

217/782-2113

"REVISED"  
TITLE V - CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT  
and  
TITLE I PERMIT<sup>1</sup>

PERMITTEE

Pilkington North America, Inc.  
Attn: Tom Bretag, Environmental Manager  
Center & 20th Street  
Ottawa, Illinois 61350

<u>Application No.:</u> 95090029	<u>I.D. No.:</u> 099825AAG
<u>Applicant's Designation:</u> Glass Mfg.	<u>Date Received:</u> September 6, 1995
<u>Operation of:</u> Glass Mfg.	
<u>Date Issued:</u> September 5, 2003	<u>Expiration Date</u> <sup>2</sup> : September 5, 2008
<u>Source Location:</u> Center & 20th Street P.O. Box 578, Ottawa, LaSalle County	
<u>Responsible Official:</u> Robert Stevens, Plant Manager	

This permit is hereby granted to the above-designated Permittee to OPERATE Process Emission Unit 1, Float Glass Melting Furnace, Float Glass Melting Furnace Tin Bath, Low-E Vapor Deposition Coating Process, Float Glass Annealing Lehr, and a Gasoline Storage Tank pursuant to the above referenced permit application. This permit is subject to the conditions contained herein.

Revision Date Received: July 3, 2006  
Revision Date Issued:  
Purpose of Revision: Minor Modification

This minor modification consists of incorporating language into this permit from Construction Permit 05010008 - replacement of dust collectors, Construction Permit 07030023 - modification to float glass furnace, and Construction Permit 07070036 - rebricking project for float glass furnace.

The previous permit issued April 15, 2005 is incorporated herein by reference.

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

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

ECB:SIS:psj

cc: Illinois EPA, FOS, Region 2  
CES  
Lotus Notes

- 1 This permit may contain terms and conditions which address the applicability, and compliance if determined applicable, of Title I of the CAA and regulations promulgated thereunder, including 40 CFR 52.21 - federal PSD and 35 IAC Part 203 - Major Stationary Sources Construction and Modification. Any such terms and conditions are identified within this permit.
- 2 Except as provided in Condition 8.7 of this permit.

TABLE OF CONTENTS

	<u>PAGE</u>
1.0 SOURCE IDENTIFICATION	4
1.1 Source	
1.2 Owner/Parent Company	
1.3 Operator	
1.4 General Source Description	
2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT	5
3.0 INSIGNIFICANT ACTIVITIES	7
3.1 Identification of Insignificant Activities	
3.2 Compliance with Applicable Requirements	
3.3 Addition of Insignificant Activities	
4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE	9
5.0 OVERALL SOURCE CONDITIONS	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 NOT APPLICABLE TO THIS PERMIT	17
7.0 UNIT SPECIFIC CONDITIONS	18
7.1 Unit 01: Process Emission Unit 1 Control: Dust Collectors	
7.2 Unit 02: Float Glass Melting Furnace Control: None	
7.3 Unit 03: Float Glass Melting Furnace Tin Bath Control: None	
7.4 Unit 04: Low-E Vapor Deposition Coating Process Control: Afterburner, Heat Exchanger, Lime Neutralization System, Baghouse	
7.5 Unit 05: Float Glass Annealing Lehr Control: None	
7.6 Unit 06: Gasoline Storage Tank Control: None	
8.0 GENERAL PERMIT CONDITIONS	46

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	51
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 - Emissions of Particulate Matter from Existing Process Emission Units	1-1
10.2	Attachment 2 - Emissions of Particulate Matter from New Process Emission Units	2-1
10.3	Attachment 3 - Example Certification by a Responsible Official	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
10.7	Attachment 7 - Evaluation of the Change in Emissions from Construction Permit 07030023 for Unit 7.2 - Glass Furnace Modification Project	7-1
10.8	Attachment 8 - Past Actual Emissions (Tons/year)	8-1

1.0 SOURCE IDENTIFICATION

1.1 Source

Pilkington North America, Inc.  
Center & 20th Street  
Ottawa, Illinois 61350  
815/433-0932

I.D. No.: 099825AAG  
Standard Industrial Classification: 3211, Glass Manufacturing

1.2 Owner/Parent Company

Pilkington North America, Inc.  
811 Madison Ave., P.O. Box 799  
Toledo, Ohio 43697-0799

1.3 Operator

Pilkington North America, Inc.  
811 Madison Avenue, P.O. Box 799  
Toledo, Ohio 43697-0799

Tom Bretag, Environmental Manager  
815/433-0932

1.4 General Source Description

Pilkington North America, Inc. is located at Center & 20th Street P.O. Box 578, Ottawa. The facility manufactures architectural flat glass for sale in the architectural and residential construction markets. There are three main structures on the 218-acre LOF property: Plant #5, Plant No 7, and the Power House. Currently, Plant No 7 and Power House are not in operation.

2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

Act	Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711
BAT	Best Available Technology
Btu	British thermal unit
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CAM	Compliance Assurance Monitoring
CFR	Code of Federal Regulations
dscf	Dry standard cubic feet
ERMS	Emissions Reduction Market System
gal	gallon
gr	grams
°F	Fahrenheit
ft <sup>3</sup>	cubic feet
HAP	Hazardous Air Pollutant
hr	hour
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
ILCS	Illinois Compiled Statutes
Illinois EPA	Illinois Environmental Protection Agency
kg	kilogram
kW	kilowatts
LAER	Lowest Achievable Emission Rate
lb	pound
MACT	Maximum Achievable Control Technology
Mft <sup>3</sup>	Million cubic feet
mmBtu	Million British thermal units
mo	month
MW	Megawatts
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO <sub>x</sub>	Nitrogen Oxides
NSPS	New Source Performance Standards
PM	Particulate Matter
PM <sub>10</sub>	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
ppm	parts per million
PSD	Prevention of Significant Deterioration
RMP	Risk Management Plan
SO <sub>2</sub>	Sulfur Dioxide
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
USEPA	United States Environmental Protection Agency
VOL	Volatile organic liquid
VOM	Volatile Organic Material
VPL	Volatile petroleum liquid
yr	year

### 3.0 INSIGNIFICANT ACTIVITIES

#### 3.1 Identification of Insignificant Activities

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

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

None

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

Degreasers  
Imperfection Ink Marking System  
Adipic Acid Application Process

- 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)].

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
Unit 01	Batch Hall Storage Modified Per Construction Permit 05010008: replacement of 2 dust collectors	1935/2005	Dust Collectors (24 total)
	Batch Mixer	1969	Dust Collectors (4 total)
	Furnace Fill System	1969/1975	Dust Collectors (2 total (in parallel))
	Cullet Return System Area 1 Modified Per Construction Permit 05010008: replacement of #4 Dust Collector	Pre-1972/2005	Cullet Return Crossover Area Dust Collector (DC-4)
	Cullet Return System Area #2	Pre-1972	Capping Area Dust Collector (DC-5)
	Cullet Return System Area #3	Pre-1975	Float Wareroom East Dust Collector (DC-6)
	Cullet Return System Area #4	Pre-1972	Float Wareroom East Dust Collector (DC-8)
Unit 02	Float Glass Melting Furnace: Natural Gas Fired	1969	None
	Modifications to Float Glass Melting Furnace per Construction Permit 07030023 as Follows:  Oxygen Lancing will Replace Oxygen Enrichment With Incremental Increases in Oxygen Supply as Required to Maintain Furnace Conditions  Oxygen Plant will Supply up to 80,000 CFH of Total Oxygen	2007	Proprietary 3R System

Emission Unit	Description	Date Constructed	Emission Control Equipment
Unit 02 (Continued)	<p>Modifications to Float Glass Melting Furnace Per Construction Permit 07070036 as Follows:</p> <p>Rebricking the 5F1 Glass Furnace,</p> <p>Install of Low-NO<sub>x</sub> Burners,</p> <p>Replace Ejectors with Natural Draft Chimney, Rebrick Regenerators, Install 3R System (a Proprietary System Designed to Reduce Nitrogen Oxide (NO<sub>x</sub>) Emissions)</p>	2007	Proprietary 3R System
Unit 03	Float Glass Melting Furnace Tin Bath	1969	None
Unit 04	Low-E Vapor Deposition Coating Process	1988	Afterburner, Heat Exchanger, Lime Neutralization System, Baghouse
Unit 05	Float Glass Annealing Lehr	1992	None
Unit 06	1000 Gallon Gasoline Storage Tank	1975	None

## 5.0 OVERALL SOURCE CONDITIONS

### 5.1 Source Description

5.1.1 This permit is issued based on the source requiring a CAAPP permit as a major source of Nitrogen Oxide, Sulfur Dioxide, and Particulate Matter emissions.

### 5.2 Applicable Regulations

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

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

- a. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), 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.

#### 5.2.3 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.

#### 5.2.4 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.

- 5.2.5 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.

#### 5.2.6 Episode Action Plan

- a. If the source is required to have an episode action plan pursuant to 35 IAC 244.142, 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.

#### 5.2.7 CAM Plan

This stationary source has a pollutant-specific emissions unit that is subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources. The source must submit a CAM plan for each affected pollutant-specific emissions unit upon application for renewal of the initial CAAPP permit, or upon a significant modification to the CAAPP permit for the construction or modification of a large pollutant-specific emissions unit which has the potential post-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

#### 5.3 Non-Applicability of Regulations of Concern

None

#### 5.4 Source-Wide Operational and Production Limits and Work Practices

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

None

#### 5.5 Source-Wide Emission Limitations

#### 5.5.1 Permitted Emissions for Fees

The annual emissions from the source, 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)	50.37
Sulfur Dioxide (SO <sub>2</sub> )	321.39
Particulate Matter (PM)	218.35
Nitrogen Oxides (NO <sub>x</sub> )	799.01
HAP, not included in VOM or PM	10.284
Total	1,399.40

#### 5.5.2 Emissions of Hazardous Air Pollutants

This permit is issued based on the emissions of HAPs as listed in Section 112(b) of the CAA not being equal to or exceeding 10 tons per year of a single HAP or 25 tons per year of any combination of such HAPs, so that this source is considered a minor source for 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

- a. Total annual emissions of each individual HAP and of total HAPs on a calendar year basis for the applicable emission units covered by Section 7 (Unit Specific Conditions) of this permit.
- b. Total monthly and running 12 month total VOM emissions for the whole source based on the applicable emission units covered by Section 7 (Unit Specific Conditions) of this permit.

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 of the source with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

5.7.2 Annual Emissions Report

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

5.8 General Operational Flexibility/Anticipated Operating Scenarios

N/A

5.9 General Compliance Procedures

#### 5.9.1 General Procedures for Calculating 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.

6.0 NOT APPLICABLE TO THIS PERMIT

7.0 UNIT SPECIFIC CONDITIONS

7.1 Unit 01: Process Emission Unit 1  
Control: Dust Collectors

7.1.1 Description

Batch Hall Storage - raw material unloading, storage, weighing, and discharging to the process.

Batch Mixer - mix raw material before discharging into furnace.

Furnace Fill System - discharge mixed batch and recycled glass (cullet) into glass melting furnace.

Cullet Return System Area 1 - Handling of cullet off the line; return cullet to storage areas.

Cullet Return System Area 2 - Transfer and storage of cut glass sheets, breaking glass, and handling of the cullet of the line.

Cullet Return System Area 3 - Transfer and storage of cut glass sheets, breaking glass, and handling of the cullet of the line.

Cullet Return System Area 4 - Handling of cut glass and cullet of the line.

7.1.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed/Modified	Emission Control Equipment
Unit 01	Batch Hall Storage Modified Per Construction Permit 05010008: Replacement of 2 Dust Collectors	1935/2005	Dust Collectors (24 total)
	Batch Mixer	1969	Dust Collectors (4 total)
	Furnace Fill System	1969/1975	Dust Collectors (2 total (in parallel))
	Cullet Return System Area 1 Modified Per Construction Permit 05010008: Replacement of #4 Dust Collector	Pre-1972/2005	Cullet Return Crossover Area Dust Collector (DC-4)

Emission Unit	Description	Date Constructed/ Modified	Emission Control Equipment
Unit 01 (Cont.)	Cullet Return System Area #2	Pre-1972	Capping Area Dust Collector (DC-5)
	Cullet Return System Area #3	Pre-1975	Float Wareroom East Dust Collector (DC-6)
	Cullet Return System Area #4	Pre-1972	Float Wareroom East Dust Collector (DC-8)

7.1.3 Applicability Provisions and Applicable Regulations

- a. The "affected process emission unit 1" for the purpose of these unit-specific conditions, are the units described in 7.1.1 and 7.1.2.
- b. The affected process emission unit 1 is subject to the emission limits identified in Condition 5.2.2.
- c. Units within process emission unit 1 are 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 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 at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.322. (See also Attachment 1) [35 IAC 212.322(a)]

7.1.4 Non-Applicability of Regulations of Concern

Construction Permit 05010008 for replacement of dust collectors was issued based on no increase of emissions from the new dust collectors because there was no change in production and the efficiency of the new dust collectors equals or exceeds the efficiency of the replaced dust collectors. The unit is therefore subject to no new regulations other than those in condition 7.1.3.

7.1.5 Operational and Production Limits and Work Practices

None

7.1.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the process emission unit 1 is subject to the following:

Emissions and operation of the following process shall not exceed the following limits:

<u>Equipment</u>	<u>Operation (Hours/Year)</u>	<u>Particulate Matter</u>	
		<u>(Lb/Hour)</u>	<u>(Tons/Year)</u>
Batch Hall (DC-1)	8,760	0.29	1.26
Cullet System #2 (DC-5)	8,760	0.51	2.24
Cullet System #3 (DC-6)	8,760	0.31	1.37
Cullet System #4 (DC-8)	8,760	0.24	1.06

Compliance with the annual limit shall be based 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 72120139, pursuant to Title I of the Clean Air Act, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and 40 CFR 52.21, Prevention of Significant Deterioration (PSD). 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 these rules. [T1]

For other sources within this unit there are no specific emission limitations, however, there are source wide emission limitations in Condition 5.5 that include these sources.

#### 7.1.7 Testing Requirements

Upon reasonable request by the Illinois EPA, pursuant to Section 39.5(7)(d) of the Act and 35 IAC 212.107, for both fugitive and non-fugitive particulate matter emissions, a determination as to presence or absence of visible emissions from emission units shall be conducted in accordance with Method 22, 40 CFR Part 60, Appendix A, except that the length of the observing period shall be at the discretion of the observer, but not less than one minute. This test method shall be used to determine compliance with 35 IAC 212.123 [35 IAC 212.107].

#### 7.1.8 Monitoring Requirements

None

#### 7.1.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the process emission unit 1 to demonstrate compliance

with 5.5.1, 7.1.3(c), and 7.1.6, pursuant to Section 39.5(7)(b) of the Act:

- a. Records addressing use of good operating practices for the dust collectors:
  - i. Records for periodic inspection of the bag collectors with date, name of individual performing the inspection, and the nature of the inspection.
  - ii. Records of prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.
- b. Raw Material Usage, lb/day.
- c. Operating hours per day.

#### 7.1.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the process emission unit 1 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.

#### 7.1.11 Operational Flexibility/Anticipated Operating Scenarios

None

#### 7.1.12 Compliance Procedures

Compliance of the process emission unit 1 with conditions 7.1.3(c) and 7.1.6 shall be based on the recordkeeping requirements of 7.1.9, and by the use of the emission factors and formula listed below:

For Particulate and Particulate HAPs emissions:

$$A = R \times EF \times (1 - C/100)$$

$$B = A \times 1 \text{ T}/2000 \text{ lb} \times \text{operating hours/year}$$

Where:

A = Particulate or Particulate HAPs emissions, lb/hr

B = Particulate or Particulate HAPs emissions, T/yr

R = Raw material usage, lb/hr

EF = Emission factor and control efficiencies as listed in the following table:

Process	Emission Factor*		Control* Efficiency (%)
	Particulate Lb/Ton Raw Materials Used	Particulate HAPs Lb/Ton Raw Materials Used	
Batch Hall Storage	1.264	0.00105	99
Batch Mixer	0.351	0.00105	99
Furnace Fill System	0.106	0.000198	99
Cullet Return System Area 1	0.2276	---	99
Cullet Return System Area 2	2.27	---	99
Cullet Return System Area 3	1.39	---	99
Cullet Return System Area 4	1.0798	---	99

\* As provided in the Title V Permit Application

7.2 Unit 02: Float Glass Melting Furnace  
Control: None

7.2.1 Description

Mixed raw material and cullet is melted in the Float Glass Melt Furnace under natural gas flame to produce molten glass. Natural gas is the fuel used in the furnace burner. Propane fuel shall be used as back up fuel in float glass melting furnace.

