

217/782-2113

TITLE V - CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT
and
TITLE I PERMIT¹

PERMITTEE

Chicago Heights Steel
Attn: Steve Gourley
Main & Birmingham Avenue
Chicago Heights, Illinois 60411

<u>Application No.:</u> 96030081	<u>I.D. No.:</u> 031045ABS
<u>Applicant's Designation:</u>	<u>Date Received:</u> March 7, 1996
<u>Operation of:</u> Steel Fabricating Factory	
<u>Date Issued:</u> October 8, 1999	<u>Expiration Date</u> ² : October 8, 2004
<u>Source Location:</u> Main & Birmingham Avenue, Chicago Heights, Cook	
<u>Responsible Official:</u> Frank L. Corral, President	

This permit is hereby granted to the above-designated Permittee to OPERATE a factory that fabricates sign posts and merchant steel products from scrap rail and bar stock, pursuant to the above referenced permit application. This permit is subject to the conditions contained herein.

If you have any questions concerning this permit, please contact Darin Clutts at 217/782-2113.

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

DES:DCC:psj

cc: Illinois EPA, FOS, Region 1
USEPA

¹ This permit may contain terms and conditions which address the applicability, and compliance if determined applicable, of Title I of the CAA and regulations promulgated thereunder, including 40 CFR 52.21 - federal PSD and 35 IAC Part 203 - Major Stationary Sources Construction and Modification. Any such terms and conditions are identified within this permit.

² Except as provided in Condition 8.7 of this permit.

TABLE OF CONTENTS

	<u>PAGE</u>
1.0 SOURCE IDENTIFICATION	4
1.1 Source	
1.2 Owner/Parent Company	
1.3 Operator	
1.4 General Source Description	
2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT	5
3.0 INSIGNIFICANT ACTIVITIES	7
3.1 Identification of Insignificant Activities	
3.2 Compliance with Applicable Requirements	
3.3 Addition of Insignificant Activities	
4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE	9
5.0 OVERALL SOURCE CONDITIONS	10
5.1 Source Description	
5.2 Applicable Regulations	
5.3 Non-Applicability of Regulations of Concern	
5.4 Source-Wide Operational and Production Limits and Work Practices	
5.5 Source-Wide Emission Limitations	
5.6 General Recordkeeping Requirements	
5.7 General Reporting Requirements	
5.8 General Operational Flexibility/Anticipated Operating Scenarios	
5.9 General Compliance Procedures	
6.0 EMISSIONS REDUCTION MARKETING SYSTEM (ERMS)	15
6.1 Description of ERMS	
6.2 Applicability	
6.3 Obligation to Hold Allotment Trading Units (ATUs)	
6.4 Market Transaction	
6.5 Emissions Excursion Compensation	
6.6 Quantification of Seasonal VOM Emissions	
6.7 Annual Account Reporting	
6.8 Allotment of ATUs to the Source	
6.9 Recordkeeping for ERMS	
6.10 Federal Enforceability	
6.11 Exclusions from Further Reductions	

	<u>PAGE</u>	
7.0	UNIT SPECIFIC CONDITIONS	22
7.1	Group 1: Steel Fabricating Line Control: None	
7.2	Group 2: Straightening Machines Control: Gravity Collectors	
7.3	Group 3: Line #1 (Nordson) Control: None	
7.4	Group 4: Line #2 (Post Plant) Control: None	
8.0	GENERAL PERMIT CONDITIONS	40
8.1	Permit Shield	
8.2	Applicability of Title IV Requirements	
8.3	Emissions Trading Programs	
8.4	Operational Flexibility/Anticipated Operating Scenarios	
8.5	Testing Procedures	
8.6	Reporting Requirements	
8.7	Obligation to Comply with Title I Requirements	
9.0	STANDARD PERMIT CONDITIONS	45
9.1	Effect of Permit	
9.2	General Obligations of Permittee	
9.3	Obligation to Allow Illinois EPA Surveillance	
9.4	Obligation to Comply with Other Requirements	
9.5	Liability	
9.6	Recordkeeping	
9.7	Annual Emissions Report	
9.8	Requirements for Compliance Certification	
9.9	Certification	
9.10	Defense to Enforcement Actions	
9.11	Permanent Shutdown	
9.12	Reopening And Reissuing Permit For Cause	
9.13	Severability Clause	
9.14	Permit Expiration and Renewal	
10.0	ATTACHMENTS	
10.1	Attachment 1 - Summary of Significant Emission Units	1-1
10.2	Attachment 2 - Certification by a Responsible Official	2-1

1.0 SOURCE IDENTIFICATION

1.1 Source

Chicago Heights Steel
Main & Birmingham Avenue
Chicago Heights, Illinois 60411
708-756-5627

I.D. No.: 031045ABS
Standard Industrial Classification: 3312, Steel Manufacture

1.2 Owner/Parent Company

CHS Acquisition Corporation
Main & Birmingham Avenue
Chicago Heights, Illinois 60411

1.3 Operator

Chicago Heights Steel
Main & Birmingham Avenue
Chicago Heights, Illinois 60411

Steve Gourley, Plant Industrial Engineer
708-756-5627

1.4 General Source Description

Chicago Heights Steel operates a steel mill that fabricates recycled scrap steel, in the form of rail and bar, to produce a variety of products including sign post and merchant steel items.

The source includes the operations of scrap steel handling, breaking, reheating, cutting and rolling. Then, the formed product is coated in one of two coating lines that include paint spraying and paint dipping. Finally, the end products are stored until shipping.

2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

ACMA	Alternative Compliance Market Account
Act	Environmental Protection Act [415 ILCS 5/1 et seq.]
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711
ATU	Allotment Trading Unit
BAT	Best Available Technology
Btu	British thermal unit
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CFR	Code of Federal Regulations
CO	Carbon Monoxide
dscf	dry standard cubic foot
ERMS	Emissions Reduction Marketing System
°F	degrees Fahrenheit
ft	foot
ft ³	cubic foot
gr	grain
HAP	Hazardous Air Pollutant
hr	hour
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
Illinois EPA	Illinois Environmental Protection Agency
kg	kilogram
kW	kilowatts
LAER	Lowest Achievable Emission Rate
lb	pound
MACT	Maximum Achievable Control Technology
Mg	megagram
m	meter
mmBtu	million British thermal units
mmscf	million standard cubic feet
NESHAP	National Emission Standards for Hazardous Air Pollutants
No.	number
NO _x	Nitrogen Oxides
NSPS	New Source Performance Standards
PM	Particulate Matter
PM ₁₀	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
ppm	parts per million (mass)
ppmv	parts per million volume
PSD	Prevention of Significant Deterioration
psia	pounds per square inch absolute

RMP	Risk Management Plan
SO ₂	Sulfur Dioxide
scf	standard cubic foot
T	ton
T1	Title I - identifies Title I conditions that have been carried over from an existing construction permit
T1N	Title I New - identifies Title I conditions that are being established in this permit
T1R	Title I Revised - identifies Title I conditions that have been carried over from an existing construction permit and subsequently revised in this permit
TOC	Total Organic Material
USEPA	United States Environmental Protection Agency
VOM	Volatile Organic Material
yr	year

3.0 INSIGNIFICANT ACTIVITIES

3.1 Identification of Insignificant Activities

The following activities at the source constitute insignificant activities as specified in 35 IAC 201.210:

- 3.1.1 Activities determined by the Illinois EPA to be insignificant activities, pursuant to 35 IAC 201.210(a)(1) and 201.211, as follows:

None

- 3.1.2 Activities that are insignificant activities based upon maximum emissions, pursuant to 35 IAC 201.210(a)(2) or (a)(3), as follows:

Fugitive PM emissions from roadways and parking areas.

Paint Rack Burn-off Oven

- 3.1.3 Activities that are insignificant activities based upon their type or character, pursuant to 35 IAC 201.210(a)(4) through (18), as follows:

Direct combustion units designed and used for comfort heating purposes and fuel combustion emission units as follows: (A) Units with a rated heat input capacity of less than 2.5 mmBtu/hr that fire only natural gas, propane, or liquefied petroleum gas; (B) Units with a rated heat input capacity of less than 1.0 mmBtu/hr that fire only oil or oil in combination with only natural gas, propane, or liquefied petroleum gas; and (C) Units with a rated heat input capacity of less than 200,000 Btu/hr which never burn refuse, or treated or chemically contaminated wood [35 IAC 201.210(a)(4)].

- 3.1.4 Activities that are considered insignificant activities pursuant to 35 IAC 201.210(b).

3.2 Compliance with Applicable Requirements

Insignificant activities are subject to applicable requirements notwithstanding status as insignificant activities. In particular, in addition to regulations of general applicability, such as 35 IAC 212.301 and 212.123 (Condition 5.2.2), the Permittee shall comply with the following requirements, as applicable:

- 3.2.1 For each cold cleaning degreaser, the Permittee shall comply with the applicable equipment and operating requirements of 35 IAC 215.182, 218.182, or 219.182.
- 3.2.2 For each particulate matter process emission unit, the Permittee shall comply with the applicable particulate matter emission limit of 35 IAC 212.321 or 212.322. For example, the particulate matter emissions from a process emission unit shall not exceed 0.55 pounds per hour if the emission unit's process weight rate is 100 pounds per hour or less, pursuant to 35 IAC 266.110.
- 3.2.3 For each organic material emission unit that uses organic material, e.g., a mixer or printing line, the Permittee shall comply with the applicable VOM emission limit of 35 IAC 215.301, 218.301, or 219.301, which requires that organic material emissions not exceed 8.0 pounds per hour or do not qualify as photochemically reactive material as defined in 35 IAC 211.4690.

3.3 Addition of Insignificant Activities

- 3.3.1 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type that is identified in Condition 3.1, until the renewal application for this permit is submitted, pursuant to 35 IAC 201.212(a).
- 3.3.2 The Permittee must notify the Illinois EPA of any proposed addition of a new insignificant activity of a type addressed by 35 IAC 201.210(a) and 201.211 other than those identified in Condition 3.1, pursuant to Section 39.5(12)(b) of the Act.
- 3.3.3 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type identified in 35 IAC 201.210(b).

4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE

Group No.	Emission Groups	Description	Date Constructed	Emission Control Equipment
1	Steel Fabricating	Steel rails/bars are heated in a reheat furnace, cut into three separate sections and rolled in three separate mills.	1959	None
2	Straightening Machines	Steel products are straightened by four roller straightening machines.	1975	Four Gravity Collectors
3	Line #1 Nordson	Spray painting booth with oven for steel products.	1975	None
4	Line #2 Post Plant	Dip painting tanks with cure oven for painting steel posts.	1975	None

5.0 OVERALL SOURCE CONDITIONS

5.1 Source Description

5.1.1 This permit is issued based on the source requiring a CAAPP permit as a major source of VOM, Xylene, Butyl Alcohol, Glycol Ethers, and the total of all HAPs emissions.

5.2 Applicable Regulations

5.2.1 Specific emission units at this source are subject to particular regulations as set forth in Section 7 (Unit-Specific Conditions) of this permit.

5.2.2 In addition, emission units at this source are subject to the following regulations of general applicability:

- a. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour) [35 IAC 212.301 and 212.314].
- b.
 - i. This source shall be operated under the provisions of an operating program prepared by the Permittee and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions [35 IAC 212.309(a)].
 - ii. The operating program shall be amended from time to time by the Permittee so that the operating program is current. Such amendments shall be consistent with the requirements set forth by this Condition and shall be submitted to the Illinois EPA [35 IAC 212.312].
 - iii. All normal traffic pattern roads and parking facilities located at this source 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 [35 IAC 212.306].

- c. i. 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 IAC 212.122, except as allowed by 35 IAC 212.123(b) and 212.124 [35 IAC 212.123(a)].
- ii. The emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period [35 IAC 212.123(b)].
- d. No person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission unit to exceed 2,000 ppm [35 IAC 214.301].

5.2.3 The Permittee shall comply with the standards for recycling and emissions reduction of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

- 5.2.4 Should this stationary source, as defined in 40 CFR Section 68.3, become subject to the Accidental Release Prevention regulations in 40 CFR Part 68, then the owner or operator shall submit [40 CFR 68.215(a)(2)(i) and (ii)]:
- a. A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR 68.10(a); or
 - b. A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan (RMP), as part of the annual compliance certification required by 40 CFR Part 70 or 71.

5.2.5 Should this stationary source, as defined in 40 CFR Part 63, become subject to 40 CFR Part 63, then the owner or operator shall comply with the applicable requirements of 40 CFR Part 63 by the date(s) specified in the NESHAP and shall certify compliance with the applicable requirements of 40 CFR Part 63 as part of the annual compliance certification as required by 40 CFR Part 70 or 71.

5.3 Non-Applicability of Regulations of Concern

None

5.4 Source-Wide Operational and Production Limits and Work Practices

In addition to the source-wide requirements in the Standard Permit Conditions in Section 9, the Permittee shall fulfill the following source-wide operational and production limitations and/or work practice requirements:

None

5.5 Source-Wide Emission Limitations

5.5.1 Permitted Emissions for Fees

The annual emissions from the source shall not exceed the following limitations. The overall source emissions shall be determined by adding emissions from all emission units. Compliance with these limits shall be determined on a calendar year basis. These limitations (Condition 5.5.1) are set for the purpose of establishing fees and are not federally enforceable.

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	308.7
Sulfur Dioxide (SO ₂)	0.3
Particulate Matter (PM)	6.4
Nitrogen Oxides (NO _x)	66.2
HAP, not included in VOM or PM	-
TOTAL	381.6

5.5.2 Emissions of Hazardous Air Pollutants

Source-wide emission limitations for HAPs as listed in Section 112(b) of the CAA are not set. This source is considered to be a major source of HAPs.

