



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	10
5.0 OVERALL SOURCE CONDITIONS	11
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 MARKET SYSTEM (ERMS)	19
6.1 Description of ERMS	
6.2 Applicability	
6.3 Obligation to Hold Allotment Trading Units (ATUs)	
6.4 Market Transactions	
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 Exclusions from Further Reductions	
7.0 UNIT SPECIFIC CONDITIONS	26
7.1 Coating Lines	
7.2 Boilers and Air Make-up Units	
7.3 Engine Testing Operations	
7.4 Storage Tanks	

	<u>PAGE</u>
8.0 GENERAL PERMIT CONDITIONS	50
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	55
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 - Tables of contemporaneous increases and decreases	1-1
10.2 Attachment 2 - Example Certification by a Responsible Official	2-1
10.3 Attachment 3 - Particulate Matter Emissions from Process Emission Units	3-1
10.4 Attachment 4 - Guidance on Revising This Permit	4-1
10.5 Attachment 5 - Form 199-CAAPP, Application For Construction Permit (For CAAPP Sources Only)	5-1
10.6 Attachment 6 - Guidance on Renewing This Permit	6-1

1.0 SOURCE IDENTIFICATION

1.1 Source

BMCA Waukegan  
200/300 Sea-Horse Drive  
Waukegan, Illinois 60085  
847/224-3886

I.D. No.: 097190AGD  
Standard Industrial Classification: 347, Coating, Engraving, and  
Allied Services  
8734, Testing Laboratories

1.2 Owner/Parent Company

Bombardier Motor Corporation of America  
10101 Science Drive  
Sturtevant, Wisconsin 53177

1.3 Operator

BMCA Waukegan  
200/300 Sea-Horse Drive  
Waukegan, Illinois 60085

Madhav Mhaskar, Manager, Environmental, Health & Safety  
262/884-5082

1.4 General Source Description

BMCA Waukegan is located at 200 and 300 Sea Horse Drive in Waukegan, Illinois, on a harbor of Lake Michigan. The manufacturing plant produces component parts for marine engines and other applications. The engineering research center, known as the Product Development Center, conducts research and development activities, including testing of prototype engines and prototype engine components.

2.0 LIST OF ABBREVIATIONS

@	at the rate of
ACMA	Alternate Compliance Market Account
Act	Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]
AP-42	Compilation of Air Pollution Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through E), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27717
ATU	Allotment Trading Unit
BAT	Best Available Technology
Btu	British thermal unit
°C	degree Celsius
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CAM	Compliance Assurance Monitoring
CE	control equipment
CFR	Code of Federal Regulations
CO	Carbon Monoxide
CTG	Control Technique Guidelines
ERMS	Emission Reduction Market System
°F	degree Fahrenheit
ft	feet
ft <sup>3</sup>	cubic foot
ft <sup>3</sup>	cubic feet
gal	gallon
HAP	Hazardous Air Pollutant
HCl	Hydrochloric Acid
HEAF	high efficiency air filter
hr	hour
I.D. No.	Identification Number of Source, assigned by Illinois EPA
IAC	Illinois Administrative Code
ID	interior diameter
ILCS	Illinois Compiled Statutes
Illinois EPA	Illinois Environmental Protection Agency
kg	kilogram
kPa	kilopascal
kW	Kilowatt
LAER	Lowest Achievable Emission Rate
lb	pound
m	meter
MACT	Maximum Achievable Control Technology
MEK	Methyl Ethyl Ketone
Mg	Megagram
mmft <sup>3</sup>	million cubic feet
mmBtu	million British thermal unit per hour
mmscf	million standard cubic feet
mo	month
MSDS	Material Safety Data Sheet
MW	molecular weight
mw	megawatt

No.	Number
NO <sub>x</sub>	Nitrogen Oxides
OD	outer diameter
PM	Particulate Matter
PM <sub>10</sub>	Particulate Matter Less Than 10 Micron
ppm	parts per million
PSD	Prevention of Significant Deterioration
psia	pounds square inch atmospheric
RMP	Risk Management Plan
SIP	State Implementation Plan
SO <sub>2</sub>	Sulfur Dioxide
SOCMI	Synthetic Organic Chemical Manufacturing Industry
T	ton
T1	Title I - identifies Title I conditions that have been carried over from an existing 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 permit and subsequently revised in this permit
TPY	Ton Per Year
USEPA	United States Environmental Protection Agency
VOL	volatile organic liquid
VOM	Volatile Organic Material
wk	week
wt. %	weight percentage
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:

Engineering Jet Washer  
Flywheel Heat Treat Processes  
Kerosene Storage Tanks

- 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:

Tin Plating Line  
Flywheel Glue Operation  
Flywheel Preheat Oven  
Flywheel Ring Gear Preheat Oven  
Flywheel Curing Oven (0.3 mmBtu/hr)  
Plant 1 Wastewater Treatment

- 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)].

Storage tanks of organic liquids with a capacity of less than 10,000 gallons and an annual throughput of less than 100,000 gallons per year, provided the storage tank is not used for the storage of gasoline or any material listed as a HAP pursuant to Section 112(b) of the CAA [35 IAC 201.210(a)(10)].

Storage tanks of any size containing virgin or re-refined distillate oil, hydrocarbon condensate from natural gas pipeline or storage systems, lubricating oil, or residual fuel oils [35 IAC 201.210(a)(11)].

Gas turbines and stationary reciprocating internal combustion engines of less than 112 kW (150 horsepower) power output [35 IAC 201.210(a)(15)].

Gas turbines and stationary reciprocating internal combustion engines of between 112 kW and 1,118 kW (150 and 1,500 horsepower) power output that are emergency or standby units [35 IAC 201.210(a)(16)].

Storage tanks of any size containing exclusively soaps, detergents, surfactants, glycerin, waxes, vegetable oils, greases, animal fats, sweeteners, corn syrup, aqueous salt solutions, or aqueous caustic solutions, provided an organic solvent has not been mixed with such materials [35 IAC 201.210(a)(17)].

Loading and unloading systems for railcars, tank trucks, or watercraft that handle only the following liquid materials, provided an organic solvent has not been mixed with such materials: soaps, detergents, surfactants, lubricating oils, waxes, glycerin, vegetable oils, greases, animal fats, sweetener, corn syrup, aqueous salt solutions, or aqueous caustic solutions [35 IAC 201.210(a)(18)].

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

Emission Unit	Description	Date Constructed	Emission Control Equipment
01	Test Panel Paint Booths with Electric Bake Ovens	10/1994	Dry Filters
02	Prototype Paint Booth with Electric Bake Oven	1959	Dry Filters
04	Plant 1 Southwest Boiler (20 mmBtu/hr)	06/1971	None
05	Plant 1 Northwest Boiler (20 mmBtu/hr)	06/1971	None
06	Plant 1 Southeast Boiler (20 mmBtu/hr)	06/1971	None
07	Indoor Endurance Testing of Engines (15 Test Tanks)	1960	None
08	Engineering Development Testing of Engines (16 Test Tanks and 10 Dynamometers)	1960	None
09	Emission Certification Testing of Engines (6 Dynamometers)	07/1997	None
10	Outdoor Endurance Testing of Engines (16 Mini Barges)	1975	None
11	Gasoline Storage Tank 1.12 (20,305 gallons)	Prior to 1972	None
12	Gasoline Storage Tank 1.13 (20,305 gallons)	Prior to 1972	None
13	Gasoline Storage Tank 1.14 (939 gallons)	Prior to 1972	None
14	Gasoline Storage Tank 1.21 (5,265 gallons)	1984	None
15	Gasoline Storage Tank 1.26 (1,000 gallons)	04/1998	None
Fugitive VOM Emissions	Component Leaks	---	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 NO<sub>x</sub>, CO, and VOM emissions.

5.1.2 This permit is issued based on the source being a major source of HAPs.

### 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), pursuant to 35 IAC 212.301 and 212.314.

Compliance with this requirement is considered to be assured by the inherent nature of operations at this source, as demonstrated by historical operation.

- b. 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, pursuant to 35 IAC 212.123(a), except as allowed by 35 IAC 212.123(b) and 212.124.
- c.
  - 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].

#### 5.2.3 Fugitive Particulate Matter Operating Program

- a. 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)].
- b. 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].
- c. 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].

#### 5.2.4 Ozone Depleting Substances

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.

#### 5.2.5 Risk Management Plan

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.

