

GREEN FOUNDRY CASE STUDIES

AIR EMISSIONS

Melt Dust Collector Installation Improved Melt Roof Ventilation



Description

Refurbished a 75,000 CFM dust collection system that was originally installed in 2000, but was tagged out-of-service in 2007. The unit operates in parallel with another melt air pollution control unit. The existing unit captured emissions from the melt deck, and this refurbished unit collects fugitive emissions from the building roof vents.

Environmental Benefits

- Improved the collection of fugitive emissions generated from the foundry melting operations and significantly reduced visible emission generated from the melting process.
- The environmental benefits also included an anticipated reduction in storm water contamination from particulate and heavy metals fallout, and improved outdoor air quality.

Cost & Savings

Cost

- The total cost of implementation was \$730,000.
- Cost savings may include the offset to storm water management Best Management Practices (BMPs).

Other Benefits

- The project improved team morale in the melt department and improved the indoor air quality while showing environmental commitment across the facility.
- The unit will also reduce time spent on visible emission monitoring as required by the facility air permit.
- Finally, the unit will improve the surrounding air quality and reinforce the facility's commitment to environmental excellence within the community.

Applicability

- The project is applicable to any facility looking to improve air quality and fugitive emission capture. The installation of an air pollution control unit is a great first defense against any industrial activity-related particulate releases.

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