5.5.3 Other Source-Wide Emission Limitations

Other source-wide emission limitations are not set for this source pursuant to either the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21, Illinois EPA rules for Major Stationary Sources Construction and Modification, 35 IAC Part 203, or Section 502(b)(10) of the CAA. However, there may be unit specific emission limitations set forth in Section 7 of this permit pursuant to these rules.

5.6 General Recordkeeping Requirements

5.6.1 Emission Records

The Permittee shall maintain records of the following items for the source to demonstrate compliance with Condition 5.5.1, pursuant to Section 39.5(7)(b) of the Act:

Total annual emissions, including emissions of HAPs, on a calendar year basis for the emission units covered by Section 7 (Unit Specific Conditions) of this permit.

5.6.2 Retention and Availability of Records

- a. All records and logs required by this permit shall be retained for at least five years from the date of entry (unless a longer retention period is specified by the particular recordkeeping provision herein), shall be kept at a location at the source that is readily accessible to the Illinois EPA or USEPA, and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request.

- b. The Permittee shall retrieve and print, on paper during normal source office hours, any records retained in an electronic format (e.g., computer) in response to an Illinois EPA or USEPA request for records during the course of a source inspection.

5.7 General Reporting Requirements

5.7.1 General Source-Wide Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

5.7.2 Annual Emissions Report

The annual emissions report required pursuant to Condition 9.7 shall contain emissions information for the previous calendar year.

5.8 General Operational Flexibility/Anticipated Operating Scenarios

N/A

5.9 General Compliance Procedures

5.9.1 General Procedures for Calculating Source Wide Emissions

- a. Compliance with the source-wide emission limits specified in Condition 5.5 shall be based on the recordkeeping and reporting requirements of Conditions 5.6 and 5.7, and Compliance Procedures in Section 7 (Unit Specific Conditions) of this permit.
- b. Compliance provisions addressing Condition 5.2.2(a) are not set by this permit as compliance is assumed to be achieved as demonstrated by historical operation and following the procedures of the operating program required by Condition 5.2.2(b).

6.0 EMISSIONS REDUCTION MARKET SYSTEM (ERMS)

6.1 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 CAA.

The ERMS addresses VOM emissions during a seasonal allotment period from May 1 through September 30. Once the ERMS begins, 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 during initial issuance of the sources' CAAPP 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 IAC 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 IAC 205.500 and 35 IAC 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 IAC 205.710). Sources may also transfer or sell the ATUs that they hold to other sources or participants [35 IAC 205.630].

6.2 Applicability

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

6.3 Obligation to Hold Allotment Trading Units (ATUs)

- a. Pursuant to 35 IAC 205.150(c)(1) and 35 IAC 205.720, and as further addressed by Condition 6.8, 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 6.5.
 - i. VOM emissions from insignificant emission units and activities as identified in Section 3 of this permit, in accordance with 35 IAC 205.220;
 - ii. Excess VOM emissions associated with startup, malfunction, or breakdown of an emission unit as authorized in Section 7.0 of this permit, in accordance with 35 IAC 205.225;
 - iii. Excess VOM emissions to the extent allowed by a Variance, Consent Order, or Compliance Schedule, in accordance with 35 IAC 205.320(e)(3);
 - iv. Excess VOM emissions that are a consequence of an emergency as approved by the Illinois EPA, pursuant to 35 IAC 205.750; and
 - v. VOM emissions from certain new and modified emission units as addressed by Condition 6.8(b), if applicable, in accordance with 35 IAC 205.320(f).
- b. Notwithstanding the above condition, in accordance with 35 IAC 205.150(c)(2), if a source commences operation of a major modification, pursuant to 35 IAC 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 in Section 7.0 of this permit.

6.4 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 IAC 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 IAC 205.610(b).
- c. The source shall have at least one account officer designated for its Transaction Account, pursuant to 35 IAC 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 IAC 205.620, and the transfer must be submitted to the Illinois EPA for entry into the Transaction Account database.

6.5 Emissions Excursion Compensation

Pursuant to 35 IAC 205.720, if the source fails to hold ATUs in accordance with Condition 6.3, 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 IAC 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.

6.6 Quantification of Seasonal VOM Emissions

- a. The methods and procedures specified in Sections 5 and 7 of 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 IAC 205.315(b)]:

No exceptions

- b. The Permittee shall report emergency conditions at the source to the Illinois EPA, in accordance with 35 IAC 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 IAC 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.

6.7 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 IAC 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 IAC 205.337;
 - iv. If a source has experienced an emergency, as provided in 35 IAC 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 IAC 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 IAC 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 IAC 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.

6.8 Allotment of ATUs to the Source

- a.
 - i. The allotment of ATUs to this source is 722 ATUs per seasonal allotment period.
 - ii. This allotment of ATUs reflects the Illinois EPA's determination that the source's baseline emissions were 81.9494 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 IAC 205.405, including units complying with MACT or using BAT, as identified in Condition 6.11 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 6.3(a) 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

Not applicable.

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 IAC Part 205, including:

i. Transfer of ATUs by the source to another participant or the ACMA, in accordance with 35 IAC 205.630;

ii. Deduction of ATUs as a consequence of emissions excursion compensation, in accordance with 35 IAC 205.720; and

iii. Transfer of ATUs to the ACMA, as a consequence of shutdown of the source, in accordance with 35 IAC 205.410.

6.9 Recordkeeping for ERMS

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

a. Seasonal component of the Annual Emissions Report;

b. Information on actual VOM emissions, as specified in detail in Sections 5 and 7 of this permit and Condition 6.6(a); and

c. Any transfer agreements for the purchase or sale of ATUs and other documentation associated with the transfer of ATUs.

6.10 Federal Enforceability

Section 6 becomes federally enforceable upon approval of the ERMS by USEPA as part of Illinois' State Implementation Plan.

6.11 Exclusions from Further Reductions

a. VOM emissions from the following emission units shall be excluded from the VOM emissions reductions requirements specified in 35 IAC 205.400(c) and (e) as long as such emission units continue to satisfy the following [35 IAC 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 IAC 205.405(a) and (c)]:

None

- 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 IAC 205.400(c) or (e) as long as such emission unit continues to use such BAT [35 IAC 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 IAC 205.405(b) and (c)]:

None

7.0 UNIT SPECIFIC CONDITIONS

7.1 Group 1: Steel Fabricating Line
Control: None

7.1.1 Description

Steel rails and billets are heated in a 112.5 mmBtu/hr gas-fired reheat furnace to sufficiently high temperatures for rolling. The steel rails are cut into three sections and then rolled, along with the billets, into posts and merchant products.

7.1.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Reheat Furnace	Maximum firing rate of 112.5 mmBtu/hr fired with natural gas	None
Rolling Mill (3 Units)	Three separate lines which contain multiple hot rolling stations	None

7.1.3 Applicability Provisions and Applicable Regulations

- a. An "affected steel fabricating line" for the purpose of these unit-specific conditions, is a process line that has a reheat furnace that is a process emission unit and emits pollutants from the combustion of natural gas, a cutting process that has no emissions, and a rolling mill that does not use guide lubricant but emits VOM, all constructed prior to April 14, 1972.
- b.
 - i. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit of the affected steel fabricating line, except as provided in 35 IAC 218.302, 218.303, or 218.304 and the following exemption: If no odor nuisance exists the limitation of 35 IAC 215 Subpart G shall only apply to photochemically reactive material [35 IAC 218.301].
 - ii. The affected steel fabricating line is subject to the opacity and SO₂ emission limits identified in Condition 5.2.2(c) and (d), respectively.