- 5.2.6
  - a. Should this stationary source become subject to a regulation under 40 CFR Parts 60, 61, or 63, or 35 IAC after the date issued of this permit, then the owner or operator shall, in accordance with the applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance with the applicable requirements of such regulation(s) as part of the annual compliance certification, as required by 40 CFR Part 70 or 71.
  - b. No later than upon the submittal for renewal of this permit, the owner or operator shall submit, as part of an application, the necessary information to address either the non-applicability of, or demonstrate compliance with all applicable requirements of any potentially applicable regulation which was promulgated after the date issued of this permit.
  - c. This stationary source will be subject to the rules listed below when such rules becomes final and effective. The Permittee shall comply with the applicable requirements of such regulations by the date(s) specified in such regulations and shall certify compliance with the applicable requirements of such regulations as part of the annual compliance

certification required by 40 CFR Part 70 or 71 beginning in the year that compliance is required under a final and effective rule.

- i. 40 CFR Part 63, Subpart MMMM, Misc. Metal Parts and Products (Surface Coating);
- ii. 40 CFR Part 63, Subpart DDDDD, Industrial, Commercial and Institutional Boilers and Process Heaters; and
- iii. 40 CFR Part 63, Subpart PPPPP, Engine Test Cells/Standards.

#### 5.2.7 Episode Action Plan

- a. The Permittee shall maintain at the source and have on file with the Illinois EPA a written episode action plan (plan) for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The plan shall contain the information specified in 35 IAC 244.144.
- b. The Permittee shall immediately implement the appropriate steps described in this plan should an air pollution alert or emergency be declared.
- c. If a change occurs at the source which requires a revision of the plan (e.g., operational change, change in the source contact person), a copy of the revised plan shall be submitted to the Illinois EPA for review within 30 days of the change. Such plans shall be further revised if disapproved by the Illinois EPA.
- d. For sources required to have a plan pursuant to 35 IAC 244.142, a copy of the original plan and any subsequent revisions shall be sent to:
  - i. Illinois EPA, Compliance Section; and
  - ii. For sources located in Cook County and outside of the city of Chicago: Cook County Department of Environmental Control; or
  - iii. For sources located within the city of Chicago: Chicago Department of Environmental Control.

#### 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:

The Permittee is allowed to substitute raw materials as long as the substitution does not violate an applicable regulation, any permit limitation and any other requirements of this permit.

5.5 Source-Wide Emission Limitations

5.5.1 Permitted Emissions for Fees

The annual emissions from the source, not considering insignificant activities as addressed by Section 3.0 of this permit, 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)	733.00
Sulfur Dioxide (SO <sub>2</sub> )	4.00
Particulate Matter (PM)	14.00
Nitrogen Oxides (NO <sub>x</sub> )	104.00
HAP, not included in VOM or PM	---
TOTAL	855.00

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 on a calendar year basis for the emission units covered by Section 7 (Unit Specific Conditions) of this permit.

### 5.6.2 Records for VOM and HAP Emissions

The Permittee shall maintain records of the following items for the source to quantify annual VOM and HAP emissions, so as to demonstrate compliance with the annual emission limits in Condition 5.5:

- a. Aggregate monthly VOM emissions from emission units included in Section 7 of this permit; and
- b. Aggregate monthly HAP emissions from emission units included in Sections 3 and 7 of this permit, calculated as a fraction of VOM emissions according to vapor weight percent.

### 5.6.3 Records for Operating Scenarios

N/A

### 5.6.4 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 deviations 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.

### 5.7.3 Annual Reporting of HAP Emissions

The Permittee shall submit an annual report to the Illinois EPA, Compliance Section, on HAP emissions from the source. This may be included in the annual emissions report required pursuant to Condition 9.7.

## 5.8 General Operational Flexibility

The Permittee may substitute materials and miscellaneous equipment used at this source provided the use of the substituted material or equipment does not violate applicable regulations or result in an exceedance of the emission limits of this permit and the changes do not constitute a modification under Title I of the CAA (See also Condition 8.4.2).

## 5.9 General Compliance Procedures

### 5.9.1 General Procedures for Calculating Emissions

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.

- a. For the purpose of estimating emissions from the storage tanks, the most recent version of TANKS is acceptable.
- b. For the purpose of estimating fugitive VOM emissions from valves, fitting, and pumps at the source, the average emissions factor approach found in the USEPA document "Protocol for Equipment Leak Emission Estimates", (EPA-453/R-93-026, June 1993), is acceptable.

- c. For the purpose of estimating HAP emissions from equipment at the source, the vapor weight percent of each HAP for each organic liquid times the VOM emissions contributed by that organic liquid is acceptable.

## 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. 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' 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 November 30 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 2,239 ATUs per seasonal allotment period.
- ii. This allotment of ATUs reflects the Illinois EPA's determination that the source's baseline emissions were 224.1895 tons per season.
  - A. This determination includes the use of 1994 and 1996 as baseline seasons for the manufacturing plant and the use of 1990 and 1996 as baseline seasons for the Product Development Center. This determination includes use of the 1990 season as a substitute for the 1996 season for the Product Development Center due to non-representative conditions in this season, as allowed by 35 IAC 205.320(a)(2). The Illinois EPA has determined that manufacturing and product development are separate sources for the purpose of determining the allotment of ATUs. However, BMCA Waukegan is a single "participating source" and shall have one transaction account.
  - B. This determination also includes adjustment to actual emissions to account for voluntary over-compliance at the source, e.g., usage of cleaning solvent with VOM content less than required, pursuant to 35 IAC 205.320(d), as further addressed in Section 7 of this permit.
- 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 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)]:

Boilers - Plant 1  
Indoor Endurance Testing  
Engineering Department Testing  
Outdoor Endurance Testing

- 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 Emission Units 01-03: Coating Lines

7.1.1 Description

BMCA Waukegan operates the following spray painting and coating systems:

Two Test Panel Paint Booths And Ovens  
Prototype Paint Booth And Oven

The test panel paint booths, located at the Product Development Center, are used to paint test substrates using various types of coatings for engineering evaluation purposes. The painted test panels are subjected to a variety of performance tests (i.e., corrosion, hardness, stress testing) and then they are destroyed. Primarily compliant (high solids) coatings are used. However, since comparative evaluations are performed, conventional coatings are also used.

The prototype paint booth, also located at the Product Development Center, is used to paint various metal and plastic parts that are engineering prototypes of current and future BMCA products. Compliant coatings are primarily used in this booth. However, on occasion, conventional coatings are also used for plastic parts and maintenance painting.

Coating operations generate VOM and HAP emissions from evaporation of the solvents contained in or added to the coatings. In addition, products of fuel combustion are emitted from four curing/drying ovens fired with natural gas.

7.1.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
01	Test Panel Paint Booths with Electric Bake Ovens	Dry Filters
02	Prototype Paint Booth with Electric Bake Oven	Dry Filters

7.1.3 Applicability Provisions and Applicable Regulations

- a. An "affected coating line" for the purpose of these unit specific conditions is a coating operation that includes a spray booth or dip tank and drying oven which is used to apply a coating to metal that falls under the category of miscellaneous metal parts and products. As of the "date issued" as shown on page 1

of this permit, the affected coating lines are identified in Condition 7.1.2.

- b. Emission Unit 01 is subject to 35 IAC 212.321, which provides that:

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 subsection (c) of 35 IAC 212.321 (See also Attachment 3) [35 IAC 212.321(a)].

- c. Emission Unit 02 is subject to 35 IAC 212.322, which provides that:

No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any existing 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 prior to April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.322 (See also Attachment 3) [35 IAC 212.322(a)].

- d. Each affected coating line is subject to 35 IAC 218.204(j)(5), which provides that:

- i. No owner or operator of an 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 and Products (Marine Engines). 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:

<u>Category</u>	<u>kg/liter</u>	<u>lb/gallon</u>
Air Dried Coatings	0.42	3.5
Baked Primer/Topcoat	0.42	3.5
Baked Corrosion Resistant Basecoat	0.28	2.3

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.

- ii. The VOM content limit applicable to the miscellaneous metal parts coating operation may be complied with on a daily weighted average per line basis [35 IAC 218.205].

#### 7.1.4 Non-Applicable Regulations of Concern

- a. The affected coating lines are not subject to 35 IAC 218.301, Use of Organic Material, pursuant to 35 IAC 218.209, Exemption From General Rule on Use of Organic Material which excludes coating lines from this requirement.
- b. The affected coating lines are not subject to the control requirements of 35 IAC 218 Subpart PP for coating to plastics because pursuant to 35 IAC 218.920(d) no limits under this Subpart shall apply to emission units with emission of VOM to the atmosphere less than or equal to 1.0 tons per calendar year if the total emissions from such emission units not complying with 35 IAC 218.926 does not exceed 5.0 tons per calendar year.
- c. This permit is issued based on the affected coating lines not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because each affected coating line either does not use an add-on control device to achieve compliance with an emission limitation or standard or does not have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

#### 7.1.5 Operational and Production Limits and Work Practices

- a. Each affected coating line drying oven shall only be operated with natural gas as the fuel.
- b. The Permittee shall operate, maintain, and replace the filters in a manner that assures compliance with the conditions of this section. For this purpose, the pressure drop across the filter shall be an indicator of when a filter needs to be replaced.
- c. An adequate inventory of spare filters shall be maintained.

7.1.6 Emission Limitations

In addition to Condition 5.2.2, the source-wide limitations in Condition 5.5, and the VOM content limitations of Condition 7.1.3, the affected coating lines are subject to the following limitations:

- a. These limitations were established in Permit 94030059, which addressed spray painting emission units (Emission Units 01-02). These limits ensure that construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically 35 IAC Part 203. Permit 94030059 was issued based upon a contemporaneous and creditable decrease in VOM emissions so that the net increase in VOM emissions is not significant. The accounting of contemporaneous emissions increases and decrease is shown in Tables 1 and 2 (Attachment 1 of this permit). The decrease in emissions was created by elimination of solvent cleaning of castings, which allowed the permanent shutdown of a conveyORIZED vapor degreaser (JM5743). [T1]
- i. Emissions and operation of the coating operations not regulated by 35 Ill. Adm. Code 218 Subpart F, including the coating of plastic parts, shall not exceed the following limits:

<u>Material</u>	VOM			VOM Emissions	
	<u>Content (Lb/Gal)</u>	<u>Material Usage (Gal/Wk)</u>	<u>(Gal/Yr)</u>	<u>(Lb/Wk)</u>	<u>(Ton/Yr)</u>
Conventional Coating	6.0	75	975	450	2.93
Lower VOM Coating	4.3	-	-	-	-
Non-metal Parts Coatings Subtotal		138.5	1,800	723	4.70
All Coatings Total		607.7	7,900	2,365	15.38

These limits are based on the VOM content limits in Condition 7.1.3(d) and the material usage limits above.

The above limits allow flexibility for the usage of the lower VOM coating. Since the lower VOM coating has no usage or emission limits, usage of the lower VOM coating is limited by the subtotal of the two coating types.

The above limits also allow flexibility for the usage of the metal parts coating. Since

the metal parts coating has no usage or emission limits, usage of metal parts coatings is limited by the limitations on the plant wide coatings total. Note that the total VOM emission from all coatings for Emission Units 01-02 is 15.38 tons/yr, not 15.38 tons/yr + 4.70 tons/yr.

- ii. Emissions and operation of the cleaning solvents used in the coating operations shall not exceed the following limits:

<u>Material</u>	VOM		VOM Emissions		
	<u>Content (Lb/Gal)</u>	<u>Material Usage (Gal/Wk)</u>	<u>(Gal/Yr)</u>	<u>(Lb/Wk)</u>	<u>(Ton/Yr)</u>
Cleaning Solvent	7.5	323.1	4,200	1,341	8.72

These limits are based on maximum operating conditions and material balance. Cleaning solvent emissions are calculated by assuming the VOM emission is equal to the amount used minus the amount recovered and shipped off site.

- iii. Compliance with annual limits shall be determined from a running total of 52 weeks of data. [T1]

7.1.7 Testing Requirements

Testing for VOM content of coatings and other materials shall be performed as follows [35 IAC 218.105(a), 218.211(a), and Section 39.5(7)(b) of the Act]:

- a. Upon reasonable request by the Illinois EPA, the VOM content of specific coatings and cleaning solvents used on each affected coating line shall be determined according to USEPA Reference Methods 24 and 24A of 40 CFR 60 Appendix A and the procedures of 35 IAC 218.105(a), 218.208 and 218.211(a).
- b. The VOM content of representative coatings "as applied" on the affected coating line shall be determined according to USEPA Reference Methods 24 and 24A of 40 CFR 60 Appendix A and the procedures of 35 IAC 218.105(a);
- c. This testing may be performed by the supplier of a material provided that the supplier provides appropriate documentation for such testing to the Permittee and the Permittee's records pursuant to Condition 7.1.9(b) directly reflect the application

of such material and separately account for any additions of solvent [35 IAC 218.105(a), 218.208, and 218.211(a)].

7.1.8 Inspection Requirements

The Permittee shall visually inspect the filters and check for air flow or pressure drop on a regular basis in order to ensure proper operation of the filters and the need for replacement.

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 each affected coating line to demonstrate compliance with Conditions 5.5.1, 7.1.3 and 7.1.6, pursuant to Section 39.5(7)(b) of the Act:

- a. The Permittee shall collect and maintain records of the following information each day for each affected coating line subject to 35 IAC 218.204, pursuant to 35 IAC 218.211(c):
  - i. The name and identification number of each coating as applied on each affected coating line.
  - 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 affected coating line.
- b. Records of the testing of VOM and HAP content (in wt. %) of each coating and cleaning solvent as tested pursuant to the conditions of this section, which include the following [Section 39.5(7)(e) of the Act]:
  - i. Identification of material tested;
  - ii. Results of analysis;
  - iii. Documentation of analysis methodology; and
  - iv. Person performing analysis.
- c. The operating schedule of the affected coating line.
- d. Results of filter inspections and dates of replacements.

- e. On days when a coating line uses daily-weighted average as defined in 35 IAC 218.205 for compliance with 35 IAC Part 218, Subpart F, the following records shall be kept for that line in addition to the records required by 7.1.9(a) and (b), pursuant to 35 IAC 218.211(d):
  - i. The volume of each coating as applied each day on each affected coating line.
  - ii. The daily-weighted average VOM content of all coatings (minus water and any compounds which are specifically exempted from the definition of VOM) as applied on each coating line.
- f. The Permittee shall maintain a record of the VOM content of each coating material and each cleaning material, in lb VOM/gallon. This record shall be kept current.
- g. The Permittee shall collect and record all of the following information:
  - i. The gallons of each coating and cleaning solvent used per week and per year. For the metal parts coating totals, the water and exempted compounds may be subtracted out to determine the total gallons of coating used;
  - ii. VOM emissions per week and per year. VOM emissions shall be calculated assuming 100% evaporation of the VOM in the material used. Calculations of weekly emissions and rolling annual emissions may be performed on a monthly basis;
  - iii. VOM content of cleaning solvents used;
  - iv. The gallons of cleaning solvent shipped off site and the corresponding VOM content of this solvent; and
  - v. Natural gas fuel usage of the curing and drying ovens on the affected coating lines, ft<sup>3</sup>/month and ft<sup>3</sup>/year.

#### 7.1.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of deviations of an affected coating 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. Pursuant to 35 IAC 218.211(c)(3)(A), the Permittee shall notify the Illinois EPA of any record showing violation of Condition 7.1.3(c) (see also 35 IAC 218.204(j)) within 30 days of such an occurrence.
- b. If there is an exceedance of the requirements of Condition 7.1.6 as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois, within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.

7.1.11 Operational Flexibility/Anticipated Operating Scenarios

In addition to the general operational flexibility in Conditions 5.8 and 8.4, the Permittee is authorized to make the following physical or operational change with respect to the affected coating lines 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:

- a. Usage of coatings, thinners, or cleaning solvents at this source with various VOM contents provided that the materials are tested in accordance with Condition 7.1.7, the source wide emission limitations in Condition 5.5.1 and any other limitations of this permit are not exceeded and the affected coating line remains in compliance with Conditions of this permit.

7.1.12 Compliance Procedures

- a. Compliance with the particulate matter limitations in Condition 7.1.3(b) is assured and achieved by the proper operation and maintenance of the filters as required by Condition 7.1.5(b) and the work-practices inherent in the operation of an affected coating line.
- b. Compliance of each coating with the VOM content limitations in Condition 7.1.3(c) shall be based on the recordkeeping requirements in Condition 7.1.9 and by the use of either testing as required in Condition 7.1.7 or by use of the formulae listed below:

$$\text{VOM Coating Content} = V \times D / [1 - W \times D]$$

Where:

V = Percent VOM in the Coating (%)

D = Overall Coating Density (lb/gal)

$W = \sum (w_i/d_i)$

Where:

$w_i$  = Percent Exempt Compound i in the Coating

$d_i$  = Overall Density of Exempt Compound i, in lb/gal

and the summation is applied over water and all exempt compounds i, in the coating.

- c. Compliance with the VOM emission limitations in Conditions 5.5.1 and 7.1.6 shall be determined from the recordkeeping and testing required by this section and the following equation:

VOM Emissions (lb) = Coating Usage (gal) \* Coating Density (lb/gal) \* VOM Content of Coating (wt. %) + Solvent/Thinner Usage (gal) \* VOM Content of Solvent/Thinner (wt. %) \* Solvent/Thinner Density (lb/gal).

- d. Fuel combustion emissions from the affected coating lines' curing and drying ovens shall be calculated based on the following emission factors:

<u>Pollutant</u>	<u>Emission Factor</u> <u>(lb/10<sup>6</sup> ft<sup>3</sup>)</u>
PM	7.4
SO <sub>2</sub>	0.6
VOM	5.5
NO <sub>x</sub>	100.0

These are the emission factors for uncontrolled natural gas combustion in small boilers (< 100 mmBtu/hr), Table 1.4-2, AP-42, Volume I, Supplement D, March 1998.

