

**ENSURING
ENVIRONMENTAL
COMPLIANCE THROUGH
CEMS**

Jharkhand State Pollution Control Board

Jharkhand Star Rating Program

- MoU with University of Chicago on 1st March 2019
- Voluntary Phase launched on 5th June 2019
- Mandatory Phase to start from 5th June 2020
- Rating based on PM emission till June 2021
- SOX, NOX & ZLD will be included from 5th June 2021 onwards
- Hon'ble NGT has also ordered for the rating of industries

About Star Rating Program

- The Star Rating program utilizes continuously monitored emissions data from industrial plants, to categorize them from 1-star to 5-star.
- The Star Rating Program aims to decrease air pollution by increasing transparency
- Transparency among industries spurs abatement by improving Industry Owners' / Operators' information about their own plant emissions

Why Star Rating?

- Increased transparency of emission data
- Recognition to industries with low emission
- Increased data reliability.
- Capacity building opportunities for industries
- Increasing public awareness

Voluntary Phase

- 3 industries applied for the voluntary phase
- 2 industries (Tata Steel and Maithan Power) selected-
Based on PM emission criteria
- Process will be standardized by November 2019
- Rating will be made available to public from December 2019 onwards (www.jspcb.info)
- Best performing industry will be facilitated on 5th June 2020

Mandatory Phase

- Proposed to start from 5th June 2020
- Mandatory for all the 17 category highly polluting industries
- Registration process will start from 1st March 2020
- Till now we are focusing on quantitative data
- Focus will now be on qualitative data as well
- Board will help in calibration process from January 2020 onwards

[CPCB Guidelines Web Link](#)

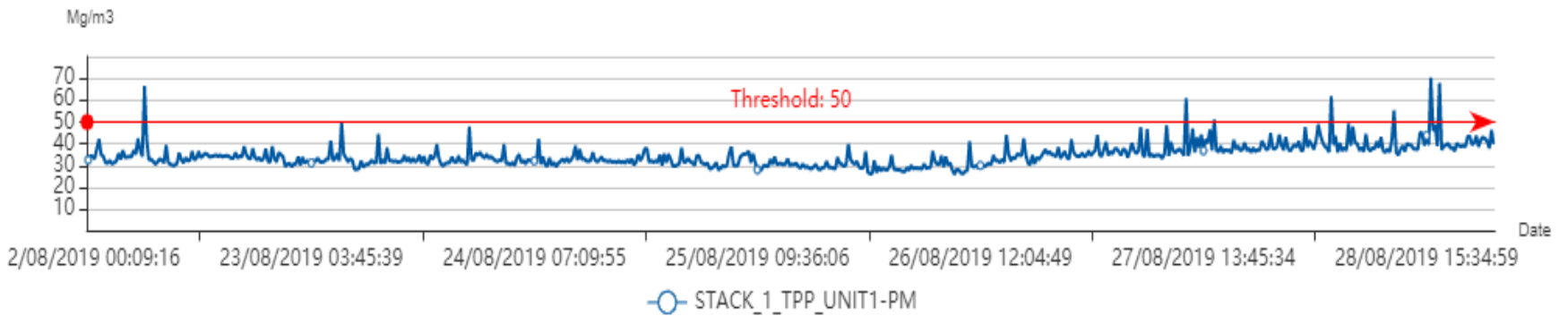
https://cpcb.nic.in/upload/thrust-area/Final_OCEMS_Guidelines_14-June-2018.pdf



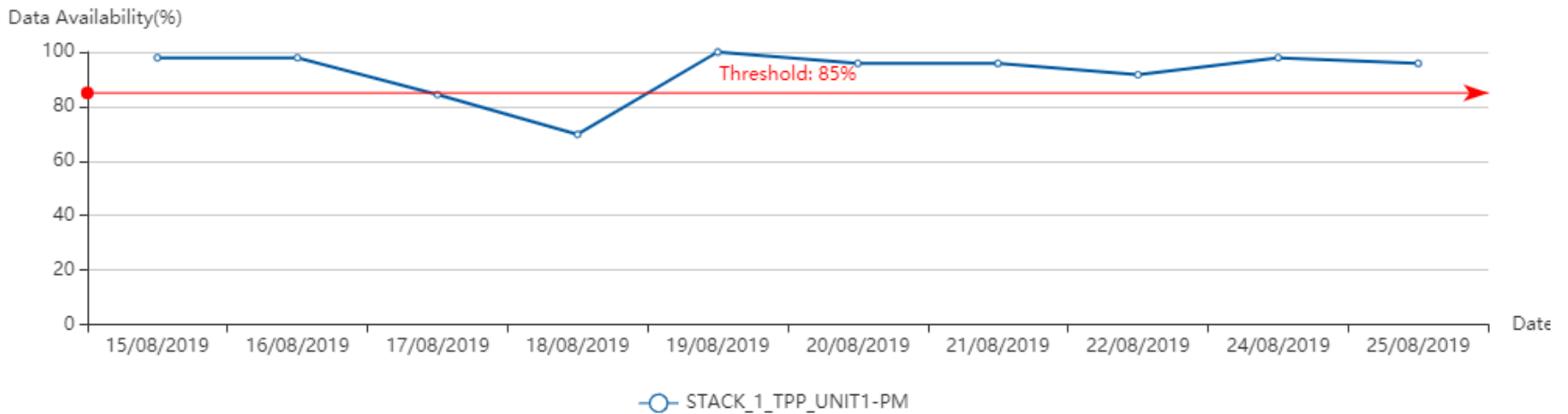
**Beware:
Regulators are Watching
YOU**

Data Processing

15 Minute Average Data - PM



15 Minute Average Data [Switch to Bar Chart](#)



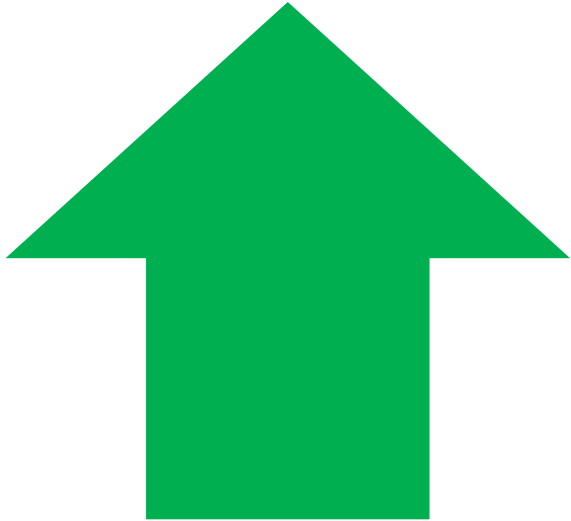
Analysis of Data from Industries

Stack_34_LD_02_Secondary_Emission_02	jhar_analyzer_39	PM	3.78	mg/Nm3	9/9/2019 6:03
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Stack_34_LD_02_Secondary_Emission_02	jhar_analyzer_39	PM	3.78	mg/Nm3	9/9/2019 4:49
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Stack_34_LD_02_Secondary_Emission_02	jhar_analyzer_39	PM	3.78	mg/Nm3	9/9/2019 3:03
Stack_34_LD_02_Secondary_Emission_02	jhar_analyzer_39	PM	3.78	mg/Nm3	9/9/2019 2:26
Stack_34_LD_02_Secondary_Emission_02	jhar_analyzer_39	PM	3.78	mg/Nm3	9/9/2019 2:09
Stack_34_LD_02_Secondary_Emission_02	jhar_analyzer_39	PM	3.78	mg/Nm3	9/9/2019 1:36
Stack_34_LD_02_Secondary_Emission_02	jhar_analyzer_39	PM	3.78	mg/Nm3	9/9/2019 0:35
Stack_34_LD_02_Secondary_Emission_02	jhar_analyzer_39	PM	3.78	mg/Nm3	9/8/2019 23:45
Stack_34_LD_02_Secondary_Emission_02	jhar_analyzer_39	PM	3.78	mg/Nm3	9/8/2019 22:05
Stack_34_LD_02_Secondary_Emission_02	jhar_analyzer_39	PM	3.78	mg/Nm3	9/8/2019 21:32
Stack_34_LD_02_Secondary_Emission_02	jhar_analyzer_39	PM	3.78	mg/Nm3	9/8/2019 21:00
Stack_34_LD_02_Secondary_Emission_02	jhar_analyzer_39	PM	3.78	mg/Nm3	9/8/2019 20:17
Stack_34_LD_02_Secondary_Emission_02	jhar_analyzer_39	PM	3.78	mg/Nm3	9/8/2019 19:30
Stack_34_LD_02_Secondary_Emission_02	jhar_analyzer_39	PM	3.78	mg/Nm3	9/8/2019 18:49
Stack_34_LD_02_Secondary_Emission_02	jhar_analyzer_39	PM	3.78	mg/Nm3	9/8/2019 18:15
Stack_34_LD_02_Secondary_Emission_02	jhar_analyzer_39	PM	3.78	mg/Nm3	9/8/2019 17:07
Stack_34_LD_02_Secondary_Emission_02	jhar_analyzer_39	PM	3.78	mg/Nm3	9/8/2019 16:31
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Data
Inconsistency

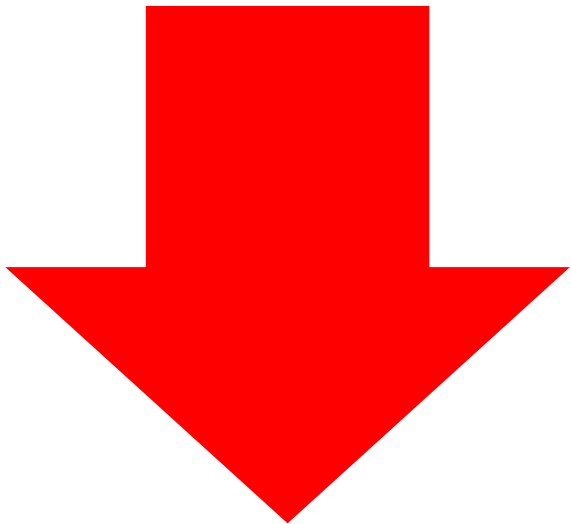
Data
Manipulation

Choose Your Way



Compliance

- * Better Public Perception
- * Reduced Legal Problems
- * Incentives



Non-Compliance

- * Ethical Issues
- * High Legal Problems
- * Penalty- EC Charge

Comply and get the advantage

Average of 15 minutes data strictly at 15 minutes interval.



Raw monthly data of the previous month on 2nd day of every month.



Raw data of past three months (June, July, August) in Excel format to be provided immediately.

PARAMETER SPECIFIC EMISSION STANDARD: ONLINE

Industries/Facilities	Emission Parameters
Aluminum	PM, CO, Total Fluoride,
Cement Plant	PM, SO ₂ , HCl, HF, TOC & NO _x
Integrated Iron & Steel Plants	PM, SO ₂ , NO _x & CO
Oil Refinery	PM, SO ₂ , CO & H ₂ S
Petrochemical	PM, SO ₂ , NO _x & CO
Power Plant	PM, SO ₂ , NO _x , & Hg
Zinc	PM & SO ₂
Copper	PM & SO ₂
Biomedical Waste Incinerator	PM, SO ₂ , HCl, CO & CO ₂
Common Hazardous Waste Incinerator	PM, HCl, SO ₂ , NO _x , HF, TOC & CO
Sugar, Cotton Textile, Composite Woolen Mills, Synthetic Rubber, Pulp & Paper, Distilleries, Leather Industries, Calcium Carbide, Carbon Black, Natural Rubber, Asbestos, Caustic Soda, Small Boilers, Aluminium Plants, Tanneries, Inorganic Chemicals & other such industries using boilers	PM, SO ₂ & NO _x
Distillery	PM
ChlorAlkali	Cl ₂ & HCl
Fertilizer	PM & Fluoride

PARAMETER SPECIFIC EMISSION STANDARD: ONLINE

Industries/Facilities	Emission Parameters
Bio-Medical Waste Incinerators	PM, NO _x , HCl, CO & CO ₂
Hazardous Waste Incinerators	PM, HCl, SO ₂ , NO _x , HF, TOC & CO



The program will help in improving the data availability and data quality



This will strengthen the monitoring mechanism



Emission Trading Scheme may be introduced in line with "Emission Trading Scheme" recently launched at Surat, Gujarat

Where
the
program
will lead
for?



THANK YOU
