

Six Monthly Environmental Clearance Compliance Report of Integrated steel plant (0.5 MTPA) of M/S Sree Metaliks Limited at village –Anra, P.O- Upara Raigada, Dist-Keonjhar, Odisha.

EC Order No. J-11011/192/2008- IA.II(I) dated 13.06.2009

SL. NO.	CONDITION	COMPLIANCE
i	<p>Efforts shall be made to reduce RSPM levels in the ambient air and time bound action plan shall be submitted. On-line ambient air quality monitoring and continuous stack monitoring facilities for all the stacks and sufficient air pollution control devices shall be provided to keep the emission levels below 100 mg/Nm³. At no time, the emission level shall go beyond the prescribed standards. Interlocking facilities shall be provided so that process can be automatically stopped in case emission level exceeds the limit.</p>	<p>At present , we have setup only 0.6 mtpa pelletization plant along with PGP of required capacity . The other units like DRI, Sinter, MBF, Beneficiation, SMS of coal washery shall come up in two phases in future. Pollution control measures at pelletization plant, raw material storage yard, finished product storage yard etc. are being taken up. The following measures are already taken up in existing plant.</p> <ul style="list-style-type: none"> - Various fugitive emission generating areas like stock houses, transfer points, junction points etc. have been provided with appropriate suction device connected to bag filters. - Water sprinkling arrangements are made available in raw material handling areas. - The solid wastes generated are stored over an earmarked area with pollution control measures. - Green belts have been developed along the boundary of the plant. - Regularly monitoring is carried out to assess the dust level.
ii	<p>Hot gases from DRI kiln shall be passed through Dust Settling Chamber (DSC) to remove coarse solids and After Burning Chamber (ABC) to burn CO completely and</p>	<p>This unit is not operational. The construction work for 1x500 TPD is under progress. The condition stipulated shall be abided by during the operation of the unit.</p>

	<p>used in waste heat recovery boiler (WHRB). The gas then shall be cleaned in ESP before leaving out into the atmosphere through ID fan and stack. Electrostatic precipitator (ESP) shall be provided to DRI plant, WHRB and FBB boilers to control air emissions within 100 mg/Nm³. Bag house shall be provided to BF Dry gas cleaning system. Gas cleaning plant having dust catcher and ventury scrubber shall be provided to blast furnace (BF). Cleaned gas from blast furnace shall be used as fuel in blast furnace.</p>	
iii	<p>Electrostatic precipitator (ESP) and bag filters shall be provided to sinter plant. Dust extraction system comprising of ESP and multi- cyclones shall be provided to pellet plant. Fume extraction system with bag filters shall be provided to induction furnace and ladle refining furnace. Bag filters shall also be provided at coke and flux grinding systems. Fume extraction system followed by a stack shall be provided to continuous casting machine. Dust extraction system comprising of ESP and multi-cyclones shall be provided to pellet plant. ESP and bag filters shall be provided to sinter plant.</p>	<p>Presently only one unit of 0.6 mtpa pellet plant is under operation. Dust extraction system comprising of ESP and multi cyclone is provided at pellet plant.</p>
iv	<p>In-plant control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Fugitive dust emission</p>	<p>Fugitive emission generation points like various stock house, material transfer and junction points, product hoppers have been provided with appropriate suction device</p>

	<p>from raw material and product handling section on shall be controlled by dust extraction systems with bag filters or by water sprinkling. Dust extraction system with bag filters shall be provided at all the material transfer points. Dust suppression system with water sprinklers shall be provided at raw material stock piles and loading/unloading points. Dust extraction system shall be provided at cooling discharge house, product separation unit. Water sprinkling system and dust extraction system shall be provided at raw material sizing and handling areas. All conveyors shall be completely covered by GI sheets. Bag filters and dust suppression system shall be provided at coal crushing and handling areas.</p>	<p>connected to bag filter.</p> <p>Dust suppression system for raw material handling area has already been provided. All transfer points of belt conveyor have been provided.</p> <p>The solid waste generated is being suitably disposed off within the premises.</p> <p>All conveyors, transfer points etc has been provided with enclosures.</p>
v	<p>Gaseous emission levels including secondary fugitive emissions from blast furnace and sinter plant shall be controlled within the latest permissible limits issued by the Ministry and regularly monitored. Guidelines / Code of Practice issued by the CPCB shall be followed. The emission standards issued by the Ministry in May, 2008 for the sponge plants shall be followed.</p>	<p>MBF & Sinter plant shall be under operation after phase II expansion. The condition stipulated shall be added by.</p>
vi	<p>Vehicular pollution due to</p>	<p>Material transportation through trucks,</p>

	<p>transportation of raw material and finished product shall be controlled. Proper arrangements should also be made to control dust emissions during loading and unloading of the raw material and finished product.</p>	<p>tippers etc is being carried out in covered condition to avoid spillages and dust emission.</p> <p>Unloading of materials by trucks is being carried out with proper care avoiding dropping of the materials from height.</p> <p>The material is being moistened by sprinkling water while loading/unloading.</p> <p>Regular water spraying and cleaning is being practiced on the internal roads and major internal roads have been black topped to control fugitive emission.</p> <p>Vehicle with pollution under control (PUC) certificate are permitted in transportation of raw material and finished product.</p>
vii	<p>Total water requirement from Baitarni River and bore wells shall not exceed 857 m³/hr. Ground water requirement shall not exceed the limit stipulated by the CGWA vide letter no. 21-4 (71)/SER/CGWA/2008/035 dated 22nd September, 2008. Closed circuit re-circulation system shall be installed to reduce fresh water consumption and no wastewater generation.</p> <p>BF-GCP and coal washery water shall be treated in thickener and used in the pig casting machine.</p> <p>Acidic and alkaline effluent from DM water plant shall be neutralized and reused for dust suppression and gardening etc. All the wastewater from coal washery (belt press), MBF</p>	<p>Presently only 0.6MTPA pellet plant along with PGP is under operation. The present water consumption is 180 m³/day for which necessary permissions from Ministry of Jal shakti, GOI have been obtained. No waste water is discharged outside the plant premises.</p> <p>Domestic effluent of Factory premises and colony are discharged to individual soak pits via septic tanks. After operationalization of the entire plant, the stipulated conditions shall be complied.</p>

	<p>(ventury scrubber), Power Plant (cooling tower and boiler blow down) and back wash of filtration unit of Water Treatment Plant shall be treated in Common Effluent Treatment Plant (CETP) and recycled/reused for various activities at the site including dust suppression, green belt, ash moistening and firefighting etc. No wastewater shall be discharged outside the premises and Zero effluent discharge shall be ensured. Domestic effluent shall be treated in septic tank followed by soak pit and used for green belt development.</p>	
viii	<p>Prior permission for the drawl of 857 m³/hr water from Baitarni River shall be obtained from the concerned department and a copy submitted to the Regional Office at Bhubaneswar within 3 months of issue of the environment clearance.</p>	<p>Presently, the project is drawing ground water for which permission is obtained. However, there is a proposal to meet the water requirement from river Baitarani which is at 7Km from the project by laying pipeline along Row. Necessary application has been mad4e to water resource Dept, GoO tor permission.</p>
ix	<p>The water consumption should not exceed 16 m³/Ton of Steel as per prescribed standard.</p>	<p>Agreed</p>
x	<p>Ground water monitoring around the solid waste disposal site / secured landfill (SLF) shall be carried out regularly and report submitted to the Regional Office at Bhubaneswar, CPCB and OPCB.</p>	<p>Ground water monitoring is carried out regularly in buffer area and the reports are being submitted to OSPCB. The test report is annexed as Annexure- I.</p>
xi	<p>Iron ore fines, DRI fines, coal fines,</p>	<p>Bag filter dust from pellet plant is being</p>

	<p>sinter dust, GCP dust, SMS dust etc. shall be used in sinter plant. Bag filter dust from pellet plant shall be recycled in the process. Usable scrap from BF and SMS shall be recycled back in the SMS. Slag from IF, EAF and LRF shall be recycled through sinter/blast furnace. Tailings from Iron ore beneficiation plant shall be disposed off in tailing ponds. All the other solid wastes including broken refractory mass shall be properly disposed off in environment-friendly manner. Used oil and oily waste shall be provided to authorized recyclers / re-processors.</p>	<p>recycled in the process. Used oil and other hazardous water are properly stored and disposed of to authorized recycler unit.</p>
xii	<p>Fluidized Bed Boiler (FBB) shall be installed before installation of sponge iron plant so that utilization of char in the FBB boiler is ensured. All the char from DRI plant, middlings and rejects from the coal washery shall be utilized in the FBB boiler of power plant and no char shall be disposed off anywhere else. All the blast furnace (BF) slag shall be granulated and provided to cement manufacturers for further utilization. ESP dust, bag filter dust, wet scrapper dust, kiln accretions, SMS slag shall be properly utilized or disposed off in environment-friendly manner.</p>	<p>Shall be carried out after construction & commissioning of the said unit.</p>
xiii	<p>All the slag shall be used for road</p>	<p>Shall be complied as stipulated in the</p>

	making and construction purpose only after passing through Toxic Chemical Leachability Potential (TCLP) test. Otherwise, slag shall be disposed in secured landfill as per CPCB guidelines.	condition.
xiv	Proper handling, storage, utilization and disposal of all the solid waste shall be ensured and regular report regarding toxic metal content in the waste material and its composition, end use of solid/hazardous waste shall be submitted to the Regional Office at Bhubaneswar, CPCB and OPCB.	Shall be complied as stipulated in the condition.
xv	A time bound action plan shall be submitted to reduce solid waste, its proper utilization and disposal.	Shall be submitted after the setting up of the entire plant for which EC is obtained.
xvi	Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 1999 and subsequent amendment in 2003. All the fly ash and granulated slag shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding shall be submitted to the Regional Office at Bhubaneswar within 3 months of issue of this letter.	Presently, the ash generated from PGP is used for road filling and filling of low Lying area.
xvii	As proposed, green belt shall be developed in 33 % area in and around the plant as per the CPCB guidelines in consultation with DFO.	We have developed green belt over an area of 43 acre. However after complete installation and commissioning of the plant, 33% of total project area shall be under green belt which will be completed within two years in phase manner.

xviii	All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Steel Sector shall be implemented.	Shall be implemented.
xix	All the commitments made to the public during the Public Hearing / Public Consultation meeting held on 20 th February, 2009 shall be satisfactorily implemented.	The issues raised during the public hearing and action taken over the issues raised are summarized and annexed as Annexure-II .
xx	Recommendations of the State Forest Department shall be obtained regarding likely impact of the proposed steel plant on the surrounding reserve/protected forests viz. Nayagarh RF (6.92 km NE), Amuni PF (2.18 km E), Gandhamardjan RF (4.58 km SE), Gachinda RF (7.77 km E), Jagar PF (3.83 km SE), Kumundi PF (6.39 km S), Khairimundi RF (9.20 km S), Raiguda PF (2.25 km SW) located within 10 km radius of the proposed project site and implemented.	The land proposed to be acquired for construct installation of plant involves forest land. Hence , while using forest land for material uses, the recommendation of the state forest Dept. shall be obtained and implemented.
xxi	The company shall provide housing for 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
GENERAL CONDITIONS		
i	The project authorities must strictly	Agreed

	adhere to the stipulations made by the Orissa Pollution Control Board (OPCB) and the State Government.	
ii	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.	Agreed
iii	The gaseous emissions from various process units shall conform to the load/mass based standards notified by this Ministry on 19 th May, 1993 and standards prescribed from time to time. The Orissa Pollution Control Board (OPCB) may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location.	Agreed
iv	At least four ambient air quality monitoring stations shall be established in the downward direction as well as where maximum ground level concentration of SPM, SO ₂ and NO _x are anticipated in consultation with the OPCB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional Office at Bhubaneswar and OPCB, CPCB once in six months.	Periodically monitoring is carried out and the report is annexed as Annexure-I . The monitoring is carried out by NABL accredited laboratory M/S CEMC Pvt. Ltd, Bhubaneswar
v	In-plant control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Further, specific measures	Various control measures like water sprinkling, suction etc are installed and under operation effectively.

	like water sprinkling around the coal stockpiles and asphaltting or concreting of the roads shall be done to control fugitive emissions.	
vi	Industrial wastewater shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19 th May, 1993 and 31 st December, 1993 or as amended form time to time. The treated wastewater shall be utilized for plantation purpose.	Agreed, Waste Water is being properly collected, treated & reused. Our Plant maintains Zero discharge norms.
vii	The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).	Various noise control measures are adopted. Regular noise level monitoring is carried out by NABL Accredited laboratory and the reports are being submitted regularly. The noise level report in and around the existing plant is enclosed as Annexure- I .
viii	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	All the employees and workers are examined by a registered medical practitioner for occupational diseases every year. Ensures medical fitness of all the new employees through Pre-employment Health check up in prescribed format. Blood Sugar monitoring is done at regular intervals. All kinds of primary medications are available in the Occupational Health Centre

		<p>like Antibiotics, Anti-inflammatory, Antacids, Anti-Cold, etc. Including all kind of surgical equipment required for wound repair and minor incision.</p> <p>One ambulance with first aid box and oxygen cylinder for prompt transport to a tertiary health centre as & when required.</p> <p>The PME conducted by the registered practitioner is enclosed as Annexure -III.</p>
ix	<p>The company shall develop rain water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.</p>	<p>CGWB guidelines shall be followed for the construction of the Rain water Harvesting System.</p> <p>Rain water harvesting pond capacity: Area = 2630 m²(0.65 acres) Depth of Reservoir = 8 m</p> <p>Annual average rainfall of Keonjhar district= 1115.4mm =1.115 m</p> <p>Water available in reservoir = 17,884 m³/yr Water available for consumption per Day = 50m³/day</p>
x	<p>The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA / EMP report. Further, the company must undertake socio-economic development activities in the surrounding villages like community development programmes, educational programmes, drinking water supply and health care etc. Suggestions made during the public hearing shall be implemented.</p>	<p>Agreed</p> <p>CSR activities mentioned in Annexure- IV.</p>
xi	<p>As proposed, Rs. 1401.05 Lakhs and</p>	<p>Agreed</p>

	Rs. 753.64 Lakhs shall be earmarked towards total capital cost and recurring cost/annum for environmental pollution control measures shall be judiciously utilized to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. The funds so provided shall not be diverted for any other purpose.	The necessary pollution control equipment has been installed and is under regular maintenance for which funds has been earmarked in the annual budget. Till date, an amount of 5 cr for Capital cost and 40 lakhs pay annum is regularly spent under recurring cost for environmental pollution control measures.
xii	The Regional Office of this Ministry at Bhubaneswar / CPCB / OPCB shall monitor the stipulated conditions. A six monthly compliance report and the monitored data along with statistical interpretation shall be submitted to them regularly.	Agreed, Six Monthly compliance reports are being submitted to the Regional Office of the Ministry at Bhubaneswar & MoEF & CC to New Delhi.
xiii	The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the OPCB and may also be seen at Website of the Ministry of Environment and Forests at http://envfor.nic.in . This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be	Complied

	forwarded to the Regional office at Bhubaneswar.	
xiv	Project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.	<p>Loan sanctioned date: 01.06.2010</p> <p>Date of commencing the land development work: 23.07.2009</p> <p>Date of Financial Closures: 31.03.2011</p> <p>Date of Final approval of the Project: 30.08.2007</p>
xv	A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad / 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 web site of the company by the proponent.	Complied
xvi	The project proponent shall upload the status of compliance of the stipulated environment 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 MOEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO ₂ , NO _x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a	Complied.

	convenient location near the main gate of the company in the public domain.	
xvii	The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB.	Complied.
xviii	The environmental statement for each financial year ending 31 st 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 conditions and shall also be sent to the respective Regional Offices of the MOEF by e-mail.	Complied.