

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- NESHAP SOURCE

PERMITTEE

Allied Metal Company
Attn: Hal Jernigan
4528 West Division Street
Chicago, Illinois 60651

Application No.: 95120165

I.D. No.: 031600ADP

Applicant's Designation:

Date Received: October 13, 2005

Subject: Aluminum Smelting Furnaces

Date Issued: September 13, 2011

Expiration Date: September 13, 2016

Location: 4528 West Division Street, Chicago, Cook County, 60651

This permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of three (3) natural gas-fired reverberatory aluminum melting furnaces controlled by baghouse (BH-2), one (1) 7.5 tons/hour rotary scrap crusher controlled by cyclone and baghouse, four (4) natural gas-fired molten pot pre-heaters (5 mmBtu/hour each), and other natural gas-fired heating units (0.85 mmBtu/hour total combined) pursuant to the above-referenced applications:

- 1a. This federally enforceable state operating permit is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for Carbon Monoxide (CO), Nitrogen Oxides (NO_x), and Particulate Matter less than 10 microns (PM₁₀), and 10 tons/year for any single Hazardous Air Pollutants (HAP) and 25 tons/year for any combination of such HAPs). As a result, the source is excluded from requirements to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit are described in Attachment A.
- b. Prior to initial issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permits for this location.
- 2a. This source is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Secondary Aluminum Production, 40 CFR 63 Subparts A and RRR. The Illinois EPA is administering the NESHAP in Illinois on behalf of the United States EPA under a delegation agreement.
- b. Pursuant to 40 CFR 63.1500(c), the requirements of 40 CFR 63 Subpart RRR pertaining to dioxin and furan (D/F) emissions and associated operating, monitoring, reporting and recordkeeping requirements apply to the following affected sources, located at a secondary aluminum production facility that is an area source of HAPs as defined in 40 CFR 63.2:

- i. Each new and existing thermal chip dryer;
 - ii. Each new and existing scrap dryer/delacquering kiln/decoating kiln;
 - iii. Each new and existing sweat furnace;
 - iv. Each new and existing secondary aluminum processing unit, containing one or more group 1 furnace emission units processing other than clean charge.
- c. Pursuant to 40 CFR 63.1505(a), the owner or operator of a new or existing affected source must comply with each applicable limit in 40 CFR 63.1520. Table 1 to 40 CFR 63 Subpart RRR summarizes the emission standards for each type of source.

Table 1 to Subpart RRR of Part 63—Emission Standards for New and Existing Affected Sources

Affect source/ Emission unit	Pollutant	Limit	Units
New and existing aluminum scrap shredder	PM	0.01	gr/dscf
New and existing clean furnace (Group 2)		No Limit	Work practices: clean charge only and no reactive fluxing

- 3a. Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.
- b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 meter (1000 foot) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.
- c. Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.

- d. Pursuant to 35 Ill. Adm. Code 212.321(a), no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).
- 4. Pursuant to 35 Ill. Adm. Code 214.301, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2000 ppm.
- 5. Pursuant to 35 Ill. Adm. Code 218.301, no person shall cause or allow the discharge of more than 3.6 kg/hour (8 lbs/hour) of organic material into the atmosphere from any emission unit, except as provided in 35 Ill. Adm. Code 218.302, 218.303, or 218.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code 218 Subpart G shall only apply to photochemically reactive material.
- 6a. This permit is issued based on the source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Secondary Nonferrous Metals Processing Area Sources, 40 CFR 63 Subpart TTTTTT, because this source is not a secondary nonferrous metals processing facility (as defined in 40 CFR 63.11472).
- b. This permit is issued based on the source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP): Area Source Standards for Aluminum, Copper, and Other Nonferrous Foundries, 40 CFR 63 Subpart ZZZZZZ, because this source is not an aluminum foundry, copper foundry, or other nonferrous foundry as defined in 40 CFR 63.11556.
- 7. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the wind speed is greater than 40.2 km/hour (25 mph). Determination of wind speed for the purposes of this rule shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to this rule is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.
- 8a. i. Pursuant to 40 CFR 63.6(e)(1)(i), at all times, including periods of startup, shutdown, and malfunction, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. During a period of startup, shutdown, or malfunction, this general duty to minimize emissions requires that the owner or operator reduce emissions from the

affected source to the greatest extent which is consistent with safety and good air pollution control practices. The general duty to minimize emissions during a period of startup, shutdown, or malfunction does not require the owner or operator to achieve emission levels that would be required by the applicable standard at other times if this is not consistent with safety and good air pollution control practices, nor does it require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, review of operation and maintenance procedures (including the startup, shutdown, and malfunction plan required in 40 CFR 63.6(e)(3)), review of operation and maintenance records, and inspection of the source.

- ii. Pursuant to 40 CFR 63.6(e)(1)(ii), malfunctions must be corrected as soon as practicable after their occurrence. To the extent that an unexpected event arises during a startup, shutdown, or malfunction, an owner or operator must comply by minimizing emissions during such a startup, shutdown, and malfunction event consistent with safety and good air pollution control practices.
- b. Pursuant to 40 CFR 63.6(f)(1), the non-opacity emission standards set forth in 40 CFR Part 63 shall apply at all times except during periods of startup, shutdown, and malfunction, and as otherwise specified in an applicable subpart. If a startup, shutdown, or malfunction of one portion of an affected source does not affect the ability of particular emission points within other portions of the affected source to comply with the non-opacity emission standards set forth in 40 CFR Part 63, then that emission point must still be required to comply with the non-opacity emission standards and other applicable requirements.
- 9a. i. Pursuant to 40 CFR 63.1506(a)(1), on and after the compliance date established by 40 CFR 63.1501, the owner or operator must operate all new and existing affected sources and control equipment according to the requirements in 40 CFR 63.1506.
- ii. Operating requirements are summarized in Table 2 to 40 CFR 63 Subpart RRR.

