



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

OP/Env/C-05/44 /2014
September 27, 2014.

Dear Sir,

Reg: Environmental Statement for the Period 2013-14 for 6 MTPA Steel Plant at Kalinganagar Industrial Complex by, Tata Steel Limited

We are enclosing the "Environmental Statement" for the year 2013-2014 for 6 MTPA Steel Plant, under construction, at Kalinganagar Industrial Complex by Tata Steel for your kind consideration.

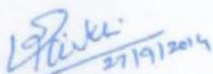
It may kindly be noted that the construction activities at the site are in full swing and commissioning activities are likely to start in very near future. We wish to mention that all control measures are being taken at site to minimize the impact on environment.

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



Received

29-09-2014

**ENVIRONMENTAL STATEMENT
FOR THE YEAR 2013-14**

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

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

FORM – V**TATA STEEL LIMITED
6 MTPA STEEL PLANT, ODISHA PROJECT****ENVIRONMENT STATEMENT REPORT FOR THE YEAR ENDING 31.03.2014****PART-A**

| | | | |
|------|---|---|--|
| I) | Name and address of the occupier | : | Rajiv Kumar Vice President, Operations, Tata Steel Limited, Block – 2, General Admin Office, Kalinganagar Industrial Complex, Duburi - 755026, Dist - Jajpur |
| II) | Industry Category Primary (SIC Code) Secondary (SIC Code) | : | Large Metallurgical Industry : - : - |
| III) | Production capacity | : | 6.0 MTPA Crude Steel Production (Factory under construction) |
| IV) | Year of establishment | : | Under Construction |
| V) | Date of last environmental statement submitted. | : | 2 September, 2013 |

PART-B**WATER & RAW MATERIAL CONSUMED**

- i) **Total Water consumed** (m3/day)
- Process : Nil (Construction in progress)
- Cooling : 2880 (Construction & Spraying on roads)
- Domestic : 1080 (Drinking purpose at site)
- 3960 (Water supplied by IDCO)

| Name of the product | Process water consumption per unit of product Output | |
|---------------------|--|--|
| | During the previous Financial Year 2012-2013 | During the previous Financial Year 2013-2014 |
| Steel | Not Applicable as construction is in progress | |

- ii) **Raw Material Consumption: Not Applicable at present as Construction is in progress.**

| Name of Raw Material | Name of the Products | Consumption of raw material | |
|----------------------|----------------------|-----------------------------|----------------|
| | | 2012-13 | 2013-14 |
| | | MT/Yr. | MT/Yr. |
| Not Applicable | Steel | Not Applicable | Not Applicable |
| | | | |
| | | | |
| | | | |
| | | | |

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

Note – As constructions is going on, no process discharge or emissions.
Please refer Annexure-1 for Ambient Air Quality

| Pollutants | Quantity of pollutants Discharged (mass/day) | Concentrations of pollutants discharged (mass / volume) | Percentage of variation from prescribed (standards with reasons. |
|------------|--|---|--|
| a) WATER | kg/day | mg/lit | - |
| | <u>12-13</u> <u>13-14</u> Not Applicable | <u>12-13</u> <u>13-14</u> Not Applicable | - |
| b) AIR | kg/ day | mg/Nm ³ | - |
| | <u>12-13</u> <u>13-14</u> Not Applicable | <u>12-13</u> <u>13-14</u> Not Applicable | - |

PART-D**HAZARDOUS WASTES**

(AS SPECIFIED UNDER HAZARDOUS WASTES MANAGEMENT AND HANDLING RULES' 2008)

| Sl. No. as per Schedule-I | Hazardous Wastes | Total Quantity (Tonne/year) | |
|---------------------------|---|-----------------------------|---------|
| | | 2012-13 | 2013-14 |
| | Not Applicable at present as construction is in progress. | - | - |
| | | | |

PART-E**SOLID WASTES**

| Sl. No. | Solid Waste | Total Quantity Generated | |
|---------|-----------------------------------|--------------------------|---------|
| | | 2012-13 | 2013-14 |
| a. | From process | Nil | Nil |
| b. | From Pollution Control facility | 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 pollution control measures 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. During 2013-14- 29888 Nos. of trees. |
|---|---|

PART – H**Additional investment proposal for environmental protection including abatement of pollution**

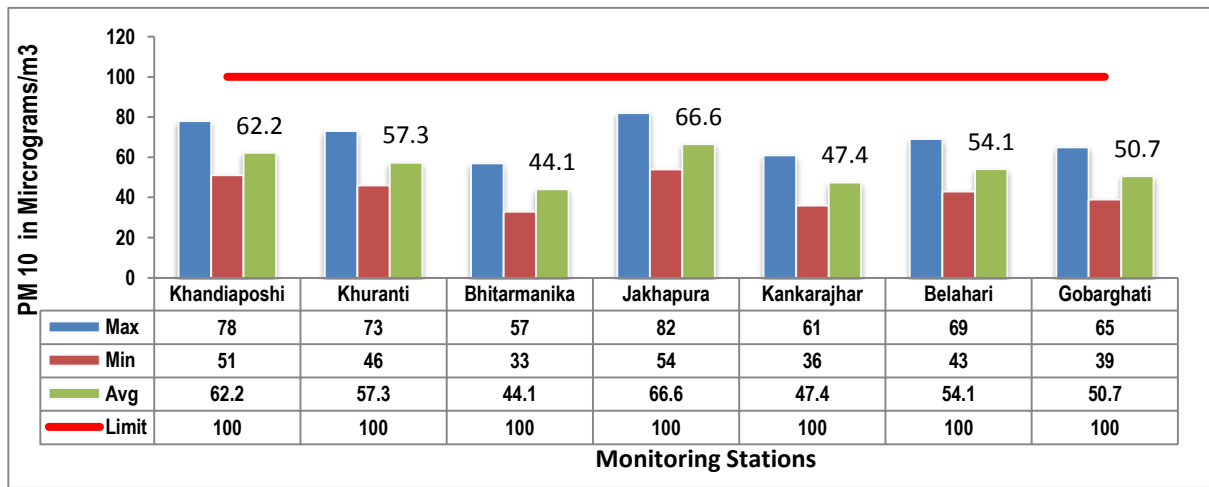
- Investment of more than 1500 crores planned for pollution control equipment and other environmental protection measures are being implemented which includes:
 - ESPs, Bag-filters, Dust Suppression, Water sprinklers, dry fogging system, Fume extraction system etc.
 - WWTP at each individual plant and 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.
 - 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. 29888 tree saplings have planted during 2013-14. About 10000 sq.m of garden lawn has been developed at KPO site.

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

| | |
|---|---|
| <p>Any other particulars for improving in respect of environmental protection and abatement of pollution.</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 • Water Sprinkling is being done on kachha roads within project site to suppress dust • Regular monitoring of ambient air, surface water, ground water and ambient noise is carried out. Please refer Annexure-1 • Tata Steel has already applied for grant of Consent to Operate and Authorization for Hazardous Waste Management. |
|---|---|

Annexure-1

Ambient Air Monitoring (PM 10) in & around project site in 2013-14:



Surface & Ground water Quality in & around Project site:

| Surface water/ Station | Date | pH | DO, mg/l | TSS, mg/lit | BOD mg/lit | COD, mg/lit | Iron, mg/lit | Cr+6, mg/lit | Mn, mg/lit | Coliform MPN, Nos |
|---------------------------|------|---------|----------|-------------|------------|-------------|--------------|--------------|------------|-------------------|
| LIMIT (IS 2296, Class C) | - | 6.5-8.5 | 4 | -- | 3 | - | 50 | 0.05 | - | 5000 |
| Barkhai (SW1) Upstream | Avg | 7.2 | 7.3 | 184 | 1.41 | 4.42 | 0.96 | 0.009 | 0.14 | 530 |
| Kusunpur (SW2) Downstream | Avg | 6.9 | 6.7 | 216 | 1.74 | 5.17 | 1.18 | 0.018 | 0.21 | 740 |

| Ground water/ Station | Date | pH | Turbi dity, NTU | Hardness, mg/lit | TDS, mg/lit | Iron, mg/lit | Cr+6, mg/lit | Zn, mg/lit | Fluori des | Coliform MPN, Nos |
|-----------------------|------|---------|-----------------|------------------|-------------|--------------|--------------|------------|------------|-------------------|
| LIMIT (BIS 10500) | - | 6.5-8.5 | 5 | 300 | 500 | 0.3 | 0.05 | 5 | 1 | - |
| Duburi Jn (GW4) | Avg | 7.2 | 1.3 | 55 | 158 | 0.12 | BDL | 0.19 | BDL | ND |
| Maniapatla (GW1) | Avg | 7.1 | 1.2 | 42 | 144 | 0.12 | BDL | 0.15 | BDL | ND |

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