

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT - RENEWAL - NESHAP SOURCE

PERMITTEE

Arnold Engineering Co.
Attn: Thomas j. Korolewski
300 North West Street
Marengo, Illinois 60152

Application No.: 73090130 I. D. No.: 111812AAB
Applicant's Designation: Date Received: July 14, 2000
Subject: Magnetic Alloys Manufacturing
Date Issued: Expiration Date:
Location: 300 North West Street, Marengo

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of the following equipment pursuant to the above-referenced application:

Permalloy Strip Facility

<u>Emission Unit</u>	<u>Control Device</u>
5 Strip Mills	--
Strip Treatment Equipment	--
9 Annealing Furnaces	--
Washer	--
3 Cold Degreasers	--
Foil Surface Treatment	Fume Scrubber
2 Solvent Recovery Stills	

Sintered Alnico Facility

<u>Emission Unit</u>	<u>Control Device</u>
Jaw Crusher	Dust Collector
Ball Mill	Dust Collector
Weigh-Up, Separator, Pulverizer and Screener	Dust Collector
Pulverizer	Dust Collector
Blender	Dust Collector
4 Dewaxing Furnaces	--
5 Sintering Furnaces	--

Molypermalloy Facility

<u>Emission Unit</u>	<u>Control Device</u>
4 Hammer Mills	4 Dust Collectors
Cyclonair Delumper	Baghouse
Pulverizer	Baghouse
2 Annealing Furnaces	2 Afterburners
2 Powder Booths	2 Filters and 1 ECB-2 Dust Collection Booth
Coating Line	2 Dust Collectors
Parylene Coater	--
3 Screeners	3 Dust Collectors
15 Presses	3 Dust Collectors
4 Blenders	2 Dust Collectors
4 Electric Furnaces	--
Boiler	--
2 Storage Tanks	--
Process Boiler	--
Separator	Dust Collector
Rod Mill	Dust Collector
Calciner	

Centerless Grinder	--
2 Sandblasters	Dust Collector
9 Presses	--

Cast Alnico Facility

Samarium Cobalt Facility

<u>Emission Unit</u>	<u>Control Device</u>	<u>Emission Unit</u>	<u>Control Device</u>
5 Induction Furnaces	--	Jaw Crusher	--
Smokehouse	--	Micro Pulverizer	Dust Collector
Shakout, sanding	--	Attritor	--
18 Grinders	4 Dust Collectors	5 Evaporator Vessels	Vapor Condenser
3 Heat Treating Furnaces	--	Dry Blender	--
Washer	--	2 Pelletizing Presses	--
2 Die Casting Operations	--	2 Grinders	--
Sand Preparation	Baghouse	Slicer	--
Core Preparation	Scrubber	Vapor Degreaser	Vapor Condenser
2 Baked Ovens	--	Sintering Furnace	--
		Vacuum Bico Crasher	--

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 air pollutants from the source to less than major source thresholds (i.e., 25 tons/yr for volatile organic materials. 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 issued for this location.
- 2a. The two cold degreasers (#504 and #1621) used at the permalloy strip facility are subject to 40 CFR Part 63, Subpart T -National Emission Standards for Halogenated Solvent Cleaning. The Illinois EPA is administering this regulation in Illinois on behalf of the United States EPA under a delegation agreement. The United States EPA issued this final rule on December 2, 1994.
- b. The Permittee must be in compliance with 40 CFR Part 63, Subpart T - National Emission Standards for Halogenated Solvent Cleaning on or before December 2, 1997.
- c. Maintain a log of solvent additions and deletions for each solvent cleaning machine.
- d. Pursuant to 40 CFR Part 63.465(b), the Permittee shall on the first operating day of every month ensure that the solvent cleaning machine system contains only clean liquid solvent. This includes, but is not limited to, fresh unused solvent, recycled solvent and used solvent that has been cleaned of soils. A

fill line must be indicated during the first month the measurements are made.