Table 2 to Subpart RRR of Part 63 – Summary of Operating Requirements for New and Existing Affected Sources and Emission Units

Affected source/emission unit	Monitor type/operation/process	Operating requirements
All affected sources and emission units with an add-on air pollution control device	Emission capture and collection system	Design and install in accordance with Industrial Ventilation: A Handbook of Recommended Practice; operate in accordance with OM&M plan. ^b

Affected source/emission unit	Monitor type/operation/process	Operating requirements
Group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln	Labeling	Identification, operating parameter ranges and operating requirements posted at affected sources and emission units; control device temperature and residence time requirements posted at scrap dryer/delacquering kiln/decoating kiln.
Aluminum scrap shredder with fabric filter	Bag leak detector or VE	Initiate corrective action within 1-hour of alarm and complete in accordance with OM&M plan ^b ; operate such that alarm does not sound more than 5% of operating time in 6-month period. Initiate corrective action within 1-hour of any observed VE and complete in accordance with the OM&M plan. ^b
Clean (group 2) furnace	Charge and flux materials	Use only clean charge. Use no reactive flux.

^b OM&M plan – Operation, maintenance, and monitoring plan.

- b. Pursuant to 40 CFR 63.1506(b), the owner or operator must provide and maintain easily visible labels posted at each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln that identifies the applicable emission limits and means of compliance, including:
- i. The type of affected source or emission unit (e.g., scrap dryer/delacquering kiln/decoating kiln, group 1 furnace, group 2 furnace, in-line fluxer).
 - ii. The applicable operational standard(s) and control method(s) (work practice or control device). This includes, but is not limited to, the type of charge to be used for a furnace (e.g., clean scrap only, all scrap, etc.), flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M plan.
- c. Pursuant to 40 CFR 63.1506(c), for each affected source or emission unit equipped with an add-on air pollution control device, the owner or operator must:
- i. Design and install a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental

Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Manual of Recommended Practice";

- ii. Vent captured emissions through a closed system, except that dilution air may be added to emission streams for the purpose of controlling temperature at the inlet to a fabric filter; and
 - iii. Operate each capture/collection system according to the procedures and requirements in the OM&M plan.
- d. Pursuant to 40 CFR 63.1506(e), the owner or operator of a scrap shredder with emissions controlled by a fabric filter must operate a bag leak detection system, or a continuous opacity monitor, or conduct visible emissions observations.
- i. If a bag leak detection system is used to meet the monitoring requirements in 40 CFR 63.1510, the owner or operator must:
 - A. Initiate corrective action within 1-hour of a bag leak detection system alarm and complete the corrective action procedures in accordance with the OM&M plan.
 - B. Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.
 - ii. If visible emission observations are used to meet the monitoring requirements in 40 CFR 63.1510, the owner or operator must initiate corrective action within 1-hour of any observation of visible emissions during a daily visible emissions test and complete the corrective action procedures in accordance with the OM&M plan.
- e. Pursuant to 40 CFR 63.1506(o), the owner or operator of a new or existing group 2 furnace must:
- i. Operate each furnace using only clean charge as the feedstock.
 - ii. Operate each furnace using no reactive flux.
- f. Pursuant to 40 CFR 63.1506(p), when a process parameter or add-on air pollution control device operating parameter deviates from the value or range established during the performance test and incorporated in the

OM&M plan, the owner or operator must initiate corrective action. Corrective action must restore operation of the affected source or emission unit (including the process or control device) to its normal or usual mode of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. Corrective actions taken must include follow up actions necessary to return the process or control device parameter level(s) to the value or range of values established during the performance test and steps to prevent the likely recurrence of the cause of a deviation.

- 10a. Pursuant to 35 Ill. Adm. Code 212.306, all normal traffic pattern access areas surrounding storage piles specified in 35 Ill. Adm. Code 212.304 and all normal traffic pattern roads and parking facilities which are located on mining or manufacturing property shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program required by 35 Ill. Adm. Code 212.309, 212.310 and 212.312.
- b. Pursuant to 35 Ill. Adm. Code 212.307, all unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods.
- c. Pursuant to 35 Ill. Adm. Code 212.308, crushers, grinding mills, screening operations, bucket elevators, conveyor transfer points, conveyors, bagging operations, storage bins and fine product truck and railcar loading operations shall be sprayed with water or a surfactant solution, utilize choke-feeding or be treated by an equivalent method in accordance with an operating program.
- d. Pursuant to 35 Ill. Adm. Code 212.309(a), the emission units described in 35 Ill. Adm. Code 212.304 through 212.308 and 35 Ill. Adm. Code 212.316 shall be operated under the provisions of an operating program, consistent with the requirements set forth in 35 Ill. Adm. Code 212.310 and 212.312, and prepared by the owner or operator and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions.
- e. Pursuant to 35 Ill. Adm. Code 212.310, as a minimum the operating program shall include the following:
 - i. The name and address of the source;
 - ii. The name and address of the owner or operator responsible for execution of the operating program;
 - iii. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;

- iv. Location of unloading and transporting operations with pollution control equipment;
 - v. A detailed description of the best management practices utilized to achieve compliance with 35 Ill. Adm. Code 212 Subpart K, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;
 - vi. Estimated frequency of application of dust suppressants by location of materials; and
 - vii. Such other information as may be necessary to facilitate the Illinois EPA's review of the operating program.
- f. Pursuant to 35 Ill. Adm. Code 212.312, the operating program shall be amended from time to time by the owner or operator so that the operating program is current. Such amendments shall be consistent with 35 Ill. Adm. Code 212 Subpart K and shall be submitted to the Illinois EPA for its review.
- 11a. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.
- b. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the baghouses and the cyclone such that the baghouses and cyclone are kept in proper working condition and not causes a violation of the Illinois Environmental Protection Act or regulations promulgated therein.
- c. The reverberatory aluminum melting furnaces, the molten pot pre-heaters, and the other heating units shall only be operated with natural gas as the fuel. The use of any other fuel in the reverberatory aluminum melting furnaces, the molten pot pre-heaters, or the other heating units requires that the Permittee first obtain a construction permit from the Illinois EPA and then perform stack testing to verify compliance with all applicable requirements.
- 12a. Emissions and operation of the three reverberatory furnaces shall not exceed the following limits:
- i. The metal usage for all three furnaces combined: 131,400 tons/yr and 13,140 tons/month.
 - ii. Emissions from the metal process through all three furnaces combined shall not exceed the following limits:

<u>(Tons/Hr)</u>	Metal Throughput		Emission Factor (PM) <u>(Lbs/Ton)</u>	PM Emission	
	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>		<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
15	13,140	131,400	1.3	14.24	85.41

These limits are based on the maximum metal feed rate of each furnaces (5 tons/hour), the maximum operating hours (8,760 hrs/yr), and standard emission factors (Tables 12.8-2, AP-42, Fifth Edition) for Smelting Secondary Aluminum Operations for a Reverberatory Furnace with an Uncoated Baghouse.

- iii. Natural gas usage for the three reverberatory furnaces combined: 57.82 mmscf/month and 578.2 mmscf/year
- iv. Emissions from natural gas combustion in the three reverberatory furnaces shall not exceed the following limits:

<u>Pollutant</u>	Emission Factor	Emissions	
	<u>(Lbs/mmscf)</u>	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
Carbon Monoxide (CO)	84.0	2.43	24.28
Nitrogen Oxides (NO _x)	100.0	2.89	28.91
Particulate Matter (PM)	7.6	0.22	2.20
Sulfur Dioxide (SO ₂)	0.6	0.02	0.17
Volatile Organic Material (VOM)	5.5	0.16	1.59

These limits are based on the maximum firing rate of the furnaces combined (66 mmBtu/hour), 8,760 hours/year of operation, and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

- b. Emissions and operation from natural gas combustion in the four molten pot preheaters shall not exceed the following limits:
 - i. Natural gas usage: 17.52 mmscf/month and 175.20 mmscf/year
 - ii. Emissions from the combustion of natural gas:

<u>Pollutant</u>	Emission Factor	Emissions	
	<u>(Lbs/mmscf)</u>	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
Carbon Monoxide (CO)	84.0	0.74	7.36
Nitrogen Oxides (NO _x)	100.0	0.88	8.76
Particulate Matter (PM)	7.6	0.07	0.67
Sulfur Dioxide (SO ₂)	0.6	0.01	0.05
Volatile Organic Material (VOM)	5.5	0.05	0.48

These limits are based on the maximum firing rate of the preheaters combined (20 mmBtu/hour), 8,760 hours/year of

operation, and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

- c. Emissions and operation from natural gas combustion in other heating units shall not exceed the following limits:

- i. Natural gas usage: 0.75 mmscf/month and 7.45 mmscf/year
- ii. Emissions from the combustion of natural gas:

<u>Pollutant</u>	Emission	Emissions	
	Factor (Lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	0.03	0.31
Nitrogen Oxides (NO _x)	100.0	0.04	0.37
Particulate Matter (PM)	7.6	0.02	0.03
Sulfur Dioxide (SO ₂)	0.6	0.01	0.01
Volatile Organic Material (VOM)	5.5	0.01	0.02

These limits are based on the maximum firing rate of the units combined (0.85 mmBtu/hour), 8,760 hours/year of operation, and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

- d. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from this source shall not exceed 0.9 tons/month and 9.0 tons/year of any single HAP and 2.25 tons/month and 22.5 tons/year of any combination of such HAPs. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirement to obtain a CAAPP permit from the Illinois EPA.
 - e. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).
- 13a. Pursuant to 40 CFR 63.7(a)(2), except as provided in 40 CFR 63.7(a)(4), if required to do performance testing by a relevant standard, and unless a waiver of performance testing is obtained under 40 CFR 63.7 or the conditions of 40 CFR 63.7(c)(3)(ii)(B) apply, the owner or operator of the affected source must perform such tests within 180 days of the compliance date for such source.
- b. i. Pursuant to 40 CFR 63.7(b)(1), the owner or operator of an affected source must notify the Illinois EPA or USEPA in writing of his or her intention to conduct a performance test at least 60 calendar days before the performance test is initially scheduled to begin to allow the Illinois EPA or USEPA, upon request, to review and approve the site-specific test plan required under 40 CFR 63.7(c) and to have an observer present during the test.

- ii. Pursuant to 40 CFR 63.7(b)(2), in the event the owner or operator is unable to conduct the performance test on the date specified in the notification requirement specified in 40 CFR 63.7(b)(1) due to unforeseeable circumstances beyond his or her control, the owner or operator must notify the Illinois EPA or USEPA as soon as practicable and without delay prior to the scheduled performance test date and specify the date when the performance test is rescheduled. This notification of delay in conducting the performance test shall not relieve the owner or operator of legal responsibility for compliance with any other applicable provisions of 40 CFR Part 63 or with any other applicable Federal, State, or local requirement, nor will it prevent the Illinois EPA or USEPA from implementing or enforcing 40 CFR Part 63 or taking any other action under the Clean Air Act.

- c. i. Pursuant to 40 CFR 63.7(c)(2)(i), before conducting a required performance test, the owner or operator of an affected source shall develop and, if requested by the Illinois EPA or USEPA, shall submit a site-specific test plan to the Illinois EPA or USEPA for approval. The test plan shall include a test program summary, the test schedule, data quality objectives, and both an internal and external quality assurance (QA) program. Data quality objectives are the pretest expectations of precision, accuracy, and completeness of data.

- ii. Pursuant to 40 CFR 63.7(c)(2)(ii), the internal QA program shall include, at a minimum, the activities planned by routine operators and analysts to provide an assessment of test data precision; an example of internal QA is the sampling and analysis of replicate samples.

- iii. Pursuant to 40 CFR 63.7(c)(2)(iii), the external QA program shall include, at a minimum, application of plans for a test method performance audit (PA) during the performance test. The PA's consist of blind audit samples provided by the Illinois EPA or USEPA and analyzed during the performance test in order to provide a measure of test data bias. The external QA program may also include systems audits that include the opportunity for on-site evaluation by the Illinois EPA or USEPA of instrument calibration, data validation, sample logging, and documentation of quality control data and field maintenance activities.

- iv. Pursuant to 40 CFR 63.7(c)(2)(iv), the owner or operator of an affected source shall submit the site-specific test plan to the Illinois EPA or USEPA upon the Illinois EPA's or USEPA's request at least 60 calendar days before the performance test is scheduled to take place, that is, simultaneously with the notification of intention to conduct a performance test required under 40 CFR 63.7(b), or on a mutually agreed upon date.

- v. Pursuant to 40 CFR 63.7(c)(2)(v), the Illinois EPA or USEPA may request additional relevant information after the submittal of a site-specific test plan.
- d. Pursuant to 40 CFR 63.7(c)(4)(i), the owner or operator must analyze performance audit (PA) samples during each performance test. The owner or operator must request performance audit materials 30 days prior to the test date. Audit materials including cylinder audit gases may be obtained by contacting the appropriate EPA Regional Office or the responsible enforcement authority.
- e. Pursuant to 40 CFR 63.7(d), if required to do performance testing, the owner or operator of each new source and, at the request of the Illinois EPA or USEPA, the owner or operator of each existing source, shall provide performance testing facilities as follows:
 - i. Sampling ports adequate for test methods applicable to such source. This includes:
 - A. Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures; and
 - B. Providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures;
 - ii. Safe sampling platform(s);
 - iii. Safe access to sampling platform(s);
 - iv. Utilities for sampling and testing equipment; and
 - v. Any other facilities that the Illinois EPA or USEPA deems necessary for safe and adequate testing of a source.
- f. i. Pursuant to 40 CFR 63.7(e)(1), performance tests shall be conducted under such conditions as the Illinois EPA or USEPA specifies to the owner or operator based on representative performance (i.e., performance based on normal operating conditions) of the affected source. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test, nor shall emissions in excess of the level of the relevant standard during periods of startup, shutdown, and malfunction be considered a violation of the relevant standard unless otherwise specified in the relevant standard or a determination of noncompliance is made under 40 CFR 63.6(e). Upon request, the owner or operator shall make available to the Illinois EPA or USEPA such records as may be necessary to determine the conditions of performance tests.

- ii. Pursuant to 40 CFR 63.7(e)(2), performance tests shall be conducted and data shall be reduced in accordance with the test methods and procedures set forth in 40 CFR 63.7, in each relevant standard, and, if required, in applicable appendices of 40 CFR Parts 51, 60, 61, and 63 unless the Illinois EPA or USEPA:
 - A. Specifies or approves, in specific cases, the use of a test method with minor changes in methodology (see definition in 40 CFR 63.90(a)). Such changes may be approved in conjunction with approval of the site-specific test plan (see 40 CFR 63.7(c)); or
 - B. Approves the use of an intermediate or major change or alternative to a test method (see definitions in 40 CFR 63.90(a)), the results of which the Illinois EPA or USEPA has determined to be adequate for indicating whether a specific affected source is in compliance; or
 - C. Approves shorter sampling times or smaller sample volumes when necessitated by process variables or other factors; or
 - D. Waives the requirement for performance tests because the owner or operator of an affected source has demonstrated by other means to the Illinois EPA's or USEPA's satisfaction that the affected source is in compliance with the relevant standard.
- iii. Pursuant to 40 CFR 63.7(e)(3), unless otherwise specified in a relevant standard or test method, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the relevant standard. For the purpose of determining compliance with a relevant standard, the arithmetic mean of the results of the three runs shall apply. Upon receiving approval from the Illinois EPA or USEPA, results of a test run may be replaced with results of an additional test run in the event that—
 - A. A sample is accidentally lost after the testing team leaves the site; or
 - B. Conditions occur in which one of the three runs must be discontinued because of forced shutdown; or
 - C. Extreme meteorological conditions occur; or
 - D. Other circumstances occur that are beyond the owner or operator's control.
- iv. Pursuant to 40 CFR 63.7(e)(4), nothing in 40 CFR 63.7(e)(1) through (e)(3) shall be construed to abrogate the Illinois EPA's

area sources are subject only to those performance testing requirements pertaining to D/F. Owners or operators of sweat furnaces meeting the specifications of 40 CFR 63.1505(f)(1) are not required to conduct a performance test.

- i. The owner or operator must conduct each test while the affected source or emission unit is operating at the highest production level with charge materials representative of the range of materials processed by the unit and, if applicable, at the highest reactive fluxing rate.
 - ii. Each performance test for a continuous process must consist of 3 separate runs; pollutant sampling for each run must be conducted for the time period specified in the applicable method or, in the absence of a specific time period in the test method, for a minimum of 3 hours.
 - iii. Each performance test for a batch process must consist of three separate runs; pollutant sampling for each run must be conducted over the entire process operating cycle.
 - iv. Where multiple affected sources or emission units are exhausted through a common stack, pollutant sampling for each run must be conducted over a period of time during which all affected sources or emission units complete at least 1 entire process operating cycle or for 24 hours, whichever is shorter.
 - v. Initial compliance with an applicable emission limit or standard is demonstrated if the average of three runs conducted during the performance test is less than or equal to the applicable emission limit or standard.
- c. Pursuant to 40 CFR 63.1511(c), the owner or operator must use the following methods in Appendix A to 40 CFR Part 60 to determine compliance with the applicable emission limits or standards:
- i. Method 1 for sample and velocity traverses.
 - ii. Method 2 for velocity and volumetric flow rate.
 - iii. Method 3 for gas analysis.
 - iv. Method 4 for moisture content of the stack gas.
 - v. Method 5 for the concentration of PM.
 - vi. Method 9 for visible emission observations.
 - vii. Method 23 for the concentration of D/F.
 - viii. Method 25A for the concentration of THC, as propane.

