



Addl. PCCF, MoEFCC,
Regional Office (ECZ),
Bungalow No. A-2, Shyamali Colony,
Ranchi – 834002.

Ref No. - JMB/115/ **001566** /2017

November, 22, 2017

SUB: Half Yearly Compliance Report of the conditions of EC issued by MoEFCC, New Delhi to Lagla Mahal Sand Lease, Tata Steel Limited, Dhanbad for the period April'17 to September'17.

Dear Sir,

We are enclosing herewith compliance report for the period April'17 to September'17 for the EC granted vide letter no.- J-11015/426/2008-IA.II (M), Dated-27th February,2013 issued by Ministry of Environment, Forest and Climate Change, New Delhi. This is for your kind perusal.

Thanking you,

Yours faithfully,


General Manager (Coal)

Email I.D.- skumar.singh@tatasteel.com

Encl: As above.

Copy to: Member Secretary, Eastern Zonal Office, Southend Conclave, 502, 5th Floor 1582, Rajdanga Main Road, Kolkata-700107.

Copy to: Member Secretary, JSPCB, T.A. Division Building (Ground Floor), H.E.C, Dhurwa, Ranchi -834004.

TATA STEEL LIMITED

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HALF YEARLY COMPLIANCE REPORT
(PERIOD: APRIL'17 – SEPTEMBER'17)

LAGLA MAHAL SAND LEASE
(CAPACITY: 0.1 MTPA RIVER BED SAND)
VILLAGE: LAGLA & MAHAL, DIST: BOKARO, JHARKHAND



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

**ENVIRONMENTAL CLEARANCE GRANTED VIDE LETTER NO. - J-11015/426/2008-
IA.II(M) DATED- 27.02.2013 ISSUED BY GOVT. OF INDIA, MINISTRY OF
ENVIRONMENT, FOREST AND CLIMATE CHANGE, NEW DELHI.**

Compliance status of Environmental Clearance of Lagla and Mahal Sand Lease Mining project of M/s Tata Steel Ltd., Village Lagla and Mahal, dist. Bokaro, Jharkhand vide MoEFCC Letter no J-11015/426/2008-IA.II (M) dated February 27, 2013

S. No.	Condition	Compliance Status
Specific Condition		
(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 Consent to Establish has been granted by JSPCB vide letter no. PC/NOC/DHN/17/2010-D-497(N) dated 31.03.2015 and the Consent to Operate (CTO) vide letter no. 1376 dated 07.04.2015 valid till 31.03.2016. The CTO has further been renewed on 23.02.2016 for a period of 5 years (till 31.03.2021). All the conditions as stipulated in the consent are being complied with.
(ii)	The project proponent shall comply with section 3 of the Mines Act.	It is being complied.
(iii)	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.	Sand excavation is done by leaving 1/5th of the width of the river intact for maintaining the embankment. It will be ensured that no change in the river course takes place.
(iv)	Particulate level (PM2.5) shall be monitored regularly and the result placed in the public domain.	Monitoring of PM2.5 has been carried out in this period. The report is given as annexure-I.
(v)	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.	The mine lease area is a riverbed. Hence we approach the villagers and assist them in planting the native species as well as fruit plants in the villages.
(vi)	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 is being complied. Water spraying is done on the transportation roads.

Compliance status of Environmental Clearance of Lagla and Mahal Sand Lease Mining project of M/s Tata Steel Ltd., Village Lagla and Mahal, dist. Bokaro, Jharkhand vide MoEFCC Letter no J-11015/426/2008-IA.II (M) dated February 27, 2013

(vii)	<p>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.</p>	<p>The extraction of sand is done with utmost care of the environment. There is no extraction of water as well as no change in river course involved hence there will be no impact on the hydrogeological regime. The monitoring report of the ground water level and quality is given as annexure-I.</p>
(viii)	<p>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.</p>	<p>No water is required for the operation of project. Drinking water required by the workers is arranged by the company.</p>
(ix)	<p>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.</p>	<p>Adequate monitoring of the health of the vehicles used for transportation of sand is ensured to avoid any oil & grease leakage. Higher capacity trucks have been deployed.</p>

Compliance status of Environmental Clearance of Lagla and Mahal Sand Lease Mining project of M/s Tata Steel Ltd., Village Lagla and Mahal, dist. Bokaro, Jharkhand vide MoEFCC Letter no J-11015/426/2008-IA.II (M) dated February 27, 2013

(x)	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 are regularly checked and maintained. Only vehicles having PUC certificates are allowed to ply. Transportation of sand is always done via tarpaulin-covered trucks which are optimally loaded.
(xi)	No drilling and blasting operation shall be carried out.	Not applicable as it is a sand mining project.
(xii)	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, does not get air borne during gathering & transportation. Sand stored in the sand yards is transferred to underground voids through surface bunkers in a slurry form. However, dust control measures while transporting of sand is in place through water tanker, coverage of trucks and optimal loading.
(xiii)	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.
(xiv)	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.

Compliance status of Environmental Clearance of Lagla and Mahal Sand Lease Mining project of M/s Tata Steel Ltd., Village Lagla and Mahal, dist. Bokaro, Jharkhand vide MoEFCC Letter no J-11015/426/2008-IA.II (M) dated February 27, 2013

(xv)	<p>The critical parameters such as RSPM (Particulate matter with size less than 10 micron i.e., PM10) and NOx 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.</p>	<p>The monitoring of the air parameters has been done in this period. There is no use of water for mining operation hence there is no discharge. Details of air analysis are given later. The monitoring reports are regularly uploaded on company's website along with half-yearly EC compliance reports. Screenshot has been provided as Annexure-II.</p>
(xvi)	<p>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.</p>	<p>The Company already has an Environment Policy approved by the Managing Director and it addresses all the issues mentioned. Tata Steel Environmental Policy is attached as Annexure-III.</p> <p>The status of adherence to the policy and compliance to Environmental laws and regulations is regularly discussed at higher levels. Any non-compliance noticed is corrected at divisional level. If any issue is beyond our control, it is brought to the notice of higher management.</p>

Compliance status of Environmental Clearance of Lagla and Mahal Sand Lease Mining project of M/s Tata Steel Ltd., Village Lagla and Mahal, dist. Bokaro, Jharkhand vide MoEFCC Letter no J-11015/426/2008-IA.II (M) dated February 27, 2013

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)	At least four ambient air quality-monitoring stations should be established in the core zone as well as in the buffer zone for RSPM (Particulate matter with size less than 10micron i.e., PM10) 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.	The monitoring stations have been established and monitoring jobs are being performed regularly. The ambient air quality analysis reports are attached as Annexure-I.
(v)	Data on ambient air quality [(RSPM(Particulate matter with size less than 10micron i.e., PM10) 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 is being submitted as annexure-I in this compliance report.

Compliance status of Environmental Clearance of Lagla and Mahal Sand Lease Mining project of M/s Tata Steel Ltd., Village Lagla and Mahal, dist. Bokaro, Jharkhand vide MoEFCC Letter no J-11015/426/2008-IA.II (M) dated February 27, 2013

(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.	Sand, being coarse in nature and having high moisture content, does not get air borne during gathering & transportation. However, dust control measures while transporting of sand is in place through water tanker, coverage of trucks and optimal loading.
(vii)	Measures 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 a fully equipped Environment Cell Laboratory with qualified personnel. Laboratory has been recognized and registered with the Jharkhand State Pollution Control Board vide letter ref no. B-3922, dated-30.08.2012. The monitoring and analysis is also done at regular intervals by M/s S S Environics India Pvt. Ltd., an MoEF recognised laboratory (vide its notification 07.12.2012).

Compliance status of Environmental Clearance of Lagla and Mahal Sand Lease Mining project of M/s Tata Steel Ltd., Village Lagla and Mahal, dist. Bokaro, Jharkhand vide MoEFCC Letter no J-11015/426/2008-IA.II (M) dated February 27, 2013

(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 is monitored separately. It will be provided in the next compliance report. Rs. 10 lakhs incurred for water spraying activities on transportation road.
(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.	The CTE and CTO of the project have been granted by JSPCB. The permission for lifting of sand from the river bed has also been granted by District Mining Officer, Bokaro.
(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 MoEF, its Regional Office Bhubaneswar, the respective zonal office of CPCB and the SPCB. 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 MoEF, Bhubaneswar, the respective Zonal Officer of CPCB and the SPCB.	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.	It will be complied with.

Compliance status of Environmental Clearance of Lagla and Mahal Sand Lease Mining project of M/s Tata Steel Ltd., Village Lagla and Mahal, dist. Bokaro, Jharkhand vide MoEFCC Letter no J-11015/426/2008-IA.II (M) dated February 27, 2013

	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.	It will be complied with.
(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.	The environmental statement for financial year 2016-17 has been submitted to JSPCB on 26th September 2017 and it is also uploaded on the company website (Annexure- II). The soft copy of Environment Statement is also sent to MOEF by email at ro.ranchi-mef@gov.in.
(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 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 complied with.


General Manager (Coal)

Annexure- I Ambient Air & Groundwater Analysis Report

Period- April'17 to June'17

Name of Industry : Lagla Mahal Sand Mining Project

No. of sampling points : 4

Sampling Location	Date of Sampling/ Weather Condition		
	APRIL'17	MAY'17	JUNE'17
Mahal School Near Izri River	17.04.2017/ Clear	16.05.2017/ Clear	28.06.2017/ Rainy
Lagla Gram Panchayat	17.04.2017/ Clear	16.05.2017/ Clear	28.06.2017/ Rainy
Bagula School	18.04.2017/ Clear	17.05.2017/ Rainy	29.06.2017/ Clear
Shahar Juri School	18.04.2017/ Clear	17.05.2017/ Rainy	29.06.2017/ Clear

Location	Latitude/ Longitude	Date	PM ₁₀	PM _{2.5}	SO ₂	NO _x
			PM ₁₀ Level : 24 Hourly Limit-100µg/m ³	PM _{2.5} Level : 24 Hourly Limit-60µg/m ³	SO _x Level: 24 Hourly Limit- 80µg/m ³	NO _x Level: 24 Hourly Limit- 80µg/m ³
Mahal School Near Izri River	23°38'06.1"N / 86°23'41.2" E	17.04.2017	63.0	34.0	13.0	14.0
		16.05.2017	62.5	33.0	12.5	13.5
		28.06.2017	59.5	29.0	10.0	12.0
Lagla Gram Panchayat	23°37'21.3" N/ 86°23'35.3" E	17.04.2017	58.5	31.5	11.5	12.0
		16.05.2017	60.0	32.5	12.5	13.5
		28.06.2017	55.0	27.0	9.0	11.5
Bagula School	23°36'27.3" N/ 86°21'59.7" E	18.04.2017	55.0	29.5	11.5	13.5
		17.05.2017	52.0	26.5	9.0	11.5
		29.06.2017	53.5	28.5	10.0	12.0
Shahar Juri School	23°36'26.6" N/ 86°20'58.9" E	18.04.2017	57.0	30.0	12.0	13.0
		17.05.2017	54.0	27.5	10.5	12.0
		29.06.2017	55.0	28.0	11.7	12.5
Minimum			52.0	26.5	9.0	11.5
Maximum			63.0	34.0	13.0	14.0
Average			57.1	29.8	11.1	12.6

Sr. Manager (Environment)

Annexure- I Ambient Air & Groundwater Analysis Report

Period- July' 17 to September' 17

Name of Industry : Lagla Mahal Sand Mining Project

No. of sampling points : 4

Sampling Location	Date of Sampling/ Weather Condition		
	JULY'17	AUGUST'17	SEPTEMBER'17
Mahal School Near Izri River	18.07.2017/ Cloudy	21.08.2017/ Clear	27.09.2017/ Clear
Lagla Gram Panchayat	18.07.2017/ Cloudy	21.08.2017/ Clear	27.09.2017/ Clear
Bagula School	19.07.2017/ Rainy	22.08.2017/ Clear	28.09.2017/ Clear
Shahar Juri School	19.07.2017/ Rainy	22.08.2017/ Clear	28.09.2017/ Clear

Location	Latitude/ Longitude	Date	PM ₁₀	PM _{2.5}	SO ₂	NO _x
			PM ₁₀ Level : 24 Hourly Limit-100µg/m ³	PM _{2.5} Level : 24 Hourly Limit-60µg/m ³	SO _x Level: 24 Hourly Limit- 80µg/m ³	NO _x Level: 24 Hourly Limit- 80µg/m ³
Mahal School Near Izri River	23°38'06.1"N / 86°23'41.2" E	18.07.2017	60.0	30.0	11.0	12.5
		21.08.2017	65.0	35.0	12.0	14.0
		27.09.2017	63.0	32.0	11.5	13.0
Lagla Gram Panchayat	23°37'21.3" N/ 86°23'35.3" E	18.07.2017	50.0	29.0	10.5	12.0
		21.08.2017	52.0	30.5	11.0	12.5
		27.09.2017	53.0	31.0	11.5	13.0
Bagula School	23°36'27.3" N/ 86°21'59.7" E	19.07.2017	50.0	28.5	10.0	12.0
		22.08.2017	54.0	30.5	10.5	13.0
		28.09.2017	53.0	29.0	10.0	12.5
Shahar Juri School	23°36'26.6" N/ 86°20'58.9" E	19.07.2017	52.0	29.5	10.5	12.0
		22.08.2017	55.0	31.0	11.5	12.5
		28.09.2017	57.0	31.5	11.7	13.0
Minimum			50.0	28.5	10.0	12.0
Maximum			65.0	35.0	12.0	14.0
Average			55.3	30.6	11.0	12.7


