

217/782-2113

LIFETIME OPERATING PERMIT -- NSPS AND NESHAP SOURCE -- REVISED

PERMITTEE

H. Kramer & Company
Attn: Randall K. Weil
1345 West 21st Street
Chicago, Illinois 60608

Application No.: 72090081 I.D. No.: 031600AGL
Applicant's Designation: 031600AGL Date Received: May 27, 2009
Subject: Smelter and Refiner
Date Issued: October 26, 2009 Expiration Date: See Condition 1.
Location: 1345 West 21st Street, Chicago, Cook County, 60608

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of:

Rotary Furnace #1 Controlled by Baghouses #2 and #6 and Fugitive Baghouse #5
Rotary Furnace #2 Controlled by Baghouses #2 and #6 and Fugitive Baghouse #1
3 Coreless Induction Furnaces (operating up to 2 at a time) Controlled by Baghouse #4
2 Channel Induction Furnaces Controlled by Venturi Scrubber with Mist Eliminator
1 Brick Crusher

pursuant to the above-referenced application. This permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This operating permit shall expire 180 days after the Illinois EPA sends a written request for the renewal of this permit.
- b. This permit shall terminate if it is withdrawn or is superseded by a revised permit.
2. This permit is issued based on the potential to emit (PTE) for hazardous air pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act being less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs, or such less quantity as USEPA may establish by rule which would require the Permittee to obtain a Clean Air Act Permit Program (CAAPP) permit from the Illinois EPA.
- 3a. The coreless induction furnaces are subject to the New Source Performance Standard (NSPS) for Secondary Brass and Bronze Production Plants, 40 CFR 60, Subpart A and M. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States EPA under a delegation agreement.
- b. Pursuant to 40 CFR 60.132(b), on and after the date on which the initial performance test is completed or required to be completed under 40 CFR 60.8, whichever date comes first, no owner or operator of an affected facility shall cause to be discharged into the atmosphere from

that affected facility any gases that exhibit 10 percent opacity or greater.

- c. Pursuant to 40 CFR 60.11(d), at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating 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, opacity observations, review of operating and maintenance procedures, and inspection of the source.
- 4a. All furnace melting operations at this source are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Secondary Nonferrous Metals Processing Area Sources, 40 CFR 63 Subparts A and TTTTTT. 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 63.11465(a), you must route the emissions from each existing affected source through a fabric filter or baghouse that achieves a particulate matter (PM) control efficiency of at least 99.0 percent or an outlet PM concentration limit of 0.034 grams per dry standard cubic meter (g/dscm) (0.015 grains per dry standard cubic feet (gr/dscf)).
- c. The Permittee shall comply with the applicable testing, monitoring, notification, and recordkeeping requirements in 40 CFR Part 63 Subpart TTTTTT.
- 5a. Pursuant to 35 Ill. Adm. Code 212.301 the Permittee shall not cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible to an observer looking generally toward the zenith at a point beyond the property line of the source.
- b. Pursuant to 35 Ill. Adm. Code 212.321, 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).
- c. The Permittee shall operate the source in such a way that the opacity of emissions does not exceed the limits specified in 35 Ill. Adm. Code 212.123.
- 6a. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic inspections and maintenance on the equipment covered under this permit such that the equipment is kept in proper working condition and not cause a violation of the Environmental Protection Act or regulations promulgated therein.

- b. Pollution control devices shall be in operation at all times when the associated emission unit(s) is in operation and emitting air contaminants.
- 7. The Permittee shall not allow or cause to allow the processing of any scrap containing Beryllium.
- 8. Emissions and operation of the following equipment shall not exceed the following limits:

<u>Item of Equipment</u>	<u>Process Weight Rate</u>		<u>Particulate Matter Emissions</u>	
	<u>(Tons/Hour)</u>	<u>(Lbs/Hour)</u>	<u>(Lbs/Hour)</u>	<u>(Tons/Year)</u>
Rotary Furnace #1	2.1		3.77	16.5
Rotary Furnace #2	2.5		4.18	18.3

<u>Natural Gas Combustion Emissions</u>	<u>Nitrogen Oxides</u>		<u>Carbon Monoxide</u>	
	<u>(Lbs/Hr)</u>	<u>(Tons/Yr)</u>	<u>(Lbs/Hr)</u>	<u>(Tons/Yr)</u>
Rotary Furnace #1 (11.5 mmBtu)	1.15	5.04	0.97	4.23
Rotary Furnace #2 (20.8 mmBtu)	2.08	9.11	1.74	7.65

These limits are based on the maximum process rates and firing rates indicated by the Permittee, continuous operation (8,760 hours/year), standard emission factors for fuel combustion (AP-42) and allowable particulate matter in Ill. Adm. Code 212.321 as this is more restrictive than the 0.015 gr/dscf limit required by 40 CFR 63.11465(a). Compliance with annual limits shall be determined from a running total of 12 months of data.

- 9. Emissions and operation of the following equipment shall not exceed the following limits:

<u>Item of Equipment</u>	<u>Particulate Matter Emissions</u>	
	<u>(Lbs/Hour)</u>	<u>(Tons/Year)</u>
2 Channel Induction Furnaces	1.33	5.60
3 Coreless Induction Furnaces (Operated 2 at one time)	3.10	13.07

These limits are based on the maximum process rates indicated by the Permittee, continuous operation (8,760 hours/year), and allowable particulate matter in 40 CFR 63.11465(a) which is more restrictive than Ill. Adm. Code 212.321. Compliance with annual limits shall be determined from a running total of 12 months of data.

- 10. This permit is issued based on negligible emissions of particulate matter from the brick crusher. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year.
- 11. Operation in excess of the applicable emission standards during malfunction and breakdown is allowed. This allowance applies only to the following specific equipment: 2 rotary furnaces not to exceed 24 hours in length. This condition supersedes standard condition No. 9.a

as it applies to malfunction or breakdown. The Permittee shall maintain the records required by standard condition No. 9.b.

12. The Permittee shall maintain records of excess emissions during malfunctions and breakdowns. As a minimum, these records shall include:
 - a. Date and duration of malfunction or breakdown;
 - b. A full and detailed explanation of the cause for such emissions;
 - c. The contaminants emitted and an estimate of the quantity of emissions;
 - d. The measures used to reduce the quantity of emissions and the duration of the occurrence;
 - e. The steps taken to prevent similar malfunctions or breakdowns or reduce their frequency and severity; and
 - f. The Permittee shall notify in writing the Illinois EPA's regional office:

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

by 10:00 a.m. of the next workday of any malfunction or breakdown of the rotary furnaces or associated control.

13. The Permittee shall maintain monthly records of the following items:
 - a. Metal processed for each furnace (tons/month and tons/year);
 - b. Natural gas usage (scf/month and scf/year); and
 - c. Particulate Matter, Nitrogen Oxides, and Carbon Monoxide and Lead emissions with supporting calculations (tons/month and tons/year).
14. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three years from the date of entry and shall be made available for inspection and copying by the Illinois EPA upon request. Any records retained in an electronic format (e.g., computer) 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 request for records during the course of a source inspection.
15. If there is an exceedance of or 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/deviation. The report shall include the emissions released

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

16. 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

17. Persons with a lifetime operating permit must obtain a revised permit for any of the following changes at the source:

- a. An increase in emissions above the amount the emission unit or the source is permitted to emit; or
- b. A modification; or
- c. A change in operations that will result in the source's noncompliance with a condition in the existing permit; or
- d. A change in ownership, company name, or address, so that the application or existing permit is no longer accurate.

Please note that this permit has been revised to incorporate Construction Permits 06030096 and 07030082 and the required testing that was performed as required by those construction permits.

If you have any questions on this permit, please contact Bruce Beazly at 217/782-2113.

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

Date Signed: _____

ECB:BDB:jws

cc: Region 1
Chris Pressnall, DLC