

Brief Summary of New EPA Regulations for Aluminum, Copper, and Other Nonferrous Foundries –Area Sources 40 CFR Part 63 Subpart ZZZZZZ

EPA has new requirements to reduce air pollution from aluminum, copper and other nonferrous (not iron or steel) foundries. Toxic air pollutants from these places include particulates and metal compounds of beryllium, cadmium, chromium, lead, manganese, and nickel. These toxic air pollutants can pose a health risk to anyone who breathes air containing them.

This is a short summary of the actions that aluminum, copper and other nonferrous foundries must take to comply with the new rule. For more details and assistance, please talk to your EPA regional office contact. These web links to government contacts are a good place to start:

- http://www.epa.gov/ttn/atw/area/regional_contacts.pdf
<http://www.smallbiz-enviroweb.org/sba/sbap.html>

What Is Required?

The rule applies to all facilities that are:

- Aluminum, copper and other nonferrous (not iron or steel) foundries with melting operations that are considered area sources. Area source facilities are those that emit less than 10 tons of a single toxic air pollutant or less than 25 tons of any combination of toxic air pollutants.

And,

- Melt more than 600 tons or more each year of aluminum, copper, and other nonferrous metal.

All of these foundries must:

- Cover or enclose melting furnaces that are equipped with covers or enclosures during the melting process as much as possible.
- Buy scrap for melting that has as much of the hazardous metals removed as possible. (Hazardous metals are defined as the lead, nickel, chromium, cadmium, beryllium, and manganese. There is also language in the rule that describes which hazardous metals are associated with the different types of foundries and the percent by weight threshold, 0.1% or 1.0%, for each metal.)
- Write a management practices plan that describes how the facility will reduce their air toxics emissions as much as possible, and follow that plan.

There are additional rule requirements for large area source copper and nonferrous metal foundries (but not aluminum). A large area source foundry is one that melts 6,000 tons or more of copper or other nonferrous metal per year.

Existing large copper and other nonferrous foundries must either:

- Limit particulate (PM) emissions to no more than 0.015 grains per dry standard cubic foot (gr/dscf) for existing melting operations,

Or,

- Use a PM control device (like a fabric filter) on their melting furnace(s) that can reduce the amount of PM by at least 95%.

New large copper and other nonferrous foundries must either:

- Limit PM emissions to no more than 0.010 gr/dscf,

Or,

- Use a PM control device (like a fabric filter) on their melting furnace(s) that can reduce the amount of PM by at least 99%.

What Testing Is Required?

Large copper and other nonferrous metal foundries also need to test their air pollution control equipment:

- All large copper and other nonferrous foundries must conduct a performance test (a test of emissions coming out of the control device) within 180 days of their compliance date and report the results to EPA.
 - The compliance date for existing sources is June 27, 2011.
 - The compliance date for new sources is when the source starts up.
- All large copper and other nonferrous foundries must monitor visible emissions coming from fabric filters.
- New large copper and other nonferrous foundries that are using fabric filters for PM control from their melting operations must install, operate, and maintain a bag leak detection system for each fabric filter.

What Records Must Be Kept?

- Copies of notifications sent to EPA, and any supporting documentation.
- Records that demonstrate compliance with management practices.
- Records of all performance tests, inspections and monitoring data.
- Maintenance records for all required control systems.
- Records that document that the facility is not a large copper or other nonferrous foundry (for smaller foundries).
- Bag leak detection system records.
- Records to be kept in a form suitable and readily available for expeditious review.