

**Six monthly compliance report of conditions laid down vide letter no. J-11011/438/2007-IA II (I), Dtd.02.02.2009 of Ministry of Environment & Forest, Government of India in respect of Integrated Steel Plant at Nimidha, PS: Motanga, Dist.: Dhenkanal of MGM STEELS LTD. for the period of April 2012 to September 2012.**

A.	SPECIFIC CONDITION	COMPLIANCE
i)	Efforts shall be made to reduce RSPM levels in the ambient air and a 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 level below 100 mg/Nm <sup>3</sup> . 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. Data on ambient air quality and stack emissions shall be regularly submitted to this Ministry including its Regional Office at Bhubaneswar, CPCB and Chhattisgarh Environment Conservation Board (CECB) once in six months.	<p>All efforts have been made to reduce RSPM levels. The following pollution control measures have been taken.</p> <ul style="list-style-type: none"> <li>▪ Proper design of material handling system with completely closed gallery conveyers.</li> <li>▪ Bag filter of adequate capacity in different circuits having suction at receiving, screening, crushing, dispatch &amp; transfer points.</li> <li>▪ High Pressure Atomization with water fogging system at Ground Hopper &amp; other vital points</li> <li>▪ 3 field Electro Static Precipitator (ESP) of adequate capacity to keep the flue gas emission level below 100 mg/Nm<sup>3</sup></li> <li>▪ Gas Conditioning Tower (GCT)</li> <li>▪ After Burning Chamber (ABC)</li> <li>▪ Wet Scrapers for GCT&amp; ABC</li> <li>▪ Pneumatic Conveying System for Bag Filters, ESP &amp; Boiler.</li> <li>▪ Ash Conditioners for Silos.</li> <li>▪ Dust monitoring System at main chimney</li> </ul>
ii)	As proposed, Electrostatic precipitator (ESP) shall be provided to DRI plant, Sinter plant and Blast furnace, WHRB and ABC boilers to control air emissions. Bag filter/scrubber shall be provided induction furnace. Gas cleaning plant having dust catcher and bag filter shall be provided to blast furnace (BF) and BF gas shall be used for power generation. Venture scrubbers shall be provided to Rolling Mill.	Electro Static Precipitator (ESP) having 3 Nos. of fields with necessary interlocking system have been installed for the DRI plant. For sinter Plant, Blast Furnace, ABC Boiler etc. required pollution control equipment shall be installed.
iii)	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 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. Blast Furnace gas shall be used for power generation.	The Hot Gases from DRI Kiln passes through Dust Settling Chamber and thereafter through After Burning Chamber (ABC). Thereafter it has two parallel passages either through WHRB or through GCT before entry into ESP and thereafter into the atmosphere through ID Fan and stack. Either of the passages have auto damper control

iv)	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.	All guidelines/code of practice issued by CPCB and necessary emission standards shall be followed.
v)	Vehicular pollution due to transportation of raw material and finished products shall be controlled. Proper arrangements shall also be made to control dust emissions during loading and unloading of the raw material and finished product. All the raw materials including fly ash shall be transported in the closed containers only and shall not be overloaded. Vehicular emissions shall be regularly monitored.	Transportation of raw material and finished products is being carried out in vehicles securely covered with tarpaulin and tied with nylon rope. Transportation of Fly Ash, Char & Bag Filter Dust is being done in closed Container. Necessary water spraying systems have been installed for the dust suppression at all loading & unloading points.
vi)	In plant control measures for checking fugitive emissions from all the vulnerable sources like spillage/raw materials/coal handlings etc. shall be provided. Dust suppression system like Dense Fog System and Water Sprinkling System shall be provided at Raw Material Handling areas. Ash conditioners shall be installed to control fugitive ash dust pollution at loading and transport points. Dust collectors shall be installed at crushers, transfer points of conveyors, raw material and coal yard to control fugitive emissions. Dust extraction system comprising of suction hood, duct, bag filters, fan, stack etc. shall be provided to Induction Furnace, DRI screening section and coal crushing & screening section. Centralized de-dusting system i.e. collection of fugitive emissions through suction hood and subsequent treatment through bag filter or any other device and finally emitted through a stack of appropriately designed height conforming to the standards shall be provided. Fugitive emissions shall be regularly monitored and records maintained.	All efforts have been made to reduce RSPM levels. The following pollution control measures have been taken. <ul style="list-style-type: none"> <li>▪ Proper design of material handling system.</li> <li>▪ Completely closed gallery for all conveyors.</li> <li>▪ Bag filter of adequate capacity in different circuits having suction at receiving, discharge &amp; transfer points.</li> <li>▪ High Pressure Atomization with water fogging system.</li> <li>▪ Electro Static Precipitator (ESP)</li> <li>▪ Gas Conditioning Tower (GCT)</li> <li>▪ After Burning Chamber (ABC)</li> <li>▪ Wet Scrapers</li> <li>▪ Pneumatic Conveying System for Bag Filter dust handling</li> <li>▪ Pneumatic Conveying System for ESP dust handling</li> <li>▪ Ash Conditioners</li> <li>▪ Dust monitoring at main chimney</li> </ul>
vii)	Total water requirement from Brahmani River shall not exceed to 406 m <sup>3</sup> /h. No ground water	Water for plant process is being met from Brahmani river. However, during

	<p>shall be used. The wastewater from gas cleaning plant of blast furnace and coal washery water shall be treated in thickener and properly used. Acidic and alkaline effluent from DM water plant shall be neutralized and reused in the plant. All the other wastewater shall be treated in effluent treatment plant (ETP) and used for ash conditioning, dust suppression and green belt development. No wastewater shall be discharged outside the premises and 'Zero' effluent discharge shall be ensured. Domestic No waste water being discharged outside the premises a domestic effluent will be treated in Septic Tank followed by soak pit.</p>	<p>construction stage and for drinking purpose ground water is being used. The necessary NOC from CGWA has already been obtained.</p> <p>Waste water is being treated and used for dust suppression and green belt development.</p> <p>No waste water is being discharged outside the plant premises.</p>
viii)	<p>Prior permission for the drawl of 406 m<sup>3</sup>/day water from Brahmani River shall be obtained from the concerned department. No wastewater shall be discharged outside the premises and 'Zero' effluent discharge should be ensured.</p>	<p>Permission for 1.63 Cusec of drawl of water from Brahmani River has already obtained. No water shall be discharged from the plant premises.</p>
ix)	<p>The water consumption for the proposed steel plant shall not exceed 16m<sup>3</sup>/Ton of Steel as per prescribed standard.</p>	<p>It shall be followed.</p>
x)	<p>Ground water monitoring around the solid waste disposal site / Secured Land Fill (SLF) shall be carried out regularly and report submitted to the Ministry's Regional Office at CECB, CPCB and OPCB.</p>	<p>Monitoring in regular basis shall be carried out as per the norms on operation of plant and report shall be submitted.</p>
xi)	<p>AFBC plant shall be installed before installation of Sponge Iron Plant so that utilization of char in the AFBC boiler is ensured. All the char from DRI Plant, Coal Washery rejects and middling shall be utilized in AFBC Boiler of Power Plant and no char should be disposed off anywhere else. All the Blast Furnace (BF) slag shall be granulated and provided to cement manufacturers for further utilization. BF dust, Sinter Plant dust, Bag House dust of SMS shall be recycled to Sinter Plant. Coal rejects, accretion slag, SMS slag and tailings shall be properly disposed off in environment-friendly manner. Oily waste shall be provided to authorized recyclers/ preprocessors.</p>	<p>This is being carried out.</p>
xii)	<p>A time bound action plan shall be submitted to reduce solid waste, its proper utilization and disposal.</p>	<p>A time bound action plan will be submitted to reduce solid waste, its proper utilization and disposal.</p>
xiii)	<p>Proper handling, storage, utilization and disposal of all the solid waste shall be ensured</p>	<p>Char is being transported in closed container and is being dumped in area</p>

