



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL MODIFICATION
BUTLER COUNTY**

CERTIFIED MAIL

Street Address:

122 S. Front Street

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 14-04212

DATE: 10/16/2003

US Aluminate Company Inc.
Peter Askew
9411 Philadelphia Road, Suite H
Baltimore, MD 21237

Enclosed Please find a modification to the Ohio EPA Permit To Install referenced above which will modify the terms and conditions.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 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. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. 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, Ohio 43215

Sincerely,

Michael W. Ahern

Michael W. Ahern, Supervisor
Field Operations and Permit Section
Division of Air Pollution Control

cc: USEPA

HCDES



STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

**Permit To Install
Terms and Conditions**

**Issue Date: 10/16/2003
Effective Date: 10/16/2003**

FINAL ADMINISTRATIVE MODIFICATION OF PERMIT TO INSTALL 14-04212

Application Number: 14-04212
APS Premise Number: 1409030215
Permit Fee: **\$0**
Name of Facility: US Aluminate Company Inc.
Person to Contact: Peter Askew
Address: 9411 Philadelphia Road, Suite H
Baltimore, MD 21237

Location of proposed air contaminant source(s) [emissions unit(s)]:
**3700 Dixie Highway
Fairfield, Ohio**

Description of proposed emissions unit(s):
12.55 MMBTU/HR Natural Gas/No. 2 Fuel Oil Fired Boiler.

The above named entity is hereby granted a modification to the permit to install described above pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this modification 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 source(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 included in the application, the above described source(s) of pollutants will be granted the necessary operating permits.

This permit is granted subject to the conditions attached hereto.


Ohio Environmental Protection Agency

Director

US Aluminate Company Inc.
PTI Application: 14-04212
Modification Issued: 10/16/2003

Facility ID: 1409030215

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 quarterly, i.e., 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 regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized

representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

6. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

7. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

8. Termination of Permit to Install

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

9. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio

US Aluminate Company Inc.
PTI Application: 14-04212
Modification Issued: 10/16/2003

Facility ID: 1409030215

Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

10. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

11. Applicability

This Permit To Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

12. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

13. Source Operation and Operating Permit Requirements After Completion of Construction

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or

US Aluminate Company Inc.

Facility ID: 1409030215

PTI Application: 14-04212

Modification Issued: 10/16/2003

modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the source(s) covered by this permit.

14. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

15. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

B. Permit to Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

SUMMARY (for informational purposes only) TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons Per Year</u>
PM	0.63
PM ₁₀	0.41
SO ₂	16.73
NO _x	6.86
CO	4.51
OC	0.59

US Aluminate Company Inc.
PTI Application: 14-04212
Modif

Facility ID: 1409030215

Emissions Unit ID: B001

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>
B001 - 12.55 mmBtu/Hr Natural Gas/No. 2 Fuel Oil-Fired Boiler - Modification	OAC rule 3745-31-05(A)(3) 40 CFR Part 60, Subpart Dc OAC rule 3745-17-07(A)(1)
	OAC rule 3745-17-10(B)(1)
	OAC rule 3745-18-06

US Air

PTI A

Modification Issued: 10/16/2003

Emissions Unit ID: B001

Applicable Emissions
Limitations/Control Measures

For the burning of natural gas:

0.007 lb PM/MMBtu
 0.007 lb PM₁₀/MMBtu
 0.0006 lb SO₂/MMBtu
 0.098 lb NO_x/MMBtu
 0.082 lb CO/MMBtu
 0.005 lb VOC/MMBtu

For the burning of #2 fuel oil:

0.014 lb PM/MMBtu
 0.0071 lb PM₁₀/MMBtu
 0.51 lb SO₂/MMBtu
 0.14 lb NO_x/MMBtu
 0.036 lb CO/MMBtu
 0.0014 lb VOC/MMBtu

0.63 TPY PM
 0.41 TPY PM₁₀
 16.73 TPY SO₂
 6.86 TPY NO_x
 4.51 TPY CO
 0.59 TPY OC

See Term B.1

The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1) and 40 CFR Part 60, Subpart Dc.

See Term B.2

Visible particulate emissions from any stack associated with this emissions unit shall not exceed 20

percent opacity, as a six-minute average, except as specified by rule.