7.1.4 Non-Applicability of Regulations of Concern

This permit is issued based on the affected steel fabricating line not being subject to 35 IAC 212.322, emissions of particulate matter from process emission units for which construction or modification commenced prior to April 14, 1972 , because particulate matter emissions result from the combustion of fuel by a process emission unit where such rules cannot reasonably be applied.

7.1.5 Operational and Production Limits

None

7.1.6 Emission Limitations

There are no specific emission limitations for this unit, however, there are source wide emission limitations in Condition 5.5 that include this unit.

7.1.7 Testing Requirements/Work Practices

- a. Upon request by the Illinois EPA or USEPA, the Permittee shall measure the emissions in the effluent stream of the exhaust from the reheat furnace of the affected steel fabricating line for the pollutant(s), specified in the request. These test(s) shall be performed by an approved testing service during conditions which are representative of maximum emissions.
- b. The following methods and procedures shall be used for testing of emissions, unless another method is approved by the Agency: Refer to 40 CFR 60, Appendix A for USEPA test methods.

Location of Sample Points	USEPA Method 1
Gas Flow and Velocity	USEPA Method 2
Flue Gas Weight	USEPA Method 3
Moisture	USEPA Method 4
Particulate Matter	USEPA Method 5
Sulfur Dioxide	USEPA Method 6
Volatile Organic Material	USEPA Method 25, or 25A if outlet VOM concentration < ppmv as C Non CH ₄
Nitrogen Oxides	USEPA Method 7
Carbon Monoxide	USEPA Method 10

7.1.8 Inspection Requirements/Monitoring Requirements

None

7.1.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected steel fabricating line to demonstrate compliance with Conditions 5.5.1, pursuant to Section 39.5(7)(b) of the Act:

- a. Natural gas usage by the reheat furnace in standard cubic feet per year; and
- b. Steel rail and billet throughput for the rolling mill in tons per month and tons per year.
- c. Results of any stack test required by Condition 7.1.7.

7.1.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance of the affected steel fabricating line with the permit requirements as follows pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

- a. Any record showing violation of Condition 7.1.3(b) shall be reported by sending a copy of such record to the Illinois EPA within 30 days following the occurrence of the violation.
- b. The final report of any stack test required by Condition 7.1.7.

7.1.11 Operational Flexibility / Anticipated Operating Scenarios

N/A

7.1.12 Compliance Procedures

- a. Compliance with VOM limitation of Condition 7.1.3(b)(i) by the rolling mill of the affected steel fabricating line is addressed by the records of Condition 7.1.9(b) and the emission factor in Condition 7.1.12(c).

- b. Compliance provisions addressing Condition 5.2.2(c) and (d) as referenced by Condition 7.1.3(b)(ii) are not set by this permit as compliance is assumed to be achieved by the normal work practices and maintenance activities inherent in operation of the affected steel fabricating line when the reheat furnace is combusting natural gas.
- c. To determine compliance with the emission limitations of Conditions 5.5.1 for the purpose of establishing fees, the emissions from the affected steel fabricating line shall be calculated by using the following emission factors:

i. For the reheat furnace:

<u>Pollutant</u>	Natural Gas Emission Factor (lbs/10 ⁶ ft ³)
NO _x	280
PM	7.6
SO ₂	0.6
VOM	5.5

Where emission factors for NO_x, PM, SO₂ and VOM for uncontrolled natural gas combustion in large boilers (> 100 mmBtu/hr), Tables 1.4-1 and 1.4-2, AP-42, March 1998.

Fuel Combustion Emissions = natural gas consumed times the appropriate emission factor.

ii. For the rolling mill:

<u>Pollutant</u>	Emission Factor (lbs/ton)
VOM	0.03

Where emission factor for VOM is from the AIRS emission factor of 0.08 lb/ton adjusted for the fact that rail guide is not used.

Process Emissions = steel throughput times the emission factor.

7.2 Group 2: Straightening Machines
 Control: Gravity Collectors

7.2.1 Description

Four roller straightening machines are used to straighten steel product where each machine is controlled by a gravity collector that collects the scale.

7.2.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Straightening Machines (4 units)	Steel products are straightened by four roller straightening machines.	Gravity Collectors

7.2.3 Applicability Provisions and Applicable Regulations

- a. An "affected straightening machine" for the purpose of these unit-specific conditions, is a process unit, with a gravity collector, that straightens steel product and was constructed on or after April 14, 1972.
- b. i. An affected straightening machine is subject to 35 IAC 212.321(a), which provides that:
 - 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, 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 Condition 7.2.3(b)(i)(B) below [35 IAC 212.321(a)].
 - B. The emissions of particulate matter into the atmosphere in any one hour period from an affected straightening machine shall not exceed the allowable emission rates specified in the following equation:

$$E = A(P)^B$$

Where:

P = Process weight rate;

E = Allowable emission rate;

For process weight rates up to 408 Mg/hr
(450 T/hr):

	<u>Metric</u>	<u>English</u>
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	2.54
B	0.16	0.534

- ii. An affected straightening machine is subject to the opacity limit identified in Condition 5.2.2(c).

7.2.4 Non-Applicability of Regulations of Concern

None

7.2.5 Operational and Production Limits

None

7.2.6 Emission Limitations

There are no specific emission limitations for this unit, however, there are source wide emission limitations in Condition 5.5 that include this unit.

7.2.7 Testing Requirements/Work Practices

None

7.2.8 Inspection Requirements/Monitoring Requirements

None

7.2.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for an affected straightening machine to demonstrate compliance with Conditions 5.5.1 and 7.2.3(b), pursuant to Section 39.5(7)(b) of the Act:

- a. Steel product throughput for each affected straightening machine in tons per month and tons per year.
- b. Hours of operation for each affected straightening machine in hours per month and hours per year.

7.2.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance of an affected straightening machine with the permit requirements as follows pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

Any record showing violation of Condition 7.2.3(b) shall be reported by sending a copy of such record to the Illinois EPA within 30 days following the occurrence of the violation.

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.2.12 Compliance Procedures

- a. Compliance with the PM limitation of Condition 7.2.3(b)(i) by an affected straightening machine is addressed by the recordkeeping required by Conditions 7.2.9(a) and (b), a grain loading factor of 0.03 gr/dscf, a maximum air flow of 4500 ACFM and a correction coefficient for moisture of 0.9.
- b. Compliance provisions addressing Condition 5.2.2(c) as referenced by Condition 7.2.3(b)(ii) is not set by this permit as compliance is assumed to be achieved by the normal work practices and maintenance activities inherent in operation of an affected straightening machine.
- c. To determine compliance with the emission limitations of Conditions 5.5.1 for the purpose of establishing fees, the emissions from an affected straightening machine shall be calculated by the following methods:

The annual operating hours record of Condition 7.2.9(b) and the hourly emission rate calculated from the compliance procedure of Condition 7.2.12(a).

7.3 Group 3: Line #1 (Nordson)
Control: None

7.3.1 Description

Steel product are coated (painted) in a spray booth and then cured in a 5.0 mmBtu/hr gas-fired oven.

7.3.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Nordson Spray Booth	Spray painting booth	None
Nordson Cure Oven	5.0 mmBtu/hr gas-fired oven	None

7.3.3 Applicability Provisions and Applicable Regulations

- a. An "affected coating line" for the purpose of these unit-specific conditions, is a spray booth with a fabric filter and a curing oven that paints steel product and was constructed on or after April 14, 1972.
- b. Applicable Emission Limits
 - i. The affected coating line is subject to 35 IAC 212.321(a), which provides that:
 - 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, 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 Condition 7.3.3(b)(i)(B) below [35 IAC 212.321(a)].
 - B. The emissions of particulate matter into the atmosphere in any one hour period from the affected coating line shall not exceed the allowable emission rates specified in the following equation:

$$E = A(P)^B$$

Where:

P = Process weight rate;
 E = Allowable emission rate;

For process weight rates up to 408 Mg/hr
 (450 T/hr):

	<u>Metric</u>	<u>English</u>
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	2.54
B	0.16	0.534

ii. The affected coating line is subject to 35 IAC 218.204(j)(2), which provides that:

A. No owner or operator of the affected coating line shall apply at any time any coating in which the VOM content exceeds the following emission limitations for the extreme performance coating as applied to miscellaneous metal parts. The following emission limitation is 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 by the affected coating line:

<u>kg/liter</u>	<u>lb/gallon</u>	
0.42	3.5	(Air Dried)
0.40	3.3	(Baked)

B. 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 composites.

iii. The affected coating line is subject to the opacity and SO₂ emission limit identified in Conditions 5.2.2(c) and (d), respectively.

7.3.4 Non-Applicability of Regulations of Concern

The affected coating line is not required to meet 35 IAC 218.301 and 218.302, Use of Organic Material, when subject to the limitations of 35 IAC 218.204 [35 IAC 218.209].

7.3.5 Operational and Production Limits

None

7.3.6 Emission Limitations

There are no specific emission limitations for this unit, however, there are source wide emission limitations in Condition 5.5 that include this unit.

7.3.7 Testing Requirements/Work Practices

Testing for VOM content of coatings shall be performed as follows [35 IAC 218.105(a) and Section 39.5(7)(b) of the Act]:

- a. Upon request by the Illinois EPA or USEPA, the VOM content of specific coatings used on the affected coating line shall be determined according to USEPA Reference Method 24 of 40 CFR 60, Appendix A.
- b. The Permittee may test the materials in accordance with these methods or the supplier of a material may provide documentation, e.g., material safety data sheets (MSDS), for such testing that reflects the appropriate method.

7.3.8 Inspection requirements/Monitoring Requirements

The Permittee shall fulfill monitoring of VOM content by keeping records of data collected from the test requirements of Condition 7.3.7 as required by Condition 7.3.9.

7.3.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected coating line to demonstrate compliance with Conditions 5.5.1 and 7.3.3 pursuant to Section 39.5(7)(b) of the Act and 35 IAC 218.211:

- a. The name and identification number of each coating as applied each day on the affected coating line [35 IAC 218.211(c)(2)(A)];

- b. 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 affected coating line [35 IAC 218.211(c)(2)(B)];
- c. Usage of all coatings and solvents in gallons per calendar year;
- d. Amount reclaimed for any coating or solvent in gallons per calendar year; and
- e. Natural gas usage by the cure oven in standard cubic feet per calendar year.

7.3.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance of the affected coating line with the permit requirements as follows pursuant to Section 39.5(7)(f)(ii) of the Act and 35 IAC 218.211. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

Any record showing violation of Condition 7.3.3(b)(ii) shall be reported by sending a copy of such record to the Illinois EPA within 30 days following the occurrence of the violation [35 IAC 218.211(c)(3)(B)].

7.3.11 Operational Flexibility / Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to changing of any type of coating or solvent as long as the coating, as applied, complies with Condition 7.3.3(b)(ii) without prior notification to the Illinois EPA or revision of this permit. This condition does not affect the Permittee's obligation to properly obtain a construction permit in a timely manner for any activity constituting construction or modification of the source, as defined in 35 IAC 201.102.

7.3.12 Compliance Procedures

- a. Compliance provisions addressing PM limitation of Condition 7.3.3(b)(i) and the opacity limit of Condition 5.2.2(c) as referenced by Condition 7.3.3(b)(iii) are not set by this permit as compliance is assumed to be achieved by normal work

practices and the inspection requirement of Condition 7.3.8(b).

- b. Compliance procedures with the SO₂ limit of Condition 5.2.2(d) as referenced by Condition 7.3.3(b)(iii) are not set by this permit as compliance is assumed to be achieved by the cure oven using natural gas.
- c. Compliance with the VOM content limitation of Condition 7.3.3(b)(ii) for coatings used on the affected coating line is addressed by VOM testing in accordance with Condition 7.3.7 and the recordkeeping required by Condition 7.3.9.
- d. To determine compliance with the emission limitations of Condition 5.5.1 for the purpose of establishing fees, the emissions from the affected coating line shall be calculated by the following methods:
 - i. Emissions of VOM from the process of coating and curing and clean-up:

$$\sum_{i=1}^n [C_{Ui} - C_{Ri}]C_{Vi}$$

Where:

i = Subscript denoting a specific coating;

n = The number of different coatings;

C_U = The usage (gallons) of a specific coating;

C_R = The reclaimed amount of a specific coating; and

C_V = The weight percent VOM (pound per gallon) of a specific coating including water and other exempted compounds.

$$\sum_{i=1}^l [S_{Ui} - S_{Ri}]S_{Vi}$$

Where:

i = Subscript denoting a specific solvent;

l = The number of different solvents;

S_U = The usage (gallons) of a specific clean-up solvent;

S_R = The reclaimed amount of a specific clean-up solvent; and

S_V = The weight percent VOM (pound per gallon) of a specific clean-up solvent including water and other exempted compounds.

Total VOM emissions = Coating VOM emissions + Clean-up solvent VOM emissions

ii. Emissions from the combustion of fuel in the cure oven:

<u>Pollutant</u>	<u>Natural Gas Emission Factor (lbs/10⁶ ft³)</u>
NO _x	100
PM	7.6
SO ₂	0.6
VOM	5.5

Where emission factors for NO_x, PM, SO₂ and VOM for uncontrolled natural gas combustion in small boilers (< 100 mmBtu/hr), Tables 1.4-1 and 1.4-2, March 1998.

Fuel Combustion Emissions = natural gas consumed times the appropriate emission factor.

7.4 Group 4: Line #2 (Post Plant)
 Control: None

7.4.1 Description

Steel product are coated with primer, finish, and topper in dip tanks and are then cured in a 3.85 mmBtu/hr gas-fired oven. The paint racks then go through a 2.88 mmBtu/hr burn-off oven.

7.4.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Post Plant Dip Tanks	Dip coating tanks for primer, finish, and topping	None
Post Plant Cure Oven	3.85 mmBtu/hr gas-fired oven	None

7.4.3 Applicability Provisions and Applicable Regulations

a. An "affected coating line" for the purpose of these unit-specific conditions, are dip coating tanks that coat steel posts and a curing oven where all were constructed on or after April 14, 1972.

b. Applicable Emission Limits

i. The affected coating line is subject to 35 IAC 218.204(j)(2), which provides that:

A. No owner or operator of the affected coating line shall apply at any time any coating in which the VOM content exceeds the following emission limitations for the coating as applied to miscellaneous metal parts. The following emission limitation is 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 by the affected coating line:

<u>kg/liter</u>	<u>lb/gallon</u>
0.42	3.5 (Air Dried)
0.40	3.3 (Baked)

B. 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 composites.

- ii. The affected coating line is subject to the SO₂ emission limit identified in Condition 5.2.2(d).

7.4.4 Non-Applicability of Regulations of Concern

The affected coating line is not required to meet 35 IAC 218.301 and 218.302, Use of Organic Material, when subject to the limitations of 35 IAC 218.204 [35 IAC 218.209].

7.4.5 Operational and Production Limits

None

7.4.6 Emission Limitations

There are no specific emission limitations for this unit, however, there are source wide emission limitations in Condition 5.5 that include this unit.

7.4.7 Testing Requirements/Work Practices

Testing for VOM content of coatings shall be performed as follows [35 IAC 218.105(a) and Section 39.5(7)(b) of the Act]:

- a. Upon reasonable request by the Illinois EPA, the VOM content of specific coatings used on the affected coating line shall be determined according to USEPA Reference Method 24 of 40 CFR 60, Appendix A.
- b. The Permittee may test the materials in accordance with these methods or the supplier of a material may provide documentation, e.g., material safety data sheets (MSDS), for such testing that reflects the appropriate method.

7.4.8 Inspection Requirements/Monitoring Requirements

The Permittee shall fulfill monitoring of VOM content by keeping records of data collected from the test requirements of Condition 7.4.7 as required by Condition 7.4.9.

7.4.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected coating line to demonstrate compliance with Conditions 5.5.1 and 7.4.3 pursuant to Section 39.5(7)(b) of the Act and 35 IAC 218.211:

- a. The name and identification number of each coating as applied each day on the affected coating line; [35 IAC 218.211(c)(2)(A)]
- b. 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 affected coating line; [35 IAC 218.211(c)(2)(B)]
- c. Usage of all coatings and solvents in gallons per calendar year;
- d. Amount reclaimed for any coating or solvent in gallons per calendar year; and
- e. Natural gas usage by the cure oven in standard cubic feet per calendar year.

7.4.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance of the affected coating line with the permit requirements as follows pursuant to Section 39.5(7)(f)(ii) of the Act and 35 IAC 218.211. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

Any record showing violation of Condition 7.4.3(b)(i) shall be reported by sending a copy of such record to the Illinois EPA within 30 days following the occurrence of the violation. [35 IAC 218.211(c)(3)(B)]

7.4.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to changing of any type of coating or solvent as long as the coating, as applied, complies with Condition 7.4.3(b)(i) without prior notification to the Illinois EPA or revision of this permit. This condition does not affect the Permittee's obligation to properly obtain a construction permit in a

timely manner for any activity constituting construction or modification of the source, as defined in 35 IAC 201.102.

7.4.12 Compliance Procedures

- a. Compliance with the VOM content limitation by Condition 7.4.3(b)(i) for coatings used on the affected coating line is addressed by VOM testing in accordance with Condition 7.4.7 and the recordkeeping required by Condition 7.4.9.
- b. Compliance procedures with the SO₂ limit of Condition 5.2.2(d) as referenced by Condition 7.4.3(b)(ii) are not set by this permit as compliance is assumed to be achieved by the cure oven using natural gas.
- c. To determine compliance with the emission limitations of Conditions 5.5.1 for the purpose of establishing fees, the emissions from the affected coating line shall be calculated by the following methods:
 - i. Emissions of VOM from the process of coating and curing and clean-up:

$$\sum_{i=1}^n [C_{Ui} - C_{Ri}]C_{Vi}$$

Where:

i = Subscript denoting a specific coating;

n = The number of different coatings;

C_U = The usage (gallons) of a specific coating;

C_R = The reclaimed amount of a specific coating; and

C_V = The weight percent VOM (pound per gallon) of a specific coating including water and other exempted compounds.

$$\sum_{i=1}^1 [S_{Ui} - S_{Ri}]S_{Vi}$$

Where:

i = Subscript denoting a specific solvent;

l = The number of different solvents;

S_U = The usage (gallons) of a specific clean-up solvent;

S_R = The reclaimed amount of a specific clean-up solvent; and

S_V = The weight percent VOM (pound per gallon) of a specific clean-up solvent including water and other exempted compounds.

Total VOM emissions = Coating VOM emissions + Clean-up solvent VOM emissions

ii. Emissions from the combustion of fuel in the cure oven:

<u>Pollutant</u>	<u>Natural Gas Emission Factor (lbs/10⁶ ft³)</u>
NO _x	100
PM	7.6
SO ₂	0.6
VOM	5.5

Where emission factors for NO_x, PM, SO₂ and VOM for uncontrolled natural gas combustion in small boilers (< 10 mmBtu/hr), Tables 1.4-1 and 1.4-2, AP-42, March 1998.

Fuel Combustion Emissions = natural gas consumed times the appropriate emission factor.

8.0 GENERAL PERMIT CONDITIONS

8.1 Permit Shield

Pursuant to Section 39.5(7)(j) of the Act, the Permittee has requested and has been granted a permit shield. This permit shield provides that compliance with the conditions of this permit shall be deemed compliance with applicable requirements which were applicable as of the date the proposed permit for this source was issued, provided that either the applicable requirements are specifically identified within this permit, or the Illinois EPA, in acting on this permit application, has determined that other requirements specifically identified are not applicable to this source and this determination (or a concise summary thereof) is included in this permit.

This permit shield does not extend to applicable requirements which are promulgated after June 20, 1999 (the date of issuance of the draft permit) unless this permit has been modified to reflect such new requirements.

8.2 Applicability of Title IV Requirements (Acid Deposition Control)

This source is not an affected source under Title IV of the CAA and is not subject to requirements pursuant to Title IV of the CAA.

8.3 Emissions Trading Programs

No permit revision shall be required for increases in emissions allowed under any USEPA approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for elsewhere in this permit and that are authorized by the applicable requirement [Section 39.5(7)(o)(vii) of the Act].

