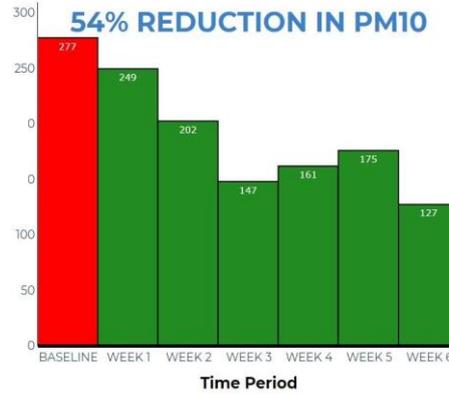
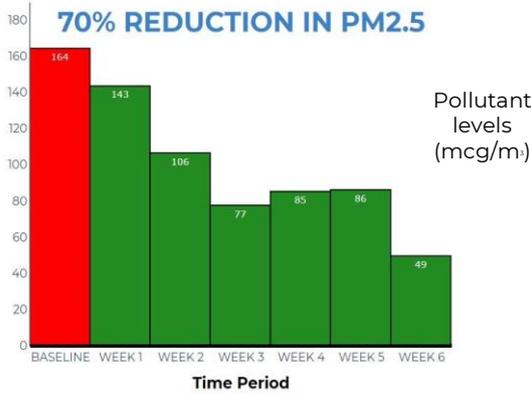


CASE STUDY

Steel Plant

Jharkhand, India



Introduction

A leading steel manufacturer, located in an industrial town in Jharkhand, was keen to ensure cleaner air for their employees and surrounding communities. The company was looking for a solution to improve ambient air quality across 200 acres with their facility.

Problem

The plant faced the problem of fugitive emissions. The coal piles, blast furnace and coking plant generated heavy amounts of particulate matter (PM). The ambient air quality levels at the facility were being difficult to limit within the standards set by the CPCB. The facility had point-source pollution control devices, which couldn't address ambient air pollution. Polluted air causes issues such as community backlash, regulatory fines, and a tainted brand image, that companies typically wish to avoid.

Solution

The Environmental Engineering team from Devic Earth inspected the 200-acre premises and examined parameters such as peak production hours, wind pattern and topography. The levels of the pollutants in the air such as particulate matter (PM), NOx, SOx and VOCs were monitored. After the baseline study of air quality for 2 weeks, Devic Earth installed Pure Skies, a unique IoT enabled technology, to control levels of PM2.5 and PM10. Laser scattering sensor-based air quality monitors were also deployed to study the improvement in air quality over the next few months.

Result

Within 6 weeks, there was a 70% reduction in PM2.5 and a 54% reduction in PM10 levels. The company, already known for its sustainability initiatives such as biodiversity conservation and product sustainability, successfully boosted their efforts with the help of Pure Skies.

Summary

- Steel manufacturing plant
- Outdoor deployment
- 200 acres covered
- Ongoing installation (data for Jan 2021 – March 2021)

Benefits

- >54% better air quality
- Addressed fugitive emissions from furnace, equipment and coal piles
- Reduced regulatory pressure
- Sustainable branding
- Improved employee
 - o satisfaction
 - o health
 - o productivity