	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 Ministry's Regional Office at Bhubaneswar, SPCB and CPCB.	designated for char dumping. Proper disposal procedure like water spraying, compaction, embankment is being carried out at the char dumping area.
xiv)	Proper utilization of fly ash shall be ensured as per Fly ash Notification, 1999 as amendment in 2003. As proposed, fly ash and bottom ash shall be given to cement plants / brick manufacturers for further utilization.	<ul style="list-style-type: none"> <li>▪ Fly ash is being used for land fillings at various lower line areas within our plant premises.</li> <li>▪ Make brick making unit.</li> </ul>
xv)	As proposed, green belt shall be developed in 33 % area within and around the plant premises as per the CPCB guidelines in consultation with DFO.	<p>The company has engaged a professional consultant to plan &amp; develop the Green Belt in &amp; around the plant premises.</p> <p>Plantation has been carried out along with boundary. Plantation is also being carried out outside the boundary by the plant authority.</p>
xvi)	All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Steel Sector shall be implemented.	Recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Steel Sector will be implemented.
xvii)	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, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	Housing for construction labour has been provided along with all necessary facilities and amenities.

**B. GENERAL CONDITIONS:**

i)	The project authorities must strictly adhere to the stipulations made by the Orissa Pollution Control Board (OPCB) and the State Government.	Stipulation made by OPCB and the State Govt. is being strictly adhered to.
ii)	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.	This will be strictly followed.
iii)	The gaseous emissions from various process units shall conform to the load/mass based standards notified by this Ministry on 19th 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. At no time, the emission level shall go beyond the	All necessary measures to control the gaseous emissions to conform to the load/mass based standards have been taken by installation of various pollution control equipment and necessary interlocking facilities.

	prescribed standards. Interlocking facilities shall be provided so that process can be automatically stopped in case emission level exceeds the limit.	
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 <sub>2</sub> and NO <sub>x</sub> 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.	<p>On line Ambient Air Quality Monitoring Station has been procured for monitoring of the following parameter's O<sub>3</sub>, CO, SO<sub>2</sub>/H<sub>2</sub>S, NO/NO<sub>2</sub>/NO<sub>x</sub> particulate matter, TSP, PM 10, PM<sub>2.5</sub>.</p> <p>On line Weather Monitoring Station has been procured for installation to monitor the following parameters. Wind Speed, wind Direction, Rain Fall Humidity, Radiation.</p> <p>The above monitoring stations have built in data processing system with internal storage capacity for 5 years of continues operation. It also has full inter0net connectivity either via Air through GPRS/UMTS/EDGE/WLN or fixed line connection or cable modem etc.</p> <p>Presently work has been awarded to consultants. A separate environmental management cell having suitable qualified personnel will be set up under the control of a Sr. Executive who will report directly to the Head of the Organization.</p>
v)	In-plant control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Further, specific measures like water sprinkling around the coal stockpiles and asphaltting or concreting of the roads shall be done to control fugitive emissions.	<p>Pulse jet bag filter of capacity as per enclosed details have been installed at Raw material handling and product handling area cooler discharge, magnetic separator and other potential dust generating point to minimize fugitive emission. The particulate emission from all vents/stacks connected to the bag filters shall not exceed 150 mg/Nm<sup>3</sup>. Height of the stacks/vents are more than 30 meters from ground level.</p> <p>2 (two) Nos. of wet scrappers for DSC and GCT have been installed. The complete material conveying system has been enclosed within closed gallery.</p> <p>The complete raw material yard is made from RCC. The road within the plant is made from RCC. The ring road around the plant is black topped. Permanent high</p>

		<p>pressure water spraying system is being installed at intervals on haul roads and in work zone are to minimize fugitive dust emission.</p> <p>All the Bag Filters and Electro Static Precipitators are provided with Pneumatic conveying &amp; conditioning facilities. Dust disposal systems are being implemented as per the norms. The solid waste will be disposal in an area of 35 acres of land. Detail solid waste management plan will be submitted within time frame.</p>
vi)	Industrial waste water shall 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 form time to time. The treated waste water shall be utilized for plantation purpose.	It is being followed.
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).	All D.G. Sets and compressors are with acoustic enclosures and mounted on anti-vibration pads. The noise levels observed are within the permissible standards.
viii)	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	Regular initial health checkup and routine health checkup is being carried by a team of Occupational Health Specialists for all the employees/ workers. Mega Health Camp has already been conducted twice within the last year for the people residing in nearby villages. A total No. of 814 persons have been examined from the nearby villages.
ix)	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.	Rain water harvesting structures will be constructed within the plant premises to harvest the rain water for utilization in the lean season besides recharging the ground water
x)	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 programs, educational programs,	<p>All environmental protection measures and safe guards recommended in EIA/ EMP shall be complied. The company has undertaken the following socio economic development activities in the surrounding villages.</p> <ol style="list-style-type: none"> <li>1. Excavation of ponds in nearby villages to</li> </ol>

	drinking water supply and health care etc. Suggestions made during the public hearing shall be implemented.	<p>meet water scarcity in summer in Gadia Sahi &amp; Bada Sahi.</p> <p>2. Repairing of village roads in Nimidha village.</p> <p>3. Extra plantation made Kankadahad block in Dhenkanal.</p> <p>4. Water distribution at Nimidha, Chintapokhari, Odapada and Haldiabahal, etc.</p>
xi)	As proposed, Rs. 46.10 Crores and Rs. 7.36 Crores earmarked towards the capital cost and recurring cost towards the 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.	A sum of ₹.27.50Crore has already been spent towards capital cost of Environment & Pollution Control and ₹.1.00 Crore towards recurring cost of the above. Further pollution control equipment shall be procured as and when required according to conditions stipulated by the Ministry of Environment & Forests as well as the State Government.
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.	This will be complied with.
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 <a href="http://envfor.nic.in">http://envfor.nic.in</a> . 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 forwarded to the Regional office at Bhubaneswar.	This will be complied with.
	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.	This is being complied with.

**AMBIENT AIR QUALITY MONITORING**

**MONTH: APRIL 2012**

**Location: Iron Ore Screen House**

Sl. No.	Parameters	Unit	04.04.2012	19.04.2012
1	PM10	µg/cum.	83.7	82.1
2	PM2.5	µg/cum.	42.3	43.1
3	SO <sub>2</sub>	µg/cum.	33.1	33.9
4	NO <sub>x</sub>	µg/cum.	32.4	33.5

**Location: Coal Crusher and Screening House**

Sl. No.	Parameters	Unit	04.04.2012	19.04.2012
1	PM10	µg/cum.	82.5	83.3
2	PM2.5	µg/cum.	41.8	42.3
3	SO <sub>2</sub>	µg/cum.	33.3	34.1
4	NO <sub>x</sub>	µg/cum.	33.1	32.7

**Location: Main Axis Chimney**

Sl. No.	Parameters	Unit	04.04.2012	19.04.2012
1	SPM	µg/cum.	16.8	17.3

**Location: Product Storage House**

Sl. No.	Parameters	Unit	04.04.2012	19.04.2012
1	PM10	µg/cum.	80.5	78.7
2	PM2.5	µg/cum.	41.3	42.1
3	SO <sub>2</sub>	µg/cum.	33.2	33.7
4	NO <sub>x</sub>	µg/cum.	31.7	33.1

**Location: Administrative Building**

Sl. No.	Parameters	Unit	04.04.2012	19.04.2012
1	PM10	µg/cum.	76.3	78.9
2	PM2.5	µg/cum.	36.3	36.2
3	SO <sub>2</sub>	µg/cum.	26.2	27.1
4	NO <sub>x</sub>	µg/cum.	23.1	25.3



**AMBIENT AIR QUALITY MONITORING**

**MONTH: MAY 2012**

**Location: Iron Ore Screen House**

Sl. No.	Parameters	Unit	04.05.2012	19.05.2012
1	PM10	µg/cum.	38.2	38.7
2	PM2.5	µg/cum.	24.3	23.7
3	SO <sub>2</sub>	µg/cum.	23.8	24.9
4	NO <sub>x</sub>	µg/cum.	22.7	23.1

**Location: Coal Crusher and Screening House**

Sl. No.	Parameters	Unit	04.05.2012	19.05.2012
1	PM10	µg/cum.	39.1	35.6
2	PM2.5	µg/cum.	23.4	22.9
3	SO <sub>2</sub>	µg/cum.	23.6	21.8
4	NO <sub>x</sub>	µg/cum.	21.8	21.9

**Location: Main Axis Chimney**

Sl. No.	Parameters	Unit	04.05.2012	19.05.2012
1	SPM	µg/cum.	17.2	17.7

**Location: Product Storage House**

Sl. No.	Parameters	Unit	04.05.2012	19.05.2012
1	PM10	µg/cum.	40.9	37.9
2	PM2.5	µg/cum.	23.5	24.1
3	SO <sub>2</sub>	µg/cum.	22.1	20.0
4	NO <sub>x</sub>	µg/cum.	22.7	19.9

**Location: Administrative Building**

Sl. No.	Parameters	Unit	04.05.2012	19.05.2012
1	PM10	µg/cum.	37.9	38.7
2	PM2.5	µg/cum.	22.4	23.7
3	SO <sub>2</sub>	µg/cum.	21.1	24.9
4	NO <sub>x</sub>	µg/cum.	20.9	21.3

**AMBIENT AIR QUALITY MONITORING**

**MONTH: JUNE 2012**

**Location: Iron Ore Screen House**

<b>Sl. No.</b>	<b>Parameters</b>	<b>Unit</b>	<b>04.06.2012</b>	<b>19.06.2012</b>
1	PM10	µg/cum.	33.2	32.9
2	PM2.5	µg/cum.	18.1	17.6
3	SO <sub>2</sub>	µg/cum.	16.3	15.4
4	NO <sub>x</sub>	µg/cum.	15.9	16.8

**Location: Coal Crusher and Screening House**

<b>Sl. No.</b>	<b>Parameters</b>	<b>Unit</b>	<b>04.06.2012</b>	<b>19.06.2012</b>
1	PM10	µg/cum.	34.3	33.4
2	PM2.5	µg/cum.	19.2	18.9
3	SO <sub>2</sub>	µg/cum.	16.4	16.1
4	NO <sub>x</sub>	µg/cum.	16.9	16.7

**Location: Main Axis Chimney**

<b>Sl. No.</b>	<b>Parameters</b>	<b>Unit</b>	<b>04.06.2012</b>	<b>19.06.2012</b>
1	SPM	µg/cum.	16.1	17.1

**Location: Product Storage House**

<b>Sl. No.</b>	<b>Parameters</b>	<b>Unit</b>	<b>04.06.2012</b>	<b>19.06.2012</b>
1	PM10	µg/cum.	33.0	32.6
2	PM2.5	µg/cum.	19.2	19.4
3	SO <sub>2</sub>	µg/cum.	17.3	17.1
4	NO <sub>x</sub>	µg/cum.	16.7	17.8

**Location: Administrative Building**

<b>Sl. No.</b>	<b>Parameters</b>	<b>Unit</b>	<b>04.06.2012</b>	<b>19.06.2012</b>
1	PM10	µg/cum.	34.2	34.6
2	PM2.5	µg/cum.	20.2	21.1
3	SO <sub>2</sub>	µg/cum.	21.6	22.3
4	NO <sub>x</sub>	µg/cum.	16.7	17.7

**AMBIENT AIR QUALITY MONITORING**

**MONTH: JULY 2012**

**Location: Iron Ore Screen House**

<b>Sl. No.</b>	<b>Parameters</b>	<b>Unit</b>	<b>04.07.2012</b>	<b>19.07.2012</b>
1	PM10	µg/cum.	35.7	79.7
2	PM2.5	µg/cum.	18.7	40.2
3	SO <sub>2</sub>	µg/cum.	19.1	27.2
4	NOx	µg/cum.	20.3	31.5

**Location: Coal Crusher and Screening House**

<b>Sl. No.</b>	<b>Parameters</b>	<b>Unit</b>	<b>04.07.2012</b>	<b>19.07.2012</b>
1	PM10	µg/cum.	37.1	81.3
2	PM2.5	µg/cum.	17.8	41.4
3	SO <sub>2</sub>	µg/cum.	16.2	29.3
4	NOx	µg/cum.	18.4	32.4

**Location: Main Axis Chimney**

<b>Sl. No.</b>	<b>Parameters</b>	<b>Unit</b>	<b>04.07.2012</b>	<b>19.07.2012</b>
1	SPM	µg/cum.	15.9	16.6

