# Secondary Aluminum NESHAP
# 40CFR Part 63 Subpart RRR

## Startup, Shutdown, & Malfunction Plan for

MI Metals, Inc. - Oldsmar
301 Commerce Blvd.
Oldsmar, FL 34677
Phone 813 855-5695

# Regulatory Overview

A copy of the Startup, Shutdown, & Malfunction Plan (Plan) and revisions will be located at the Supervisor's Office of MI Metals, Inc. (MI). MI will maintain this Plan and prior versions for a period of 5 years (40 CFR, Subpart A 63.6(e)(3)(v)). This Plan does not contain proprietary information and will be made available to regulators upon request.

**Regulatory Requirements**

The general regulatory requirements cited below are addressed in this Plan:

63.6(e)(3) of Subpart A, General Provisions and 63.1516(a) of Subpart RRR requires that MI develop and implement a Plan for operations used to comply with the Secondary Aluminum NESHAP (63.1516,63.6(e)(3)). This Plan is intended to meet the Federal requirements for MI operations.

63.1516(a)(2) and 63.6(e)(3) of Subpart A, General Provisions, requires MI to describe what corrective action MI will take to minimize potential for uncontrolled emissions if a malfunction occurs at an affected process, air pollution control, or monitoring equipment.

In addition to the requirements to develop and implement a written Plan, MI is also required to (63.1516(a) and 63.6(e)(3)(vii):

- Keep records of any malfunction event that occurs and keep records of the actions MI taken to minimize emissions during the event.
- Submit reports if procedures taken during the event are not consistent with the procedures MI put in the plan and excess emissions occurred.
- Revise the Plan if a new malfunction occurs that has not been described before or if procedures for startup, shutdown, and malfunction have been changed.
- Update the Plan if requested by EPA or the appropriate State or Local Air Pollution Control Authority.

# Startup & Shutdown Procedures

Refer to MI Metals Baghouse User's Manual and Furnace Operation Manual for startup and shutdown procedures. Baghouse & furnace process will startup & shutdown by pressing start/stop button that will actuate automatic sequence.

The Baghouse and control equipment must be operating before startup of furnace.

Furnace must be shutdown before baghouse and control equipment is shutdown.

Burner flue gate and furnace front door must be in open position before automatic purge/relighting of furnace.

Complete, sign, and date Baghouse Startup/Shutdown Report Form.

In the event actions taken are not consistent with the procedures specified in the Plan, the operator will record inconsistencies on the Malfunction Report Form. The PDEM & FDEP will be notified of these inconsistent actions by phone within 2 working days and by a written letter within 7 days.

# Defining Malfunctions

**Regulatory Definition of Malfunction**

The General Provisions define a "malfunction" as:

Any sudden, infrequent, and not reasonably preventable failure of air pollution control and monitoring equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not considered to be malfunctions (63.2).

A true malfunction must have a reasonable potential to cause an exceedance in emissions or operating parameter.

MI also has a separate plan for routine maintenance of MI process equipment and control devices covered under the Secondary Aluminum NESHAP that is called MI Operation, Maintenance, and Monitoring Plan (OM&M). According to MI OM&M Plan routine maintenance operations must be performed in accordance with the equipment manufacturer's specifications and recommendations, as well as the procedures specific to MI that are detailed in MI OM&M Plan.

# Types of Potential Malfunctions

The following is a list of malfunction events covered by this Plan:

- Failure of monitoring system components (for example: monitoring equipment, data acquisition equipment).
- Catastrophic events (for example: fire, lightening, hurricanes, winds, tornadoes, extreme weather/storms, flood, earthquake, meteors, and other acts of God).
- Loss of utilities (for example: power, gas, water, as applicable to equipment).
- Sabotage of equipment.
- Sudden and unavoidable failure of control or process equipment (for example: faulty equipment, explosion, electrical short, furnace/hood/duct cracks, structural collapse, system crash), not due to poor operation or maintenance.

# Plan Overview and Responsibilities

**Purpose of Plan**

The purpose of this Plan is to describe the proper actions that will be taken at MI in the event of startup, shutdown, or malfunction of equipment regulated by the Secondary Aluminum NESHAP (40 CFR Part 63 Subpart RRR, and 40CFR Part 63.6 and 63.10 Subpart A).

**Responsible Officials**

The Regional Manager will maintain the most recent copy of this Plan in the Supervisor's office. The Regional Manager will review this Plan annually with personnel involved with the foundry operation. Certification of Training Form will be signed by attendees and instructor after completing training class. The Regional Manager, Director, General Manager, & Supervisor will review the Plan annually or whenever changes occur. The Director will revise and issue copies of written Plan as needed.

All reports submitted to the FDEP, PDEM, and USEPA associated with this Plan will be signed by a responsible official in accordance with 63.1516(a) and appropriate provisions under Subpart A, the General Provisions.

All reports associated with this Malfunction Plan will be signed by a responsible official in accordance with 63.1516(a) and appropriate provisions under Subpart A, the General Provisions.

**Startup, Shutdown, and Malfunction Plan Approval Signature**

Jay Poppleton – Treasurer/Assistant Secretary (refer to cover page)

**Devices covered by this Plan**:

| Type | Manufacturer | Model | Location |
|---|---|---|---|
| Baghouse/Furnace | L. Haberny Co. | LHC3-276-03 | Foundry Department |

# Important Phone Numbers

| | | |
|---|---|---|
| Facility | Office | (813) 855-5695 |
| President | Brook Massey | (813) 494-8039 |
| Plant Manager | Wayne Bracy | (813) 486-4365 |
| Lead Operator | Josh Forty | (727) 458-3395 |
| Maintenance Supervisor | Art Hackett | (813) 802-8380 |
| Director | Howard Loy | (727) 424-7501<br>FAX (727) 442-2007 |
| Regional Manager | Luis de Andino | (727) 415-7135 |
| Safety Director | Mel Mitchell | (727) 599-4905 |
| Fire Dept | City of Oldsmar | 911 |
| Police | City of Oldsmar | 911 |
| Medical | EMS | 911 |
| Doctor | Medero Medical | (813) 490-8231 |
| Electric | TECO | (813) 233-0800 |
| Gas | City of Clearwater | (727) 462-6668 |
| Hotline | USEPA | (800) 535-0202 |
| *Florida (phone & report) | DEP-James McDonald | (813) 632-7600<br>FAX (813) 632-7668 |
| Emergency Management | Pinellas County | (727) 462-3800 |
| *Pinellas (phone & report) | DEM-Shea Jackson | (727) 464-4422<br>FAX (727) 464-4420 |
| Manufacturer Representative | Remelt Technologies | (407) 880-2444 |
| Consultant Engineer | Bob Anderson, RCA Mgmt | (330) 715-3034 |
| Control Monitor | Control Design & Integration | (740) 472-2170 |

# Section 1: Malfunction of Monitoring System Components: Monitoring Equipment, Data Acquisition

- Confirm equipment status.
- Identify the component that has failed.
- Notify appropriate maintenance or other responsible personnel.
- Respond to correct or repair the malfunction in a safe, efficient and timely manner as soon as it is practicable before next charge cycle, for example:

  Replace defective parts

  Reinstall software

  Reenter control settings

- Suspend operations as soon as practicable before next charge cycle until compliance can be assured if failure cannot be repaired before next charge cycle. No additional charge cycle may begin until repair is completed.
- Record pertinent information on Malfunction Report Form (refer to attachment) to log date, time, duration, cause of malfunction, and corrective action taken.
- Record whether the Plan was followed for each malfunction event.

# Section 2: Catastrophic Events: Fire, Lightning, Hurricane, Tornado, Wind, Flood, Storm, Weather, and Other Acts of God

- Ensure that the situation has become stable and the hazards have been cleared before proceeding further.
- Confirm the system status and note which equipment is off-line or otherwise impaired.
- Notify appropriate maintenance or other responsible personnel.
- Respond to correct or repair the malfunction in a safe, efficient and timely manner as soon as it is practicable before next charge cycle, for example:

  Right overturned equipment and attempt to reinstall/restart.

  Replace damaged parts.
- Suspend operations as soon as practicable before next charge cycle until compliance can be assured if failure cannot be repaired before next charge cycle. No additional charge cycle may begin until repair is completed.
- Record pertinent information on Malfunction Report Form (refer to attachment) to log date, time, duration, cause of malfunction, and corrective action taken.
- Record whether the Plan was followed for each malfunction event.

# Section 3: Loss of Utilities: Power, Gas, Water, etc. (as applicable to facility equipment)

- Ensure that the situation has become stable and the hazards have been cleared before proceeding further.

- Confirm the system status and note which equipment is off-line or otherwise impaired.

- Notify appropriate maintenance or other responsible personnel.

- Respond to correct or repair the malfunction in a safe, efficient, and timely manner as soon as it is practicable before next charge cycle, for example:

  Call Power Company or 911 if power failure seems plant-wide; if not, trace power failure from equipment to power source.

  Check source of gas or water.

