

Steel Founders' Society of America

April 6, 2006

**Iron and Steel
Area Source Rule Update**

KERAMIDA Environmental, Inc.

Iron & Steel Foundry

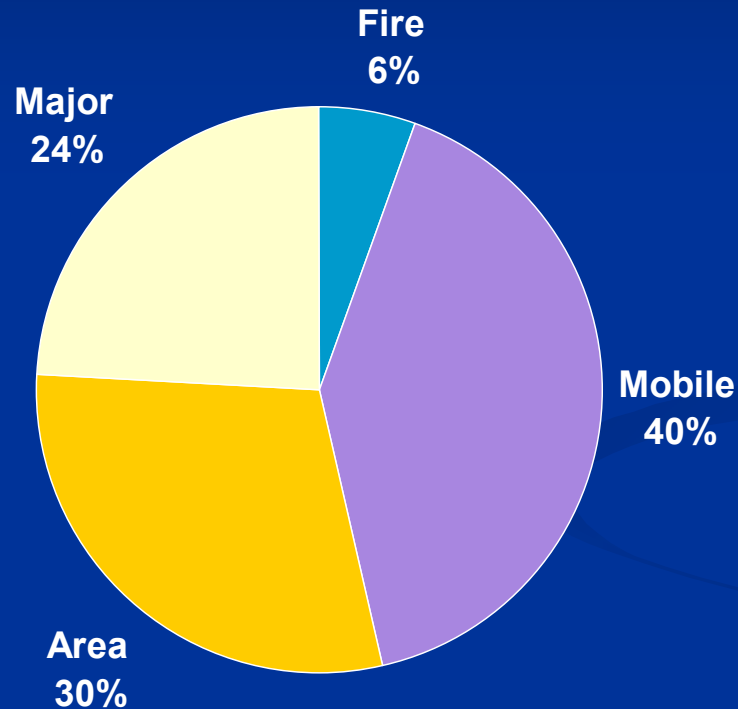
Area Source Rule

- Major Sources (25 tons/yr of HAP's) must comply with MACT rule by April 23, 2007
- Urban Sources that are not Major are to be covered by “Area Source Rules” – EPA is trying to get a draft rule out by late 2007?? – compliance ??
- Goal is 75%/90% reduction of 30 identified HAP's, some are which come from foundry operations:
 - Chrome, Lead, Manganese, Nickel, Cadmium
 - Benzene, Formaldehyde, Acetaldehyde, Acrolein, POM's, etc

The Rule

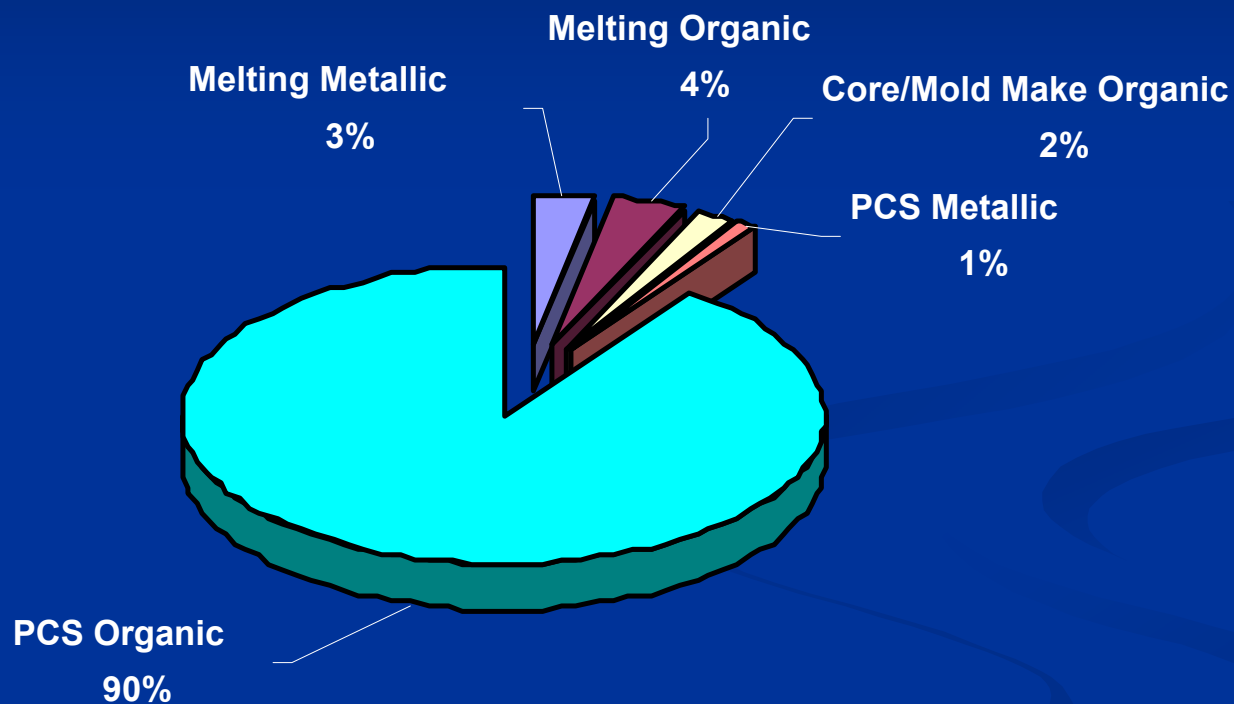
- Three options for an area source rule:
 - Lower the Major Source MACT threshold
 - Implement “Generally Available Control Technology” (GACT)
 - Flexible Rule
 - EPA to set guidelines for local agencies to develop rules based on local conditions
- May consider other issues.
 - Cost
 - Other environmental improvements
 - Energy
 - Criteria Pollutants
- The rule is meant to be flexible – giving wide latitude to EPA on how to structure the rule and encourages EPA to work with industry associations to jointly develop rules.
- Since the rule is meant to be “flexible” it is not prescriptive on how EPA is to address issues such as a definitive definition of “GACT”