**Location: Product Storage House**

<b>Sl. No.</b>	<b>Parameters</b>	<b>Unit</b>	<b>04.07.2012</b>	<b>19.07.2012</b>
1	PM10	µg/cum.	38.6	79.6
2	PM2.5	µg/cum.	20.4	39.0
3	SO <sub>2</sub>	µg/cum.	21.1	31.2
4	NOx	µg/cum.	22.9	30.8

**Location: Administrative Building**

<b>Sl. No.</b>	<b>Parameters</b>	<b>Unit</b>	<b>04.07.2012</b>	<b>19.07.2012</b>
1	PM10	µg/cum.	41.7	80.9
2	PM2.5	µg/cum.	20.3	36.9
3	SO <sub>2</sub>	µg/cum.	19.7	27.4
4	NOx	µg/cum.	21.9	27.3

**AMBIENT AIR QUALITY MONITORING**

**MONTH: AUGUST 2012**

**Location: Iron Ore Screen House**

<b>Sl. No.</b>	<b>Parameters</b>	<b>Unit</b>	<b>04.08.2012</b>	<b>19.08.2012</b>
1	PM10	µg/cum.	78.3	76.2
2	PM2.5	µg/cum.	37.3	35.7
3	SO <sub>2</sub>	µg/cum.	26.1	26.5
4	NOx	µg/cum.	28.2	29.1

**Location: Coal Crusher and Screening House**

<b>Sl. No.</b>	<b>Parameters</b>	<b>Unit</b>	<b>04.08.2012</b>	<b>19.08.2012</b>
1	PM10	µg/cum.	79.6	80.2
2	PM2.5	µg/cum.	39.0	37.7
3	SO <sub>2</sub>	µg/cum.	25.9	28.2
4	NOx	µg/cum.	27.1	29.9

**Location: Main Axis Chimney**

<b>Sl. No.</b>	<b>Parameters</b>	<b>Unit</b>	<b>04.08.2012</b>	<b>19.08.2012</b>
1	SPM	µg/cum.	18.3	17.9

**Location: Product Storage House**

<b>Sl. No.</b>	<b>Parameters</b>	<b>Unit</b>	<b>04.08.2012</b>	<b>19.08.2012</b>
1	PM10	µg/cum.	82.0	80.5
2	PM2.5	µg/cum.	40.1	39.5
3	SO <sub>2</sub>	µg/cum.	31.1	30.2
4	NOx	µg/cum.	27.2	28.5

**Location: Administrative Building**

<b>Sl. No.</b>	<b>Parameters</b>	<b>Unit</b>	<b>04.08.2012</b>	<b>19.08.2012</b>
1	PM10	µg/cum.	75.1	75.7
2	PM2.5	µg/cum.	36.2	35.2
3	SO <sub>2</sub>	µg/cum.	26.8	25.7
4	NOx	µg/cum.	25.7	26.1

**AMBIENT AIR QUALITY MONITORING****MONTH: SEPTEMBER 2012****Location: Iron Ore Screen House**

Sl. No.	Parameters	Unit	04.09.2012	19.09.2012
1	PM10	µg/cum.	80.7	82.8
2	PM2.5	µg/cum.	40.2	41.1
3	SO <sub>2</sub>	µg/cum.	28.3	26.7
4	NO <sub>x</sub>	µg/cum.	29.1	29.8

**Location: Coal Crusher and Screening House**

Sl. No.	Parameters	Unit	04.09.2012	19.09.2012
1	PM10	µg/cum.	80.2	79.6
2	PM2.5	µg/cum.	42.5	39.3
3	SO <sub>2</sub>	µg/cum.	28.9	31.3
4	NO <sub>x</sub>	µg/cum.	32.1	30.9

**Location: Main Axis Chimney**

Sl. No.	Parameters	Unit	04.09.2012	19.09.2012
1	SPM	µg/cum.	18.5	18.3

**Location: Product Storage House**

Sl. No.	Parameters	Unit	04.09.2012	19.09.2012
1	PM10	µg/cum.	82.7	81.7
2	PM2.5	µg/cum.	41.2	41.6
3	SO <sub>2</sub>	µg/cum.	32.3	31.7
4	NO <sub>x</sub>	µg/cum.	29.1	30.3

