HALF YEARLY COMPLIANCE REPORT
(PERIOD: OCTOBER'13-MARCH'14)

OF

MAHAL SAHARJURI SAND LEASE

TATA STEEL LIMITED, JHARIA DIVISION
P.O.- JAMADOBA, DIST. - DHANBAD,
STATE- JHARKHAND, PIN CODE – 828112.

ENVIRONMENTAL CLEARANCE GRANTED VIDE LETTER NO. - J-11015/162/2008-IA.II(M) DATED- 19TH JANUARY 2012 ISSUED BY GOVT. OF INDIA, MINISTRY OF ENVIRONMENT & FOREST, NEW DELHI.

A. SPECIFIC CONDITIONS:

(i) The project proponent shall obtain Consent to Establish and Consent to Operate from the Jharkhand State Pollution Control Board, and effectively implement all the conditions stipulated therein.

- **The NOC application has been submitted to JSPCB, Ranchi vide letter ref no. JMB/115/002792/2012 Dated- 04.12.2012.It is in process of being granted**.

(ii) The project proponent shall comply with section 3 of the Mines Act.

- **It is being complied.**

(iii) 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 / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders.

- **We have a Corporate Environment Policy and the implementation of the policy is being reviewed through Integrated Management System at regular intervals. There is a proper system in place to submit legal compliances and violations, if any, to top management for their information and review.**

(iv) Sand collection shall be done at the middle/ main stream and not at the bank of the river to avoid any change of the river course due to the project.

- **It will be followed strictly.**

(v) Particulate level ($PM_{2.5}$) shall be monitored regularly and the result placed in the public domain.

- **Currently, not monitored as project not started.**

(vi) The project proponent shall identify the degraded area within the mine lease and undertake plantation/afforestation in the area identified by planting the native species.

- **Plantation on the land all along the riverside will be taken up by mutual understanding with the owner of the land, since the location of mine lease is a riverbed.**

(vii) 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 loading and unloading point and all transfer points. Extensive water sprinkling shall be carried out of 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.

- **It will be complied and roads falling within leasehold will be made pucca.**

(viii) The project proponent shall undertake adequate safeguard measures during extraction of river bed material and ensure that due to this activity the hydrogeological regime of the surrounding area shall not be affected. Regular monitoring of ground water level and quality shall be carried out around the mine lease area by establishing a network of existing well and installing new piezometers during the mining operation. The periodic monitoring [(at least four times in a year- pre-monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January); once in each season)] shall be carried out in consultation with the State Ground Water Board/Central Ground Water Authority and the data thus collected may be sent regularly to the Ministry of Environment and Forests and its Regional Office Bhubaneswar, the Central Ground Water Authority and the Regional Director, Central Ground Water Board. If at any stage, it is observed that the groundwater table is getting depleted due to the mining activity, necessary corrective measures shall be carried out .

- **It will be complied as soon as mining operation is undertaken and report to be submitted to various agencies as stated above.**

(ix) The project proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite of water (surface water and groundwater), if any, required for the project.

- **No water is required for the operation of project. Drinking water is required for the workers which is arranged for by the company.**

(x) Appropriate mitigative measures shall be taken to prevent pollution of the river in consultation with the State Pollution Control Board. It shall be ensured that there is no leakage of oil and grease in the river from the vehicles used for transportation.

- **Adequate monitoring of the health of the vehicles used for transportation of sand will be ensured to avoid any oil & grease leakage. Higher capacity trucks will be deployed.**

(xi) Vehicular emissions shall be kept under control and regularly monitored. The mineral transportation shall be carried out through the covered trucks only and the vehicles carrying the mineral shall not be overloaded.

- **The vehicles used will be regularly checked and maintained. All vehicles would have pollution-control certificates. Transportation of sand is always done via tarpaulin-covered trucks which are optimally loaded.**

(xii) No drilling and blasting operation shall be carried out.

- **Not applicable**

(xiii) Mineral handling area shall be provided with the 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.

