

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT

PERMITTEE

Nichols Aluminum Lincolnshire
Attn: Gary Stimpson
200 Schelster Road
Lincolnshire, Illinois 60069

Application No.: 96050019 I. D. No.: 097095AAB
Applicant's Designation: Date Received: May 6, 1996
Operation of: Aluminum Rolling Mills and Annealing Furnaces
Date Issued: Expiration Date:
Location: 200 Schelster Road, Lincolnshire

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of an aluminum rolling mill controlled by fume control system and seven annealing furnaces pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 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., 25 tons/year for volatile organic materials (VOM)). As a result, the source is excluded from the 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 issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permits issued for this location.
- 2. Operations and emissions of rolling mill shall not exceed the following limits:

Aluminum Throughput		Emission Factors		E M I S S I O N S			
		(lb/ton)		VOM		PM	
<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>	<u>VOM</u>	<u>PM</u>	<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>	<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>
30,000	275,000	0.14	0.16	2.1	19.3	2.4	22.0

These limits are based on the maximum production rate, emission factors derived from the stack test data, filter control efficiency 95% for PM (manufacturer's specification) and filter VOM collection efficiency 59% (measurements performed at the plant) and 90% control system capture efficiency. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months.

3. Operations and emissions of the seven annealing furnaces shall not exceed the following limits:

a. Lubricant oil evaporation emission:

Aluminum Throughput		Emission Factor	VOM Emissions	
(Ton/Mo)	(Ton/Yr)	(Lb/Ton)	(Ton/Mo)	(Ton/Yr)
11,600	137,000	0.088	0.5	6.0

b. Natural gas combustion emissions:

Natural gas usage: 20.5 mmscf/Mo, 246.0 mmscf/Yr

Pollutant	Emission Factor	Emissions	
	(lb/mmscf)	(Ton/Mo)	(Ton/Yr)
Nitrogen Oxides (NO _x)	100	1.0	12.3
Carbon Monoxide (CO)	84	0.9	10.3
Particulate Matter (PM)	7.6	0.08	0.9
Volatile Organic Materials (VOM)	5.5	0.06	0.7

These limits are based on the maximum production rate and emission factors derived from the stack test for evaporating losses and standard emission factors for combustion emissions. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months.

4. The emissions of Hazardous Air Pollutants (HAP) as listed in Section 112(b) of the Clean Air Act shall not equal or exceed 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish by rule which would require the Permittee to obtain a Clean Air Act Permit Program permit from the Illinois EPA. 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 Clean Air Act Permit Program permit from the Illinois EPA.

5. The Permittee shall maintain monthly records of the following items:

- a. Aluminum process rate (ton/mo, ton/yr);
- b. Names and amounts of lubricating oils used (ton/mo; ton/yr) and their VOM content (wt. %);
- c. Natural gas usage (mmscf/mo, mmscf/yr);
- d. VOM emission calculations (ton/mo; ton/yr).

6. 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 or USEPA 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 the Illinois EPA or USEPA request for records during the course of a source inspection.

7. If there is an exceedance of the requirements of this permit, as determined by the record 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. The report shall include the emissions released, a copy of the relevant records, and a description of the exceedance or violation, and efforts to reduce emissions and future occurrences.
8. The Permittee shall submit the following additional information from the prior calendar year, along with the Annual Emissions Report, due May 1st of each year:
 - a. Aluminum process rate (ton/yr);
 - b. Names and amounts of lubricating oils used (ton/yr);
 - c. Natural gas usage (mmscf/mo, mmscf/yr).
9. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system 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 Agency'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 permit, please call Valeriy Brodsky at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:VJB:

cc: Illinois EPA, FOS Region 1
Illinois EPA, Compliance Section
Lotus Notes

Attachment A - Emissions Summary

This attachment provides a summary of the maximum emission from the aluminum processing plant operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. This is processing of 275,000 tons of aluminum and burning 246 mmscf of natural gas per year. The resulting maximum emissions are well below the levels, e.g., 25 tons per year for VOM 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.

1. Operations and emissions of rolling mill shall not exceed the following limits:

Aluminum Throughput (Ton/Mo) (Ton/Yr)		Emission Factors (lb/ton)		E M I S S I O N S			
		VOM	PM	VOM (Ton/Mo)(Ton/Yr)		PM (Ton/Mo)(Ton/Yr)	
30,000	275,000	0.14	0.16	2.1	19.3	2.4	22.0

2. Operations and emissions of the seven annealing furnaces shall not exceed the following limits:

- a. Lubricant oil evaporation emission:

Aluminum Throughput (Ton/Mo) (Ton/Yr)		Emission Factor (Lb/Ton)	VOM Emissions (Ton/Mo) (Ton/Yr)	
11,600	137,000	0.088	0.5	6.0

- b. Natural gas combustion emissions:

Natural gas usage: 20.5 mmscf/Mo, 246.0 mmscf/Yr

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3. The emissions of Hazardous Air Pollutants (HAP) as listed in Section 112(b) of the Clean Air Act shall not equal or exceed 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish by rule which would require the Permittee to obtain a Clean Air Act Permit Program permit from the Illinois EPA. 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 Clean Air Act Permit Program permit from the Illinois EPA.

VJB: