



State of Ohio Environmental Protection Agency

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JUN 14 2007

Street Address:

Lazarus Gov. Center
50 West Town Street, Suite 700
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

CANTON CITY HEALTH DEPT Mailing Address:

AIR POLLUTION DIVISION
Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

CERTIFIED MAIL

RE: FINAL PERMIT TO INSTALL
STARK COUNTY

Application No: 15-01657
Fac ID: 1576001813

DATE: 6/7/2007

Thakar Aluminum Corp. - Canton Facility
Richard Pollock
1364 Olds Street
Canton, OH 442860449

	TOXIC REVIEW
	PSD
	SYNTHETIC MINOR
	CEMS
40 CFR Part 63, subpart RRR	MACT
	NSPS
	NESHAPS
	NETTING
	MAJOR NON-ATTAINMENT
	MODELING SUBMITTED
	GASOLINE DISPENSING FACILITY

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00 which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, OH 43215

Sincerely,

Michael W. Ahern

Michael W. Ahern, Manager
Permit Issuance and Data Management Section
Division of Air Pollution Control

CC: USEPA

Canton LAA



Permit To Install
Terms and Conditions

Issue Date: 6/7/2007
Effective Date: 6/7/2007

FINAL PERMIT TO INSTALL 15-01657

Application Number: 15-01657

Facility ID: 1576001813

Permit Fee: **\$1500**

Name of Facility: Thakar Aluminum Corp. - Canton Facility

Person to Contact: Richard Pollock

Address: 1364 Olds Street
Canton, OH 442860449

Location of proposed air contaminant source(s) [emissions unit(s)]:
4420 Louisville Street N.E.
Canton, Ohio

Description of proposed emissions unit(s):
PTI modification to use reflux materials in 2 reverbratory secondary aluminum furnaces.

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director

Part I - GENERAL TERMS AND CONDITIONS

A. Permit to Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) quarterly by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment - (P901) - Secondary Aluminum Group 1 Reverberatory Furnace with 2 Natural Gas Fired Burners each rated at 9MMBtu/hr. The Furnace processes 4.5 tons of scrap/hr and is an area source for HAP's.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
ORC 3704.03(T)(4)	The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE, PM-10, SOx, NOx, CO, or VOC from this air contaminant source since the uncontrolled potential to emit for these pollutants is less than ten tons per year.
OAC rule 3745-17-11(B)	11.2 lbs PE/hr. (See Table 1 in OAC rule 3745-17-11) See section A.2.c.
OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from the stack shall not exceed 20% opacity as a 6-minute average.
OAC rule 3745-17-07(B)(1)	Visible particulate emissions (PE) of fugitive dust shall not exceed 20% opacity as a 3-minute average.
OAC rule 3745-17-08(A)	See section A.2.a below.
40 CFR part 63 subpart RRR	See section A.2.b below.

2. Additional Terms and Conditions

- 2.a The permittee shall employ control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.
- 2.b This affected emissions unit is designated as a Group 1 furnace under 40 CFR part 63 subpart RRR solely because it uses a reactive flux during the melting process. However, because the emission unit melts only clean scrap and as long as it remains an area source for HAP's, subpart RRR does not apply. (See sections 40 CFR Part 63.1500(b)(8) and 40 CFR Part 63.1500(c)(4)).

- 2.c This emission limitation is based on the emissions units potential to emit. Therefore, no monitoring, record keeping, or reporting is necessary to ensure compliance with this emission limit.

