

**TATA STEEL LIMITED**

**Environmental Monitoring Report of CRM Complex at Bara, Jamshedpur  
STACK EMISSION MONITORING REPORT FOR 2014-15**

All data in mg/Nm3

| Location                              | Parameter | Apr-14 | May-14 | Jun-14 | Jul-14 | Aug-14 | Sep-14 | Oct-14 | Nov-14 | Dec-14 | Jan-15 | Feb-15 | Mar-15 |
|---------------------------------------|-----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Mill Fume Exhaust (Demister APC)      | PM        | 8.9    | 10.2   | 10.5   | 12.8   | 10.9   | 8.5    | 10.4   | 12.4   | 13.2   | 12.2   | 10.9   | 11.3   |
|                                       | SOx       | NT     | NT     | NT     | NT     | NT     | NT     | NT     | NT     | NT     | NT     | NT     | NT     |
|                                       | NOx       | NT     | NT     | NT     | NT     | NT     | NT     | NT     | NT     | NT     | NT     | NT     | NT     |
| Boiler stack (O2 analyser)            | PM        | 9.5    | 10.4   | 8.9    | 8.4    | 10.5   | 9.8    | 10.2   | 11.2   | 10.5   | 9.5    | 11.3   | 10.4   |
|                                       | SOx       | NT     | NT     | NT     | NT     | NT     | NT     | NT     | NT     | NT     | NT     | NT     | NT     |
|                                       | NOx       | 6      | NT     | NT     | NT     | NT     | NT     | NT     | NT     | NT     | NT     | NT     | NT     |
| ARP stack (Scrubber)                  | PM        | 12.4   | 44.3   | 30.6   | 46.2   | 45.0   | 20.8   | 25.6   | 31.4   | 30.3   | 39.8   | 25.7   | 28.7   |
|                                       | SOx       | NT     | NT     | NT     | NT     | NT     | NT     | NT     | NT     | NT     | NT     | NT     | NT     |
|                                       | NOx       | NT     | NT     | NT     | NT     | NT     | NT     | NT     | NT     | NT     | NT     | NT     | NT     |
| Pickling line fume exhaust (Scrubber) | Acid Mist | 10.7   | 12.4   | 8.9    | 9.9    | 6.5    | 5.3    | 7.7    | 10.9   | 6.5    | 8.7    | 4.6    | 7.9    |
|                                       | PM        | 28.4   | 16.3   | 12.6   | 18.9   | 26.9   | 12.9   | 10.5   | 15.4   | 18.6   | 22.9   | 20.4   | 10.5   |
|                                       | SOx       | NT     | NT     | NT     | NT     | NT     | NT     | NT     | NT     | NT     | NT     | NT     | NT     |
|                                       | NOx       | NT     | NT     | NT     | NT     | NT     | NT     | NT     | NT     | NT     | NT     | NT     | NT     |
|                                       | Acid Mist | 7.1    | 6.9    | 5.2    | 5.8    | 4.2    | 4.7    | 5.5    | 4.2    | 5.5    | 6.1    | 5.3    | 6.3    |

\* NT = Not Tractable, NA = Not Available

*Manager Lab.*  
Manager Lab.  
Environment Management

*Sr. Manager*  
Sr. Manager  
Environment Management

**TATA STEEL LIMITED**

**Environmental Monitoring Report of CRM Complex at Bara, Jamshedpur**

**CRM TREATED EFFLUENT MONITORING REPORT FOR 2014-15**

| Location           | Parameter    | Norm    | Unit | Apr-14 | May-14 | Jun-14 | Jul-14 | Aug-14 | Sep-14 | Oct-14 | Nov-14 | Dec-14 | Jan-15 | Feb-15 | Mar-15 |
|--------------------|--------------|---------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Drain at Gate No-1 | pH           | 6.0-8.5 | -    | 8.21   | 8.37   | 8.23   | 8.15   | 8.24   | 8.16   | 7.87   | 7.91   | 8.22   | 8.15   | 8.00   | 8.32   |
|                    | TSS          | 100     | mg/L | 45     | 33     | 42     | 36     | 54     | 15     | 80     | 52     | 54     | 59     | 34     | 55.00  |
|                    | Oil & Grease | 10      | mg/L | 0.8    | 1      | 2.4    | 2.6    | 1.4    | 1.8    | 1.4    | 1.2    | 1.6    | 1.0    | 1.8    | 1.60   |
|                    | Cr+6         | 0.20    | mg/L | 0.09   | 0.05   | 0.01   | 0.04   | 0.03   | 0.04   | NT     | 0.04   | NT     | 0.02   | 0.026  | NT     |
| Drain at Gate No-2 | COD          | 250     | mg/L | 20     | 14     | 12     | 16     | 25     | 11     | 24     | 21     | 20     | 61     | 27     | 35.40  |
|                    | pH           | 6.0-8.5 | -    | 7.66   | 7.95   | 7.02   | 7.98   | 7.68   | 7.74   | 7.58   | 6.16   | 8.34   | 8.40   | 8.26   | 8.11   |
|                    | TSS          | 100     | mg/L | 24     | 54     | 78     | 55     | 62     | 37     | 53     | 52     | 59     | 63     | 26     | 42     |
|                    | Oil & Grease | 10      | mg/L | 24     | 0.8    | 1.6    | 1.4    | 1.2    | 0.8    | 1      | 1      | 1.4    | 1.4    | 1.2    | 1.2    |
|                    | Cr+6         | 0.20    | mg/L | 0.02   | 0.03   | NT     | 0.03   | NT     | 0.03   | NT     | 0.02   | NT     | 0.05   | 0.013  | NT     |
|                    | COD          | 250     | mg/L | 92     | 78     | 21     | 75     | 20     | 67     | 72     | 57     | 18     | 57     | 47     | 24.1   |

Standards applicable as per Environment (Protection) (Third Amendment) Rules, 2012 issued in Gazette of India Notification vide No.: G. S. R. 277 (E) dated March 31, 2012.

NT - Not Traced

*Manoj Kumar*

Manager - Lab.

Environment Management

*Anup Sivarava*

Sr. Manager

Environment Management

