U.S. Environmental Protection Agency
Applicability Determination Index

Control Number: M060025

Category:	MACT
EPA Office:	Region 4
Date:	08/10/2005
Title:	Molding and Core Making
Recipient:	Owen, Timothy S.
Author:	Banister, Beverly H.
Comments:	

Part 63, EEEEE	Iron and Steel Foundries

References:	63.7680

Abstract:

Q: Does EPA find that mold and core making lines that use the "Expandable Pattern Casting" (or "Lost Foam") process at the Mueller Company's facility in Albertville, Alabama subject to the MACT requirements for Iron and Steel Foundries under 40 CFR part 63, subpart EEEEE?

A: Yes. The pouring, cooling, and shakeout operations of Mueller's Expendable Pattern Casting process are not significantly different than a conventional sand casting operation, and therefore should be considered as such for 40 CFR part 63, subpart EEEEE purposes. In addition, Mueller's pouring operations would be classified as pouring stations, not pouring areas. The main distinctions between a pouring station and a pouring area are that pouring stations are automated and that the pouring can reasonably be assumed to occur at distinct points.

Letter:

United States Environmental Protection Agency
Region 4
Atlanta Federal Center
61 Forsyth Street
Atlanta, Georgia 30303-8960

4APT-ATMB

Timothy S. Owen, Chief
Energy Branch
Air Division
Alabama Department of Environmental Management
1400 Coliseum Blvd.
Montgomery, Alabama 36110-2059

Dear Mr. Owen:

This is in response to your letter dated November 2, 2004, which forwards a letter from the Mueller Company in Albertville, Alabama, in regards to an interpretation of the National Emission Standards for

Hazardous Air Pollutants for Iron and Steel Foundries, 40 CFR Part 63, Subpart EEEEE. Mueller operates a gray iron foundry and is subject to Subpart EEEEE, which covers emissions from pouring areas, pouring stations, and mold and core making lines at each new or existing iron and steel foundry that is a major source of hazardous air pollutants. Specific types of mold and core making lines mentioned in Subpart EEEEE include a sand mold system, a triethylamine (TEA) cold box mold or core making line, and a furan warm box mold or core making line. The majority of all casting at Mueller has been converted to an Expendable Pattern Casting (EPC), or Lost Foam process, which is not specifically mentioned in Subpart EEEEE. Therefore, Mueller has asked if Subpart EEEEE is applicable to their EPC process. Mueller is also seeking clarification on whether their pouring process is regulated as a pouring station or a pouring area.

The process information provided by Mueller describes a system where metal is transported with a single overhead crane to an upper barrel production line in which molds are placed on a forty-flask line with seven pouring locations, and a lower barrel production line in which molds are placed on a thirty-flask line with three pouring locations. Once the molds are poured, the molding line moves the flasks around a set of rails where the molds cool until they reach a dump station where the sand and castings are separated. New molds are added to the lines after finished molds are dumped.

After discussions with EPA Headquarters and reviewing the Background Information Document, EPA-453/R-02-013, which discusses the EPC (Lost Foam) process, it is EPA's position that the pouring, cooling, and shakeout operations of Mueller's EPC process are not significantly different than a conventional sand casting operation, and therefore should he considered as such for Subpart EEEEE purposes.

Regarding the clarification of Mueller's pouring operations, the main distinctions beteen a pouring station and a pouring area are that pouring stations are automated and that the pouring can reasonably be assumed to occur at distinct points. Based on the information that Mueller provided, it is EPA's position that Mueller's pouring operations would be classified as pouring stations.

If you have any further questions regarding this Subpart EEEEE interpretation, please contact Lee Page of the Region 4 staff at (404) 562-9131.

Sincerely,

Beverly H. Banister
Director
Air, Pesticides & Toxics
Management Division