The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- 2.a** The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements of 40 CFR Part 60 are also federally enforceable.
- 2.b** The lb/MMBtu emission limitations outlined in Section A.1 is based upon the emissions unit's potential to emit. Therefore, no hourly records are required to demonstrate compliance with these limits.
- 2.c** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of natural gas and #2 fuel oil, the annual fuel oil usage limitation, and the fuel oil sulfur content limitation.

B. Operational Restrictions

- 1.** The maximum No. 2 fuel oil usage for this emissions unit shall not exceed 471,000 gallons per year.
- 2.** The quality of the fuel oil burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable sulfur dioxide emission limitation specified in Section A.1. above, not to exceed 0.5 percent by weight.

C. Monitoring and/or Record keeping Requirements

- 1.** For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the name of the supplier, the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBtu). [The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).] A shipment may be comprised of multiple tank truck loads from the same supplier's batch, or may be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240 and D4294), or equivalent methods as approved by the Director.

The permittee shall maintain a record of certification from each oil supplier that the fuel oil complies with the definition of distillate oil in accordance with 40 CFR Part 60.41c.

The permittee shall maintain records of the oil burned in this emissions unit in accordance with either Alternative 1 or Alternative 2 described below.

a. Alternative 1:

For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBtu). [The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).] A shipment may be comprised of multiple tank truck loads from the same supplier's batch, and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.

b. Alternative 2:

The permittee shall collect a representative grab sample of oil that is burned in this emissions unit for each day when the emissions unit is in operation. If additional fuel oil is added to the tank serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit. A representative grab sample of oil does not need to be collected on days when this emissions unit is only operated for the purpose of "test-firing." The permittee shall maintain records of the total quantity of oil burned each day, except for the purpose of test-firing, the permittee's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBtu). [The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).]

2. The permittee shall maintain monthly records of the following information:

- a. The total amount of natural gas burned in this emissions unit, in cubic feet;
- b. The total amount of No. 2 fuel oil burned in this emissions unit, in gallons;

D. Reporting Requirements

1. The permittee shall notify the Director (the appropriate District Office or local air agency) in writing of any record which shows a deviation of the allowable sulfur dioxide emission limitation

US Aluminate Company Inc.
PTI Application: 14-04212
Modif

Facility ID: 1409030215

Emissions Unit ID: **B001**

based upon the calculated sulfur dioxide emission rates from Section C.1. above. The notification shall include a copy of such record and shall be sent to the Director (the appropriate District Office or local air agency) within 45 days after the deviation occurs.

2. The permittee shall submit annual reports of the total amount of natural gas used, in cubic feet, and total amount of #2 fuel oil used, in gallons. These reports shall be submitted by February 15 of each year and shall contain the information for the previous twelve calendar months (January through December).
3. Pursuant to the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times, if not previously done so:
 - a. Construction date (no later than 30 days after such date);
 - b. Anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
 - c. Actual start-up date (within 15 days after such date); and
 - d. Date of performance testing (if required, at least 30 days prior to testing).
 - e. The design heat input capacity of the emissions unit and the type of fuel to be combusted; and
 - f. The annual capacity factor at which the permittee anticipates operating the emissions unit.

Reports are to be sent to:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
P. O. Box 163669
Columbus, Ohio 43216-3669

and

Hamilton County Department of Environmental Services
250 William Howard Taft Road
Cincinnati, Ohio 45219

E. Testing Requirements

1. Compliance with the opacity limitation stated in term A.1. shall be demonstrated by the methods outlined in 40 CFR Part 60, Appendix A, Method 9.
2. Compliance with the operational restrictions and fuel oil sulfur content in term B.1 and B.2 shall be demonstrated by the record keeping requirements specified in term C.1 and C.2.
3. Compliance with the emissions limits in term A.1 shall be demonstrated by the emissions factors in AP-42 Fifth Edition, Chapter 1, Tables 1.3-1 & 1.3-3 revised 9/98, and AP-42, Tables 1.4-1 & 1.4-2 revised 7/98.
4. Emission Limitation:
Sulfur dioxide emissions shall not exceed 0.51 lb/mmBtu when burning #2 fuel oil.

Applicable Compliance Method:

When firing fuel oil, compliance with the allowable sulfur dioxide emission limitation shall be demonstrated by documenting that the sulfur content of each shipment of oil received during a calendar month meets the limitation. See term C.1.

F. Miscellaneous Requirements

1. The terms and conditions listed in this permit to install shall supercede all the air pollution control requirements contained in permit to install 14-04212 as issued on December 24, 1996.