8.4 Operational Flexibility/Anticipated Operating Scenarios

8.4.1 Changes Specifically Addressed by Permit

Physical or operational changes specifically addressed by the Conditions of this permit that have been identified as not requiring Illinois EPA notification may be implemented without prior notice to the Illinois EPA.

8.4.2 Changes Requiring Prior Notification

The Permittee is authorized to make physical or operational changes without applying for or obtaining an amendment to this permit, provided that the changes do not constitute a modification under Title I of the CAA,

emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change and the Permittee provides written notice to the Illinois EPA, Division of Air Pollution Control, Permit Section, at least 7 days before commencement of the change [Section 39.5(12)(a) of the Act]. This notice shall:

- a. Describe the physical or operational change;
- b. Identify the schedule for implementing the physical or operational change;
- c. Provide a statement of whether or not any New Source Performance Standard (NSPS) is applicable to the physical or operational change and the reason why the NSPS does or does not apply;
- d. Provide emission calculations which demonstrate that the physical or operational change will not result in a modification; and
- e. Provide a certification that the physical or operational change will not result in emissions greater than authorized under the Conditions of this permit.

8.5 Testing Procedures

Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods. Documentation of the test date, conditions, methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of any tests conducted as required by this permit or as the result of a request by the Illinois EPA shall be submitted as specified in Condition 8.6.

8.6 Reporting Requirements

8.6.1 Monitoring Reports

A report summarizing required monitoring as specified in the conditions of this permit shall be submitted to the Air Compliance Section of the Illinois EPA every six months as follows [Section 39.5(7)(f) of the Act]:

<u>Monitoring Period</u>	<u>Report Due Date</u>
January - June	September 1
July - December	March 1

All instances of deviations from permit requirements must be clearly identified in such reports. All such reports shall be certified in accordance with Condition 9.9.

8.6.2 Test Notifications

Unless otherwise specified elsewhere in this permit, a written test plan for any test required by this permit shall be submitted to the Illinois EPA for review at least 60 days prior to the testing pursuant to Section 39.5(7)(a) of the Act. The notification shall include at a minimum:

- a. The name and identification of the affected unit(s);
- b. The person(s) who will be performing sampling and analysis and their experience with similar tests;
- c. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the source and any control equipment will be determined;
- d. The specific determination of emissions and operation which are intended to be made, including sampling and monitoring locations;
- e. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods;
- f. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification; and
- g. Any proposed use of an alternative test method, with detailed justification.

8.6.3 Test Reports

Unless otherwise specified elsewhere in this permit, the results of any test required by this permit shall be submitted to the Illinois EPA within 60 days of completion of the testing. The test report shall include at a minimum [Section 39.5(7)(e)(i) of the Act]:

- a. The name and identification of the affected unit(s);

- b. The date and time of the sampling or measurements;
- c. The date any analyses were performed;
- d. The name of the company that performed the tests and/or analyses;
- e. The test and analytical methodologies used;
- f. The results of the tests including raw data, and/or analyses including sample calculations;
- g. The operating conditions at the time of the sampling or measurements; and
- h. The name of any relevant observers present including the testing company's representatives, any Illinois EPA or USEPA representatives, and the representatives of the source.

8.6.4 Reporting Addresses

- a. The following addresses should be utilized for the submittal of reports, notifications, and renewals:
 - i. Illinois EPA - Air Compliance Section

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (MC 40)
P.O. Box 19276
Springfield, Illinois 62794-9276
 - ii. Illinois EPA - Air Regional Field Office

Illinois Environmental Protection Agency
Division of Air Pollution Control
Eisenhower Tower
1701 South First Avenue
Maywood, Illinois 60153
 - iii. Illinois EPA - Air Permit Section (MC 11)

Illinois Environmental Protection Agency
Division of Air Pollution Control
Permit Section
P.O. Box 19506
Springfield, Illinois 62794-9506

iv. USEPA Region 5 - Air Branch

USEPA (AR - 17J)
Air & Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604

- b. Unless otherwise specified in the particular provision of this permit, reports shall be sent to the Illinois EPA - Air Compliance Section with a copy sent to the Illinois EPA - Air Regional Field Office.

8.7 Obligation to Comply with Title I Requirements

Any term, condition, or requirement identified in this permit by T1, T1R, or T1N is established or revised pursuant to 35 IAC Part 203 or 40 CFR 52.21 ("Title I provisions") and incorporated into this permit pursuant to both Section 39.5 and Title I provisions. Notwithstanding the expiration date on the first page of this permit, the Title I conditions remain in effect pursuant to Title I provisions until the Illinois EPA deletes or revises them in accordance with Title I procedures.

9.0 STANDARD PERMIT CONDITIONS

9.1 Effect of Permit

9.1.1 The issuance of this permit does not release the Permittee from compliance with State and Federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the United States or the State of Illinois or applicable ordinances, except as specifically stated in this permit and as allowed by law and rule [Section 39.5(7)(j)(iv) of the Act].

9.1.2 In particular, this permit does not alter or affect the following:

- a. The provisions of Section 303 (emergency powers) of the CAA, including USEPA's authority under that Section;
- b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
- c. The applicable requirements of the acid rain program consistent with Section 408(a) of the CAA; and
- d. The ability of USEPA to obtain information from a source pursuant to Section 114 (inspections, monitoring, and entry) of the CAA.

9.1.3 Notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

9.2 General Obligations of Permittee

9.2.1 Duty to Comply

The Permittee must comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the CAA and the Act, and is grounds for any or all of the following: enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application [Section 39.5(7)(o)(i) of the Act].

The Permittee shall meet applicable requirements that become effective during the permit term in a timely manner

unless an alternate schedule for compliance with the applicable requirement is established.

9.2.2 Duty to Maintain Equipment

The Permittee shall maintain all equipment covered under this permit in such a manner that the performance or operation of such equipment shall not cause a violation of applicable requirements.

9.2.3 Duty to Cease Operation

No person shall cause, threaten or allow the continued operation of any emission unit during malfunction or breakdown of the emission unit or related air pollution control equipment if such operation would cause a violation of an applicable emission standard, regulatory requirement, ambient air quality standard or permit limitation unless such malfunction or breakdown is allowed by a permit condition [Section 39.5(6)(c) of the Act].

9.2.4 Disposal Operations

The source shall be operated in such a manner that the disposal of air contaminants collected by the equipment operations, or activities shall not cause a violation of the Act or regulations promulgated thereunder.

9.2.5 Duty to Pay Fees

The Permittee must pay fees to the Illinois EPA consistent with the fee schedule approved pursuant to Section 39.5(18) of the Act, and submit any information relevant thereto [Section 39.5(7)(o)(vi) of the Act]. The check should be payable to "Treasurer, State of Illinois" and sent to: Fiscal Services Section, Illinois Environmental Protection Agency, P.O. Box 19276, Springfield, Illinois 62794-9276.

