

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT

PERMITTEE

Senior Operations, Inc.  
Attn: Mark Glawe, Plant Facilities Manager  
300 East Devon Avenue  
Bartlett, Illinois 60103-4608

<u>Application No.:</u> 95100001	<u>I.D. No.:</u> 031412AAA
<u>Applicant's Designation:</u>	<u>Date Received:</u> October 20, 2005
<u>Subject:</u> Metal Bellows Manufacturing	
<u>Date Issued:</u>	<u>Expiration Date:</u>
<u>Location:</u> 300 East Devon Avenue, Bartlett, Cook County	

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of an open top vapor degreaser with a condenser, 4 natural gas fired boilers (#1, #2, #3 and #4), 3 pickling lines with a scrubber, plasma tube cutting operations, spray paint operation, electric drying ovens, vacuum furnaces, annealing oven, belt furnaces, pumphouse boiler, vacuum charging unit, gas-fired ovens, water heaters, tube burner, soap and caustic storage tanks and process heater 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:
  - i. This federally enforceable state operating permit (FESOP) 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 material (VOM), 10 tons/year for a single hazardous air pollutant (HAP) and 25 tons/year for totaled HAPs). 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.
  - ii. To establish federally enforceable Emission Reduction Market System (ERMS) provisions, including baseline emissions, allotment for each seasonal allotment period, identification of any units deemed to be insignificant activities for the purposes of the ERMS, emissions calculation methodologies, and provisions addressing all other applicable requirements of 35 Ill. Adm. Code Part 205, which are described in Attachment B.
- 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. This permit is issued based on the source no longer being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Halogenated Solvent Cleaning, 40 CFR 63 Subpart T. Pursuant to 40 CFR 63.640(a), the provisions of 40 CFR 63 Subpart T apply to each individual batch vapor, in-line vapor, in-line cold, and batch cold solvent cleaning machine that uses any solvent containing methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride or chloroform, or any combination of these halogenated HAP solvents, in a total concentration greater than 5 percent by weight, as a cleaning and/or drying agent.
  - b. This permit is issued based on the source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Steel Pickling-HCl Process Facilities and Hydrochloric Acid Regeneration Plants, 40 CFR 63 Subpart CCC. Pursuant to 40 CFR 63.1155(a)(3), the provisions of 40 CFR 63 Subpart CCC do not apply to facilities that pickle carbon steel without using hydrochloric acid.
- 3a. No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 Ill. Adm. Code 212.122, pursuant to 35 Ill. Adm. Code 212.123(a), except as allowed by 35 Ill. Adm. Code 212.123(b) and 212.124.
    - b. No person shall cause or allow any visible emissions of fugitive particulate matter from any process, including any material handling or storage activity, beyond the property line of the emission source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 Ill. Adm. Code 212.301 and 212.314.
    - c. Pursuant to 35 Ill. Adm. Code 212.309(a), the emission units described in 35 Ill. Adm. Code 212.304 through 212.308 shall be operated under the provisions of an operating program, consistent with the requirements set forth in 35 Ill. Adm. Code 212.310 and 212.312, and prepared by the owner or operator and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions.

All normal traffic pattern access areas surrounding storage piles specified in 35 Ill. Adm. Code 212.304 and all normal traffic pattern roads and parking facilities which are located on mining or manufacturing property shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program required by 35 Ill. Adm. Code 212.309, 212.310 and 212.312.
    - d. Pursuant to 35 Ill. Adm. Code 212.310, as a minimum the operating program shall include the following:

- i. The name and address of the source;
  - ii. The name and address of the owner or operator responsible for execution of the operating program;
  - iii. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;
  - iv. Location of unloading and transporting operations with pollution control equipment;
  - v. A detailed description of the best management practices utilized to achieve compliance with this Subpart, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;
  - vi. Estimated frequency of application of dust suppressants by location of materials; and
  - vii. Such other information as may be necessary to facilitate the Illinois EPA's review of the operating program.
- e. Pursuant to 35 Ill. Adm. Code 212.321(a), no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 Ill. Adm. Code 212.321.
  - f. Pursuant to 35 Ill. Adm. Code 214.303(a), with the exception of fuel combustion emission sources and acid manufacturing, no person using sulfuric acid shall cause or allow the emission of sulfuric acid and/or sulfur trioxide from all other similar emission sources at a plant or premises to exceed 45.4 grams in any one hour period for sulfuric acid usage less than 1180 Mg/year (100 percent acid basis) (0.10 lbs/hour up to 1300 tons/year).
4. Pursuant to 35 Ill. Adm. Code 216.121, no person shall cause or allow the emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hour) to exceed 200 ppm, corrected to 50 percent excess air.
  - 5a. Pursuant to 35 Ill. Adm. Code 218.183(a), 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. Pursuant to 35 Ill. Adm. Code 218.183(b), 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; and
    - 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 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.
- c. Pursuant to 35 Ill. Adm. Code 218.204(j)(4), no owner or operator of a coating line shall apply at any time any coating in which the VOM content exceeds the following emission limitations for the specified coating. The following emission limitations are expressed in units of VOM per volume of coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied at each coating applicator, except where noted. Compounds which are specifically exempted from the definition of VOM should be treated as water for the purpose of calculating the "less water" part of the coating composition. The emission limitations are as follows:

Miscellaneous Metal Parts and Products Coating

	kg/l	lbs/gal
All other coatings		
i. Air Dried	0.40	(3.3)
ii. Baked	0.34	(2.8)

- d. Pursuant to 35 Ill. Adm. Code 218.208(a), the limitations of 35 Ill. Adm. Code 218 Subpart F shall not apply to coating lines within a source, that otherwise would be subject to the same subsection of 35 Ill. Adm. Code 218.204 (because they belong to the same coating category, e.g. can coating), provided that combined actual emissions of VOM from all lines at the source subject to that subsection never exceed 6.8 kg/day [15 lbs/day] before the application of capture systems and control devices. (For example, can coating lines within a source would not be subject to the limitations of 35 Ill. Adm. Code 218.204 (b) if the combined actual emissions of VOM from the can coating lines never exceed 6.8 kg/day [15 lbs/day] before the application of capture systems and control devices.) Volatile organic material emissions from heavy off-highway vehicle products coating

lines must be combined with VOM emissions from miscellaneous metal parts and products coating lines to determine applicability. Any owner or operator of a coating source shall comply with the applicable coating analysis test methods and procedures specified in 35 Ill. Adm. Code 218.105(a) and the recordkeeping and reporting requirements specified in 35 Ill. Adm. Code 218.211(a) if total VOM emissions from the subject coating lines are always less than or equal to 6.8 kg/day [15 lbs/day] before the application of capture systems and control devices and, therefore, are not subject to the limitations of 35 Ill. Adm. Code 218.204. Once a category of coating lines at a source is subject to the limitations in 35 Ill. Adm. Code 218.204 the coating lines are always subject to the limitations in 35 Ill. Adm. Code 218.204.

- e. Pursuant to 35 Ill. Adm. Code 218.301, no person shall cause or allow the discharge of more than 3.6 kg/hour (8 lbs/hour) of organic material into the atmosphere from any emission source, except as provided in 35 Ill. Adm. Code 218.302, 218.303, 218.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code 218 Subpart G shall apply only to photochemically reactive material.
- 6a. The vapor degreaser shall not be operated with any solvent containing methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride or chloroform, or any combination of these halogenated HAP solvents, in a total concentration greater than 5 percent by weight, as a cleaning and/or drying agent.
- b. The pickling lines shall not be operated with using hydrochloric acid.
- c. In the event that the operation of this source 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 nuisance.
- 7a. Emissions and operation of the vapor degreaser shall not exceed the following limits:

<u>Material</u>	<u>Material Usage</u>		<u>Volatile Organic Material Emissions</u>	
	<u>(Tons/Month)</u>	<u>(Tons/Year)</u>	<u>(Tons/Month)</u>	<u>(Tons/Year)</u>
VOM Mixture	7.3	40.0	7.3	40.0

These limits are based on the maximum actual emissions based on the maximum usage of the "VOM mixture" material.