Sr. Manager (Environment)

Annexure-II**Ground Water Quality Analysis****Ground water level fluctuation in and around Core & Buffer zone area of sand mining lease
Pre-Monsoon Season- May'17**

S.No	Date	Location	Time	Sample Parameter			
				Depth in meter (m)	pH	Electrical Conductivity, $\mu\text{S/m}$	Total Hardness (as CaCO_3), mg/l
1	30.05.2017	Premsinghdih	10:00AM	8.0	7.1	750	430
2	30.05.2017	Lagla	11:30AM	7.5	7.2	580	360
3	30.05.2017	Alakdih	10:40AM	7.5	7.1	570	380
4	30.05.2017	Joradih	12:15PM	6.5	7.2	500	430
5	30.05.2017	SEB Quarters	10:30AM	8.5	7.0	710	350
6	30.05.2017	Kargali	01:30PM	7.0	7.2	640	324
7	30.05.2017	Kumargora	01:00PM	8.5	7.1	600	350
8	30.05.2017	Bhojudih	01:15PM	7.5	7.1	650	470
9	30.05.2017	Mahal	12:00PM	7.0	7.1	500	350
10	30.05.2017	Sudamdih	11:50AM	6.8	7.2	750	365

Monsoon Season- August'17

S.No	Date	Location	Time	Sample Parameter			
				Depth in meter (m)	pH	Electrical Conductivity, $\mu\text{S/m}$	Total Hardness (as CaCO_3), mg/l
1	08.08.2017	Premsinghdih	11:25AM	1.4	7.2	735	750
2	08.08.2017	Lagla	10:05AM	1.8	7.0	540	620
3	08.08.2017	Alakdih	01:45PM	1.2	7.2	560	623
4	08.08.2017	Joradih	12:10AM	1.5	7.1	400	530
5	08.08.2017	SEB Quarters	11:10AM	1.2	7.1	740	710
6	08.08.2017	Kargali	12:25PM	1.25	7.1	610	582
7	08.08.2017	Kumargora	12:55PM	1.70	7.0	720	630
8	08.08.2017	Bhojudih	01:00PM	1.12	7.1	620	633
9	08.08.2017	Mahal	01:30PM	1.02	7.2	510	520
10	08.08.2017	Sudamdih	10:30AM	1.24	7.2	775	711


Sr. Manager (Environment)



S.S. Environics (India) Pvt. Ltd.

(An ISO 9001:2008, 14001:2004 and OHSAS 18001:2007 Certified Company)

Plot No-361/2314 "Sustenance Tower"

At: Patrapada, P.O: Dumuduma, Dist: Khurda, Bhubaneswar-751 019, Odisha

Tele Fax: 0674-2471574, E-mail : emails@ssevironics.com

Date: 08.03.2017

AMBIENT AIR QUALITY REPORTS

Name of Industry : M/s. Tata Steel Ltd, Jamadoba, TATA STEEL LTD., JAMADOBBA Group Plant Jharkhand

Month of Monitoring : February 2017

Date of analysis : 18.02.2017 to 27.02.2017

Ref/No: SSE/16/R- 2867

Name of Industry

Month of Monitoring

Date of analysis

Sl. No	Name of the Location	Date of Sampling	Time Weighted Average	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO _x (µg/m ³)	CO (mg/m ³)	NH ₃ (µg/m ³)	O ₃ (µg/m ³)	As (ng/m ³)	Ni (ng/m ³)	Cd (ng/m ³)	Cr (ng/m ³)
1.	Lagla gram panchayat	14.02.17	24hrly	89.12	42.25	7.6	15.2	0.16	24.2	5.1	BDL	BDL	ND	ND
2.	Saharjuri School	14.02.17	24hrly	85.18	46.32	6.4	15.8	0.12	23.8	5.0	BDL	BDL	ND	ND
3.	Ichhar High School, Purulia	15.02.17	24hrly	91.90	49.82	8.1	13.4	0.14	24.2	5.3	BDL	BDL	ND	ND
4.	Railway Colony, Bhojudih	15.02.17	24hrly	93.19	51.69	7.4	13.8	0.19	26.8	5.2	BDL	BDL	ND	ND
	CPCB Standard		24hrly	100	60	80	80	4(1hr)	400	180 (1hr)	--	--	--	--
	Method of Analysis & Code of Method													
				Gravimetric Method IS: 5182,Part-23	Gravimetric Method IS: 5182,Part-23	Improved West-Gaeke Method IS: 5182,Part-2	Modified Jacob & Hocheiser (Na, Arsenite) IS: 5182,Part-6	Non Dispersive Infrared Spectroscopy (NDIR) IS: 5182,Part-10	1.Chemiluminescence 2,1-diphenol Blue Method APHA-401	1.Chemiluminescence 2.Chemical Method IS:5182,Part-9	ICP Method After Sampling on EPM 2000 OR Equivalent Filter Paper.	ICP Method After Sampling on EPM 2000 OR Equivalent Filter Paper.	ICP Method After Sampling on EPM 2000 OR Equivalent Filter Paper.	ICP Method After Sampling on EPM 2000 OR Equivalent Filter Paper.

BDL Values: PM-10:-5µg/m³, PM-2.5:- 2.0µg/m³, SO₂:- 4 µg/m³, NO_x:- 9 µg/m³, CO:- 0.1 mg/m³, Ozone:- 5 µg/m³, Ni:- 0.05 ng/m³, As:- 0.05 ng/m³, NH₃:- 20 µg/m³ ND: Not Detected



Annexure-II

Upload of compliance report on company's website

The screenshot shows a web browser window with the URL www.tatasteel.com/sustainability/environment-compliance-reports/. The page title is "Annexure-EC compliance Oct'16 - March'17 Sukinda". The breadcrumb navigation is "Sustainability » Environment Compliance Reports". The main content area lists several reports, with the third one highlighted by a red box:

- EC Compliance Oct16 to March 17
- Half Yearly EC Compliance Report of Kalimela Open Cast Project Oct'16 to Mar'17
- Half Yearly EC Compliance Report of Lagla Mahal Sand Mining Project Oct'16 to Mar'17**
- Half Yearly EC Compliance Report of Mahal Saharjuri Sand Mining Project Oct'16 to Mar'17
- Half Yearly EC Compliance Report of Jamadoba Coal Washery Oct'16 to Mar'17
- EC Compliance Oct16 to March 17 - Banebari Manganese Mine

The screenshot shows a web browser window with the URL www.tatasteel.com/sustainability/environment-compliance-reports/. The page title is "Environmental Statement for Tata Central Hospital, Jamadoba for 2016-17". The breadcrumb navigation is "Sustainability » Environment Compliance Reports". The main content area lists several environmental statements, with the second one highlighted by a red box:

- Annual Environmental Statement of Gomardih pertaining for 2016-17
- Environmental Statement for Lagla Mahal Sand Mining Project for 2016-17**
- Environmental Statement for Kalimela Open Cast Project for 2016-17
- Environmental Statement for Jamadoba Colliery for 2016-17
- Environmental Statement for Jamadoba Coal Washery for 2016-17
- Environmental Statement for Digwadih Colliery for 2016-17
- Environmental Statement for Bhelatand Coal Washery for 2016-17

TATA STEEL

ENVIRONMENTAL POLICY

Tata Steel's environmental responsibilities are driven by our commitment to preserve the environment and are integral to the way we do business.

1. We are committed to deal proactively with Climate Change issue by efficient use of natural resources & energy; reducing and preventing pollution; promoting waste avoidance and recycling measures; and product stewardship.
 - We shall identify, assess and manage our environment impact.
 - We shall regularly monitor, review and report publicly our environmental performance.
 - We shall develop & rehabilitate abandoned sites through afforestation and landscaping and shall protect and preserve the biodiversity in the areas of our operations.
 - We shall enhance awareness, skill and competence of our employees and contractors so as to enable them to demonstrate their involvement, responsibility and accountability for sound environmental performance.
2. We are committed to continual improvement in our environmental performance.
 - We shall set objective-targets, develop, implement and maintain management standards and systems, and go beyond compliance of the relevant industry standards, legal and other requirements.
3. We will truly succeed when we sustain our environmental achievement and are valued by the communities in which we work.

Date : November 1, 2013

A handwritten signature in black ink, appearing to read 'T V Narendran', written over a horizontal line.

T V Narendran
Managing Director

