STANDARDS & MANAGEMENT PRACTICES

XYZ Foundry Co.

US EPA Area MACT Subpart ZZZZZZ (40 CFR Part 63)

The XYZ Foundry Co. operates a <aluminum, copper, other non-ferrous (may enter more than one> foundry at its facility located in Anytown, USA. The foundry is subject to Subpart ZZZZZZ of 40 CFR Part 63 and has developed the following Standards and Management Practices to ensure compliance with the requirements of §63.11550. Every operator and supervisor of the company will follow these practices at all times. Any deviations will be reported to your supervisor immediately.

*MELT FURNACE OPERATION*

Every melting furnace which is equipped with a cover or enclosure {including furnace roof} will be operated with the cover or enclosure in the closed mode at all times possible. The cover or enclosure will be in the open mode ONLY when access to the melting zone of the furnace is necessary during melting operations. These times include:

1. Charging
2. Tapping
3. Alloy Addition (cover only open to the extent necessary)
4. Temperature check if it is necessary to open or partially open the cover.

The melting furnaces in the foundry which have a cover or enclosure include:

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

The melting furnaces in the foundry exempt from this requirement due to the lack of a cover or enclosure are:

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*METAL AND SCRAP PURCHASING PROCEDURES*

The foundry will purchase only charge metal that has been depleted to the extent practicable of hazardous air pollutants (HAPs). The only HAPs to be allowed in the charge metal are those necessary to achieve the metal specifications of the castings to be produced.

To achieve this requirement, metal purchases for charging melting furnaces will be limited to ONLY certified ingot, sows, alloying ingredients, and other charge materials with a specific metallurgical makeup. The actual charge materials for each melt furnace will be restricted to these purchased charge metals and internal foundry returns (gates, risers, heads, scrap castings, etc and customer returns of our castings.

The foundry will maintain material safety data sheets (MSDSs), product data sheets, or other vendor documents which specify the actual constituents of each source of charge metal for each vendor.

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To achieve this requirement, metal purchases for charging melting furnaces will be limited to certified ingot, sows, alloying ingredients, other charge materials with a specific metallurgical makeup, and metal scrap that has been depleted to the extent practicable of HAPs. The actual charge materials for each melt furnace will be restricted to these purchased charge metals and internal foundry returns (gates, risers, heads, scrap castings, etc and customer returns of our castings. Each charge shall be made in strict accordance with written guidelines and charge directives if the charge includes metal scrap containing HAPs.

All charges which include HAP containing scrap shall be formulated to minimize the HAP content of the final tapped metal to the requirements for the alloy being melted. The charges shall be modified if necessary based on spectrographic analysis.

The foundry will maintain material safety data sheets (MSDSs), product data sheets, or other vendor documents which specify the actual constituents of each source of charge metal for each vendor. An MSDS shall also be maintained for each source of metal scrap (scrap MSDSs can be expected to contain broad ranges of some component metal—and the purchasing department shall minimize the concentration of HAP metals consistent with the alloys required.

*EMPLOYEE TRAINING REQUIREMENTS*

Each foundry employee, both hourly and salaried, shall be given specific instructions governing the implementation and operation of these standards and management practices. The initial training shall emphasize the foundry’s commitment to minimize the release of HAPs to the workplace and the environment. This training shall be in addition to the OSHA Hazard Communication Training, but may be given simultaneously. It is vital that all employees understand the reasons for both the melt furnace restrictions as well as the strict limits on the purchase of charge metals. A specific written record of the completion and content of this training shall be maintained.

Employees directly involved in the operation of the melt furnaces and the purchase of metals and charging of the furnaces shall have additional training in their areas of responsibility. Furnace personnel shall be trained in the operation of the covers/enclosures and the need to ensure maximum “furnace covered” operating time. This training will include “on the job” training and close supervision by the melt supervisor or foreman. Purchasing and change make-up personnel shall be trained to understand the specific limits of the HAP metal which are necessary in the alloys required by our clients, and the best methods to develop a charge to ensure that not only the metal alloy achieves the customer specification, but that it does so with the minimum potential for workplace or atmospheric release of HAP fume. The use of foundry spectrographic analysis will be use as necessary to ensure this goal <remove this sentence if spectrograph is not present>. A specific record of the completion and content of this training shall be maintained.

*RECORD KEEPING*

The US EPA regulation requires that each notification and certification, including any performance tests, be maintained for a period of at least 5-years. The XXXXXXX Manager shall maintain and control copies of these documents. The documents shall be available during normal business hours for review by a state or federal inspector. <note: after 2 years the records may be moved off site—include this only if you plan offsite storage>

Record Keeping for the operation of the melting furnaces and their associated covers and enclosures shall be documented—in writing—at least monthly. Each inspection shall clearly indicate the level of conformance with this standard and contain the date of the inspection and signature of the supervisor conducting the inspection. The written copies shall be maintained for inspection by the XXXXXX Manager.

Production records for the melting operation showing total tons of non-ferrous metal melted per month shall be maintained. This value shall be the total melt capacity including all charged metal. Aluminum shall be maintained as a separate value. <suggest that you elaborate on this, ex the melt weight shall be extracted from the daily charge sheets, etc>

The metal purchasing records shall consist of—at a minimum:

1. MSDS, product data sheets, or other vendor documents which specify the actual constituents of each source of all charge metal.
2. MSDS for each type and vendor of metal scrap. <insert only if using scrap>
3. Purchase orders or equivalent documents for all charge and alloying metal purchased. Orders shall clearly indicate the alloy of the spec metals being purchased.
4. Any vendor supplied quality or spectrographic results showing the concentration of HAPs which are present.

The XXXXX Manager shall maintain copies of the detailed performance testing which is conducted on any dust/fume collection equipment which exhaust one or more melt furnaces regardless of the presence of covers or enclosures. He/she shall also maintain the written records of the daily/weekly VE observations.

Finally, the XYZ Manager shall maintain copies of all discrepancy reports including the Semi-Annual Certification which are submitted as a result of a discrepancy. These reports shall include the time of each discrepancy, time that an investigation of the problem began, and time the discrepancy was resolved. The report shall also include a detailed explanation of the problem and its resolution.

*MONITORING & COMPLIANCE*

Monitoring and compliance with this program is the responsibility of all employees. The Foundry Manager has the primary responsibility for ensuring overall compliance. The XXXXXXX Manager has the primary responsibility for monitoring the purchasing operation to ensure compliance. This includes ensuring that each load of incoming metal, and scrap where applicable, meets the purchase order criteria. All material found out of spec will be refused and returned to the vendor.

The Melt Supervisor has the primary responsibility to ensure that the furnace covers and enclosures are maintained in the closed position to the maximum extent practical. This will require some on-the-job training of melt crew personnel. SAFETY is our number one priority, and no portion of this standard shall in any way reduce the level of safety for any employee or contractor.

Date of Last Revision: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Responsible Party: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_