EPA Area Source Rule



Source of HAP's – EPA 1999

Typical Iron Foundry Emission HAP Emission Profile



For typical large greensand cored foundry with wet scrubber.

History

- Area sources originally identified by EPA did not account for required reduction of the 30 HAPs.
- Additional sources were listed in proposed rulemaking on July 19, 1999. This included Iron and Steel Foundries.
- Iron and Steel Foundries were added to the list in June 26, 2002. (18 Source Categories)

History

■ Why?

1999

The current list of area source categories doesn't include categories representing 90 percent of the emissions of each of the 30 area source HAPs. The current list meets the 90-percent or greater requirement for 11 31 of the 30 area source HAPs. For 10 32 other HAPs, the list accounts for at least 80 percent of the emissions, and for ethylene dichloride the list accounts for approximately 78 percent of the emissions. Improved inventory data may demonstrate that the current list of area sources already meets the 90-percent requirement for some of these HAPs. The remaining HAPs on the list represent less than 75 percent of the emissions: arsenic compounds, cadmium compounds, chromium compounds, hexachlorobenzene, lead compounds, manganese compounds, nickel compounds, and polychlorinated biphenyl.

Current Issues

- Currently Iron and Steel Foundries are listed for certain HAP metals and, per EPA, Steel Foundries also for “Chlorine”?
- What about organics?
 - Not an original emission of concern for foundries
 - But – EPA currently wants to include organics in some way and has said “In addition, EPA's development of new Area Source regulations for the iron and steel foundries, will include incentives for reducing emissions using replacement binders.”

Current Issues

- EPA wants to include organics due to the amount of organic emissions identified during the MACT rulemaking process.
- EPA held a “Binder Conference” at RTP with foundry suppliers.
- AFS held a conference in Cincinnati, OH on March 14-15, 2006.

*CONFERENCE ON ADVANCEMENTS IN LOW EMISSIONS
CASTINGS TECHNOLOGY*

Bottom Line

- EPA appears committed to address organic reductions in some way in the Iron and Steel Area Source Rules
- The rule would appear to require EPA to address inorganic HAPs (HAP Metals)

Current Status

- AFS 10-E Subcommittee formed to address the area source rule
 - Steve Lewallen, Neenah Foundry, Chair
 - Amy Blankenbiller, AFS Washington, Facilitating
 - Have held conference calls, meetings with foundry members and with EPA
 - Next meeting for the subcommittee is at 4:00 PM, April 19th at the Hyatt Regency Hotel during the Metal Casting Congress, Columbus Ohio. (Contact Amy Blankenbiller)
 - The subcommittee will also meet at AFS at 8:30 AM on June 7, 2006
- SFSA and steel foundries participate in the Area Source Subcommittee

Current Status

- Volunteers from the Area Source Subcommittee are working on different aspects of the area source issues and will report to the group at the scheduled committee meetings.
- Foundries are asked to come up with proposals addressing HAP reductions that will be the least painful to member foundries.

Current Status – EPA

- EPA is cooperating with the AFS Area Source Subcommittee to come up with an area source rule.
- On March 31, 2006 a judge on the Sierra Club vs. EPA Section 112(c)(6) and 112(d)(2) or (d)(4) deadline case issued a Summary Judgment requiring EPA to complete the Areas Source Rules for source categories needed to achieve their 90% reduction goal **no latter than December 15, 2007**. The current timeline for the completion of the Iron and Steel Area Source Rules is not known at this time but would be before the December 2007 deadline.

And what about Major Sources

- Remember 112(f) Residual Risk ? EPA is required to go back and determine if there is a “residual risk” associated with major source facilities that “are” complying with MACT. If so, they are to promulgate additional regulations to reduce this risk.
- If EPA applies additional requirements, or provides incentives to reduce organic emissions from Area Sources, expect them to do the same to Major Sources
- It is unlikely EPA will ignore 70% of the industry emissions