

FORM – V (See rule – 14)
Environmental Statement for the financial year ending the 31st March -2014
6&7 Pits Colliery

PART – A

| | |
|--|---|
| 1.Name and address of the owner/ occupier of the : industry/ operation or process | 6&7 Pits Colliery |
| Agent : | Mr. Kumar Akhilesh Singh Head(6&7 Pits Colliery) Tata Steel Ltd., P.O.- Bhaga Dist.- Dhanbad, Jharkhand-828301 |
| Nominated Owner : | Mr. T.V.Narendran Managing Director, Tata Steel Ltd (India and South East Asia) Jamshedpur, Dist- East Singhbhum Jharkhand – 831 001 |
| 2.Industry category: Primary (STC Code) Secondary (STC Code) | -- |
| 3.Production Capacity – Units | 0.60 MTPA – Raw Coal |
| 4.Year of Establishment | 1937 |
| 5.Date of the last environmental statement submitted | 30 th September' 2013 (Vide Letter No.S&E/ENV/ESSA/05/953/13) |

PART – B

Water and Raw Material Consumption

1. Water Consumption M³ / day.

| | Water consumption in 2013-2014 |
|-------------------|---------------------------------------|
| Process | Not Applicable |
| Industrial | 12.90 M ³ /day |
| Domestic | 1675.8 M ³ /day |

| Sl. No | Name of the products | Process water consumption per unit of product output. | |
|---------------|-----------------------------|--|--|
| | | During the previous financial year 2012-2013 | During the current financial year 2013-2014 |
| 1. | Raw Coal | Not Applicable | Not Applicable |

FORM – V (See rule – 14)**Environmental Statement for the financial year ending the 31st March -2014****6&7 Pits Colliery****2. Raw Material Consumption**

| Sl. No | Name of the Raw Material | Name of the product | Raw Materials consumption per unit production output. | |
|--------|--------------------------|---------------------|---|---|
| | | | During the previous financial year 2012-2013 | During the current financial year 2013-2014 |
| 1. | Explosives | Raw Coal | 0.41 Kg/Tonne | 0.30 Kg/Tonne |
| 2. | Detonators | | 0.76 Nos/Tonne | 0.61 Nos/Tonne |

*Industries may use codes if disclosing details of raw materials would violate contractual obligation, otherwise all industries have to name the raw materials used.

PART – C**Pollution discharged to environment / unit of output.****(Parameter as prescribed in the consent issued)**

| Sl. No | Pollution | Quantity of pollutants discharged (mass/ day) | | Concentration of pollutants in discharges (Mass/Volume) | | Percentage of variation from prescribed standard with reason. |
|--------|-----------|---|--|---|---|---|
| A. | AIR | SPM Level : 24 Hourly Limit- 700µg/m ³ | RPM Level : 24 Hourly Limit- 300µg/m ³ | SO ₂ Level: 24 Hourly Limit- 120µg/m ³ | NO _x Level: 24 Hourly Limit- 120µg/m ³ | All values are within limits. |
| | | <i>(As per Air Quality Standards for Jharia Coal Mines vide notification G.S.R.742(E), dated 25.9.2000)</i> | | | | |
| | | 264.79 | 136.69 | 10.36 | 13.41 | |
| B. | WATER | Parameter | Results | Measurement | Limit | All values are within limits. |
| | | pH | 7.34 | pH | 5.5-9.0 | |
| | | Total Suspended Solid | 37.21 | mg/ltr. | 100 | |
| | | Total Dissolved Solid | 658.29 | mg/ltr. | 2100 | |
| | | Biological Oxygen Demand | 4.63 | mg/ltr. | 30 | |
| | | Chemical Oxygen Demand | 43.29 | mg/ltr. | 250 | |
| | | Oil & Grease | 0.68 | mg/ltr. | 10 | |

The colliery does not have any single point source of air pollution. Hence, quantitative estimation of air pollutants discharged in Kg/day cannot be ascertained.

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PART – D

Hazardous Wastes

(as specified under Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2008)

| Sl No | Hazardous Waste | Total Quantity | |
|-------|---|--|---|
| | | During the previous financial year 2012-2013 | During the current financial year 2013-2014 |
| 1. | From process Used Oil Used cap lamp Battery | 630 Litres 900 Nos | 1050 Litres 1426 Nos |
| 2. | From pollution control facility | - | - |

PART – E

Solid Wastes

| Sl No | Solid Wastes | Total Quantity (Kg.) | |
|-------|---|--|---|
| | | During the previous financial year 2012-2013 | During the current financial year 2013-2014 |
| 1. | Steel Scrap and other materials (conveyor belt, cable pieces waste) collected from U/G mines. | 98 Tonnes | 210 Tonnes |
| 2. | Quantity recycled or reutilized within the unit/ sold/ disposed | All wastes sold to recyclers | All wastes sold to recyclers |

PART – F

Please specify the characterization (in term of composition and quantum) of hazardous as well as solid wastes and indicate disposal practices adopted for both these categories of wastes.

| Category of Waste | Characteristics | Quantity | Disposal Practice |
|---|-------------------------------------|-------------------------|---|
| Solid Waste 1. Steel Scrap and other materials | Solid | 210 Tonnes | Steel scrap and other solid wastes, which is mentioned here sent to central scrap yard for segregation and disposal to vendors. |
| Hazardous Waste 1. Used Oil 2. Used Cap Lamp Battery | Used Oil (Liquid) Battery(Solid) | 1050 Litres 1426 Nos | Hazardous wastes are disposed off to registered recyclers according to applicable Hazardous Wastes Management Rules. |

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PART – G

Impact of the pollution abatement measures taken on conservation of natural resources and on the cost of production.

Rs. 450.48 lakhs yearly on cost of stowing activities i.e filling of U/G voids for surface protection and prevention of subsidence.

Rs. 45 lakhs yearly on cost of Fire Control measures (Fire/Isolation Stopping and Nitrogen plant)

Rs. 10 lakhs yearly on cost of Goaf Filling activities.

Rs. 100000 yearly on cost of Drain repairing /maintenance, settling tank maintenance jobs.

Rs. 5,00,000 incurred annually for Horticultural activities including green belt development.

Rs. 10 lakhs approx incurred yearly on water spraying costs in underground and surface.

A Continuous Ambient Air Quality Monitoring Station has been installed at Jamadoba for online monitoring with data transfer to JSPCB, Ranchi. Cost incurred for this system is 60 lakhs.

PART – H

Additional measures/ investment proposals for environmental protection including abatement of pollution, prevention of pollution

The above environmental measures will be continued in future too.

PART – I

Any other particulars for improving the quality of environment

1. We are providing safe drinking water from our water treatment plant & MADA to our employees.
2. We are regularly sprinkling water in an around the units, to suppress dust.
3. We provide dust mask to our employees to prevent exposure to dust in underground mines.
4. Our welfare department arranges to clean the domestic garbage's from our colonies to provide better environment.
5. We also reimburse the cost of LPG cylinder refilling cost to the employees to avoid coal burning.
6. Regular monitoring of Air Quality & mine water analysis by our separate Environment Cell.
7. We have already done the tree plantation job and this is a continuous process in company lease hold areas.
8. Regular thrust on Environment awareness conducting training classes at P.T.I., Jamadoba.
9. We are an IMS certified unit (ISO 9001 & 14001 and OHSAS 18001 certified).

Name of Unit – 6&7 Pits Colliery

Head, 6&7 Pits Colliery
TATA STEEL LIMITED