmental protection measures is proposed as Rs.4.50 Crores. It has been stated that there is no court case relating to the project or related activities.
 - The Ministry of Environment and Forests has examined the application in accordance with the EIA Notification, 2006 and hereby accords environmental clearance

under the provisions thereof to the above mentioned Khondbond Iron & Manganese Ore Mining Project along with an Iron ore beneficiation plant by M/s Tata Steel Limited for an annual production capacity of 8.0million tonnes of iron ore(ROM) and 1,00,000tonnes(0.1million tonnes) of manganese ore(ROM) by the opencast semi-mechanized and mechanized method involving total mine lease area of 978ha and setting up of a iron ore beneficiation plant with a capacity of 8.0million TPA throughput, subject to implementation of the following conditions and environmental safeguards.

A. Specific Conditions

- (i) 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.
- (ii) 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.
- (iii) 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.
- (iv) 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.
- (v) 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 non compliance/violation environmental norms to the Board of Directors of the Company and/or stakeholders or shareholders.
- (vi) 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.
- (vii) 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.

- (viii) 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.
- (ix) 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.
- (x) 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.
- (xi) The tailing ponds shall be lined HDPE lining.
- (xii) The decanted water from the tailing dam shall be re-circulated and there should be zero discharge from the tailing dam.
- (xili) Appropriate technology shall be used for maximum recovery of ore in order to reduce slurry discharge and to increase the life of the talling ponds.
- (xiv) The project proponent shall constitute on emergency management team under the control of project incharge to deal with the emergency situation pertaining to the talling 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.
- 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 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 758.665ha 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 & Forests and its Regional Office located at Bhubaneswar on six monthly basis.
- (xvi) -Catch drains and slitation ponds of appropriate size shall be constructed around the talling ponds, mine working, soll, 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 Baltarni River, the Karo Nadi, the Kakrapani nallah, the 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 watering the mine area, roads, green belt development etc. The drains shall 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 directly into the Suna Nadi(Kundra nallah), the Jaipa Nadi, the Baitarni River, the Karo Nadi, the Kakrapani nallah, the Kundru nallah, the Dalko nallah, the Kashi nallah, the Tapodihi nallah, the Teherei nallah, the Archanda nallah and other water bodies and sump capacity should be designed keeping 50% safety margin over and above 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.

- (xvii) 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.
- (xviii) The vold 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.
- (xix) 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, talling 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.
- (xx) 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.
- (xxi) 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.
- (xxii) 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.

- (viii) 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.
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- (xv) 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 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 758.665ha 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 & Forests and its Regional Office located at Bhubaneswar on six monthly basis.
- (xvi) -Catch drains and siltation ponds of appropriate size shall be constructed around the talling ponds, mine working, soil, OB and mineral dump(s) to prevent run off of water and flow of sediments directly into the Suna Nadl(Kundra nallah), the Jalpa Nadl, the Baltarni River, the Karo Nadl, the Kakrapani nallah, the 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

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- (xx) 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.
- (xxi) 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.
- (xxii) 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.