The solvent level within the machine must be returned to the same fill-line each month, immediately prior to calculating monthly emissions. The solvent cleaning machine does not have to be emptied and filled with fresh unused solvent prior to the calculations.

- e. Pursuant to 40 CFR Part 63.465(c), the Permittee shall on the first operating day of the month comply with the following requirements:
 - i. Using the records of all solvents additions and deletions for the previous monthly reporting period, determine solvent emissions (E) using the equation in Condition 3(b).
 - ii. Determine SSR, using the following method:
 - A. From test conducted using EPA reference method 25d.
 - B. By engineering calculations included in the compliance report.
 - iii. Determine monthly rolling average, EA, for the 3-month period ending with the most recent reporting periods using the following equation:

$$EA_i = \frac{\sum_{j=1}^3 E_i}{3}$$

Where:

EA_i = The average halogenated HAP solvent emissions over the preceding 3 monthly reporting periods, (pounds of solvent per square feet of solvent/air interface area per month).

j=1 = The most recent monthly reporting period.

j=2 = The monthly reporting period immediately prior to j=1.

j=3 = The monthly reporting period immediately prior to j=2.

- 3a. The emissions and operation of each solvent cleaning machine shall not exceed the following limits, pursuant to 40 CFR Part 63.464(a)(1):

<u>Type of Machine</u>	<u>Solvent-Air Interface Area (Ft²)</u>	<u>Organic Material Emissions</u>	
		<u>3-Month Rolling Average Monthly Emissions (Lb/Month)</u>	<u>(Ton/Year)</u>
Existing In-Line (#504)	1.34	42.0	0.25
Existing In-Line (#1621)	1.67	52.4	0.32

These limits are based on the type of solvent cleaning machine, solvent-air interface area, and determined by using equation in Condition 3(b).

- b. For determination with the limits of this permit, halogenated solvent usage shall be determined by the following equation, pursuant to 40 CFR Part 63.465(c)(1). E, SA, LSR, SSR, and AREA shall be determined on the first operating day of each month.

$$E = (SA - LSR - SSR) / AREA$$

Where:

- E = The total halogenated HAP solvent emissions from the solvent cleaning machine during the current month (lb/ft²).
- SA = The total amount of halogenated HAP liquid solvent added to the solvent cleaning machine during the current month (lb/month). Solvent addition up to pre marked fill line is required to maintain the same level at the beginning of each month before the calculation.
- LSR = The total amount of halogenated HAP liquid solvent removed from the solvent cleaning machine during the current month (lb/month). Solvent is removed only when it is necessary to remove.
- SSR = The total amount of halogenated HAP solvent removed from the solvent cleaning machine solid waste during the current month (lb/month). This shall be determined by engineering calculation or by EPA test method 25D.
- AREA = The solvent-air interface area of the solvent cleaning machine (ft²).

- 4. This permit is issued based on the cold cleaning degreasers being exempted from the material requirements of 35 Ill. Adm. Code 218.182(c). The cold cleaning degreasers are used to clean electronic components and are exempted under 35 Ill. Adm. code 218.182(f).
- 5. The Permittee shall comply with the following operating requirements for cold cleaning degreasers, pursuant to 35 Ill. Adm. Code 218.182:
 - a. Waste solvent shall be stored in covered containers only and not disposed of in such a manner that more than 20% of the waste solvent (by weight) is allowed to evaporate into the atmosphere;
 - b. The cover of the degreaser shall be closed when parts are not being handled and parts are drained until dripping ceases;
 - c. The degreaser must be equipped with a cover which is closed whenever parts are not being handled in the cleaner. The cover shall be designed to be easily operated with one hand or with the mechanical assistance of springs, counterweights, or a powered system;

- d. The degreaser shall be equipped with a device for draining cleaned parts. The drainage device shall be constructed so that parts are enclosed under the cover while draining;
 - e. The degreaser must be equipped with one of the following control devices if the vapor pressure of the solvent is greater than 4.3 kPa (32 mmHg or 0.6 psi) measured at 38°C (100°F) or if the solvent is heated above 50°C (120°F) or its boiling point:
 - i. A freeboard height of 7/10 of the inside width of the tank or 91 cm (36 in), whichever is less; or
 - ii. Any other equipment or system of equivalent emission control as approved by the Illinois EPA and further processed consistent with Section 218.108 of this Part. Such a system may include a water cover, refrigerated chiller or carbon adsorber.
 - f. A permanent conspicuous label summarizing the operating procedure must be affixed to the degreaser; and
 - g. If a solvent spray is used, the degreaser must be equipped with a solid fluid stream spray, rather than a fine, atomized or shower spray.
6. The Permittee shall comply with the following requirements for open top vapor degreasers pursuant to 35 Ill. Adm. Code 218.183:
- a. Operating requirements: No person shall operate an open top vapor degreaser unless:
 - i. The cover of the degreaser is closed when workloads are not being processed through the degreaser;
 - ii. Solvent carry out emissions are minimized by:
 - A. Racking parts to allow complete drainage;
 - B. Moving parts in and out of the degreaser at less than 3.3 m/min (11 ft/min);
 - C. Holding the parts in the vapor zone until condensation ceases;
 - D. Tipping out any pools of solvent on the cleaned parts before removal from the vapor zone; and
 - E. Allowing parts to dry within the degreaser until visually dry;

- iii. Porous or absorbent materials, such as cloth, leather, wood or rope, are not degreased;
 - iv. Less than half of the degreaser's open top area is occupied with a workload;
 - v. The degreaser is not loaded to the point where the vapor level would drop more than 10 cm (4 in) when the workload is removed from the vapor zone;
 - vi. Spraying is done below the vapor level only;
 - vii. Solvent leaks are repaired immediately;
 - viii. Waste solvent is stored in covered containers only and not disposed of in such a manner that more than 20% of the waste solvent (by weight) is allowed to evaporate into the atmosphere;
 - ix. Water is not visually detectable in solvent exiting from the water separator; and
 - x. Exhaust ventilation exceeding 20 cubic meters per minute per square meter (65 cubic feet per minute per square foot) of degreaser open area is not used, unless necessary to meet the requirements of the Occupational Safety and Health Act (29 U.S.C. Section 651 et seq.).
- b. Equipment requirements: No person shall operate an open top vapor degreaser unless:
- i. The degreaser is equipped with a cover designed to open and close easily without disturbing the vapor zone.
 - ii. The degreaser is equipped with the following switches:
 - A. One which shuts off the sump heat if the amount of condenser coolant is not sufficient to maintain the designed vapor level;
 - B. One which shuts off the spray pump if the vapor level drops more than 10 cm (4 in) below the bottom condenser coil; and
 - C. One which shuts off the sump heat source when the vapor level exceeds the design level.
 - iii. A permanent conspicuous label summarizing the operating procedure is affixed to the degreaser.
 - iv. The degreaser is equipped with one of the following devices:

- A. A freeboard height of 3/4 of the inside width of the degreaser tank or 91 cm (36 in), whichever is less; and if the degreaser opening is greater than 1 square meter (10.8 square feet), a powered or mechanically assisted cover; or
- B. Any other equipment or system of equivalent emission control as approved by the Illinois EPA and further processed consistent with Section 218.108 of this Part. Such equipment or system may include a refrigerated chiller, an enclosed design or a carbon adsorption system.

7a. Usage of solvents in the degreasers shall not exceed the following limits:

Permalloy Strip Manufacturing

Perchloroethylene Usage	87 lb/month; 870 lb/year
Leksol Usage	2,000 lb/month; 20,000 lb/year

Samarium Cobalt Manufacturing

Leksol Usage	2 lb/month; 20 lb/year
--------------	------------------------

- b. Any change in the type of solvent used must be permitted prior to making such change.
 - c. These limits define the potential emissions of HAPs for the degreasers and are based on the actual emissions determined from maximum production capacity.
- 8a. For determination of compliance with the limits of this permit, solvent usage shall be determined by the following equation:

$$U = V - (W \times P)$$

Where:

U = Solvent usage for compliance determinations (gallons).

V = Virgin solvent^A added to the degreaser (gallons), as determined by daily addition log sheets.

W = Waste solvent^B removed from the degreaser and sent off-site for reclamation or disposal, as determined by monthly manifests.

P = Percent concentration of solvent in waste, as determined by analysis/testing^C.

- A For purposes of this permit, virgin solvent is defined as unused solvent.
- B For purposes of this permit, waste solvent is defined as used solvent.
- C The percent concentration of solvent in waste (P) shall be determined in accordance with USEPA Test Methods for Evaluation of Solid Waste, Physical/Chemical Methods (SW- 846), Test Method 8260.

b. Compliance with the monthly HAP emission limits shall be calculated using the solvent density, as specified in the Material Safety Data Sheet, and the solvent usage (U) per month, as follows:

$$\begin{array}{lcl} \text{Emissions} & = & \text{Solvent Usage (U) x Solvent Density (12.2)} \\ \text{(lb/month)} & & \text{(gal/month) (lb/gal)} \end{array}$$

c. Compliance with annual limits on the degreaser shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

9a. Operation of the Magnetic Alloys Manufacturing facilities shall not exceed the following limits:

Permalloy Strip Manufacturing

Strip production 1,250 tons/month; 12,500 tons/year;

Molypermalloy Manufacturing

Molypermalloy Production 65 tons/month; 660 tons/year;
Coating Usage 360 gal/month; 3,600 gal/year;

Cast Alnico Manufacturing

Cast Alnico Production 200 tons/month; 2,000 tons/year;

Sintered Alnico Manufacturing

Sintered Alnico Production 10 tons/month; 100 tons/year;

Samarium Cobalt Manufacturing

Hexane usage 0.01 tons/month; 0.1 tons/year;

b. Usage of the natural gas in the boilers and furnaces shall not exceed 20 million scf per month or 200 million scf per year.

- c. These limits define the potential emissions of the Particulate Matter (PM), Volatile Organic Material (VOM) and Hazardous Air Pollutants (HAPs) from Magnetic Alloys Manufacturing operations and are based on the actual emissions determined from maximum production capacity and standard emission factors.
 - d. The emissions of HAPs 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.
 - e. 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.
10. Pursuant to 35 Ill. Adm. Code 215.204(j4), the coatings applied in Molypermalloy facility shall not exceed 3.3 lb VOM/gal of coating (minus water and any compounds which are exempted from the definition of VOM) as applied at each applicator.
- 11a. Within 30 days of a written request from the Illinois EPA the Permittee shall submit data on the volatile organic material content of representative coatings as applied on the coating line at the Molypermalloy Manufacturing Facility determined by laboratory analysis in accordance with the 35 Ill Adm. Code Section 218.105.
- b. The submitted data shall include the VOM content of the coating, a justification of why these are representative, and a description of the sampling procedures and documentation for the analysis.
 - c. The Illinois EPA may provide additional time for the performance of this testing upon request from the Permittee which shows that it is not feasible to perform representative testing within 30 days.
12. The Permittee shall, in accordance with the manufacturer and/or vendor recommendations, perform periodic maintenance on the pollution control equipment covered under this permit such that the pollution control equipment be kept in proper working condition and not cause a violation of the Environmental Protection Act or regulation promulgated therein.
13. In the event that the operation of this emission unit results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.
- 14a. The Permittee shall retain the following records on paper or computer disk for five years, pursuant to 40 CFR Part 63.467(c):