  Trace gas or water line from equipment to the source and determine whether any leaks or breaks in line exist.

  Repair any breaks or leaks that are found in the utility system at the facility.

- Suspend operations as soon as practicable before next charge cycle until compliance can be assured if failure cannot be repaired before next charge cycle. No additional charge cycle may begin until repair is completed.

- Record pertinent information on Malfunction Report Form (refer to attachment) to log date, time, duration, cause of malfunction, and corrective action taken.

- Record whether the Plan was followed for each malfunction event.

# Section 4: Sudden and Unavoidable Failure of Equipment * (not due to poor operation or maintenance)

- Ensure that the situation has become stable and the hazard has been cleared before proceeding further.
- Confirm the system status and note which equipment is off-line or otherwise impaired.
- Notify appropriate maintenance or other responsible personnel.
- Respond to correct or repair the malfunction in a safe, efficient, and timely manner as soon as practicable before next charge cycle, for example:

  Replace deficient part, if spares are available.

  Call maintenance for assistance if needed.
- Suspend operations as soon as practicable before next charge cycle until compliance can be assured if failure cannot be repaired before next charge cycle. No additional charge cycle may begin until repair is completed.
- Record pertinent information on Malfunction Report Form (refer to attachment) to log date, time, duration, cause of malfunction, and corrective action taken.
- Record whether the Plan was followed for each malfunction event.

* Such as sudden fan failure, lime feeder failure, numerous simultaneous bag breaks/leaks, faulty equipment, explosion, electrical short, furnace/hood/duct cracks, structural collapse, system crash, etc.

# Section 5: What to Record in Case of Any Malfunction

- The shift supervisor will record the following information on the Malfunction Report Form (refer to attachment):

  The date and time the malfunction began and ended (estimated as best as possible (63.10(b)(2)(ii).

  The duration of the malfunction (63.10(b)(2)(ii).

  Suspected cause of malfunction.

  The actions taken to correct the malfunction (63.1516(a)(2).

  If the procedures in this Plan were followed (63.10(b)(2)(v).

  If the Plan was not followed, the reasons for following other malfunction procedures than those in the Plan (63.10(d)(5)(ii).

  Pertinent process information during the time of the malfunction, as indicated on the Malfunction Report Form.

  If the baghouse leak detection system malfunctions, corrective action must be initiated within 1 hour of alarm. Alarm must not sound off more than 5 % of operating time during a 6 months reporting period.

- The Director will review and sign the completed Malfunction Report Form and add any additional comments.

- Any recommended revisions to the Plan to better accommodate malfunctions including new occurrences will be noted on the Malfunction Report Form located in Supervisor's office and submitted as soon as possible after the event.

# Section 6: Whom to Notify at the Plant in Case of a Malfunction

- Individual will notify the Shift Supervisor immediately during the shift of the malfunction.
- If the malfunction cannot be correct within a reasonable amount of time and within 60 minutes after detection, notify the General Manager.
- The supervisor on duty will complete the Malfunction Report Form prior to the end of the shift or no later than 24 hours following the malfunction and submit it to the Director.
- The Director will review and sign the Malfunction Report Form. Retain the original form in the production files for 5 years (63.1517(a)(1) and 63.10(b)(1).
- In the event of a plant operation problem & temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by hazard of fire, wind, or by other cause, the Director will immediately notify FDEP & PDEM. Notification will include cause of problem, what steps will be taken to correct problem & prevent its recurrence, & any intent toward reconstruction of destroyed facility.
- If facility does not comply or unable to comply with condition or limitation specified in permit, the Director will provide FDEP & PDEM a description of & cause of noncompliance, period of noncompliance including dates & times, anticipated time noncompliance is expected to continue, & steps taken to reduce/eliminate/prevent recurrence of noncompliance.

# Section 7: What to Report to PDEM/FDEP/USEPA When There is a Malfunction

- If the actions taken during the malfunction were consistent with this Plan, MI will state this fact in MI semiannual excess emission report (due within 60 days following the end of each 6 month period) with the following information included (63.10(d)(5)(I):

  Certifying signature of the owner/operator or other responsible official.

  Statement that the actions taken during the malfunction were consistent with the Plan.

  The number, duration, and a brief description of malfunction that occurred during the reporting period (63.10(d)(5)(I) or a copy of a malfunction report form that includes this information

  Any additional information required by PDEM, FDEP, EPA or permitting authority.