- 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 plezometers 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 Ground Water Authority and the data thus collected may be sent regularly to the Ministry of Environment and Forests and its Regional Office Bhubneswar, the Central Ground Water Authority and the Regional Director, Central Ground Water Board. If at any stage, it is observed that the groundwater table is getting depleted due to the mining activity, necessary corrective measures shall be carried out.
- (xxiv) The groundwater quality around the talling 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.
- (xxv) The project proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of surface water required for the project.
- (xxvi) Appropriate mitigative measures shall be taken to prevent pollution of the Baltarni River, the Suna Nadl and the Karo Nadl in consultation with the State Pollution Control Board.
- (xxxII) The project proponent shall practice sultable rainwater harvesting measures on long term basis and work out a detailed scheme for rainwater harvesting 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.
- (xxviii)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.
- (xxix) No transportation of ore outside the mine lease area shall be carried out after sunset.
- (xxx) No biasting shall be carried out after the sunset. Biasting operation shall be carried out only during the daytime. Controlled biasting shall be practiced. The mitigative measures for control of ground vibrations and to arrest fly rocks and boulders should be implemented.
- (xxxi) Drills shall either be operated with the dust extractors or equipped with water injection system.
- (xxxII) 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.
- (xxxiii)Sewage treatment plant shall be installed for the colony. ETP shall also be provided for the workshop and wastewater generated during the mining operation.
- (xxxiv)During operation of the project, special emphasis shall be given to minimize risk and hazards due to manganese poisoning.
- (xxxv) 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.
- (xxxvi)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 tollets, 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.
- (xxxvii) 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.
- (xxxviii) 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 Wildlife Conservation Plan prepared specific to this project site shall be effectively implemented in consultation with the State Forest and Wildlife Department. A copy of approved wildlife conservation plan shall be submitted to the Ministry and its Regional Office, Bhubaneswar within 3 months.
- (xxxix) 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.
- (xl) The critical parameters such as RSPM (Particulate matter with size less than 10micron i.e., PM₁₀) and NO_X 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. 3-20012/1/2006-IA.II(M) dated 27.05.2009 issued by Ministry of Environment and Forests, which is available on the website of the Ministry www.envfor.nic.in shall also be referred in this regard for its compliance.

(xli) 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.

g. General conditions

- No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment & Forests.
- (II) No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.
- (iii) No change in the calendar plan including excavation, quantum of mineral iron ore, manganese ore and waste should be made.
- (iv) 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 NO_x 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.
- (v) Data on ambient air quality [(RSPM(Particulate matter with size less than 10micron i.e., PM₁₀) and NO_X] 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.
- (vi) 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.
- (vii) 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.
- (vili) 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.

(ix) 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.

- (x) A separate environmental management cell with suitable qualified personnel should be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.
- (xi) The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year wise Bhubaneswar.
- (xii) 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.
- (xiii) 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
- (xiv) 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 upload the status of compliance of the environmental clearance conditions, periodically. It shall simultaneously be sent to the Regional Office of the Ministry of Pollution Control Board and the State Pollution Control Board.
- (xv) A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parlsad/ 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.

- (xvi) 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.
- (xvII) 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, Bhubneswar by e-mail.
- (xviii) 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 Forests at http://envfor.nlc.in and a copy of the same should be forwarded to the Regional Office of this Ministry located at Bhubaneswar.
- The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
- Fallure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986.
- The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules made thereunder and also any other orders passed by the Hon'ble Supreme Court of India/ High Court of Orlssa and any other Court of Law relating to the subject matter.

(OM PRAKASH) DEPUTY DIRECTOR

Copy to:

The Secretary, Ministry of Mines, Government of India, Shastri Bhawan, New Delhi.

The Secretary, Department of Environment, Government of Orissa, Secretariat, (II)Bhubaneswar.

- (iii) The Secretary, Department of Mines and Geology, Government of Orissa, Secretariat, Bhubaneswar.
- (Iv) The Secretary, Department of Forests, Government of Orissa, Secretariat, Bhubaneswar.
- (v) The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
- (vi) The Chief Conservator of Forests, Regional Office (EZ), Ministry of Environment and Forests, A-3 Chandrashekharpur, Bhubaneshwar-751023.
- (vil) The Chairman, Orissa State Pollution Control Board, Parivesh Bhawan, A/118 Nilakantha Nagar, Unit-VIII, Bhubaneshwar-751012.
- (viii) The Member Secretary, Central Ground Water Authority, A2, W3 Curzon Road Barracks, K.G. Marg, New Delhi-110001.
- (ix) The District Collector, District Keonjhar, Government of Orissa.
- (x) EI Division, Ministry of Environment & Forests, EI Division, New Delhi.
- (xi) Monitoring File/Guard File/Record File.

(OM PRAKASH) DEPUTY DIRECTOR

FOR AND ON BEHALF OF TATA STEEL LIMITED BY THEIR CONSTITUTED ATTORNEY

M. C. THOMAS