- i. Record the date and amount of solvent added (SA) to each solvent cleaning machine.
 - ii. Record the date and amount of halogenated HAP solvent removed (LSR) from each solvent cleaning machine.
 - iii. The amount of solvent removed (SSR) from the waste of each cleaning machine. Analysis sheet (EPA test method 25D) or calculation shall be retained.
 - iv. Calculation sheet showing how the monthly emissions and the 3-month rolling average monthly emissions were determined.
 - v. Emissions of organic material (lb/month).
 - b. Any records by this permit shall be readily available for inspection and copying by the Illinois EPA.
15. The Permittee shall comply with the following reporting requirements pursuant to 40 CFR. Part 63.468.
- a. An initial statement of compliance report, pursuant to 40 CFR Part 63.468(e), demonstrating each existing solvent cleaning machine is in compliance by December 2, 1997, must be submitted no later than May 1, 1998. For new solvent cleaning machine compliance report shall be submitted no later than 150 days after startup. Any machine installed on or before November 29, 1993, is considered as existing machine and installed after November 29, 1993, is considered as new machine. The initial compliance report shall include the following:
 - i. Name and address.
 - ii. Facility location address.
 - iii. The solvent-air interface area for each solvent cleaning machine.
 - iv. The results of the first 3-month average emission calculation.
 - b. A solvent emission report, pursuant to 40 CFR Part 63.468(g), shall be submitted for each batch vapor or in-line solvent cleaning machine. The solvent emission report shall contain the following:
 - i. The size (air-interface area or capacity) and type (batch vapor or in-line) for each solvent cleaning machine.
 - ii. The average monthly solvent consumption for the solvent cleaning machine in lb/month.

- iii. The 3-month rolling average monthly emission estimate calculated for each month.
 - c. An exceedance report, pursuant to 40 CFR Part 63.468(h), shall be submitted every 6 months if there is not an exceedance, and every 3 months if there is an exceedance. If an exceedance did not occur the report would consist of a statement certifying that there was no exceedance. The frequency of exceedance report will increase to quarterly after an exceedance occurs. The frequency can be reduced to every six month upon approval from the Illinois EPA provided no exceedance has occurred during the last one year. Exceedance reports shall be delivered or postmarked by the 30th day following the end of each calendar half or quarter, as appropriate. The exceedance report shall include the following:
 - i. If an exceedance has occurred, the reason for the exceedance.
 - ii. If no exceedance has occurred, such information shall be stated in the report.
16. The Permittee shall maintain monthly records of the following items for the degreaser:
- a. Solvent usage (U) in gallons/month and gallons/year.
 - b. Virgin solvent added to the degreaser (V) in gallons/month and gallons/year, as determined by daily addition log sheets.
 - c. Waste solvent removed from the degreaser (W) in gallons/month and gallons/year, as determined by monthly manifests.
 - d. Analysis sheet(s) showing test results and any calculations used to determine percent concentration of solvent in waste (P) for each month.
- 17a. The Permittee shall maintain records of the following items:
- i. Name and amount of all coatings used (gal/mo and gal/yr);
 - ii. VOM and HAP content for each coating and VOM containing material used (lb/gal) or (weight percent);
 - iii. Names and amounts of all VOM and HAP containing raw materials used in each manufacturing area (ton/mo and ton/yr);
 - iv. Emissions of VOM, PM, and HAP for each manufacturing area (ton/mo and ton/yr);
 - v. Plantwide emissions of VOM, PM, and HAP (ton/mo and ton/yr);

