

Checklist for Metal Casting Industry

Checklist Provided by:

Ohio Environmental Protection Agency
Division of Hazardous Waste Management
122 South Front Street, P.O. Box 1049, Columbus, Ohio 43216-1049
614-644-2917 Phone 614-728-1245 Fax
Factsheet available at <http://www.epa.state.oh.us/dhwm/chkmc.htm>

Waste Origin/Type

- Baghouse Dust & Scrubber Waste/Dust contaminated with lead, zinc, and cadmium

Pollution Prevention & Recycling Methods

- Identify the source of contaminants (e.g., coatings on scrap) and work with suppliers to find raw materials that reduce the contaminant input.
- Install induction furnaces to reduce dust production.
- Recycle dust to original process or to another process.
- Recover contaminants with pyrometallurgical treatment, rotary kiln, hydrogen reduction, or other processes.
- Recycle to cement manufacturer.

Waste Origin/Type

- Production of Ductile Iron/Hazardous Slag

Pollution Prevention & Recycling Methods

- Reduce the amount of sulfur in the feedstock.
- Use calcium oxide or calcium fluoride to replace calcium carbide as the desulfurization agent.
- Improve process control.
- Recycle calcium carbide slag.

Waste Origin/Type

- Casting/Spent Casting Sand

Pollution Prevention & Recycling Methods

- Material substitution (e.g., olivine sand is more difficult to detoxify than silica sand).
- Separate sand and shot blast dust.
- Improve metal recovery from sand.
- Recover sand and mix old and new sand for mold making.
- Recover sand by washing, air scrubbing, or thermal treatment.
- Reuse sand for construction if possible.

*Contact Pinellas County's Pollution Prevention and Resource Recovery (P2R2) Program at 464-4761
for Waste Reduction Assistance*