B. Operational Restrictions

1. The permittee shall only fire natural gas enriched with oxygen per this PTI as fuel in this emissions unit.
2. The permittee shall charge this emission unit with clean aluminum material only. Clean material charge is defined as follows: "materials including molten aluminum; T-bar; sow; ingot; billet; pig; alloying elements; uncoated/ unpainted thermally dried aluminum chips; aluminum scrap dried at 650°F or higher; aluminum scrap delacquered/ decoated at 900°F or higher; other oil and lubricant free unpainted/ uncoated gates and risers; oil and lubricant free unpainted/ uncoated aluminum scrap, shapes, or products (e.g. pistons) that have not undergone any process (e.g. machining, coating, painting, etc.) that would cause contamination of the aluminum (with oils, lubricants, coatings, or paints); and internal runaround."
3. The permittee shall flux in this emission unit with only chlorine based reactive fluxing agents. The addition of flux shall be limited to cover flux and/or injection of the flux material under the metal line with a lance during the preparatory cycle. The permittee shall not add reactive fluxing within the hearth or in the sidewell at times when the level of molten metal falls below the top of the passage between the sidewell and the hearth.
4. Alloying, if any is performed in this emissions unit, shall be done with only clean materials, ie., free of HAP's or precursors to HAP's.
5. The permittee shall operate this emissions unit utilizing flux materials with the same weight percent halogen content and the same quantity as used during the most recent approved stack test.

C. Monitoring and/or Record keeping Requirements

1. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

- d. the total duration of any visible emissions incident; and
- e. any corrective actions taken to minimize or eliminate the visible emissions.

If any visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

2. The permittee shall maintain records of permissible feed/charge material and certify charge materials every six months.
3. The permittee shall maintain records of the flux materials used by name and manufacturer, the halogen content of each flux(as provided by the manufacturer), and the quantity of flux used per batch of aluminum processed.

D. Reporting Requirements

1. The permittee shall submit semi-annual written reports which:
 - a. identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and
 - b. describe any corrective actions taken to minimize or eliminate the visible particulate emissions.

These reports shall be submitted to the Canton City Health Department Air Pollution Control Division by January 31 and July 31 of each year and shall cover the previous 6-month periods.

2. If no visible emissions were observed during the reporting period, the permittee shall submit a report which states no visible emissions were observed during the reporting period.
3. The permittee shall submit a deviation (excursion) report for all instances in which any materials other than clean aluminum ingots, bar stock and dry sawed-off pieces of solid aluminum, aluminum chips and turnings from machining, or clean alloying materials were charged into this emissions unit.

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment - (P902) - Secondary Aluminum Group 1 Reveratory Furnace with 2 Natural Gas Fired Burners each rated at 9MMBtu/hr. The Furnace processes 4.5 tons of scrap/hr and is an area source for HAP's.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
ORC 3704.03(T)(4)	The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE, PM-10, SOx, NOx, CO, or VOC from this air contaminant source since the uncontrolled potential to emit for these pollutants is less than ten tons per year.
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OAC rule 3745-17-08(A)	See section A.2.a below.
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- 2.a The permittee shall employ control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.
- 2.b This affected emissions unit is designated as a Group 1 furnace under 40 CFR part 63 subpart RRR soley because it uses a reactive flux during the melting process. However, because the emission unit melts only clean scrap and as long as it remains an area source for HAP's, subpart RRR does not apply. (See sections 40 CFR Part 63.1500(b)(8) and 40 CFR Part 63.1500(c)(4)).

- 2.c This emission limitation is based on the emissions units potential to emit. Therefore, no monitoring, record keeping, or reporting is necessary to ensure compliance with this emission limit.

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1. The permittee shall only fire natural gas enriched with oxygen per this PTI as fuel in this emissions unit.
2. The permittee shall charge this emission unit with clean aluminum material only. Clean material charge is defined as follows: "materials including molten aluminum; T-bar; sow; ingot; billet; pig; alloying elements; uncoated/ unpainted thermally dried aluminum chips; aluminum scrap dried at 650°F or higher; aluminum scrap delacquered/ decoated at 900°F or higher; other oil and lubricant free unpainted/ uncoated gates and risers; oil and lubricant free unpainted/ uncoated aluminum scrap, shapes, or products (e.g. pistons) that have not undergone any process (e.g. machining, coating, painting, etc.) that would cause contamination of the aluminum (with oils, lubricants, coatings, or paints); and internal runaround."
3. The permittee shall flux in this emission unit with only chlorine based reactive fluxing agents. The addition of flux shall be limited to cover flux and/or injection of the flux material under the metal line with a lance during the preparatory cycle. The permittee shall not add reactive fluxing within the hearth or in the sidewell at times when the level of molten metal falls below the top of the passage between the sidewell and the hearth.
4. Alloying, if any is performed in this emissions unit, shall be done with only clean materials, ie., free of HAP's or precursors to HAP's.
5. The permittee shall operate this emissions unit while utilizing flux with the same weight percent halogen content and the same quantity as used during the most recent approved stack test.

C. Monitoring and/or Record keeping Requirements

1. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

- d. the total duration of any visible emissions incident; and
- e. any corrective actions taken to minimize or eliminate the visible emissions.

If any visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

- 2. The permittee shall maintain records of permissible feed/charge material and certify charge materials every six months.
- 3. The permittee shall maintain records of the flux materials used by name and manufacturer, the halogen content of each flux (as provided by the manufacturer), and the quantity of flux used per batch of aluminum processed.

D. Reporting Requirements

- 1. The permittee shall submit semi-annual written reports which:
 - a. identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and
 - b. describe any corrective actions taken to minimize or eliminate the visible particulate emissions.

These reports shall be submitted to the Canton City Health Department Air Pollution Control Division by January 31 and July 31 of each year and shall cover the previous 6-month periods.

- 2. If no visible emissions were observed during the reporting period, the permittee shall submit a report which states no visible emissions were observed during the reporting period.
- 3. The permittee shall submit a deviation (excursion) report for all instances in which any materials other than clean aluminum ingots, bar stock and dry sawed-off pieces of solid aluminum, aluminum chips and turnings from machining, or clean alloying materials were charged into this emissions unit.

4. The permittee shall submit a deviation (excursion) report for all instances in which materials bearing oil, grease, paint, coatings, lubricants, paper, rubber, plastic, rags or other foreign materials were charged into this emissions unit.
 5. The permittee shall submit a deviation(excursion) report for all instances in which flux halogen content and/or flux quantity charged exceeds those values used during the most recent approved stack test.
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E. Testing Requirements

1. Compliance with the emissions limitations in section A.1 of the terms and conditions of this permit shall be determined in accordance with the following methods:
 - a. Emissions Limitation:
11.2 lbs PE/hour

Applicable Compliance Method
Compliance shall be demonstrated by emissions tests performed in accordance with the test methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and section A.E.2.
 - b. Emissions Limitation:
Visible particulate emissions (PE) from the stack shall not exceed 20% opacity as a 6-minute average.

Applicable Compliance Method
Compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).
 - c. Emissions Limitation:
Visible particulate emissions (PE) of fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method
Compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 22 and the procedures specified in OAC rule 3745-17-03(B)(4).
2. The permittee shall conduct emissions testing for this emissions unit in accordance with the following requirements:
 - a. The emissions testing shall be conducted to demonstrate compliance with the PE emissions limitation in this PTI. Emissions testing shall also be conducted to demonstrate area source status of this emissions unit.

- b. The emissions testing shall be conducted while the emissions unit is operating at or near maximum capacity.
- c. The emissions testing shall be conducted in accordance with the applicable test methods in 40 CFR Part 60, subpart A and for the following parameters as specified below:

- i. PE: US EPA Method 1 - 4 and 5.
- ii. HCl, HF, and Cl₂ US EPA Method 26A

- 3. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Canton City Health Department, Air Pollution Control Division. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Canton City Health Department, Air Pollution Control Division's refusal to accept the results of the emissions test(s).
- 4. Personnel from the Canton City Health Department, Air Pollution Control Division shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from this emissions unit and/or the performance of the control equipment.
- 5. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or person(s) responsible for the results for the test(s) and submitted to the Canton City Health Department, Air Pollution Control Division within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Canton City Health Department, Air Pollution Control Division.

F. Miscellaneous Requirements

- 1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the increase in emissions due to the modification to this emissions unit was less than 1.0 ton per year of each toxic pollutant that has a listed Threshold Limit Value (TLV), as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices").