

# Star Rating Program: An Effective and Affordable Tool for Air Pollution Abatement

## **What is the Star-Rating Program?**

Odisha State Pollution Control Board's (OSPCB) star-rating program is one of the first such transparency initiatives in India that discloses pollution data from the online monitoring systems to the public in an accessible manner.

In many ways, it pushes the envelope not only for Indian pollution regulation, but environmental regulation across the world. By putting the ratings of the industries in the public domain, the goal is to get industries to compete with each other to get a 5-star rating and reduce their emissions, and get the public involved in complementing OSPCB's efforts in enforcement. Besides informing the public and industries, the program also aims to encourage healthy competition for better regulatory compliance to reduce emissions in the state. Providing information to residents of Odisha about the industry emissions in their state and locality may help augment regulatory efforts to mitigate pollution with community pressure on those industries who deteriorate the environment and endanger people's health.

## **Why Odisha?**

Odisha is richly endowed with mineral resources and coal-mines, and has more than 1000 small to large industries. The Star Rating program focuses on the nearly 150 large industrial plants belonging to the 17 high polluting sectors and makes their data public through the star-ratings. These plants have Continuous Emissions Monitoring Systems installed that send data emissions from their stacks in real-time to the Odisha State Pollution Control Board (OSPCB) server. The monitored pollutants include particulate matter (PM), Sulphur Dioxide (SO<sub>2</sub>), Nitrous Oxide (NO<sub>x</sub>), Carbon Monoxide (CO), Mercury (Hg) etc. which are harmful for health. This is yet another initiative where Odisha government has demonstrated commitment to greater transparency and accountability to the public. The Star Rating program also recognizes the efforts of industries that take responsibility to maintain clean environment and go beyond what the regulations require them to do.

## **Key Advantages:**

- Providing industries with information on their pollution emissions may increase adoption of technology and pollution control devices to decrease air pollution
- Industries with low pollution get recognized and further encouraged to reduce pollution
- Providing residents of Odisha about the industry emissions in their state and locality may help augment regulatory efforts to mitigate pollution with community pressure on polluting plants
- OSPCB already collects data through Continuous Emission Monitoring System (CEMS) on industrial air pollution emissions. Thus, the program has practically no cost with potentially high benefits.

### **How were industries selected?**

Odisha currently has 136 industrial plants with monitors installed and sending data every minute to SPCB. The same data are now being used to provide Star Ratings to industries. The Pollution Control Board has also been working with the team from EPIC India to make sure that the data are reliable. While the Star Rating program is getting launched with 20 industries in the first phase, it is expected that all industries will be included in the program by the end of the year.

Currently the Star Rating Program is restricted to Particulate Matter (PM) emissions. These sectors were identified by OSPCB as those with high pollution potential.

- Cement
- Captive Power Plants
- Integrated Power Plants
- Pulp and Paper
- Integrated Steel
- Sponge Iron

### **How are the star-ratings calculated?**

The star-rating is based on two factors: average emissions relative to the standard, and the data availability. The star-rating is calculated using the running average of emissions from each stack of the plants covered, relative to the emissions standard for that stack as shown in the table below. In addition, if data availability from the monitor is less than regulatory requirements, the industry gets a 1-star. The worst performing stack of the selected plant is then used to categorize that plant from one to five stars.

The table below shows how industries are allocated to their star-rating category.

Rating	Range of mean PM Emissions compared to prescribed standard		Rating key	Representation
	Minimum	Maximum		
5 star	0%	50%	Very Good	
4 star	50%	75%	Good	
3 star	75%	100%	Moderate	
2 star	100%	125%	Poor	
1 star	125%	--	Very Poor	

The ratings are updated monthly.