- ix. Method 26A for the concentration of HCl. Where a lime-injected fabric filter is used as the control device to comply with the 90 percent reduction standard, the owner or operator must measure the fabric filter inlet concentration of HCl at a point before lime is introduced to the system.

- d. Pursuant to 40 CFR 63.1511(f), with the prior approval of the permitting authority, an owner or operator may utilize emission rates obtained by testing a particular type of group 1 furnace which is not controlled by any add-on control device, or by testing an in-line flux box which is not controlled by any add-on control device, to determine the emission rate for other units of the same type at the same facility. Such emission test results may only be considered to be representative of other units if all of the following criteria are satisfied:
 - i. The tested emission unit must use feed materials and charge rates which are comparable to the emission units that it represents;
 - ii. The tested emission unit must use the same type of flux materials in the same proportions as the emission units it represents;
 - iii. The tested emission unit must be operated utilizing the same work practices as the emission units that it represents;
 - iv. The tested emission unit must be of the same design as the emission units that it represents; and
 - v. The tested emission unit must be tested under the highest load or capacity reasonably expected to occur for any of the emission units that it represents.

- e. Pursuant to 40 CFR 63.1511(g), the owner or operator of new or existing affected sources and emission units must establish a minimum or maximum operating parameter value, or an operating parameter range for each parameter to be monitored as required by 40 CFR 63.1510 that ensures compliance with the applicable emission limit or standard. To establish the minimum or maximum value or range, the owner or operator must use the appropriate procedures in 40 CFR 63.1511 and submit the information required by 40 CFR 63.1515(b)(4) in the notification of compliance status report. The owner or operator may use existing data in addition to the results of performance tests to establish operating parameter values for compliance monitoring provided each of the following conditions are met to the satisfaction of the applicable permitting authority:
 - i. The complete emission test report(s) used as the basis of the parameter(s) is submitted.
 - ii. The same test methods and procedures as required by 40 CFR 63 Subpart RRR were used in the test.

- iii. The owner or operator certifies that no design or work practice changes have been made to the source, process, or emission control equipment since the time of the report.
- iv. All process and control equipment operating parameters required to be monitored were monitored as required in 40 CFR 63 Subpart RRR and documented in the test report.
- f. Pursuant to 40 CFR 63.1511(i), with the prior approval of the permitting authority, an owner or operator may do combined performance testing of two or more individual affected sources or emission units which are not included in a single existing SAPU or new SAPU, but whose emissions are manifolded to a single control device. Any such performance testing of commonly-ducted units must satisfy the following basic requirements:
 - i. All testing must be designed to verify that each affected source or emission unit individually satisfies all emission requirements applicable to that affected source or emission unit;
 - ii. All emissions of pollutants subject to a standard must be tested at the outlet from each individual affected source or emission unit while operating under the highest load or capacity reasonably expected to occur, and prior to the point that the emissions are manifolded together with emissions from other affected sources or emission units;
 - iii. The combined emissions from all affected sources and emission units which are manifolded to a single emission control device must be tested at the outlet of the emission control device;
 - iv. All tests at the outlet of the emission control device must be conducted with all affected sources and emission units whose emissions are manifolded to the control device operating simultaneously under the highest load or capacity reasonably expected to occur; and
 - v. For purposes of demonstrating compliance of a commonly-ducted unit with any emission limit for a particular type of pollutant, the emissions of that pollutant by the individual unit shall be presumed to be controlled by the same percentage as total emissions of that pollutant from all commonly-ducted units are controlled at the outlet of the emission control device.
- 15. Pursuant to 40 CFR 63.1512(a), the owner or operator (of an aluminum scrap shredder) must conduct performance tests to measure PM emissions at the outlet of the control system. If visible emission observations is the selected monitoring option, the owner or operator must record visible emission observations from each exhaust stack for all consecutive 6-minute periods during the PM emission test according to the requirements of Method 9 in Appendix A to 40 CFR Part 60.

- b. Pursuant to 40 CFR 63.1512(q), the owner or operator of an affected source or emission unit using a bag leak detection system must submit the information described in 40 CFR 63.1515(b)(6) as part of the notification of compliance status report to document conformance with the specifications and requirements in 40 CFR 63.1510(f).
 - c. Pursuant to 40 CFR 63.1512(r), the owner or operator of each scrap dryer/delacquering kiln/decoating kiln, group 1 furnace, group 2 furnace and in-line fluxer must submit the information described in 40 CFR 63.1515(b)(3) as part of the notification of compliance status report to document conformance with the operational standard in 40 CFR 63.1506(b).
 - d. Pursuant to 40 CFR 63.1512(s), the owner or operator of a new or existing affected source or emission unit with an add-on control device must submit the information described in 40 CFR 63.1515(b)(2) as part of the notification of compliance status report to document conformance with the operational standard in 40 CFR 63.1506(c).
- 16a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:
- i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.
 - ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

- b. Testing required by Condition 17 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.
- 17. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.
- 18a. Pursuant to 40 CFR 63.8(a)(2), for the purposes of 40 CFR Part 63, all CMS required under relevant standards shall be subject to the provisions of 40 CFR 63.8 upon promulgation of performance specifications for CMS as specified in the relevant standard or otherwise by the Illinois EPA or USEPA.
- b. Pursuant to 40 CFR 63.8(b)(1), monitoring shall be conducted as set forth in 40 CFR 63.8 and the relevant standard(s) unless the Illinois EPA or USEPA:
 - i. Specifies or approves the use of minor changes in methodology for the specified monitoring requirements and procedures (see 40 CFR 63.90(a) for definition); or
 - ii. Approves the use of an intermediate or major change or alternative to any monitoring requirements or procedures (see 40 CFR 63.90(a) for definition).
- 19a. Pursuant to 40 CFR 63.1510(a), on and after the compliance date established by 40 CFR 63.1501, the owner or operator of a new or existing affected source or emission unit must monitor all control equipment and processes according to the requirements in 40 CFR 63.1510. Monitoring requirements for each type of affected source and emission unit are summarized in Table 3 to 40 CFR Subpart RRR.

Table 3 to Subpart RRR of Part 63 – Summary of Monitoring Requirements for New and Existing Affected Sources and Emission Units

Affected source/Emission unit	Monitor Type/Operation/Process	Monitoring requirements
All affected sources and emission units with an add-on air pollution control device	Emission capture and collection system	Annual inspection of all emission capture, collection, and transport systems to ensure that systems continue to operate in accordance with ACGIH standards.

Affected source/Emission unit	Monitor Type/Operation/Process	Monitoring requirements
Group 1 furnace, group 2 furnace, in-line fluxer, and scrap dryer/delacquering kiln/decoating kiln	Labeling	Check monthly to confirm that labels are intact and legible.
Aluminum scrap shredder with fabric filter	Bag leak detector or VE	Install and operate in accordance with "Fabric Filter Bag Leak Detection Guidance" ^c ; record voltage output from bag leak detector. Conduct and record results of 30-minute daily test in accordance with Method 9.
Clean (group 2) furnace	Charge and flux materials	Record charge and flux materials; certify every 6 months for clean charge and no reactive flux.

^c Non-triboelectric bag leak detectors must be installed and operated in accordance with manufacturers' specifications.

b. Pursuant to 40 CFR 63.1510(b), the owner or operator must prepare and implement for each new or existing affected source and emission unit, a written operation, maintenance, and monitoring (OM&M) plan. The owner or operator of an existing affected source must submit the OM&M plan to the responsible permitting authority no later than the compliance date established by 40 CFR 63.1501(a). The owner or operator of any new affected source must submit the OM&M plan to the responsible permitting authority within 90 days after a successful initial performance test under 40 CFR 63.1511(b), or within 90 days after the compliance date established by 40 CFR 63.1501(b) if no initial performance test is required. The plan must be accompanied by a written certification by the owner or operator that the OM&M plan satisfies all requirements of 40 CFR 63.1510 and is otherwise consistent with the requirements of 40 CFR 63 Subpart RRR. The owner or operator must comply with all of the provisions of the OM&M plan as submitted to the permitting authority, unless and until the plan is revised in accordance with the following procedures. If the permitting authority determines at any time after receipt of the OM&M plan that any revisions of the plan are necessary to satisfy the requirements of 40 CFR 63.1510 or 40 CFR Subpart RRR, the owner or operator must promptly make all necessary revisions and resubmit the revised plan. If the owner or operator determines that any other revisions of the OM&M plan are necessary, such revisions will not become effective until the owner or operator submits a description of the changes and a revised plan incorporating them to the permitting authority. Each plan must contain the following information:

- i. Process and control device parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process and control device.
- ii. A monitoring schedule for each affected source and emission unit.

- iii. Procedures for the proper operation and maintenance of each process unit and add-on control device used to meet the applicable emission limits or standards in 40 CFR 63.1505.
 - iv. Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including:
 - A. Calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and
 - B. Procedures for the quality control and quality assurance of continuous emission or opacity monitoring systems as required by the general provisions in 40 CFR Part 63 Subpart A.
 - v. Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure to be used for determining charge/feed (or throughput) weight if a measurement device is not used.
 - vi. Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established in 40 CFR 63.1510(b)(1), including:
 - A. Procedures to determine and record the cause of any deviation or excursion, and the time the deviation or excursion began and ended; and
 - B. Procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action were completed.
 - vii. A maintenance schedule for each process and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.
 - viii. Documentation of the work practice and pollution prevention measures used to achieve compliance with the applicable emission limits and a site-specific monitoring plan as required in 40 CFR 63.1510(o) for each group 1 furnace not equipped with an add-on air pollution control device.
- c. Pursuant to 40 CFR 63.1510(c), the owner or operator must inspect the labels for each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln at least once per calendar month to confirm that posted labels as required by the operational standard in 40 CFR 63.1506(b) are intact and legible.
- d. Pursuant to 40 CFR 63.1510(d), the owner or operator must:

- i. Install, operate, and maintain a capture/collection system for each affected source and emission unit equipped with an add-on air pollution control device; and
 - ii. Inspect each capture/collection and closed vent system at least once each calendar year to ensure that each system is operating in accordance with the operating requirements in 40 CFR 63.1506(c) and record the results of each inspection.
- e. Pursuant to 40 CFR 63.1510(f), the owner or operator of an affected source or emission unit using a fabric filter or lime-injected fabric filter to comply with the requirements of 40 CFR 60 Subpart RRR must install, calibrate, maintain, and continuously operate a bag leak detection system as required in 40 CFR 63.1510(f)(1) or a continuous opacity monitoring system as required in 40 CFR 63.1510(f)(2). The owner or operator of an aluminum scrap shredder must install and operate a bag leak detection system as required in 40 CFR 63.1510(f)(1), install and operate a continuous opacity monitoring system as required in 40 CFR 63.1510(f)(2), or conduct visible emission observations as required in 40 CFR 63.1510(f)(3).
- i. These requirements apply to the owner or operator of a new or existing affected source or existing emission unit using a bag leak detection system.
 - A. The owner or operator must install and operate a bag leak detection system for each exhaust stack of a fabric filter.
 - B. Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance," (September 1997). This document is available from the U.S. Environmental Protection Agency; Office of Air Quality Planning and Standards; Emissions, Monitoring and Analysis Division; Emission Measurement Center (MD-19), Research Triangle Park, NC 27711. This document also is available on the Technology Transfer Network (TTN) under Emission Measurement Technical Information (EMTIC), Continuous Emission Monitoring. Other bag leak detection systems must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.
 - C. The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.
 - D. The bag leak detection system sensor must provide output of relative or absolute PM loadings.