Oven Emissions (lb) = Natural Gas Consumed (10<sup>6</sup> ft<sup>3</sup>) \* the appropriate emission factor (lb/10<sup>6</sup> ft<sup>3</sup>).

7.2 Emission Units 04-06: Boilers

7.2.1 Description

Three natural gas-fired boilers are operated at this source. These boilers are used for comfort and process heating. Emissions from these units include fuel combustion products.

7.2.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
04	Plant 1 Southwest Boiler (20 mmBtu/hr)	None
05	Plant 1 Northwest Boiler (20 mmBtu/hr)	None
06	Plant 1 Southeast Boiler (20 mmBtu/hr)	None

7.2.3 Applicability Provisions and Applicable Regulations

- a. An "affected fuel combustion emission unit" for the purpose of these unit specific conditions, is each boiler or air make up unit listed in Condition 7.2.2.
- b. Each affected fuel combustion emission unit with actual heat input greater than 2.9 MW (10 mmBtu/hr) is subject to 35 IAC 216.121, which specifies that no person shall cause or allow the emission of carbon monoxide into the atmosphere to exceed 200 ppm, corrected to 50 percent excess air [35 IAC 216.121].
- c. Each affected fuel combustion emission unit is subject to the emission limits identified in Condition 5.2.2.

7.2.4 Non-Applicability of Regulations of Concern

- a. The affected fuel combustion emission units are not subject to NSPS, 40 CFR 60 Subpart Dc, Small Industrial-Commercial-Institutional Steam Generating Units, since each steam generating unit was constructed, modified, or reconstructed prior to June 9, 1989 which is the applicability date for this regulation.
- b. The affected fuel combustion emission units are not subject to 35 IAC 217.141, Existing Emission Sources in Major Metropolitan Areas, since the actual heat input of each unit is less than 73.2 MW (250 mmBtu/hr).

- c. The affected fuel combustion emission units are not subject to 35 IAC 218.301, Use of Organic Material, pursuant to 35 IAC 218.303, Fuel Combustion Emission Sources, which excludes fuel combustion emission units from this requirement.
- d. This permit is issued based on the affected fuel combustion emission units not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because each affected fuel combustion emission unit does not use an add-on control device to achieve compliance with an emission limitation or standard.

7.2.5 Operational and Production Limits and Work Practices

Natural gas shall be the only fuel fired in the affected fuel combustion emission units.

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

None

7.2.8 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 the affected fuel combustion emission units to demonstrate compliance with Condition 5.5.1 pursuant to Section 39.5(7)(b) of the Act:

- a. Fuel usage (ft<sup>3</sup>/mo and ft<sup>3</sup>/yr) for all boilers combined.
- b. Fuel combustion emissions calculated in accordance with the procedures given in Condition 7.2.12 (ton/mo and ton/yr).

7.2.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of deviations of an affected fuel combustion emission unit with the permit requirements, 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.

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.2.12 Compliance Procedures

- a. Compliance with Condition 7.2.3 is assumed to be achieved by the work practices inherent in operation of each affected boiler, thus no compliance procedures are set in this permit addressing this regulation.
- b. To determine compliance with Conditions 5.5.1 and 7.2.6, emissions from the affected fuel combustion emission units shall be based on the emission factors listed below:

<u>Pollutant</u>	<u>Emission Factor (lb/10<sup>6</sup> ft<sup>3</sup>)</u>
NO <sub>x</sub>	100
PM	7.6
SO <sub>2</sub>	0.6
VOM	5.5

These are the emission factors for uncontrolled natural gas combustion (less than 100 mmBtu/hr), Tables 1.4-1 and 1.4-2, AP-42, Volume I, Supplement D, March, 1998.

Boiler Emissions (lb) = (Natural Gas Consumed, ft<sup>3</sup>) x  
(The Appropriate Emission Factor)

### 7.3 Emission Units 07-10: Engine Testing Operations

#### 7.3.1 Description

BMCA Waukegan performs engine testing at the Waukegan Lakefront plant for durability evaluation, research and development, emissions measurement, and training. The source conducts indoor and outdoor testing.

The engines are replaced on an ongoing basis as test evaluations are completed. The engines are tested in individual test tanks. Some of the test tanks are equipped with dynamometers for controlling engine speed and load. The contact cooling water from some of the test tanks is conveyed through a closed-loop cooling tower system. Emissions from the cooling towers are included in the calculations of emissions from the engine testing.

In the Indoor Endurance testing, BMCA tests engines for the purpose of evaluating product durability. In the Engineering Development area, BMCA tests engines for research and development purposes. In the Emissions Certification testing, engines are tested using dynamometers for the purpose of measuring engine emissions pursuant to federal regulations. In the Outdoor Endurance operation, engines are testing in the Waukegan Harbor for the purpose of evaluating product durability.

#### 7.3.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
07	Indoor Endurance Testing of Engines (15 Test Tanks)	None
08	Engineering Development Testing of Engines (16 Test Tanks and 10 Dynamometers)	None
09	Emission Certification Testing of Engines (6 Dynamometers)	None
10	Outdoor Endurance Testing of Engines (16 Mini Barges)	None

#### 7.3.3 Applicability Provisions and Applicable Regulations

- a. An "affected engine testing unit" for the purpose of these unit specific conditions, is each engine testing unit listed in Condition 7.3.2. There are no applicable regulations pertaining to the affected engine testing units.

7.3.4 Non-Applicability of Regulations of Concern

- a. The affected engine testing units are not subject to the control requirements of 35 IAC 218, Subpart TT: Other Emission Units because the control requirements in 35 IAC 218 Subpart TT shall not apply to fuel combustion units [35 IAC 218.980(f)].
- b. The affected engine testing units are not subject to 35 IAC 212.321 or 212.322 because these sections do not contain enforceable emission limits for fuel combustion units.
- c. The affected engine testing units are not subject to 35 IAC 218.301: Use of Organic Material, because this regulation is not applicable to the burning of gasoline in an internal combustion engine at this source.
- d. This permit is issued based on the affected engine testing units not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because each affected engine testing unit does not use an add-on control device to achieve compliance with an emission limitation or standard.

7.3.5 Operational and Production Limits and Work Practices

Gasoline, kerosene, aviation fuel and/or similar types of fuel shall be the only fuel used in engine testing units.

7.3.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected engine testing units shall not exceed the following limits:

- a. Total combined emissions of the emissions certification testing engines shall not exceed the following limits:

VOM Emissions		CO Emissions	
<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>	<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>
4.0	21.3	10.0	56.45

These limits are based on the gasoline usage and emission factors for each engine type in accordance with Condition 7.3.12. Gasoline usage shall be determined from daily gasoline usage records.

Compliance with annual limits shall be determined from a running total of 365 days of data. [T1]

The above limitations were established in Permit 95120309, pursuant to 35 IAC Part 203. These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically 35 IAC Part 203. Contemporaneous increases and decreases for Permit 95120309 are presented in Tables 3, 4 and 5 (Attachment 1 of this permit). [T1]

#### 7.3.7 Testing Requirements

Upon request from the Illinois EPA, the Permittee shall conduct emission test within 30 days of the request to verify the emission factor used in 7.3.12 for the determination of emissions from engine testing units.

#### 7.3.8 Monitoring Requirements

None

#### 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 engine testing units to demonstrate compliance with Condition 5.5.1 pursuant to Section 39.5(7)(b) of the Act:

- a. The Permittee shall maintain the following records:
  - i. Gasoline usage (gal/day, gal/mo, and gal/yr) and VOM emissions (lb/mo and ton/yr) for each engine type for six emission certification engines.
  - ii. Gasoline usage (gal/mo and gal/yr) and VOM emissions (lb/mo and ton/yr) for Emission Units 07, 08 and 10.
- b. The Permittee shall maintain a list of VOM, CO, and NO<sub>x</sub> emission factors (lb VOM per 1,000 gallons of fuel consumed) by each specific engine model or by engine type, as determined by the results of tests conducted in accordance with the procedures specified in USEPA emission standards applicable to marine or non-road engines.

#### 7.3.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of deviations of an affected fuel combustion emission unit 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. If there is an exceedance of the requirements of Condition 7.3.6 as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois, within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.

7.3.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.3.12 Compliance Procedures

- a. To determine compliance with Conditions 5.5.1 and 7.3.6, emissions of the affected engine testing units shall be based on the emission factors listed below:

<u>Pollutant</u>	<u>Emission Factor (lb/1,000 gal of Gasoline or Fuel)</u>
VOM	2,157
CO	5,734
NO <sub>x</sub>	131
SO <sub>2</sub>	6.4
PM	15.5
PM <sub>10</sub>	8.4

Engine Testing Unit Emissions (lb) = (Gasoline or Fuel Usage in Gallons) x (The Appropriate Emission Factor)

- b. As an alternative to the above emission factor for VOM, the Permittee may use VOM, CO, and NO<sub>x</sub> emission factors as recorded pursuant to Condition 7.3.9(b). These emission factors shall be based on the results of tests conducted in accordance with the procedures specified in USEPA emission standards applicable to marine or non-road engines. If an emission factor has not been established for a specific model or for the engine family to which the specific model belongs, then VOM emissions shall be determined based on the default emission factor listed above.

- c. In case of any aborted emissions certification test or instance where the engine being tested has failed the test, emissions shall be determined based on gasoline usage and emissions factors listed above.

#### 7.4 Emission Units 26-29: Storage Tanks

##### 7.4.1 Description

BMCA Waukegan has five aboveground storage tanks. These tanks supply fuel to the engine testing operations. The vapor pressure of the gasoline stored in these storage tanks ranges from 1.7 to 6.2 psia at 70 °F. Permanent submerged loading is used on these tanks to minimize turbulence and evaporation of VOM during loading.

##### 7.4.2 List of Emission Units

Emission Unit	Description	Emission Control Equipment
11	Gasoline Storage Tank 1.12 (20,305 gallons)	None
12	Gasoline Storage Tank 1.13 (20,305 gallons)	None
13	Gasoline Storage Tank 1.14 (939 gallons)	None
14	Gasoline Storage Tank 1.21 (5,265 gallons)	None
15	Gasoline Storage Tank 1.26 (1,000 gallons)	None

##### 7.4.3 Applicable Regulations

- a. An "affected storage tank" for the purpose of these unit-specific conditions, is a tank used for storing gasoline or other fuels, as specified in Condition 7.4.2.
- b. The affected storage tanks are subject to 35 IAC 218.122(b), which specifies that no person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 946 l (250 gal), unless such tank is equipped with a permanent submerged loading pipe or an equivalent device approved by the Illinois EPA according to the provisions of 35 IAC 201, and further processed consistent with 35 IAC 218.108, or unless such tank is a pressure tank as described in 35 IAC 218.121(a) or is fitted with a recovery system as described in 35 IAC 218.121(b)(2) [35 IAC 218.122(b)].
- c. The affected storage tanks are subject to 35 IAC 218.301, which specifies that no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 IAC 218.302, 218.303, 218.304 [35 IAC 218.301].

- d. The affected storage tanks are subject to 35 IAC 218.585, which provides that:
- i. No person shall sell, offer for sale, dispense, supply, offer for supply, or transport for use in Illinois gasoline whose Reid vapor pressure exceeds the applicable limitations set forth in Conditions 7.4.3(d)(ii) and (d)(iii) (see also 35 IAC 218.585(b) and (c)) during the regulatory control periods, which shall be May 1 to September 15 for retail outlets, wholesale purchaser-consumer operations, and all other operations [35 IAC 218.585(a)].
  - ii. The Reid vapor pressure of gasoline, a measure of its volatility, shall not exceed 9.0 psi (62.07 kPa) during the regulatory control period in 1990 and each year thereafter [35 IAC 218.585(b)].
  - iii. The Reid vapor pressure of ethanol blend gasoline shall not exceed the limitations for gasoline set forth in Condition 7.4.3(d)(ii) (see also 35 IAC 218.585(b)) by more than 1.0 psi (6.9 kPa). Notwithstanding this limitation, blenders of ethanol blend gasoline whose Reid vapor pressure is less than 1.0 psi above the base stock gasoline immediately after blending with ethanol are prohibited from adding butane or any product that will increase the Reid vapor pressure of the blended gasoline [35 IAC 218.585(c)].

#### 7.4.4 Non-Applicability of Regulations of Concern

- a. The affected storage tanks are not subject to the 35 IAC 218 Subpart B: Organic Emissions from Storage and Loading Operations (except 35 IAC 218.122(b)), because vessels with a capacity less than or equal to 40,000 gallons storing a liquid with a maximum true pressure of less than 0.5 psia are exempt [35 IAC 218.119(a)].
- b. The affected storage tanks are not subject to 40 CFR 60 Subpart Kb: Standard of Performance for Volatile Organic Liquid Storage Vessels (including Petroleum and Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced prior to July 23, 1984 and storage vessel capacity of less than 40 m<sup>3</sup> (10,567 gallons). Storage Tanks 1.21 and 1.26 are not subject to 40 CFR 60 Subpart Kb because the tank capacity is less than 40 m<sup>3</sup> (10,567

gallons). Storage Tanks 1.12, 1.13, and 1.14 are not subject to 40 CFR 60 Subpart Kb because the construction dates of these tanks are prior to the applicability date of July 23, 1984.

- c. The affected storage tanks are not subject to 35 IAC 218.583, Gasoline Dispensing Operations - Storage Tank Filling Operations, because this source is not a gasoline dispensing operation as defined by 35 IAC 211.2590.
- d. The affected storage tanks are not subject to the requirements of 35 IAC 218.586, Gasoline Dispensing Operations - Motor Vehicle Fueling Operations, because fuel is not dispensed into motor vehicles as defined by 35 IAC 218.586(a).
- e. This permit is issued based on the affected storage tanks not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because each affected storage tank does not use an add-on control device to achieve compliance with an emission limitation or standard.

7.4.5 Operational and Production Limits and Work Practices

None

7.4.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide limitations in Condition 5.5, the affected storage tanks are subject to the following:

- a. Emissions and operation of the certification fuel storage tank (Emission Unit 14) shall not exceed the following limits:

Throughput		VOM Emissions	
<u>(Gal/Mo)</u>	<u>(Gal/Yr)</u>	<u>(Lb/Mo)</u>	<u>(Ton/Yr)</u>
7,500	30,000	185	0.50

These limits are based on maximum throughput and emissions were determined using standard emission estimates from the USEPA TANKS program, increased by 29% to allow for variable conditions. Throughput is determined based on the amount of fuel dispensed from the storage tank.

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].

The above limitations contain revisions to previously issued Permit 95120309. The source has requested that the Illinois EPA establish conditions in this permit that allow various refinements from the conditions of this aforementioned permit, consistent with the information provided in the CAAPP application. The source has requested these revisions and has addressed the applicability and compliance of Title I of the CAA, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and/or 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits continue to ensure that the construction and/or modification addressed in this permit does not constitute a new major source or major modification pursuant to these rules. These limits are the primary enforcement mechanism for the equipment and activities permitted in this permit and the information in the CAAPP application contains the most current and accurate information for the source. Specifically, the VOM emission limits were increased from 125 lb/month and 0.25 ton/year to 150 lb/month and 0.50 ton/year [T1R].

- b. Emissions from the Storage Tank 1.26 (Emission Unit 15) shall not exceed 0.1 lb/hr and 0.44 ton/year. These limits are based on a negligible emission rate from this tank, according to the maximum tank throughput and material stored.

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].

The above limitations were established in Permit 97100008, pursuant to 35 IAC Part 203. These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically 35 IAC Part 203 [T1].

#### 7.4.7 Testing Requirements

- a. Upon reasonable request by the Illinois EPA, pursuant to Section 39.5(7)(b) of the Act, the Reid vapor pressure of gasoline and the ethanol content of ethanol blend gasoline shall be determined according to the methods specified below:
  - i. Pursuant to 35 IAC 218.585(d), all sampling of gasoline required pursuant to the provisions

of Conditions 7.4.7(a)(ii) and (a)(iii) (see also 35 IAC 218.585(e) and (f)) shall be conducted by one or more of the following approved methods or procedures:

- A. For manual sampling, ASTM D4057 [35 IAC 218.585(d)(1)];
  - B. For automatic sampling, ASTM D4177 [35 IAC 218.585(d)(2)]; or
  - C. Sampling procedures for Fuel Volatility, 40 CFR 80 Appendix D [35 IAC 218.585(d)(3)].
- ii. The Reid vapor pressure of gasoline shall be measured in accordance with either test method ASTM D323 or a modification of ASTM D323 known as the "dry method" as set forth in 40 CFR 80, Appendix E. For gasoline - oxygenate blends which contain water-extractable oxygenates, the Reid vapor pressure shall be measured using the dry method test [35 IAC 218.585(e)].
  - iii. The ethanol content of ethanol blend gasoline shall be determined by use of one of the approved testing methodologies specified in 40 CFR 80, Appendix F [35 IAC 218.585(f)].

#### 7.4.8 Monitoring Requirements

None

#### 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 storage tanks to demonstrate compliance with Conditions 5.5.1 and 7.4.3 pursuant to Section 39.5(7)(b) of the Act.

- a. Records of the throughput (gal/mo and gal/yr);
- b. Records of vapor pressure (psia);
- c. MSDS of material stored in each storage tank;
- d. Record of VOM emissions from the affected storage tanks based on the material stored, the tank throughput, and the applicable emission factors and formulas with supporting calculations (ton/mo and ton/yr);

- e. Record indicating compliance of 35 IAC 218.122(b), including design information for each affected storage tank showing the presence of a permanent submerged loading pipe; and
- f. Maintenance and repair records for the tank, as related to the repair or replacement of the loading pipe.

#### 7.4.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of deviations of an affected storage tank 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. Emissions of VOM from storage tanks in excess of the limits specified in Condition 5.5.1 based on the current month's records plus the preceding 11 months within 30 days of such an occurrence.
- b. Any storage of VOL in an affected tank that is not in compliance with the requirements of Condition 7.4.3(b) (see also 35 IAC 218.122(b)), e.g., no "permanent submerged loading pipe," within five days of becoming aware of the non-compliance status. This notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps taken to avoid future non-compliance; and
- c. Any storage of VOL in an affected tank that is out of compliance with the requirements of Condition 7.4.3(b) (see also 35 IAC 218.122(b)) due to damage, deterioration, or other condition of the loading pipe, within 30 days of becoming aware of the non-compliance status. This notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps to be taken to avoid future non-compliance.

#### 7.4.11 Operational Flexibility/Anticipated Operating Scenarios

In addition to the general operational flexibility in Conditions 5.8 and 8.4, the Permittee is authorized to make the following physical and operational change with respect to the affected storage tanks 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:

- a. Usage of any VOL without exceeding the permitted emission of Condition 5.5.1.

#### 7.4.12 Compliance Procedures

Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 7.4.9. For the purpose of estimating VOM emissions, the current version of the USEPA TANKS program is acceptable.

## 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 August 4, 2002 (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 that contravene express permit terms without applying for or obtaining an amendment to this permit, provided that [Section 39.5(12)(a)(i) of the Act]:

- a. The changes do not violate applicable requirements;

- b. The changes do not contravene federally enforceable permit terms or conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements;
- c. The changes do not constitute a modification under Title I of the CAA;
- d. Emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change; and
- e. 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. This notice shall:
  - i. Describe the physical or operational change;
  - ii. Identify the schedule for implementing the physical or operational change;
  - iii. 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;
  - iv. Provide emission calculations which demonstrate that the physical or operational change will not result in a modification; and
  - v. 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

If monitoring is required by any applicable requirements or conditions of this permit, a report summarizing the required monitoring results, 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	April 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  
9511 West Harrison  
Des Plaines, Illinois 60016

iii. Illinois EPA - Air Permit Section

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Permit Section (MC 11)  
P.O. Box 19506  
Springfield, Illinois 62794-9506

iv. USEPA Region 5 - Air Branch

USEPA (AE - 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)(a) and (p)(ii) of the Act and 415 ILCS 5/4]:

- 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 authorized by this permit; 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 authorized by this permit.

#### 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)(1), (n), and (o) of the Act].

10.0 ATTACHMENTS

10.1 Attachment 1: Tables indicating contemporaneous increases and decreases

**Note that all permits referenced in this attachment were issued to Outboard Marine Corporation, Illinois EPA I.D. No. 097190AAK. OMC was a previous owner of this source.**

Table 1

Net VOM emissions increase determination from Operating Permit 94030059 (issued on 3/21/1995).

<u>Project</u>	<u>VOM Emissions (tons/year)</u>
1. Maximum potential emission increases	
A. New sources in this application:	
Coating Operation	24.10
Production Paint Air Make-up	<u>0.09</u>
Subtotal	24.19
B. Other Outstanding Applications:	
Aluminum Heat Treat System Feb - 94	0.01
Heated Die Cleaning Tank Feb - 94	<u>0.04</u>
Subtotal	0.05
C. Previously issued Permits:	
Electrocoat Coating Line Mar - 91	6.09
D. Permit Exempt Sources:	
Die Cast Holding Furnaces Jul - 89	0.42
Service School Engine Testing Jul - 94	0.55
Engine Testing Cooling Tower Jan - 94	<u>2.57</u>
Subtotal	3.54
2. Emissions Decreases	
A. ConveyORIZED Vapor Degreaser (see Table 2)	34.2
3. Five Year Net Emissions Increase	0

Table 2

VOM emission decrease determination from Operating Permit 94030059 (issued on 3/21/1995).

Trichloroethylene usage and VOM emissions from contemporaneous shutdown of conveyORIZED vapor degreaser (JM5743):

<u>Year</u>	<u>Trichloroethylene Usage</u> <u>(gallon/year)</u>	<u>VOM Emissions</u> <u>(ton/year)</u>
1990	5,130	27.9
1991	7,309	40.5
1992	0	0
1993	0	0
1994	0	0

Vapor degreaser contemporaneous decrease in emissions.

$$(40.5 + 27.9) \div 2 = 34.2 \text{ tons VOM/year}$$

Table 3

VOM emission increase determination from Construction Permit 95120309 (issued on 6/14/1996).

Total combined VOM emission increase from the plant during contemporaneous period:

Description	Permit <u>Number</u>	Date <u>Issued</u>	VOM Emissions <u>TPY</u>
Electrocoat Coating Line	90100017	Mar, 91	6.09
Aluminum Heat Treat Furnace	94020028	Apr, 94	0.04
Heated Die Cleaning Tank	94020027	Apr, 94	0.04
Spray Paint Systems	94030059	Sep, 94	24.20
Flywheel Heat Treat Process	95010055	Mar, 95	2.10
Vacuum Die Cast Furnace	95040071	Jun, 95	0.02
Certified Reverberatory Furnace	95090176	Jan, 96	0.03
Test Tank Development Equipment	96040067	Apr, 96	<u>0.27</u>
		Total	32.79

Table 4

VOM emission decrease determination from Construction Permit 95120309 (issued on 6/14/1996).

Trichloroethylene usage and VOM emissions from contemporaneous shutdown of conveyorized vapor degreaser (JM5743):

<u>Year</u>	<u>Trichloroethylene Usage (gallon/year)</u>	<u>VOM Emissions (ton/year)</u>
1990	5,130	27.9
1991	7,309	40.5
1992	0	0
1993	0	0
1994	0	0

Vapor degreaser contemporaneous creditable decrease in emissions.  
 $(40.5 + 27.9) + 2 = 34.2$  tons VOM/year

Table 5

Net VOM emission increase determination from Construction Permit 95120309 (issued on 6/14/1996).

Total VOM emissions increase during the contemporaneous period including this project (see Table 3)

$$\begin{aligned} &= (32.79 + 21.55) \text{ TPY} \\ &= 54.34 \text{ TPY} \end{aligned}$$

Total VOM emissions decrease during the contemporaneous period (see Table 4)

$$= 34.2 \text{ TPY}$$

Total VOM increase during the contemporaneous period

$$\begin{aligned} &= (54.34 - 34.2) \text{ TPY} \\ &= 20.14 \text{ TPY} \end{aligned}$$

Note: This table indicates a net increase of VOM emissions of less than 25 tons over 5 consecutive years including VOM from proposed project. This project also does not result in an increase of 25 tons or more of VOM by itself. The VOM emissions decrease is due to voluntary shutdown of conveyORIZED vapor degreasers.

Table 6

Total combined VOM emissions increases from the plant during contemporaneous period from Joint Construction and Operating Permit 98030096 (issued on 5/19/1998).

<u>Description</u>	<u>Permit Number</u>	<u>Date Issued</u>	<u>VOM Emissions (TPY)</u>
Aluminum Heat Treat Furnace	94020028	April, 1994	0.04
Heated Die Cleaning Tank	94020027	April, 1994	0.04
Spray Paint Systems	94030059	Sept., 1994	24.20
Flywheel Heat Treat Process	95010055	March, 1995	2.10
Vacuum Die Cast Furnace	95040071	June, 1995	0.02
Certified Reverberatory Furnace	95090176	Jan., 1996	0.03
Test Tank Development Equipment	96040067	April, 1996	0.27
Certified Testing Engines	95120309	June, 1996	21.55
Boilers	97060070	June, 1997	0.70
Gasoline Storage Tank	97100008	Oct., 1997	0.44
Jet Melter Furnace	98030096	May, 1998	1.22
Warwick Holding Furnace	75090032	May, 1998	0.10
		Total	50.71

Table 7

Total combined VOM emissions decrease from the plant during contemporaneous period from Joint Construction and Operating Permit 98030096 (issued on 5/19/1998).

<u>Description</u>	<u>Permit Number</u>	<u>Date Issued</u>	<u>VOM Emissions (TPY)</u>
Conveyorized Vapor Degreaser*	73040441	Dec., 1993	34.2
Warwick and Moroney Melting Furnaces	75090032, 75090075	May, 1998	<u>4.9</u>
		Total	39.1

\* Actual emissions are based on the average rate during the two-year period which is representative of normal source operation (1990 and 1991).

Table 8

Net VOM emission increase determination from Joint Construction and Operating Permit 98030096 (issued on 5/19/1998).

Total VOM increase during the contemporaneous period  
= (50.71 - 39.10) TPY  
= 11.61 TPY

Note: This table indicates a net increase of VOM emissions of less than 25 tons over 5 consecutive years including VOM from proposed project. This project also does not result in an increase of 25 tons or more of VOM by itself. The VOM emissions decrease is due to voluntary shutdown of conveyORIZED vapor degreasers and Moroney and Warwick aluminum melting operations.

Table 9

Total combined VOM emissions increase from the plant during contemporaneous period from Joint Construction and Operating Permit 98030043 (issued on 6/8/1998).

<u>Description</u>	<u>Permit Number</u>	<u>Date Issued</u>	<u>VOM Emissions (TPY)</u>
Aluminum Heat Treat Furnace	94020028	April, 1994	0.04
Heated Die Cleaning Tank	94020027	April, 1994	0.04
Spray Paint Systems	94030059	Sept., 1994	24.20
Flywheel Heat Treat Process	95010055	March, 1995	2.10
Vacuum Die Cast Furnace	95040071	June, 1995	0.02
Certified Reverberatory Furnace	95090176	Jan., 1996	0.03
Test Tank Development Equipment	96040067	April, 1996	0.27
Certified Testing Engines	95120309	June, 1996	21.55
Training Center Testing Engines	95120310	June, 1996	0.82
Boilers	97060070	June, 1997	0.70
Gasoline Storage Tank	97100008	Oct., 1997	0.44
Jet Melter Furnace	98030096	May, 1998	1.22
Warwick Holding Furnace	75090032	May, 1998	0.10
Boat Engineering Spray Booth	98030043	June, 1998	1.00
		Total	<u>52.53</u>

Table 10

Total combined VOM emissions decrease from the plant during contemporaneous period from Joint Construction and Operating Permit 98030043 (issued on 6/8/1998).

<u>Description</u>	<u>Permit Number</u>	<u>Date Issued</u>	<u>Emissions (TPY)</u>
Conveyorized Vapor Degreaser*	73040441	Dec., 1993	34.2
Warwick and Moroney Melting Furnaces	75090032, 75090075	May, 1998	<u>4.9</u>
		Total	39.1

\* Actual emissions are based on the average rate during the two-year period which is representative of normal source operation (1990 and 1991).

Table 11

Net VOM emission increase determination from Joint Construction and Operating Permit 98030043 (issued on 6/8/1998).

Total VOM increase during the contemporaneous period  
= (52.53 - 39.10) TPY  
= 13.43 TPY

Note: This table indicates a net increase of VOM emissions of less than 25 tons over 5 consecutive years including VOM from proposed project. This project also does not result in an increase of 25 tons or more of VOM by itself. The VOM emissions decrease is due to voluntary shutdown of conveyORIZED vapor degreasers and Moroney and Warwick aluminum melting operations.

10.2 Attachment 2: Example 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: \_\_\_\_\_

10.3 Attachment 3: Particulate Matter Emissions from Process Emission Units

10.3.1 Section 212.321 - Process Emission Units For Which Construction or Modification Commenced On or After April 14, 1972

- a. Except as further provided in 35 IAC Part 212, 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 this Section.
- b. Interpolated and extrapolated values of the data in subsection (c) of this Section shall be determined by using the equation:

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

Where:

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

- 1. Up to process weight rates of 408 Mg/hr (450 Ton/hr):

	Metric	English
P	Mg/hr	Ton/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

- 2. For process weight rate greater than or equal to 408 Mg/hr (450 Ton/hr):

	Metric	English
P	Mg/hr	Ton/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

- c. Limits for Process Emission Units For Which Construction or Modification Commenced On or After April 14, 1972

Metric		English	
P Mg/hr	E kg/hr	P Ton/hr	E lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

Where:

P = Process weight rate in Mg/hr or Ton/hr, and  
E = Allowable emission rate in kg/hr or lbs/hr.

10.3.2 Section 212.322 - Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972

- a. Except as further provided in 35 IAC Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in subsection (c) of this Section.

- b. Interpolated and extrapolated values of the data in subsection (c) of this Section shall be determined by using the equation:

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

Where:

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

1. For process weight rates up to 27.2 Mg/hr (30 Ton/hr):

	Metric	English
P	Mg/hr	Ton/hr
E	kg/hr	lbs/hr
A	1.985	4.10
B	0.67	0.67
C	0	0

2. For process weight rates in excess or 27.2 Mg/hr (30 Ton/hr):

	Metric	English
P	Mg/hr	Ton/hr
E	kg/hr	lbs/hr
A	25.21	55.0
B	0.11	0.11
C	-18.4	-40.0

- c. Limits for Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972

Metric		English	
P	E	P	E
Mg/hr	kg/hr	Ton/hr	lbs/hr
0.05	0.27	0.05	0.55
0.1	0.42	0.10	0.87
0.2	0.68	0.20	1.40
0.3	0.89	0.30	1.83
0.4	1.07	0.40	2.22
0.5	1.25	0.50	2.58
0.7	1.56	0.75	3.38
0.9	1.85	1.00	4.10
1.8	2.9	2.00	6.52
2.7	3.9	3.00	8.56
3.6	4.7	4.00	10.40
4.5	5.4	5.00	12.00
9.	8.7	10.00	19.20
13.	11.1	15.00	25.20
18.	13.8	20.00	30.50

Metric		English	
P	E	P	E
Mg/hr	kg/hr	Ton/hr	lbs/hr
23.	16.2	25.00	35.40
27.2	18.15	30.00	40.00
32.0	18.8	35.00	41.30
36.0	19.3	40.00	42.50
41.0	19.8	45.00	43.60
45.0	20.2	50.00	44.60
90.0	23.2	100.00	51.20
140.0	25.3	150.00	55.40
180.0	26.5	200.00	58.60
230.0	27.7	250.00	61.00
270.0	28.5	300.00	63.10
320.0	29.4	350.00	64.90
360.0	30.0	400.00	66.20
400.0	30.6	450.00	67.70
454.0	31.3	500.00	69.00

Where:

P = Process weight rate in Mg/hr or Ton/hr, and  
E = Allowable emission rate in kg/hr or lbs/hr.

#### 10.4 Attachment 4 Guidance on Revising This Permit

The Permittee must submit an application to the Illinois EPA using the appropriate revision classification in accordance with Sections 39.5(13) and (14) of the Act and 35 IAC 270.302. Specifically, there are currently three classifications for revisions to a CAAPP permit. These are:

1. Administrative Permit Amendment;
2. Minor Permit Modification; and
3. Significant Permit Modification.

The Permittee must determine, request, and submit the necessary information to allow the Illinois EPA to use the appropriate procedure to revise the CAAPP permit. A brief explanation of each of these classifications follows.

1. Administrative Permit Amendment
  - Corrects typographical errors;
  - Identifies a change in the name, address, or phone number of any person identified in the permit, or provides a similar minor administrative change at the source;
  - Requires more frequent monitoring or reporting by the Permittee;
  - Allows for a change in ownership or operational control of the source where no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new Permittees has been submitted to the Illinois EPA. This shall be handled by completing form 272-CAAPP, REQUEST FOR OWNERSHIP CHANGE FOR CAAPP PERMIT; or
  - Incorporates into the CAAPP permit a construction permit, provided the conditions of the construction permit meet the requirements for the issuance of CAAPP permits.
2. Minor Permit Modification
  - Do not violate any applicable requirement;
  - Do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit;

- Do not require a case-by-case determination of an emission limitation or other standard, or a source-specific determination of ambient impacts, or a visibility or increment analysis;
- Do not seek to establish or change a permit term or condition for which there is no corresponding underlying requirement and which avoids an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:
  - A federally enforceable emissions cap assumed to avoid classification as a modification under any provision of Title I of the CAA; and
  - An alternative emissions limit approved pursuant to regulations promulgated under Section 112(i)(5) of the CAA.
- Are not modifications under any provision of Title I of the CAA;
- Are not required to be processed as a significant permit modification; and
- Modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches.

An application for a minor permit modification shall include the following:

- A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
- The source's suggested draft permit/conditions;
- Certification by a responsible official that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and
- Information as contained on form 271-CAAPP, MINOR PERMIT MODIFICATION FOR CAAPP PERMIT for the Illinois EPA to use to notify USEPA and affected States.

### 3. Significant Permit Modification

- Applications that do not qualify as either minor permit modifications or as administrative permit amendments;
- Applications requesting a significant change in existing monitoring permit terms or conditions;
- Applications requesting a relaxation of reporting or recordkeeping requirements; and
- Cases in which, in the judgment of the Illinois EPA, action on an application for modification would require decisions to be made on technically complex issues.

An application for a significant permit modification shall include the following:

- A detailed description of the proposed change(s), including all physical changes to equipment, changes in the method of operation, changes in emissions of each pollutant, and any new applicable requirements which will apply as a result of the proposed change. Note that the Permittee need only submit revised forms for equipment and operations that will be modified.

The Illinois EPA requires the information on the following appropriate forms to be submitted in accordance with the proper classification:

- Form 273-CAAPP, REQUEST FOR ADMINISTRATIVE PERMIT AMENDMENT FOR CAAPP PERMIT; or
- Form 271-CAAPP, MINOR PERMIT MODIFICATION FOR CAAPP PERMIT; or
- Form 200-CAAPP, APPLICATION FOR CAAPP PERMIT (for significant modification).

Application forms can be obtained from the Illinois EPA website at <http://www.epa.state.il.us/air/forms>.

Note that the request to revise the permit must be certified for truth, accuracy, and completeness by a responsible official.

Note that failure to submit the required information may require the Illinois EPA to deny the application. The Illinois EPA reserves the right to require that additional information be submitted as needed to evaluate or take final action on applications pursuant to Section 39.5(5)(g) of the Act and 35 IAC 270.305.



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

<b>Application For Construction Permit (For CAAPP Sources Only)</b>	<b>For Illinois EPA use only</b>
	ID number:
	Permit number:
Date received:	

This form is to be used by CAAPP sources to supply information necessary to obtain a construction permit. Please attach other necessary information and completed CAAPP forms regarding this construction/modification project.

<b>Source Information</b>		
1. Source name:		
2. Source street address:		
3. City:	4. Zip code:	
5. Is the source located within city limits? <input type="checkbox"/> Yes <input type="checkbox"/> No		
6. Township name:	7. County:	8. ID number:

<b>Owner Information</b>		
9. Name:		
10. Address:		
11. City:	12. State:	13. Zip code:

<b>Operator Information (if different from owner)</b>		
14. Name		
15. Address:		
16. City:	17. State:	18. Zip code:

<b>Applicant Information</b>	
19. Who is the applicant? <input type="checkbox"/> Owner <input type="checkbox"/> Operator	20. All correspondence to: (check one) <input type="checkbox"/> Owner <input type="checkbox"/> Operator <input type="checkbox"/> Source
21. Attention name and/or title for written correspondence:	
22. Technical contact person for application:	23. Contact person's telephone number:

This Agency is authorized to require and you must disclose this information under 415 ILCS 5/39. Failure to do so could result in the application being denied and penalties under 415 ILCS 5 et seq. It is not necessary to use this form in providing this information. This form has been approved by the forms management center.

<b>Summary Of Application Contents</b>	
<p>24. Does the application address whether the proposed project would constitute a new major source or major modification under each of the following programs:</p> <p>a) Non-attainment New Source Review – 35 IAC Part 203;  b) Prevention of Significant Deterioration (PSD) – 40 CFR 52.21;  c) Hazardous Air Pollutants: Regulations Governing Constructed or Reconstructed Major Sources – 40 CFR Part 63?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>25. Does the application identify and address all applicable emissions standards, including those found in the following:</p> <p>a) Board Emission Standards – 35 IAC Chapter I, Subtitle B;  b) Federal New Source Performance Standards – 40 CFR Part 60;  c) Federal Standards for Hazardous Air Pollutants – 40 CFR Parts 61 and 63?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>26. Does the application include a process flow diagram(s) showing all emission units and control equipment, and their relationship, for which a permit is being sought?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>27. Does the application include a complete process description for the emission units and control equipment for which a permit is being sought?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>28. Does the application include the information as contained in completed CAAPP forms for all appropriate emission units and air pollution control equipment, listing all applicable requirements and proposed exemptions from otherwise applicable requirements, and identifying and describing any outstanding legal actions by either the USEPA or the Illinois EPA?  Note: The use of "APC" application forms is not appropriate for applications for CAAPP sources. CAAPP forms should be used to supply information.</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>29. If the application contains TRADE SECRET information, has such information been properly marked and claimed, and have two separate copies of the application suitable for public inspection and notice been submitted, in accordance with applicable rules and regulations?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No  <input type="checkbox"/> Not Applicable, No TRADE SECRET information in this application

Note 1: Answering "No" to any of the above may result in the application being deemed incomplete.

<b>Signature Block</b>	
<p>This certification must be signed by a responsible official. Applications without a signed certification will be returned as incomplete.</p>	
<p>30. I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in this application are true, accurate and complete.  Authorized Signature:</p>	
<p>BY: _____  <div style="text-align: center;">AUTHORIZED SIGNATURE</div></p> <p>_____ / _____ / _____  <div style="text-align: center;">TYPED OR PRINTED NAME OF SIGNATORY</div></p>	<p>_____ / _____ / _____  <div style="text-align: center;">TITLE OF SIGNATORY</div></p> <p>_____ / _____ / _____  <div style="text-align: center;">DATE</div></p>

Note 2: An operating permit for the construction/modification permitted in a construction permit must be obtained by applying for the appropriate revision to the source's CAAPP permit, if necessary.

10.6 Attachment 6 Guidance on Renewing This Permit

Timeliness - Pursuant to Section 39.5(5)(n) of the Act and 35 IAC 270.301(d), a source must submit to the Illinois EPA a complete CAAPP application for the renewal of a CAAPP permit not later than 9 months before the date of permit expiration of the existing CAAPP permit in order for the submittal to be deemed timely. Note that the Illinois EPA typically sends out renewal notices approximately 18 months prior to the expiration of the CAAPP permit.

The CAAPP application must provide all of the following information in order for the renewal CAAPP application to be deemed complete by the Illinois EPA:

1. A completed renewal application form 200-CAAPP, APPLICATION FOR CAAPP PERMIT.
2. A completed compliance plan form 293-CAAPP, COMPLIANCE PLAN/SCHEDULE OF COMPLIANCE FOR CAAPP PERMIT.
3. A completed compliance certification form 296-CAAPP, COMPLIANCE CERTIFICATION, signed by the responsible official.
4. Any applicable requirements that became effective during the term of the permit and that were not included in the permit as a reopening or permit revision.
5. If this is the first time this permit is being renewed and this source has not yet addressed CAM, the application should contain the information on form 464-CAAPP, COMPLIANCE ASSURANCE MONITORING (CAM) PLAN.
6. Information addressing any outstanding transfer agreement pursuant to the ERMS.
7. a. If operations of an emission unit or group of emission units remain unchanged and are accurately depicted in previous submittals, the application may contain a letter signed by a responsible official that requests incorporation by reference of existing information previously submitted and on file with the Illinois EPA. This letter must also include a statement that information incorporated by reference is also being certified for truth and accuracy by the responsible official's signing of the form 200-CAAPP, APPLICATION FOR CAAPP PERMIT and the form 296-CAAPP, COMPLIANCE CERTIFICATION. The boxes should be marked yes on form 200-CAAPP, APPLICATION FOR CAAPP PERMIT,

as existing information is being incorporated by reference.

- b. If portions of current operations are not as described in previous submittals, then in addition to the information above for operations that remain unchanged, the application must contain the necessary information on all changes, e.g., discussion of changes, new or revised CAAPP forms, and a revised fee form 292-CAAPP, FEE DETERMINATION FOR CAAPP PERMIT, if necessary.
8. Information about all off-permit changes that were not prohibited or addressed by the permit to occur without a permit revision and the information must be sufficient to identify all applicable requirements, including monitoring, recordkeeping, and reporting requirements, for such changes.
9. Information about all changes made under 40 CFR 70.4(b)(12)(i) and (ii) that require a 7-day notification prior to the change without requiring a permit revision.

The Illinois EPA will review all applications for completeness and timeliness. If the renewal application is deemed both timely and complete, the source shall continue to operate in accordance with the terms and conditions of its CAAPP permit until final action is taken on the renewal application.

Notwithstanding the completeness determination, the Illinois EPA may request additional information necessary to evaluate or take final action on the CAAPP renewal application. If such additional information affects your allowable emission limits, a revised form 292-CAAPP, FEE DETERMINATION FOR CAAPP PERMIT must be submitted with the requested information. The failure to submit to the Illinois EPA the requested information within the time frame specified by the Illinois EPA, may force the Illinois EPA to deny your CAAPP renewal application pursuant to Section 39.5 of the Act.

Application forms may be obtained from the Illinois EPA website at <http://www.epa.state.il.us/air/forms.html>.

If you have any questions regarding this matter, please contact a permit analyst at 217/782-2113.

Mail renewal applications to:

Illinois Environmental Protection Agency  
Division of Air Pollution Control

Page 4

Permit Section (MC 11)  
P.O. Box 19506  
Springfield, Illinois 62794-9506