



Jharkhand State Pollution Control Board
झारखण्ड राज्य प्रदूषण नियंत्रण पषर्द

Jharkhand Star Rating Program

The Star Rating Program is a novel initiative to maintain transparency of environmental performance



Research Partner



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About the Star Rating Program

Jharkhand State Pollution Control Board (JSPCB) has taken numerous progressive steps to improve monitoring and regulatory framework for industrial emissions and that includes installation of several continuous emission monitoring systems (CEMS) in industrial plants and going online with the process for consent to operate and consent to establish, among many others. In line with international best practices, JSPCB has also made available real-time emission data on its website.

JSPCB launched the Star Rating Program, a data disclosure and transparency initiative, in 2019 to address the problem of industrial air pollution in the state. The program utilizes continuously monitored emissions data from major industrial plants to categorize industries from 1-star to 5-star, i.e. from the least compliant to the most compliant. Besides informing the public and industries, the program also aims to encourage healthy competition among industries for better regulatory compliance to reduce emission. JSPCB collaborated with the University of Chicago Trust (UC Trust) for this initiative. The UC Trust, through the Energy Policy Institute at the University of Chicago (EPIC India), has supported JSPCB in the design and implementation of the program.

Jharkhand is the third state in the country to launch this program, after Maharashtra and Odisha. Other countries have also widely used public disclosure and transparency initiatives to improve environmental outcomes. Examples include the US Toxic Release Inventory, Indonesia's PROPER, the Philippines' Eco-watch, and the Chinese GreenWatch. The low cost of these policies focusing on releasing information already collected by the Government has a universal appeal to Governments.

An industrial air pollution map is available on this website, which gives a ranking to the industries based on their PM emissions.

Key Advantages



Transparency of information and access to pollution ratings: The Star Rating Program makes information on polluters available for the public in a transparent and accessible manner.



Regular interaction between industries and regulators: Integrating the Star Rating program into the regulatory framework can facilitate interaction between the industries and regulators.



Tracking of industrial pollution: Regularly uploaded Star Rating Report cards can lead to effective tracking of emissions.

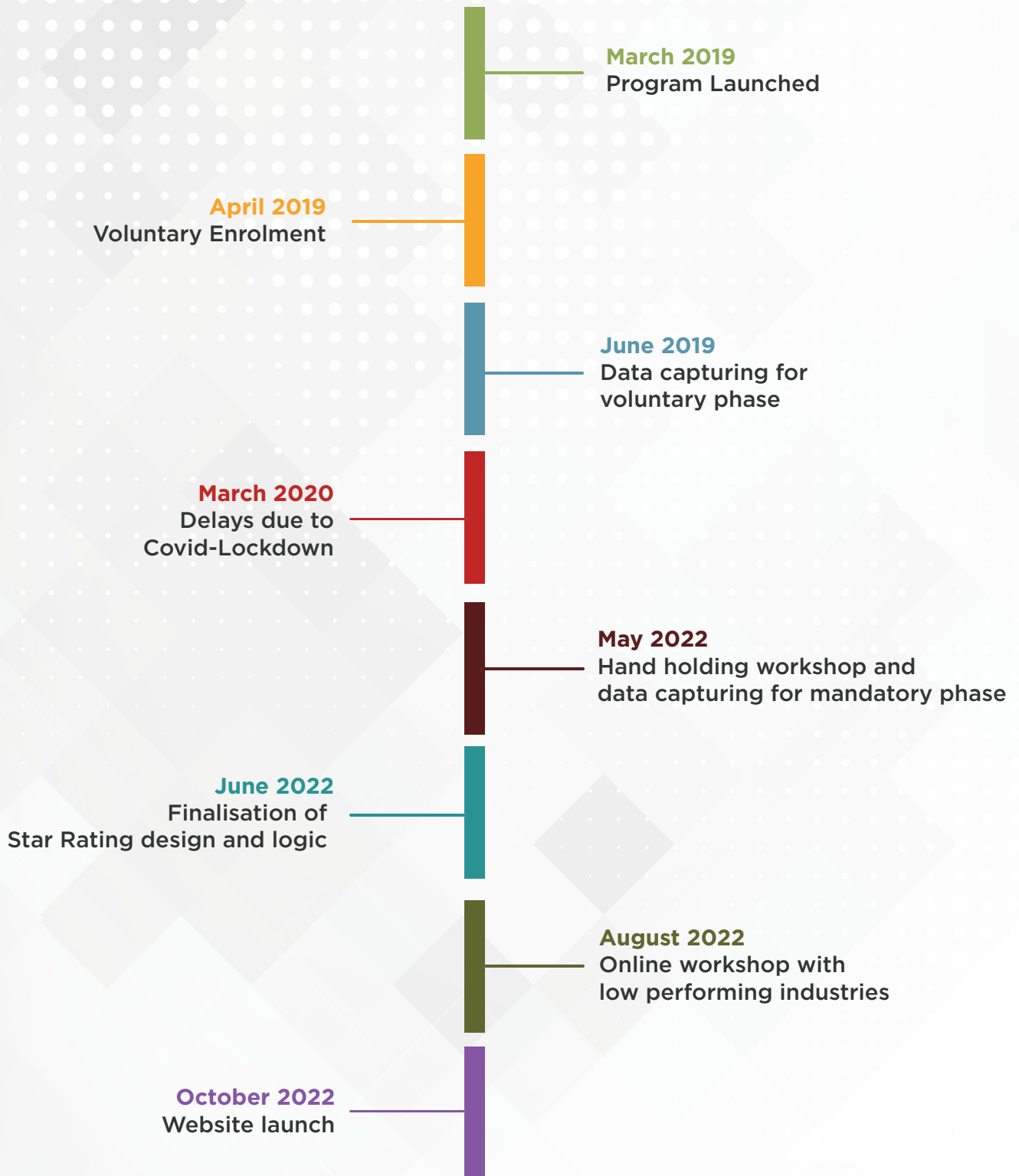


Low-cost Implementations: The program has low cost and high effectiveness, as most pollution control boards in the country already collect high quality data on industrial emissions generated through CEMS.



Pollution abatement technology adaptation: Information on industrial emissions can incentivize adopting technology to decrease air pollution.

Timeline of events



How are Star Ratings calculated?

Industries belonging to the 17 categories of highly polluting industries in Jharkhand are eligible to be a part of the Jharkhand Star Rating program. There are more than 100 such industries in the state.

The creation of star ratings for industries follows a three-step process:

Step 1: Data Availability

Industry station units that report less than 85% of their CEMS data are automatically given a 1-star rating. The industry station units that have 85% or more data availability are eligible for star ratings based on their PM emissions.

Step 2: Calculation of Mean PM

Average PM emissions of each industry station unit for the month are generated for the eligible units. The values are then compared to the rubric to get a star rating for the industry station units.

Step 3: Generating Industry Star Ratings

The industry level star rating is the aggregate of the star ratings at the industry station units.

Rubric for Star Rating using PM values

| Rating | Range of Mean PM compared to prescribed standard | | Rating key | Representation |
|--------|--|---------|------------|----------------|
| | Minimum | Maximum | | |
| 5 star | 0% | ≤ 50% | Very Good | ★★★★★ |
| 4 star | >50% | ≤ 66% | Good | ★★★★☆ |
| 3 star | >66% | ≤ 83% | Moderate | ★★★☆☆ |
| 2 star | >83% | ≤ 100% | Poor | ★★☆☆☆ |
| 1 star | >100% | - | Very Poor | ★☆☆☆☆ |

International Experience

Environmental performance rating and disclosure has emerged as a tool for complementing traditional pollution regulations in developing countries. Indonesia's Program for Pollution Control, Evaluation, and Rating (PROPER), initiated in 1995, was the first such program in a developing country.

The program used a color-coded rating, ranging from gold for excellent performance to black for poor performance, as well as "reputational incentives." PROPER has had a significant effect in shifting factories from non-compliance to compliance.

Because of the perceived overall success of PROPER, measured by reduced emission at a lower regulatory cost, many countries have established such programs for various industrial sectors. These programs include Philippines' EcoWatch, China's Green Watch, Vietnam's Green Bamboo and Ghana's EPRD.





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Jharkhand State Pollution Control Board, which was constituted under section 4 of the Water (Prevention and Control of Pollution) Act, 1974 first time on September 9, 2001 started functioning from December 15, 2001. It has a nominated Chairman, fifteen nominated Members and an appointed Member Secretary. Jharkhand State Pollution Control Board has its Head Office in T A Building, H E C Complex, Ranchi.

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EPIC India is working to expand access to reliable and affordable energy while identifying low-cost solutions to reduce pollution and improve human health and productivity. It does so by working hand-in-hand with government and industry partners to identify innovative ideas, pilot them on the ground, and rigorously measure outcomes. This approach ensures the right questions are being answered and results can be scaled up into lasting policy changes.

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JHARKHAND STATE POLLUTION CONTROL BOARD

T.A. Division Building H.E.C., Dhurwa, Ranchi-834004 (Jharkhand)

Email: ranchijspcb@gmail.com