- E. The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.
 - F. The bag leak detection system must be equipped with an alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel.
 - G. For positive pressure fabric filter systems, a bag leak detection system must be installed in each baghouse compartment or cell. For negative pressure or induced air fabric filters, the bag leak detector must be installed downstream of the fabric filter.
 - H. Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.
 - I. The baseline output must be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time.
 - J. Following initial adjustment of the system, the owner or operator must not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time except as detailed in the OM&M plan. In no case may the sensitivity be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless such adjustment follows a complete fabric filter inspection which demonstrates that the fabric filter is in good operating condition.
- ii. These requirements apply to the owner or operator of a new or existing aluminum scrap shredder who conducts visible emission observations. The owner or operator must:
- A. Perform a visible emissions test for each aluminum scrap shredder using a certified observer at least once a day according to the requirements of Method 9 in Appendix A to 40 CFR Part 60. Each Method 9 test must consist of five 6-minute observations in a 30-minute period; and
 - B. Record the results of each test.
- f. Pursuant to 40 CFR 63.1510(r), these requirements apply to the owner or operator of a new or existing group 2 furnace. The owner or operator must:
- i. Record a description of the materials charged to each furnace, including any nonreactive, non-HAP-containing/non-HAP-generating fluxing materials or agents.

- ii. Submit a certification of compliance with the applicable operational standard for charge materials in 40 CFR 63.1506(o) for each 6-month reporting period. Each certification must contain the information in 40 CFR 63.1516(b)(2)(v).
- 20a. Pursuant to 40 CFR 63.10(b)(1), the owner or operator of an affected source subject to the provisions of 40 CFR Part 63 shall maintain files of all information (including all reports and notifications) required by 40 CFR Part 63 recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche.
- b. Pursuant to 40 CFR 63.10(b)(2)(xiv), the owner or operator of an affected source subject to the provisions of 40 CFR Part 63 shall maintain relevant records for such source of all documentation supporting initial notifications and notifications of compliance status under 40 CFR 63.9.
 - c. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR

63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

- 21a. Pursuant to 40 CFR 63.1517(a), as required by 40 CFR 63.10(b), the owner or operator shall maintain files of all information (including all reports and notifications) required by the general provisions and 40 CFR 63 Subpart RRR.
- i. The owner or operator must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site.
 - ii. The owner or operator may retain records on microfilm, computer disks, magnetic tape, or microfiche; and
 - iii. The owner or operator may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.
- b. Pursuant to 40 CFR 63.1517(b), in addition to the general records required by 40 CFR 63.10(b), the owner or operator of a new or existing affected source (including an emission unit in a secondary aluminum processing unit) must maintain records of:
- i. For each affected source and emission unit with emissions controlled by a fabric filter or a lime-injected fabric filter:
 - A. If a bag leak detection system is used, the number of total operating hours for the affected source or emission unit during each 6-month reporting period, records of each alarm, the time of the alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action(s) taken.
 - B. If an aluminum scrap shredder is subject to visible emission observation requirements, records of all Method 9 observations, including records of any visible emissions during a 30-minute daily test, with a brief explanation of the cause of the emissions, the time the emissions occurred, the time corrective action was initiated and completed, and the corrective action taken.
 - ii. Records of all charge materials and fluxing materials or agents for a group 2 furnace.
 - iii. Records of monthly inspections for proper unit labeling for each affected source and emission unit subject to labeling requirements.

- iv. Records of annual inspections of emission capture/collection and closed vent systems.
 - v. Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:
 - A. Startup, shutdown, and malfunction plan;
 - B. OM&M plan; and
 - C. Site-specific secondary aluminum processing unit emission plan (if applicable).
22. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.
- 23a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:
- i. Records addressing use of good operating practices for each baghouse and cyclone:
 - A. Records for periodic inspection of each baghouse and cyclone with date, individual performing the inspection, and nature of inspection; and
 - B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.
 - ii. Amount of materials charged to each furnaces (tons/month and tons/year);
 - iii. Description of the materials charged to each furnace (VOM and HAP content, wt. % of precious metals, etc.);
 - iv. Natural gas usage (mmscf/month and mmscf/year); and
 - v. Monthly and annual CO, NO_x, PM, PM₁₀, SO₂, VOM, and HAP emissions from the source with supporting calculations (tons/months and tons/year).
- b. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source

office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

- 24a. Pursuant to 40 CFR 63.9(h)(1), the requirements of 40 CFR 63.9(h)(2) through (h)(4) apply when an affected source becomes subject to a relevant standard.
- b. i. Pursuant to 40 CFR 63.9(h)(2)(i), before a title V permit has been issued to the owner or operator of an affected source, and each time a notification of compliance status is required under 40 CFR Part 63, the owner or operator of such source shall submit to the Illinois EPA or USEPA a notification of compliance status, signed by the responsible official who shall certify its accuracy, attesting to whether the source has complied with the relevant standard. The notification shall list:
- A. The methods that were used to determine compliance;
 - B. The results of any performance tests, opacity or visible emission observations, continuous monitoring system (CMS) performance evaluations, and/or other monitoring procedures or methods that were conducted;
 - C. The methods that will be used for determining continuing compliance, including a description of monitoring and reporting requirements and test methods;
 - D. The type and quantity of hazardous air pollutants emitted by the source (or surrogate pollutants if specified in the relevant standard), reported in units and averaging times and in accordance with the test methods specified in the relevant standard;
 - E. If the relevant standard applies to both major and area sources, an analysis demonstrating whether the affected source is a major source (using the emissions data generated for this notification);
 - F. A description of the air pollution control equipment (or method) for each emission point, including each control device (or method) for each hazardous air pollutant and the control efficiency (percent) for each control device (or method); and
 - F. A statement by the owner or operator of the affected existing, new, or reconstructed source as to whether the source has complied with the relevant standard or other requirements.
- ii. Pursuant to 40 CFR 63.9(h)(2)(ii), the notification must be sent before the close of business on the 60th day following the completion of the relevant compliance demonstration activity

specified in the relevant standard (unless a different reporting period is specified in the standard, in which case the letter must be sent before the close of business on the day the report of the relevant testing or monitoring results is required to be delivered or postmarked). For example, the notification shall be sent before close of business on the 60th (or other required) day following completion of the initial performance test and again before the close of business on the 60th (or other required) day following the completion of any subsequent required performance test. If no performance test is required but opacity or visible emission observations are required to demonstrate compliance with an opacity or visible emission standard under 40 CFR Part 63, the notification of compliance status shall be sent before close of business on the 30th day following the completion of opacity or visible emission observations. Notifications may be combined as long as the due date requirement for each notification is met.

- c. Pursuant to 40 CFR 63.9(j), any change in the information already provided under 40 CFR 63.9 shall be provided to the Illinois EPA or USEPA in writing within 15 calendar days after the change.

- 25a. Pursuant to 40 CFR 63.1516(a), the owner or operator must develop a written plan as described in 40 CFR 63.6(e)(3) that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard. The owner or operator shall also keep records of each event as required by 40 CFR 63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3). In addition to the information required in 40 CFR 63.6(e)(3), the plan must include:
 - i. Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and
 - ii. Corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

- b. Pursuant to 40 CFR 63.1516(b), the owner or operator must submit semiannual reports according to the requirements in 40 CFR 63.10(e)(3). Except, the owner or operator must submit the semiannual reports within 60 days after the end of each 6-month period instead of within 30 days after the calendar half as specified in 40 CFR 63.10(e)(3)(v). When no deviations of parameters have occurred, the owner or operator must submit a report stating that no excess emissions occurred during the reporting period.
 - i. A report must be submitted if any of these conditions occur during a 6-month reporting period:

- A. The corrective action specified in the OM&M plan for a bag leak detection system alarm was not initiated within 1 hour.
 - B. The corrective action specified in the OM&M plan for visible emissions from an aluminum scrap shredder was not initiated within 1 hour.
 - C. An excursion of a compliant process or operating parameter value or range (*e.g.*, lime injection rate or screw feeder setting, total reactive chlorine flux injection rate, afterburner operating temperature, fabric filter inlet temperature, definition of acceptable scrap, or other approved operating parameter).
 - D. An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3).
 - E. An affected source (including an emission unit in a secondary aluminum processing unit) was not operated according to the requirements of 40 CFR 63 Subpart RRR.
- ii. Each report must include each of these certifications, as applicable:
- For each group 2 furnace: "Only clean charge materials were processed in any group 2 furnace during this reporting period, and no fluxing was performed or all fluxing performed was conducted using only nonreactive, non-HAP-containing/non-HAP-generating fluxing gases or agents, except for cover fluxes, during this reporting period."
- iii. The owner or operator must submit the results of any performance test conducted during the reporting period, including one complete report documenting test methods and procedures, process operation, and monitoring parameter ranges or values for each test method used for a particular type of emission point tested.
26. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.
- 27a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance or deviation. The report shall include the emissions released in accordance with the

recordkeeping requirements, a copy of the relevant records, and a description of the exceedances or deviation and efforts to reduce emissions and future occurrences.

- b. Two (2) copies of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
9511 West Harrison
Des Plaines, Illinois 60016

If you have any questions on this, please call German Barria at 217/782-2113.

Edwin C. Bakowski, P.E.
Manager, Permit Section
Division of Air Pollution Control

Date Signed: _____

ECB:GB:psj

cc: Illinois EPA, FOS Region 1
Lotus Notes

Attachment A - Emissions Summary

This attachment provides a summary of the maximum emission from the Aluminum Smelting Facility operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Agency used the annual operating scenario which results in maximum emissions from such a plant. This is processing of 68,400 tons of the materials per year. The resulting maximum emissions are well below the levels (e.g., 100 tons/year for CO, PM₁₀, and NO_x, 10 tons per year for a single HAP, and 25 tons per year for any combination of such HAPs) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that material is handled, and control measures are more effective than required in this permit.

<u>Emission Unit</u>	EMISSIONS (Tons/Year)					<u>Single HAP</u>	<u>Total HAPs</u>
	<u>CO</u>	<u>NO_x</u>	<u>PM</u>	<u>SO₂</u>	<u>VOM</u>		
3 Reverberatory Furnaces (Process)			85.41				
3 Reverberatory Furnaces (Combustion)	24.28	28.91	2.20	0.17	1.59		
4 Molten Pot Preheaters (Combustion)	7.39	8.80	0.67	0.05	0.48		
Other heating Units (Combustion)	0.31	0.37	0.03	0.01	0.02		
1 Scrap Crushing Operation	<u>0.00</u>	<u>0.00</u>	<u>1.28</u>	<u>0.00</u>	<u>0.00</u>	<u>-----</u>	<u>-----</u>
Totals	31.98	38.08	89.59	0.23	2.09	9.0	22.5

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