- vi. Natural gas consumption (mmscf/mo and mmscf/yr); and
 - vii. Production rate for each manufacturing area (ton/mo and ton/yr).
- b. The Permittee shall maintain operating and maintenance logs for the pollution control system, including: operating data, with pressure drop and stack condition, maintenance activities, with date and description of inspection, repair actions, and equipment or filter bag replacements, etc.
18. 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 and 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.
19. 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 exceedance or violation, and efforts to reduce emissions and future occurrences.
20. 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. Names and amounts of all VOM and HAP containing raw materials used (tons/year);
 - b. VOM and HAP content in each coating (lb/gal);
 - c. Natural gas consumption (mmscf/year);
 - d. Production rate for each manufacturing are (ton/yr); and
 - e. Amount of solvent used in each degreaser (gal/yr).
21. All reports, notifications, etc., required by this permit shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Unit (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

Illinois Environmental Protection Agency

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

It should be noted, this permit has been revised to change the solvent used in the magnetic and one permalloy degreaser from Trichlorethylene to Leksol. In addition, the usage and emission limits for the degreasers have been revised.

It should be noted that this permit has been revised to incorporate Construction Permit #00110010 to include 3 rotary coaters to the coating line in the Molypermalloy Facility.

It should be noted that this permit has been revised to change the emissions limits of PM and VOM from the facility.

If you have any questions on this permit, please call Tara T. Nguyen-Ede at 217/782-2113.

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

DES:TNE:jar

cc: IEPA, FOS Region 1
IEPA, FOS - CMU
Lotus Notes

Attachment A - Emissions Summary

This attachment provides a summary of the maximum emissions from this facility 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. The resulting maximum emissions are well below the levels 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 less material is handled and control measures are more effective than required in this permit.

1a. Emissions from the Magnetic Alloys Manufacturing:

<u>Facility</u>	<u>Production Rate</u>		<u>PM</u>		<u>VOM</u>	
	<u>(Tons/Mo)</u>	<u>(Tons/Year)</u>	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
Molypermalloy	66	660	0.86	8.6	0.6	6.0
Cast Alnico	200	2,000	2.83	28.3	0.68	6.8
Sintered Alnico	10	100	0.18	1.8	0.04	0.4
Samarium Cobalt	0.35	3.5	<u>0.01</u>	<u>0.06</u>	<u>0.01</u>	<u>0.1</u>
		Total	3.88	38.76	1.33	13.3

b. Emissions from the degreasing operations:

<u>Facility</u>	<u>Name of the Solvent</u>	<u>Solvent Usage</u>		<u>HAP Emissions</u>		<u>VOM Emissions</u>	
		<u>(Lb/Mo)</u>	<u>(Lb/Yr)</u>	<u>(T/Mo)</u>	<u>(T/Yr)</u>	<u>(T/Mo)</u>	<u>(T/Yr)</u>
Permalloy Strip	Perchloroethylene	87	870	0.05	0.44	--	--
	Leksol	2,000	20,000	--	--	1.00	10.00
Samarium Cobalt	Leksol	2	20	<u>--</u>	<u>--</u>	<u>0.001</u>	<u>0.01</u>
	Total			0.05	0.44	1.001	10.01

c. Emissions from the natural gas combustion equipment:

<u>Pollutant</u>	<u>Gas Usage</u>		<u>Emission Factor</u> <u>(Lb/10⁶ scf)</u>	<u>Emissions</u>	
	<u>(mmscf/Mo)</u>	<u>(mmscf/Yr)</u>		<u>(T/Mo)</u>	<u>(T/Yr)</u>
Nitrogen Oxides (NO _x)	20	200	100	1.0	10
Carbon Monoxide (CO)	20	200	84	0.84	8.4
Particulate Matter (PM)	20	200	7.6	0.08	0.76
Volatile Organic Material (VOM)	20	200	5.5	0.06	0.55
Sulfur Dioxide (SO ₂)	20	200	0.6	0.01	0.06

These tables define the potential emissions from the plant and is based on the actual emissions determined from maximum production, maximum raw materials usage and standard emission factors.

2. The emissions of HAPs 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.

3. This permit is issued based on negligible emissions of PM from the foil surface treatment system. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year.

DES:TNE:jar