**Location: Administrative Building**

Sl. No.	Parameters	Unit	04.09.2012	19.09.2012
1	PM10	µg/cum.	75.9	77.2
2	PM2.5	µg/cum.	37.3	37.9
3	SO <sub>2</sub>	µg/cum.	27.1	26.9
4	NO <sub>x</sub>	µg/cum.	26.3	27.2

## NOISE LEVEL DATA

### MONTH: APRIL 2012

Location	On 04.04.2012	On 19.04.2012
	Noise range in dBA	Noise range in dBA
N <sub>1</sub> Main Chimney Site	70.9 to 73.9	71.1 to 72.9
N <sub>2</sub> Kiln Site	68.8 to 73.5	68.3 to 73.1
N <sub>3</sub> RMP Site	67.3 to 72.1	66.9 to 71.3
N <sub>4</sub> Product Storage House	66.1 to 71.8	65.9 to 72.9
N <sub>5</sub> Raw Material Processing (RMP) Unit	68.2 to 71.8	69.1 to 73.2

### MONTH: MAY 2012

Location	On 04.05.2012	On 19.05.2012
	Noise range in dBA	Noise range in dBA
N <sub>1</sub> Main Chimney Site	68.3 to 72.7	70.7 to 73.2
N <sub>2</sub> Kiln Site	69.1 to 73.5	71.1 to 71.9
N <sub>3</sub> RMP Site	68.9 to 72.3	66.9 to 71.3
N <sub>4</sub> Product Storage House	66.8 to 70.9	67.8 to 70.3
N <sub>5</sub> Raw Material Processing (RMP) Unit	68.7 to 71.2	70.2 to 73.2

### MONTH: JUNE 2012

Location	On 04.06.2012	On 19.06.2012
	Noise range in dBA	Noise range in dBA
N <sub>1</sub> Main Chimney Site	65.3 to 65.6	65.5 to 65.8
N <sub>2</sub> Kiln Site	65.1 to 66.0	66.2 to 66.5
N <sub>3</sub> RMP Site	65.5 to 65.8	65.3 to 65.8
N <sub>4</sub> Product Storage House	65.0 to 66.1	65.3 to 65.6
N <sub>5</sub> Raw Material Processing (RMP) Unit	66.1 to 66.3	66.2 to 66.8

### MONTH: JULY 2012

Location	On 04.07.2012	On 19.07.2012
	Noise range in dBA	Noise range in dBA
N <sub>1</sub> Main Chimney Site	65.4 to 65.9	65.2 to 65.8
N <sub>2</sub> Kiln Site	65.6 to 66.1	65.1 to 65.9
N <sub>3</sub> RMP Site	66.2 to 66.8	65.3 to 65.9
N <sub>4</sub> Product Storage House	65.7 to 66.3	66.1 to 66.7
N <sub>5</sub> Raw Material Processing (RMP) Unit	66.2 to 66.9	65.4 to 66.3

**MONTH: AUGUST 2012**

<b>Location</b>	<b>On 04.08.2012</b>	<b>On 19.08.2012</b>
	Noise range in dBA	Noise range in dBA
N <sub>1</sub> Main Chimney Site	69.4 to 72.6	71.3 to 72.9
N <sub>2</sub> Kiln Site	70.6 to 73.1	71.2 to 72.9
N <sub>3</sub> RMP Site	67.5 to 69.2	70.1 to 73.2
N <sub>4</sub> Product Storage House	65.7 to 66.3	66.3 to 65.4
N <sub>5</sub> Raw Material Processing (RMP) Unit	67.3 to 69.4	67.5 to 69.1

**MONTH: SEPTEMBER 2012**

<b>Location</b>	<b>On 04.09.2012</b>	<b>On 19.09.2012</b>
	Noise range in dBA	Noise range in dBA
N <sub>1</sub> Main Chimney Site	69.1 to 71.9	70.9 to 73.1
N <sub>2</sub> Kiln Site	68.3 to 70.8	71.5 to 73.1
N <sub>3</sub> RMP Site	68.1 to 69.5	69.3 to 72.6
N <sub>4</sub> Product Storage House	66.2 to 67.2	65.8 to 66.1
N <sub>5</sub> Raw Material Processing (RMP) Unit	68.2 to 69.1	67.6 to 68.2