- b. Emissions and operation of the boilers and the other natural gas-fired combustion equipment shall not exceed the following limits:
  - i. Natural Gas Usage: 60.0 mmscf/month and 500 mmscf/year.
  - ii. Emissions from Natural Gas Combustion:

<u>Pollutant</u>	<u>Emission Factor</u>	<u>Emissions</u>	
	<u>(Lbs/mmscf)</u>	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
Carbon Monoxide (CO)	84	2.52	21.0
Nitrogen Oxides (NO <sub>x</sub> )	100	3.00	25.0
Particulate Matter (PM)	7.6	0.23	1.9
Sulfur Dioxide (SO <sub>2</sub> )	0.6	0.02	0.2
Volatile Organic Material (VOM)	5.5	0.17	1.4

These limits are based on the maximum equipment operations and standard emission factors (Tables 1.4-1 and 1.4-2 of AP-42, Volume I, Fifth Edition, Supplement D, July 1998).

- c. This permit is issued based on negligible emissions of volatile organic material from the spray paint operation. For this purpose, volatile organic material emissions from this unit shall not exceed nominal emission rates of 0.44 tons/year.
- d. This permit is issued based on negligible emissions of particulate matter from the brazing stations, welding stations and plasma tube cutting operations. For this purpose, particulate matter emissions from each of these units shall not exceed nominal emission rates of 0.44 tons/year.
- e. This permit is issued based on negligible emissions of nitrogen oxides from Department 55 pickling line and Department 12 east pickling line. For this purpose, nitrogen oxides emissions from each of these units shall not exceed nominal emission rates of 0.44 tons/year.
- f. This permit is issued based on negligible emissions of sulfur dioxide from Department 12 west pickling line. For this purpose, sulfur dioxide emissions from this unit shall not exceed nominal emission rates of 0.44 tons/year.
- g. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act shall not exceed 0.9 tons/month and 9.0 tons/year of any single HAP and 2.25 tons/month and 22.5 tons/year of any combination of such HAPs. 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 CAAPP permit from the Illinois EPA.
- h. Compliance with the annual limits of this permit 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).
- 8a. Pursuant to 35 Ill. Adm. Code 212.107, 212.109, and 212.110, testing for particulate matter emissions shall be performed as follows:
  - i. For both fugitive and nonfugitive particulate matter emissions, a determination as to the presence or absence of visible emissions

from emission units shall be conducted in accordance with Method 22, 40 CFR part 60, Appendix A, incorporated by reference in 35 Ill. Adm. Code 212.113, except that the length of the observing period shall be at the discretion of the observer, but not less than one minute. This Condition shall not apply to 35 Ill. Adm. Code 212.301, pursuant to 35 Ill. Adm. Code 212.107.

- ii. Except as otherwise provided in 35 Ill. Adm. Code Part 212, and except for the methods of data reduction when applied to 35 Ill. Adm. Code 212.122 and 212.123, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR Part 60, Appendix A, and the procedures in 40 CFR 60.675(c) and (d), if applicable, incorporated by reference in 35 Ill. Adm. Code 212.113, except that for roadways and parking areas the number of readings required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged, pursuant to 35 Ill. Adm. Code 212.109.
  - iii. Measurement of particulate matter emissions from stationary emission units subject to 35 Ill. Adm. Code Part 212 shall be conducted in accordance with 40 CFR part 60, Appendix A, Methods 5, 5A, 5D, or 5E, pursuant to 35 Ill. Adm. Code 212.110(a).
  - iv. The volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4, pursuant to 35 Ill. Adm. Code 212.110(b).
  - v. Upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA, pursuant to 35 Ill. Adm. Code 212.110(c).
- b. Testing required by Condition 8(a) shall be performed by a qualified independent testing service.
9. Pursuant to 35 Ill. Adm. Code 218.211(a), the VOM content of each coating and the efficiency of each capture system and control device shall be determined by the applicable test methods and procedures specified in 35 Ill. Adm. Code 218.105 to establish the records required under 35 Ill. Adm. Code 218.211.

- 10a. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.
- b. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.
- c. Pursuant to 35 Ill. Adm. Code 218.211(b)(3), any owner or operator of a coating line which is exempted from the limitations of 35 Ill. Adm. Code 218.204 because of 35 Ill. Adm. Code 218.208(a) shall collect and record all of the following information each day for each coating line and maintain the information at the source for a period of three years:
- i. The name and identification number of each coating as applied on each coating line; and
  - ii. The weight of VOM per volume and the volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on each coating line.
- d. Pursuant to 35 Ill. Adm. Code 218.211(c)(2), any owner or operator of a coating line subject to the limitations of 35 Ill. Adm. Code 218.204 and complying by means of 35 Ill. Adm. Code 218.204 shall collect and

record following information each day for each coating line and maintain the information at the source for a period of three years:

- i. The name and identification number of each coating as applied on the coating lines.
    - ii. The weight of VOM per volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on the coating lines.
  - e. The Permittee shall maintain records of the following items to demonstrate compliance with the Conditions of this permit:
    - i. Natural gas usage (mmscf/month and mmscf/year);
    - ii. Monthly and annual solvent usage;
    - iii. Monthly and annual waste solvent collected; and
    - iv. Monthly and annual emissions of CO, NO<sub>x</sub>, PM, SO<sub>2</sub>, VOM and HAPS with supporting calculations (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 five (5) 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 or USEPA request for records during the course of a source inspection.
12. If there is an exceedance of or deviation from 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/deviation. 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 deviation and efforts to reduce emissions and future occurrences.
13. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.
- 14a. Pursuant to 35 Ill. Adm. Code 218.211(b)(5), any owner or operator of a coating line which is exempted from the limitations of 35 Ill. Adm. Code 218.204 because of 35 Ill. Adm. Code 218.208(a) shall notify the Illinois EPA of any record showing that total VOM emissions from the

coating line or group of coating lines exceed 6.8 kg (15 lbs) in any day before the application of capture systems and control devices by sending a copy of such record to the Illinois EPA within 30 days after the exceedance occurs.

- b. Pursuant to 35 Ill. Adm. Code 218.211(c)(3), any owner or operator of a coating line subject to the limitations of 35 Ill. Adm. Code 218.204 and complying by means of 35 Ill. Adm. Code 218.204 shall notify the Illinois EPA in the following instances:

- i. Any record showing violation of 35 Ill. Adm. Code 218.204 shall be reported by sending a copy of such record to the Illinois EPA within 30 days following the occurrence of the violation.

- ii. At least 30 calendar days before changing the method of compliance from 35 Ill. Adm. Code 218.204 to 35 Ill. Adm. Code 218.205 or 35 Ill. Adm. Code 218.207, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.211(d)(1) or (e)(1), respectively. Upon changing the method of compliance from 35 Ill. Adm. Code 218.204 to 35 Ill. Adm. Code 218.205 or 35 Ill. Adm. Code 218.207, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.211(d) or (e), respectively.

- 15. Two (2) copies of required reports and notifications 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 Illinois EPA'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, please call David Hulskotter at 217/782-2113.

Edwin C. Bakowski, P.E.  
Acting Manager, Permit Section  
Division of Air Pollution Control

ECB:DWH:psj

cc: Illinois EPA, FOS Region 1  
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the metal bellows manufacturing 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. The resulting maximum emissions are well below the levels, (e.g., 100 tons per year of VOM, 10 tons per year for a single HAP, and 25 tons per 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 less material is handled, and control measures are more effective than required in this permit.

<u>Emission Unit</u>	E M I S S I O N S (Tons/Year)						
	<u>VOM</u>	<u>CO</u>	<u>NO<sub>x</sub></u>	<u>PM</u>	<u>SO<sub>2</sub></u>	<u>Single HAP</u>	<u>Total HAPs</u>
Vapor Degreaser	40.0						
Natural Gas-Fired Combustion Equipment	1.4	21.0	25.00	1.90	0.20		
Spray Paint Operation	0.44						
Plasma Tube Cutting Operations				0.44			
Department 55 Pickling Line			0.44				
Department 12 East Pickling Line			0.44				
Department 12 West Pickling Line					0.44		
Totals	<u>41.84</u>	<u>21.0</u>	<u>25.88</u>	<u>2.34</u>	<u>0.64</u>	<u>9.0</u>	<u>22.5</u>

DWH:psj

Attachment B - Emissions Reduction Market System (ERMS)

1. Description of ERMS

The ERMS is a "cap and trade" market system for major stationary sources located in the Chicago ozone nonattainment area. It is designed to reduce VOM emissions from stationary sources to contribute to reasonable further progress toward attainment, as required by Section 182(c) of the Clean Air Act.

The ERMS addresses VOM emissions during a seasonal allotment period from May 1 through September 30. Participating sources must hold "allotment trading units" (ATUs) for their actual seasonal VOM emissions. Each year participating sources are issued ATUs based on allotments set in the sources' permits. These allotments are established from historical VOM emissions or "baseline emissions" lowered to provide the emissions reductions from stationary sources required for reasonable further progress.

By December 31 of each year, the end of the reconciliation period following the seasonal allotment period, each source shall have sufficient ATUs in its transaction account to cover its actual VOM emissions during the preceding season. A transaction account's balance as of December 31 will include any valid ATU transfer agreements entered into as of December 31 of the given year, provided such agreements are promptly submitted to the Illinois EPA for entry into the transaction account database. The Illinois EPA will then retire ATUs in sources' transaction accounts in amounts equivalent to their seasonal emissions. When a source does not appear to have sufficient ATUs in its transaction account, the Illinois EPA will issue a notice to the source to begin the process for Emissions Excursion Compensation.

In addition to receiving ATUs pursuant to their allotments, participating sources may also obtain ATUs from the market, including ATUs bought from other participating sources and general participants in the ERMS that hold ATUs (35 Ill. Adm. Code 205.630) and ATUs issued by the Illinois EPA as a consequence of VOM emissions reductions from an Emissions Reduction Generator or an Intersector Transaction (35 Ill. Adm. Code 205.500 and 35 Ill. Adm. Code 205.510). During the reconciliation period, sources may also buy ATUs from a secondary reserve of ATUs managed by the Illinois EPA, the "Alternative Compliance Market Account" (ACMA) (35 Ill. Adm. Code 205.710). Sources may also transfer or sell the ATUs that they hold to other sources or participants (35 Ill. Adm. Code 205.630).

2. Applicability

This source is considered a "participating source" for purposes of the ERMS, 35 Ill. Adm. Code Part 205.

3. Obligation to Hold Allotment Trading Units (ATUs)

- a. Pursuant to 35 Ill. Adm. Code 205.150(c)(1) and 35 Ill. Adm. Code 205.720, and as further addressed by Condition 8 of this Attachment, as of December 31 of each year, this source shall hold ATUs in its account in an amount not less than the ATU equivalent of its VOM emissions during the preceding seasonal allotment period (May 1 - September 30), not including VOM emissions from the following, or the source shall be subject to "emissions excursion compensation," as described in Condition 5 of this Attachment.
  - i. VOM emissions from emission units that the Illinois EPA determines would qualify as insignificant activities under 35 Ill. Adm. Code 201, Subpart F if the source were a CAAPP source and for which a statement to this effect is contained in the FESOP for a participating or new participating source are exempt from the requirements of 35 Ill. Adm. Code Part 205, in accordance with 35 Ill. Adm. Code 205.220(b);
  - ii. Excess VOM emissions associated with startup, malfunction, or breakdown of an emission unit for sources permitted to operate during startup, malfunction or breakdown pursuant to 35 Ill. Adm. Code 201.262, in accordance with 35 Ill. Adm. Code 205.225;
  - iii. Excess VOM emissions to the extent allowed by a Variance, Consent Order, or Compliance Schedule, in accordance with 35 Ill. Adm. Code 205.320(e)(3);
  - iv. Excess VOM emissions that are a consequence of an emergency as approved by the Illinois EPA, pursuant to 35 Ill. Adm. Code 205.750; and
  - v. VOM emissions from certain new and modified emission units as addressed by Condition 8(b) of this Attachment, if applicable, in accordance with 35 Ill. Adm. Code 205.320(f).
- b. Notwithstanding the above condition, in accordance with 35 Ill. Adm. Code 205.150(c)(2), if a source commences operation of a major modification, pursuant to 35 Ill. Adm. Code Part 203, the source shall hold ATUs in an amount not less than 1.3 times its seasonal VOM emissions attributable to such major modification during the seasonal allotment period, determined in accordance with the construction permit for such major modification or applicable provisions of this permit.

4. Market Transactions

- a. The source shall apply to the Illinois EPA for and obtain authorization for a Transaction Account prior to conducting any

market transactions, as specified at 35 Ill. Adm. Code 205.610(a).

- b. The Permittee shall promptly submit to the Illinois EPA any revisions to the information submitted for its Transaction Account, pursuant to 35 Ill. Adm. Code 205.610(b).
- c. The source shall have at least one account officer designated for its Transaction Account, pursuant to 35 Ill. Adm. Code 205.620(a).
- d. Any transfer of ATUs to or from the source from another source or general participant must be authorized by a qualified Account Officer designated by the source and approved by the Illinois EPA, in accordance with 35 Ill. Adm. Code 205.620, and the transfer must be submitted to the Illinois EPA for entry into the Transaction Account database.

5. Emissions Excursion Compensation

Pursuant to 35 Ill. Adm. Code 205.720, if the source fails to hold ATUs in accordance with Condition 3 of this Attachment, it shall provide emissions excursion compensation in accordance with the following:

- a. Upon receipt of an Excursion Compensation Notice issued by the Illinois EPA, the source shall purchase ATUs from the ACMA in the amount specified by the notice, as follows:
  - i. The purchase of ATUs shall be in an amount equivalent to 1.2 times the emissions excursion; or
  - ii. If the source had an emissions excursion for the seasonal allotment period immediately before the period for the present emissions excursion, the source shall purchase ATUs in an amount equivalent to 1.5 times the emissions excursion.
- b. If requested in accordance with paragraph (c) below or in the event that the ACMA balance is not adequate to cover the total emissions excursion amount, the Illinois EPA will deduct ATUs equivalent to the specified amount or any remaining portion thereof from the ATUs to be issued to the source for the next seasonal allotment period.
- c. Pursuant to 35 Ill. Adm. Code 205.720(c), within 15 days after receipt of an Excursion Compensation Notice, the owner or operator may request that ATUs equivalent to the amount specified be deducted from the source's next seasonal allotment by the Illinois EPA, rather than purchased from the ACMA.

6. Quantification of Seasonal VOM Emissions

- a. The methods and procedures specified in this permit for determining VOM emissions and compliance with VOM emission

limitations shall be used for determining seasonal VOM emissions for purposes of the ERMS, with the following exceptions [35 Ill. Adm. Code 205.315(b)]:

No exceptions

- b. The Permittee shall report emergency conditions at the source to the Illinois EPA, in accordance with 35 Ill. Adm. Code 205.750, if the Permittee intends to deduct VOM emissions in excess of the technology-based emission rates normally achieved that are attributable to the emergency from the source's seasonal VOM emissions for purposes of the ERMS. These reports shall include the information specified by 35 Ill. Adm. Code 205.750(a), and shall be submitted in accordance with the following:
    - i. An initial emergency conditions report within two days after the time when such excess emissions occurred due to the emergency; and
    - ii. A final emergency conditions report, if needed to supplement the initial report, within 10 days after the conclusion of the emergency.
7. Annual Account Reporting
- a. For each year in which the source is operational, the Permittee shall submit, as a component of its Annual Emissions Report, seasonal VOM emissions information to the Illinois EPA for the seasonal allotment period. This report shall include the following information [35 Ill. Adm. Code 205.300]:
    - i. Actual seasonal emissions of VOM from the source;
    - ii. A description of the methods and practices used to determine VOM emissions, as required by this permit, including any supporting documentation and calculations;
    - iii. A detailed description of any monitoring methods that differ from the methods specified in this permit, as provided in 35 Ill. Adm. Code 205.337;
    - iv. If a source has experienced an emergency, as provided in 35 Ill. Adm. Code 205.750, the report shall reference the associated emergency conditions report that has been approved by the Illinois EPA;
    - v. If a source's baseline emissions have been adjusted due to a Variance, Consent Order, or CAAPP permit Compliance Schedule, as provided for in 35 Ill. Adm. Code 205.320(e)(3), the report shall provide documentation quantifying the excess VOM emissions during the season that were allowed by the Variance, Consent Order, or Compliance Schedule, in accordance with 35 Ill. Adm. Code 205.320(e)(3); and

- vi. If a source is operating a new or modified emission unit for which three years of operational data is not yet available, as specified in 35 Ill. Adm. Code 205.320(f), the report shall specify seasonal VOM emissions attributable to the new emission unit or the modification of the emission unit.
  - b. This report shall be submitted by October 31 of each year, for the preceding seasonal allotment period.
- 8. Allotment of ATUs to the Source
  - a.
    - i. The allotment of ATUs to this source is 1,061 ATUs per seasonal allotment period.
    - ii. This allotment of ATUs reflects the Illinois EPA's determination that the source's baseline emissions were 106.06 tons per season.
    - iii. The source's allotment reflects 88% of the baseline emissions (12% reduction), except for the VOM emissions from specific emission units excluded from such reduction, pursuant to 35 Ill. Adm. Code 205.405, including units complying with MACT or using BAT, as identified in Condition 10 of this Attachment of this permit.
    - iv. ATUs will be issued to the source's Transaction Account by the Illinois EPA annually. These ATUs will be valid for the seasonal allotment period following issuance and, if not retired in this season, the next seasonal allotment period.
    - v. Condition 3(a) of this Attachment becomes effective beginning in the seasonal allotment period following the initial issuance of ATUs by the Illinois EPA into the Transaction Account for the source.
  - b. Contingent Allotments for New or Modified Emission Units

None
  - c. Notwithstanding the above, part or all of the above ATUs will not be issued to the source in circumstances as set forth in 35 Ill. Adm. Code Part 205, including:
    - i. Transfer of ATUs by the source to another participant or the ACMA, in accordance with 35 Ill. Adm. Code 205.630;
    - ii. Deduction of ATUs as a consequence of emissions excursion compensation, in accordance with 35 Ill. Adm. Code 205.720; and

- iii. Transfer of ATUs to the ACMA, as a consequence of shutdown of the source, in accordance with 35 Ill. Adm. Code 205.410.

9. Recordkeeping for ERMS

The Permittee shall maintain copies of the following documents as its Compliance Master File for purposes of the ERMS [35 Ill. Adm. Code 205.700(a)]:

- a. Seasonal component of the Annual Emissions Report;
- b. Information on actual VOM emissions, as recorded and as required by Condition 6(g) of this permit and Condition 6(a) of this Attachment; and
- c. Any transfer agreements for the purchase or sale of ATUs and other documentation associated with the transfer of ATUs.

10. Exclusions from Further Reductions

- a. VOM emissions from the following emission units shall be excluded from the VOM emissions reductions requirements specified in 35 Ill. Adm. Code 205.400(c) and (e) as long as such emission units continue to satisfy the following [35 Ill. Adm. Code 205.405(a)]:
  - i. Emission units that comply with any NESHAP or MACT standard promulgated pursuant to the CAA;
  - ii. Direct combustion emission units designed and used for comfort heating purposes, fuel combustion emission units, and internal combustion engines; and
  - iii. An emission unit for which a LAER demonstration has been approved by the Illinois EPA on or after November 15, 1990.

The source has demonstrated in its ERMS application and the Illinois EPA has determined that the following emission units qualify for exclusion from further reductions because they meet the criteria as indicated above [35 Ill. Adm. Code 205.405(a) and (c)]:

Vapor Degreaser - Department 12  
Boiler #1  
Boiler #2  
Boiler #4

- b. VOM emissions from emission units using BAT for controlling VOM emissions shall not be subject to the VOM emissions reductions requirement specified in 35 Ill. Adm. Code 205.400(c) or (e) as long as such emission unit continues to use such BAT [35 Ill. Adm. Code 205.405(b)].

The source has demonstrated in its ERMS application and the Illinois EPA has determined that the following emission units qualify for exclusion from further reductions because these emission units use BAT for controlling VOM emissions as indicated above [35 Ill. Adm. Code 205.405(b) and (c)]:

None

DWH:psj