9.3 Obligation to Allow Illinois EPA Surveillance

Upon presentation of proper credentials and other documents, the Permittee shall allow the Illinois EPA, or an authorized representative to perform the following [Section 39.5(7)(p)(ii) of the Act]:

- a. Enter upon the Permittee's premises where an actual or potential emission unit is located; where any regulated equipment, operation, or activity is located or where records must be kept under the conditions of this permit;

- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect during hours of operation any sources, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- d. Sample or monitor any substances or parameters at any location:
 - i. At reasonable times, for the purposes of assuring permit compliance; or
 - ii. As otherwise authorized by the CAA, or the Act.
- e. Obtain and remove samples of any discharge or emission of pollutants; and
- f. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any activity, discharge or emission at the source.

9.4 Obligation to Comply With Other Requirements

The issuance of this permit does not release the Permittee from applicable State and Federal laws and regulations, and applicable local ordinances addressing subjects other than air pollution control.

9.5 Liability

9.5.1 Title

This permit shall not be considered as in any manner affecting the title of the premises upon which the permitted source is located.

9.5.2 Liability of Permittee

This permit does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the sources.

9.5.3 Structural Stability

This permit does not take into consideration or attest to the structural stability of any unit or part of the source.

9.5.4 Illinois EPA Liability

This permit in no manner implies or suggests that the Illinois EPA (or its officers, agents or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the source.

9.5.5 Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege [Section 39.5(7)(o)(iv) of the Act].

9.6 Recordkeeping

9.6.1 Control Equipment Maintenance Records

A maintenance record shall be kept on the premises for each item of air pollution control equipment. As a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

9.6.2 Records of Changes in Operation

A record shall be kept describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes [Section 39.5(12)(b)(iv) of the Act].

9.6.3 Retention of Records

- a. Records of all monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit [Section 39.5(7)(e)(ii) of the Act].
- b. Other records required by this permit shall be retained for a period of at least 5 years from the date of entry unless a longer period is specified by a particular permit provision.

9.7 Annual Emissions Report

The Permittee shall submit an annual emissions report to the Illinois EPA, Compliance Section no later than May 1 of the following year, as required by 35 IAC Part 254.

9.8 Requirements for Compliance Certification

Pursuant to Section 39.5(7)(p)(v) of the Act, the Permittee shall submit annual compliance certifications. The compliance certifications shall be submitted no later than May 1 or more frequently as specified in the applicable requirements or by permit condition. The compliance certifications shall be submitted to the Air Compliance Section, Air Regional Field Office, and USEPA Region 5 - Air Branch. The addresses for the submittal of the compliance certifications are provided in Condition 8.6.4 of this permit.

- a. The certification shall include the identification of each term or condition of this permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.
- b. All compliance certifications shall be submitted to USEPA Region 5 in Chicago as well as to the Illinois EPA.
- c. All compliance reports required to be submitted shall include a certification in accordance with Condition 9.9.

9.9 Certification

Any document (including reports) required to be submitted by this permit shall contain a certification by a responsible official of the Permittee that meets the requirements of Section 39.5(5) of the Act [Section 39.5(7)(p)(i) of the Act]. An example Certification by a Responsible Official is included as an attachment to this permit.

9.10 Defense to Enforcement Actions

9.10.1 Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit [Section 39.5(7)(o)(ii) of the Act].

9.10.2 Emergency Provision

- a. An emergency shall be an affirmative defense to an action brought for noncompliance with the technology-based emission limitations under this permit if the following conditions are met through properly signed, contemporaneous operating logs, or other relevant evidence:
 - i. An emergency occurred as provided in Section 39.5(7)(k) of the Act and the Permittee can identify the cause(s) of the emergency. Normally, an act of God such as lightning or flood is considered an emergency;
 - ii. The permitted source was at the time being properly operated;
 - iii. The Permittee submitted notice of the emergency to the Illinois EPA within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and
 - iv. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or regulations in this permit.
- b. This provision is in addition to any emergency or upset provision contained in any applicable requirement. This provision does not relieve a Permittee of any reporting obligations under existing federal or state laws or regulations.

9.11 Permanent Shutdown

This permit only covers emission units and control equipment while physically present at the indicated source location(s). Unless this permit specifically provides for equipment relocation, this permit is void for the operation or activity of any item of equipment on the date it is removed from the permitted location(s) or permanently shut down. This permit expires if all equipment is removed from the permitted location(s), notwithstanding the expiration date specified on this permit.

9.12 Reopening and Reissuing Permit for Cause

9.12.1 Permit Actions

This permit may be modified, reopened, and reissued, for cause pursuant to Section 39.5(15) of the Act. The filing of a request by the Permittee for a permit modification, revocation, and reissuance, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition [Section 39.5(7)(o)(iii) of the Act].

9.12.2 Reopening and Revision

This permit must be reopened and revised if any of the following occur [Section 39.5(15)(a) of the Act]:

- a. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit;
- b. Additional requirements become applicable to an affected source for acid deposition under the acid rain program;
- c. The Illinois EPA or USEPA determines that this permit contains a material mistake or inaccurate statement when establishing the emission standards or limitations, or other terms or conditions of this permit; and
- d. The Illinois EPA or USEPA determines that this permit must be revised to ensure compliance with the applicable requirements of the Act.

9.12.3 Inaccurate Application

The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation under Section 39.5(15)(b) of the Act.

9.12.4 Duty to Provide Information

The Permittee shall furnish to the Illinois EPA, within a reasonable time specified by the Illinois EPA any information that the Illinois EPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee

shall also furnish to the Illinois EPA copies of records required to be kept by this permit, or for information claimed to be confidential, the Permittee may furnish such records directly to USEPA along with a claim of confidentiality [Section 39.5(7)(o)(v) of the Act].

9.13 Severability Clause

The provisions of this permit are severable, and should any one or more be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected. The rights and obligations of the Permittee shall be construed and enforced as if this permit did not contain the particular provisions held to be invalid and the applicable requirements underlying these provisions shall remain in force [Section 39.5(7)(i) of the Act].

9.14 Permit Expiration and Renewal

The right to operate terminates on the expiration date unless the Permittee has submitted a timely and complete renewal application. For a renewal to be timely it must be submitted no later than 9 and no sooner than 12 months prior to expiration. The equipment may continue to operate during the renewal period until final action is taken by the Illinois EPA, in accordance with the original permit conditions [Section 39.5(5)(l), (n), and (o) of the Act].

10.0 ATTACHMENTS

10.1 Attachment 1 Summary of Significant Emission Units

TABLE 1-1

Group No.	Emission Group	Description	Controls	Date Constructed
1	Steel Fabricating	Steel rails/bars are heated in a reheat furnace, cut into three separate sections and rolled in three separate mills.	None	1959
2	Four Straightening Machines	Steel products are straightened by four roller straightening machines.	Four Gravity Collectors	1975
3	Line #1 Nordson	Spray painting booth with oven for steel products.	None	1975
4	Line #2 Post Plant	Dip painting tanks with oven for painting steel posts.	None	1975

10.2 Attachment 2 Certification by a Responsible Official

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____

Name: _____

Official Title: _____

Telephone No.: _____

Date Signed: _____

DCC:psj