- **Sand being coarse in nature and having high moisture content during gathering & transportation does not get air borne. Sand stored in the sand yards is transferred to underground voids through surface bunkers in a slurry form. Hence no dust arises during this operation. However, dust control measures while transporting of sand will be in place through water tanker, coverage of trucks and optimal loading.**

(xiv) 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.

- **As per our policy, PME's are conducted at regular intervals.**

(xv) 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, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

- **The workers are from the neighbouring villages and hence new housing facilities are not required.**

(xvi) The critical parameters such as RSPM (Particulate matter with size less than 10 micron i.e., PM_{10}) and NO_x in the ambient air within the impact zone shall be monitored periodically. Further, quality of discharge water shall also be monitored [(TDS, DO, PH, Fecal Coliform 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. J-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.

- **It will be complied with.**

B. GENERAL CONDITIONS:

(i) No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment and forests.

- **It will be complied with.**

(ii) No change in the calendar plan including excavation, quantum of sand from river bed and waste should be made.

- **It will be complied with.**

(iii) Conservation measures for protection of flora and fauna in the core & buffer zone should be drawn up in consultation with the local forest and wildlife department and effectively implemented.

- **No rare species are found in the area.**

(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., PM_{10}) and NOx monitoring. Location of 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.

- **4(Four) stations will be established for monitoring purpose with consultation with SPCB. However, it lies in the buffer zone of our coal mines where regular monitoring work is already being carried.**

(v) Data on ambient air quality [(RSPM(Particulate matter with size less than 10micron i.e., PM_{10}) and NOx] should be regularly submitted to the Ministry including its regional office at Bhubaneswar and to the State Pollution Control Board/ Central Pollution Control Board once in six months.

- **It will be complied with.**

(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.

- **Water spraying is done through tankers. Dust control arrangements will be installed at transfer points. The roads within the lease area will be made concrete.**

(vii) Measure should be taken for control of noise levels below 85 dBA in work Environment. Workers engaged in operations of HEMM, etc. should be provided with ear plugs / muffs.

- **Proper PPE's are provided to all the workers.**

(viii) 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.

- **No waste water generation will take place.**

(ix) Personnel working in dusty area should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspect. Occupational Health Surveillance programme of the worker should be undertaken periodically to observe any contraction due to exposure to dust and take corrective measures, if needed

- **It will be complied with.**

(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.

- **We have an established Environmental Management Cell, with qualified personnel who report directly to the General Manager of the Division.**

(xi) The funds earmarked for environmental protection measures should be kept in separate A/C and should not be diverted for other purposes. Year wise expenditure should be reported to this ministry and its regional office located at Bhubaneswar.

- **Expenditure on Environmental Protection measures will be monitored separately.**

(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.

- **Will be communicated accordingly.**

(xiii) The regional office of this ministry located at Bhubaneswar shall monitor compliance of the stipulated conditions. The project authorities should extend full co-operation to the officer (s) of the regional office by furnishing the requisite Data/ information/ Monitoring reports.

- **It will be complied with.**

(xiv) The project proponent shall submit six monthly reports on the status of compliance of the stipulated environment clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the Ministry of Environment and Forests, its Regional Office Bhubaneswar , the respective zonal office of Central Pollution Control Board and the State Pollution Control Board. The proponent shall upload the status of compliance of the environmental clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the Ministry of Environment and Forests, Bhubaneswar, the respective Zonal Officer of Central Pollution Control Board and the State Pollution Control Board.

- **It will be complied with.**

(xv) 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.

- **It has been done.**

(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.

- **To be done by SPCB.**

(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 also be sent to the respective Regional Office of the Ministry on Environment and Forests, Bhubaneswar by e-mail.

- **It will be submitted after the project starts.**

(xiii) 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 vemacular 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 website of the Ministry of Environment and Forests at http://envfor.nic.in and a copy of the same should be forwarded to the Regional Office of this Ministry located at Bhubaneswar.

- **It has been done and copies sent to regional office at Bhubaneshwar.**