- If the actions taken during a malfunction were <u>not</u> consistent with this Plan and excess emissions or parameter monitoring exceedances occurred, the Director will report the actions taken by telephone FAX transmission or e-mail within 2 working days after the malfunction. A letter must then be sent within 7 working days after the malfunction. The letter will include the following information (63.10(d)(5)(ii):

  Certifying signature of responsible official.

  Detailed explanation of the circumstance of the malfunction.

  The reasons for not following the current Plan.

  Any additional information required by PDEM, FDEP, EPA or permitting authority.

- If the actions taken during the malfunction were <u>not</u> consistent with the Plan, the Director must also (63.6(e)(3)(vii):

  Revise the Plan within 45 days after the malfunction to include procedures for operating and maintaining the source during similar malfunction events.

  Report the revisions of the Plan in the semiannual excess emissions report (within 60 days following the end of each 6 month period).

- Note: If the revisions to the Plan alter the scope of the process activities at MI or otherwise modify the applicability of any emission limit, work practice requirement, or other requirement in Subpart RRR, the revised Plan is not effective until written notice has been provided to the permitting authority describing the Plan revision(s) (63(e)(3)(viii)). Depending on what the revisions are, PDEM, FDEP, or USEPA may request to see a copy of the revised Plan (63.6(e)(3)(v).

# Malfunction Plan Checklist

- Does plan include what MI will do to find the cause and circumstance of all types of malfunctions of MI process, air pollution control, and air pollution monitoring equipment?

- Does plan include what MI will do to correct (for example, repair) the malfunctioning process, air pollution control, and air pollution monitoring equipment as soon as practical after the malfunction happens?

- Does plan include procedures for recording the following information as soon as practical after malfunction occurs?

    a. At what piece of equipment or where in the process did the malfunction occur?
    b. What was the date and time of the malfunction and how long did it last?
    c. What was the cause of the malfunction?
    d. What was done to correct the malfunctioning equipment?
    e. Were any emission or parameters that were monitored higher or different than their values allowed by regulations during the malfunction?
    f. What was done during the malfunction exactly as described in MI Plan?
    g. If anything was done that was not in current Plan, what was it?

# MI Metals – Oldsmar
# Startup/Shutdown Report Form revised 4/16/08

Startup or Shutdown: _____

Date occurred: _____

Equipment involved: _____

Time startup/shutdown began: _____

Time startup/shutdown ended: _____

Record Maximum Baghouse Temperature _____

Record Baghouse Pressure _____

Was baghouse in operation before startup and after shutdown of furnace?

Yes _____ No _____

Was burner flue gate & furnace front door opened before automatic purging/relighting of furnace?

Yes _____ No _____

Was charging of the furnace discontinued during startup/shutdown?

Yes _____ No _____

Were visible emissions and monitored parameters within permitted limits during startup/shutdown?

Yes _____ No_____

Were actions taken consistent with procedures in the Plan during startup/shutdown?

Yes _____ No_____

If any answers to above questions were no, explain discrepancies?

Comments: _____

_____

_____

Print Supervisor Name: _____

Supervisor Signature: _____

Print Director Name: _____

Director Signature: _____

# MI Metals– Oldsmar
# Malfunction Report Form revised 4/16/08

Fill out form same day & immediately call Howard Loy cell 727 424-7501 & Wayne Bracy cell 727 505-2189
Send copy of form immediately to Howard Loy FAX 727 442-2007. Howard or Wayne will immediately contact PDEM 727 464-4422 & FDEP 813 632-7600 plus fax or e-mail report within 2 days to PDEM727 464-4420 FDEP 813 632-7668

Date: _____

Malfunctioning device: _____

Time malfunction began (estimated): _____

Time malfunction ended: _____

Total duration of malfunction: _____

Suspected cause of malfunction: _____

_____

Corrective action(s) taken: _____

_____

_____

What equipment was shut down because of malfunction? : _____

_____

Were visible emissions and monitored parameters within permitted limits during malfunction?

Yes _____ No_____

Were actions taken consistent with the Plan during the malfunction?

Yes _____ No _____

If any answers to above questions were no, explain discrepancies?

Comments: _____

_____

_____

_____

Print Supervisor Name: _____

Supervisor Signature: _____

Print Director Name: _____

Director Signature: _____

MI METALS - OLDSMAR
ANNUAL TRAINING CERTIFICATION
revised 4/16/08

TRAINING PROGRAM: Reviewed Startup, Shutdown, & Malfunction / Operation, Maintenance, & Monitoring Plans in accordance with 40CFR Part 63 Subpart RRR. I have completed and understand the above training program.

| Print Name | Signature |
|---|---|
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Print Instructor Name _____

Instructor Signature _____

Date Completed _____