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The Regional Officer,
Orissa State Pollution Control Board
JCDL Campus, Pankapal,
Kalinganagar Industrial Complex,
Dist- Jajpur, Odisha.

KPO/Env/C-05/ 64 /2015
September 26, 2015.

Dear Sir,

Reg: Environmental Statement for the Period 2014-15 for 6 MTPA Steel Plant at Kalinganagar Industrial Complex by, Tata Steel Limited

We are enclosing the "Environmental Statement" for the year 2014-2015 for 6 MTPA Steel Plant at Kalinganagar Industrial Complex by Tata Steel for your kind consideration. It may kindly be noted that the steel plant was under construction during the year 2014-15. The commissioning activities started from Coke Battery heating since May 2015 which will continue over the period. We wish to mention that necessary control measures are being taken at site to minimize the impact on environment.

We trust that you will find the above in order.

Thanking you and assuring you of our best attention.

Yours faithfully,

For Tata Steel Limited

Head, Environment
Kalinganagar Project.

Encl : a/a.

Copy to: The Member Secretary, OSPCB, BBSR



TATA STEEL LIMITED

Odisha Project Kalinga Nagar Industrial Complex, Duburi, Jajpur, Odisha Pin 755 026 India
Registered office Bombay House 24 Homi Mody Street Mumbai 400 001
Tel. 91-22 66658232, Fax. 91-22 66657724
Corporate Identity Number L27100MH1907PLC000260
Website: www.tatasteel.com

**ENVIRONMENTAL STATEMENT
FOR THE YEAR 2014-15**

**6 MTPA STEEL PLANT AT KLAINGANAGAR INDUSTRIAL COMPLEX, ODISHA
TATA STEEL LIMITED**

**ENVIRONMENTAL DEPARTMENT
KALINGANAGAR PROJECT,
TATA STEEL LIMITED**

FORM-V**ENVIRONMENTAL STATEMENT FOR THE FINANCIAL YEAR 2014-15****Tata Steel Limited
6.0 MTPA Steel Plant, Kalinganagar Project****PART-A**

i)	Name and address of the owner/ occupier of the industry, operation or process	:	Rajiv Kumar VP, Operations Tata Steel Limited, Block-2, General Admin office Kalinga Nagar Industrial Complex Duburi-755026 Orissa
ii)	Industry Category Primary/(STC code) Secondary (STC code)	:	Large Metallurgical Industry — —
iii)	Production Capacity	:	6.0 MTPA Crude Steel Production Factor under construction
iv)	Year of Establishment	:	Under Construction
v)	Date of Last Environmental /Audit Report submitted	:	27.09.2014

PART-B**WATER AND RAW MATERIAL CONSUMPTION**

- i) **Total Water consumed (m3/day)**
- Process : Nil (Construction in progress)
- Cooling : 2450 (Construction & Spraying on roads)
- Domestic : 1080 (Drinking purpose at site)
3468 (Water supplied by IDCO)

Name of the product	Process water consumption per unit of product Output	
	During the previous Financial Year 2013-2014	During the previous Financial Year 2014-2015
Steel	Not Applicable as construction is in progress	

ii) Raw material consumption:

Not Applicable as
construction is in progress

Name of Raw Material	Name of the Products	Consumption of raw material	
		2013-14	2014-15
		MT/Yr.	MT/Yr.
Not Applicable	Steel	Not Applicable	Not Applicable

PART-C**POLLUTION DISCHARGED TO ENVIRONMENT/ UNIT OF OUTPUT**
(PARAMETERS AS SPECIFIED IN THE CONSENT ISSUED)

Note: As constructions is going on, no process discharge or emissions.
Please refer **Annexure-I** for Ambient Air Quality

SI No.	Pollutants	Quantity of Pollutants discharged (mass/day)		Concentration of Pollutants discharged (mass/volume)		Percentage of variation from prescribed standard with reasons
a)	WATER	Kg/day		mg/lit		–
		FY: 2013-14	FY: 2014-15	FY: 2013-14	FY: 2014-15	–
		Not Applicable		Not Applicable		–
b)	AIR	Kg/day		mg/Nm ³		–
		FY: 2013-14	FY: 2014-15	FY: 2013-14	FY: 2014-15	–
		Not Applicable		Not Applicable		–

PART-D**HAZARDOUS WASTES**

(AS SPECIFIED UNDER HAZARDOUS WASTES (MANAGEMENT, HANDLING AND TRANS BOUNDARY MOVEMENT RULES, 2008)

Sl. No as per Schedule-I	Hazardous Wastes	Total Quantity (Tonne/year)	
		2013-2014	2014-15
	Not applicable at present as construction is in progress		

PART-E
SOLID WASTE

Sl. No.	Solid waste	Total Quantity Generated	
		2013-2014	2014-2015
a.	From process	Nil	Nil
b.	From Pollution Control facilities	Nil	Nil
c.	Quantity recycled within the unit	Nil	Nil

PART-F

Characteristics of Hazardous as well as Solid wastes and their method of disposal:

Hazardous/ Solid Wastes	Characteristics	Method of disposal
Not applicable at present		

PART-G

Impact of the pollution control measures taken on conservation of natural resources and consequently on the cost of production	<ul style="list-style-type: none"> • Construction and erection of plant facilities are undertaken such a way that minimum adverse impact is on Environment. • Two ponds have been constructed within the project site to collect the rain water which will be used for sprinkling on roads thereby reducing the water intake from IDCO. • Tree plantation is being undertaken in & around site. Till 2014-15, 82017 nos. of trees planted in and around the site
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PART-H**Additional investment proposal for environmental protection including abatement of pollution**

- Investment of more than Rs. 1500 crores planned for pollution control equipment and other environmental protection measures are being implemented which includes:
 - ESPs, Bag filters, Dust suppression, Water sprinklers, dry fogging system, Fume extraction system etc.
 - WWTP at each individual plant and CETP is under construction for maximum recover, recycle & reuse of treated water.
 - Solid waste management is being carried out at site including municipal solid waste.
 - For Management of Hazardous Waste, Agreement has been made with Common Hazardous Waste Treatment, Storage and Disposal Facility
 - Rainwater harvesting ponds have been constructed at site.
 - Afforestation as per Green Belt development plan as well as avenue plantation in the periphery.
- These facilities are coming up along with plant facilities.
- Tree plantation is being carried out in & around KPO site. 82017 tree saplings have planted till 2014-15.

PART-I
(ANY OTHER PARTICULARS FOR IMPROVING THE QUALITY OF ENVIRONMENT)

<p>Any other particulars for improving the quality of environment</p>	<ul style="list-style-type: none"> • Tree plantation is undertaken in and around the site Up to FY 10-11: 1734 FY 11-12: 4800 FY 12-13: 12622 FY 13-14: 29888 FY 14-15: 33000 • 6000 Kms of road-width covered for water spraying to contain dust on roads of project site. • Regular monitoring of ambient air, surface water, ground water and ambient noise is carried out. Please refer to Annexure-I. • Hazardous Waste Authorization for Construction phase was issued by Odisha State Pollution Control Board (OSPCB) on 29.11.2014 • Authorization under Biomedical Waste Rules was granted by OSPCB on 27.02.2015. • Consent to Operate (CTO) for 5X8.769 MW DG sets granted by OSPCB on 19.03.2015. • About 2300 Sq.m of Garden has been added at various locations inside project site such as Coke Oven, BPP, and Blast Furnace. • 23680 sq.m of garden landscape are being maintained at Project site. • Soil quality & Tree growth study in plantation sites is being carried out in collaboration with Kolkata University as a special initiative for Green Belt Development.
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Annexure-I

Ambient Air Quality Monitoring around KPO site:

Location	PM ₁₀ (or size <10 µm) µg/m ³	PM _{2.5} (or size <2.5µm) µg/m ³	SO ₂ (µg/m ³)	NO _x (µg/m ³)	CO (mg/m ³)
Khandiaposhi	55.11	31.48	11.77	13.51	0.26
Khuranti	50.98	29.32	11.34	13.04	0.23
Bhitaramanika	36.97	21.78	9.62	11.32	0.14
Jakhapura	58.58	33.28	12.09	13.81	0.29
Kankarajhar	40.10	23.50	10.06	11.74	0.16
Belohari	47.47	27.50	10.91	12.60	0.20
Gobarghati Medical	43.68	25.53	10.49	12.16	0.18
Standard	60.00	40.00	50.00	40.00	2.00

Surface & Groundwater Monitoring around KPO

Surface water/ Station	Frequen cy of test	pH	DO, mg/l	TSS, mg/l	BOD mg/l	COD, mg/l	Iron, mg/l	Cr+6, mg/l	Mn, mg/l	Coliform MPN/100ml
LIMIT (IS 2296, Class C)	-	6.5-8.5	4	--	3	-	50	0.05	-	5000
Gonda Nalla	Monthly	7.4	7.3	73.9	1.34	4.97	0.6	0.007	0.06	512
Ground water/ Station	Frequenc y of test	pH	Turbi dity NTU	Hard- ness, mg/l	TDS, mg/l	Iron, mg/l	Cr+6 mg/l	Zn, mg/l	Fluori des	Coliform MPN/100ml
LIMIT (BIS10500)	-	6.5-8.5	5	300	500	0.3	0.05	5	1	-
Duburi Jn	Monthly	6.8	< 1	63.6	197.8	0.16	BDL	0.31	BDL	ND

Site Progress: A Glance



Coke Ovens



Coke Oven Battery 2 A & 2 B



Bag Filter for Coke Ovens



Sulphur Recovery Unit



Captive Power Plant



Sinter Plant



Plant Panoramic View



Green Belt Development

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