

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- RENEWAL

PERMITTEE

American Nickeloid Company  
Attn: Laboratory Manager  
2900 West Main Street  
Peru, Illinois 61354

Application No.: 83070014  
Applicant's Designation:  
Subject: Coil Coating Operations  
Date Issued: December 4, 2002  
Location: 2900 West Main Street, Peru

I.D. No.: 099827AAA  
Date Received: March 1, 2001  
Expiration Date: December 4, 2007

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of two metal coil coating lines, line B controlled by the afterburner and line F, comprised of two coaters each controlled by the separate afterburner, two dual fuel (natural gas and fuel oil #2) boilers (West and East), ten brass plating tanks controlled by a scrubber and caustic cleaner tank controlled by a scrubber 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., 100 tons/year for volatile organic materials (VOM), 10 tons/year for a single hazardous air pollutant (HAP), and 25 ton/year for totaled HAPs). As a result the source is excluded from the requirement 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 for this location.
- 2a. Coil Coating Line F, constructed after January 5, 1981 is subject to a New Source Performance Standard (NSPS) for Metal Coil Surface Coating, 40 CFR 60, Subparts A and TT. The Illinois EPA is administering NSPS in Illinois on behalf of the United States EPA under a delegation agreement.
- b. The emissions of VOM from the coil coating line F shall not exceed 10 percent of the VOM applied for each calendar month (90 percent emission reduction), pursuant to the NSPS, 40 CFR 60.462(a)(3).

- c. At all times, the Permittee shall also, to the extent practicable, maintain and operate Coil Coating Lines F1 and F2, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.
- 3. The Coil Coating Lines B and F are subject to the VOM emission limitations of 35 Ill. Adm. Code Part 215, Subpart F: Coating Operations. Compliance with the requirements of this subpart is achieved due to the use of capture systems and control devices that provide 81 percent reduction in the overall emissions of VOM from the coating lines and the control devices have a 90 percent efficiency pursuant to 35 Ill. Adm. Code 218.207(b) (1).
- 4. Operations and VOM emissions from coil coating operations shall not exceed the following limits:

<u>Unit of Equipment</u>	<u>VOM Usage</u>		<u>Control</u>	<u>VOM Emissions</u>	
	<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>	<u>Efficiency</u> <u>(Wt. %)</u>	<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>
Line B	20	220	90	2.0	22.0
Line F	60	620	90	6.0	62.0

These limits define the potential emissions of the VOM and are based on the actual emissions determined from the maximum production capacity and the most recent stack tests data. Compliance with annual limit shall be determined on a monthly basis from the sum of data for current month plus the preceding 11 months.

- 5. The emissions of hazardous air pollutants as listed in Section 112(b) of the Clean Air Act shall not equal or exceed 10 tons per year of any single hazardous air pollutant or 25 tons per year of any combination of such hazardous air pollutants, 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 hazardous air pollutants from this source not triggering the requirement to obtain a Clean Air Act Permit Program permit from the Illinois EPA.
- 6a. The afterburners shall be in operation at all times when the associated emission units are in operation and emitting air contaminants.
- b. The afterburner combustion chamber shall be preheated to at least the manufacturer's recommended temperature but no less than the temperature at which compliance was demonstrated in the most recent compliance test before the coating process is begun. This temperature shall be maintained during the coating process.
- c. The afterburner shall be equipped with a continuous monitoring device which is installed, calibrated, maintained, and operated according to vendor's specifications at all times that the afterburner is in use.

This device shall monitor the afterburner combustion chamber temperature.

- d. Owner or operator shall install, calibrate, operate, and maintain a device that continuously records the combustion temperature. This device shall have an accuracy of  $\pm 2.5^{\circ}\text{C}$  or  $\pm 0.75$  percent of the temperature being measured expressed in degrees Celsius, whichever is greater. Each owner or operator shall also record all periods (during actual coating operations) in excess of 3 hours during which the average temperature in any thermal incinerator used to control emissions from an affected facility remains more than  $28^{\circ}\text{C}$  ( $50^{\circ}\text{F}$ ) below the temperature at which compliance was demonstrated during the most recent stack test.
- 7a. The East boiler constructed after June 9, 1989 is subject to New Source Performance Standards (NSPS) for Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subparts A and Dc. The Illinois EPA is administering these standards in Illinois on behalf of the United States EPA under a delegation agreement.
- b. The Permittee shall fulfill applicable reporting and recordkeeping requirements of 40 CFR 60.48(c).
- c. At all times the Permittee shall, to the extent practicable, maintain and operate the boiler, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.
- 8. Operation and emissions of the fuel combustion equipment (combined) shall not exceed the following limits:

- a. Natural Gas Usage: 60 mmscf/mo, 580 mmscf/yr

<u>Pollutant</u>	<u>Emission Factor</u> (lb/mmscf )	<u>Emissions</u>	
		(Ton/Mo)	(Ton/Yr)
Nitrogen Oxides (NO <sub>x</sub> )	100	3.0	29.0
Carbon Monoxide (CO)	84	2.5	24.4
Particulate Matter (PM)	7.6	0.2	2.2
Volatile Organic Materials (VOM)	5.5	0.2	1.6

- b. Fuel Oil #2 Usage: 100,000 gal/mo, 1,000,000 gal/yr

<u>Pollutant</u>	<u>Emission Factor</u> (Lb/10 <sup>3</sup> gal)	<u>Emissions</u>	
		(Ton/Mo)	(Ton/Yr)
Nitrogen Oxides (NO <sub>x</sub> )	20	1.0	10.0
Sulfur Dioxide (SO <sub>2</sub> )	42	2.1	21.0
Carbon Monoxide (CO)	5	0.3	2.5
Volatile Organic Materials (VOM)	0.34	0.02	0.2

At the above location, the Permittee shall not utilize a distillate fuel oil (Grades No.1 and 2) with a sulfur content greater than the 0.3 weight percent pursuant to requirements of 35 Ill. Adm. Code 214.122(b) (2).

These limits are based on the maximum boilers operations and standard emission factors given by AP-42. Compliance with annual limits shall be determined on a monthly basis from a running total of 12 months of data.

9. This permit is issued based on negligible emission of the particulate matter from the brass plating tanks and caustic cleaning tank. For this purpose, emissions from each emission source shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year.
10. The Permittee shall maintain monthly records of the following items:
  - a. Name and identification number, density, and VOM and HAP content of each coating and VOM-containing material used on each coating line;
  - b. Usage of each coating and VOM-containing material on each coating line (tons/month and tons/year);
  - c. Afterburner monitoring data;
  - d. A log of operating time for the capture system, afterburner, monitoring devices, and the coating lines;
  - e. A maintenance log for the capture system, afterburner, and monitoring devices detailing all routine and non-routine maintenance performed including dates and duration of any outages;
  - f. Emissions of VOM and HAP (individual and total) (tons/month and tons/year).
11. 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 an Illinois EPA request for records during the course of a source inspection.
12. If there is an exceedance of 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. 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 violation and efforts to reduce emissions and future occurrences.

13. 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 Illinois EPA  
Division of Air Pollution Control  
Compliance and Enforcement Section (#40)  
P.O. Box 19276  
Springfield, IL 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 Illinois EPA  
Division of Air Pollution Control - Regional Office  
5415 North University  
Peoria, Illinois 61614

It should be noted that fuel oil storage tank, machining and wood work operations are exempt from state permit requirements pursuant to 35 Ill. Adm. Code 201.146 (n) and (aa), respectively.

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

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

DES:VJB:psj

cc: IEPA, FOS Region 2  
IEPA, Compliance and Enforcement Section  
Lotus Notes

Attachment A - Emissions Summary

This attachment provides a summary of the maximum emission from the Coil Coating 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 assumption of 100% evaporation rate of all VOM containing materials and minimum actual control efficiency. The resulting maximum emissions are well below the level, e.g., 100 tons/year for volatile organic materials (VOM), 10 tons/year for a single hazardous air pollutant (HAP), and 25 ton/year for totaled 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.

1. Operations and VOM emissions from coil coating operations shall not exceed the following limits:

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	<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>	<u>Efficiency</u> <u>(Wt. %)</u>	<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>
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Program permit from the Illinois EPA. As a result of this condition, this permit is issued based on the emissions of any hazardous air pollutants from this source not triggering the requirement to obtain a Clean Air Act Permit Program permit from the Illinois EPA.

3. This permit is issued based on negligible emission of the particulate matter from the brass plating tanks and caustic cleaning tank. For this purpose, emissions from each emission source shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year.

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