7.2.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed/ Modified	Emission Control Equipment
Unit 02	Float Glass Melting Furnace: Natural Gas Fired	1969	None
	Modifications to Float Glass Melting Furnace per Construction Permit 07030023 as Follows:  Oxygen Lancing will Replace Oxygen Enrichment With Incremental Increases in Oxygen Supply as Required to Maintain Furnace Conditions  Oxygen Plant will Supply up to 80,000 CFH of Total Oxygen	2007	Proprietary 3R System

Emission Unit	Description	Date Constructed/ Modified	Emission Control Equipment
Unit 02 (Continued)	Modifications to Float Glass Melting Furnace per Construction Permit 07070036 as Follows:  Rebricking the 5F1 Glass Furnace,  Install of Low-NO <sub>x</sub> Burners,  Replace Ejectors with Natural Draft Chimney, Rebrick Regenerators, Install 3R System (a Proprietary System Designed to Reduce Nitrogen Oxide (NO <sub>x</sub> ) Emissions)	2007	

7.2.3 Applicability Provisions and Applicable Regulations

a. The "affected furnace" for the purpose of these unit-specific conditions, is the emission unit described in conditions 7.2.1 and 7.2.2.

b. The affected furnace 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 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 at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.322. (See also Attachment 1) [35 IAC 212.322(a)]

c. The affected furnace is subject to 35 IAC 214.301 which provides that no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission sources to exceed 2000 ppm.

d. Startup Provisions

The Permittee is authorized to operate the affected furnace in violation of the applicable limit of 35

IAC 212.322, 216.121, and 214.301 during startup of the furnace pursuant to 35 IAC 201.262, as the Permittee has affirmatively demonstrated that all reasonable efforts have been made to minimize startup emissions, duration of individual starts, and frequency of startups. This authorization is subject to the following:

i. This authorization only extends for a period of up to 3 days once every 8 to 12 years following initial firing of fuel during the startup event.

ii. The Permittee shall take the following measures to minimize startup emissions, the duration of startups, and minimize the frequency of startups:

A. Implementation of established startup procedures; and

B. Operating the affected furnace according to manufacturer's recommendations.

iii. The Permittee shall fulfill the applicable recordkeeping requirements of Condition 7.2.9(c).

#### 7.2.4 Non-Applicability of Regulations of Concern

- a. The affected furnace is not subject to a New Source Performance Standard (NSPS) for glass manufacturing plants, 40 CFR 60, Subparts A and CC, since the affected furnace was constructed in 1969; applicability requires construction or modification after June 15, 1979.
- b. The affected furnace is not subject to 35 IAC 214.142 Sulfur Limitations: Small Sources Located Outside Metropolitan Areas since the furnace does not burn solid fuel exclusively, as applicability requires.
- c. The affected furnace is not subject to 35 IAC 216.121, Carbon Monoxide Emissions from Fuel Combustion Sources, since the furnace is not engaged in production of heat or power by indirect heat transfer.
- d. Construction Permit 07070036 (rebricking project) was issued based on the project not constituting a major modification in accordance with 40 CFR 52.21, Prevention of Significant Deterioration of Air Quality (PSD), because the potential increases in emissions from the affected furnace are less than the

PSD significant net emission increase thresholds.  
(See also Attachment 8.)

- e. Construction Permit 07030023 for the modifications detailed in Condition 7.2.2 was based on the modifications to the furnace not being a major modification subject to the PSD rules because they will not be accompanied by significant increases in emissions of PSD pollutants, as defined under the PSD rules. In particular, the projected increase in emissions of NO<sub>x</sub> is only 39 tons/year. (See Attachment 7)

7.2.5 Operational Production Limits and Work Practices

- a. Propane fuel shall be used as back up fuel in float glass melting furnace and shall not exceed 15,000 gallons/month and 157,600 gallons/year. [T1N]
- b. The Permittee shall, for a period of 5 years following resumption of regular operation after the modifications per Construction Permit 07070036 (detailed in condition 7.2.2) are made, operate the affected changes in such a manner that this project does not result in a significant increase in emissions and qualify as a major modification for such emissions, including NO<sub>x</sub>, SO<sub>2</sub>, VOM, CO PM, PM<sub>10</sub> and HAPs.
- c. Natural gas shall be the only fuel fired in the affected furnace during normal operation.
- d. The Permittee shall, for a period of 10 years following resumption of regular operation after the modifications entailed detailed in 7.2.2 per Construction Permit 07030023 are made, operate the affected changes in such a manner that this project does not result in a significant increase in emissions of NO<sub>x</sub> and qualify as a major modification for NO<sub>x</sub>.

7.2.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected furnace is subject to the following:

Pollutant	NO <sub>x</sub>	SO <sub>2</sub>	VOM	CO	H <sub>2</sub> SO <sub>4</sub>	PM	PM <sub>10</sub>
Lb/Ton of Draw	6.67	3.23	0.105	0.175	0.517	1.19	1.13
Lb/Hr	148.10	72.69	2.36	3.93	11.63	36.97	26.42
Tons/Year	649	318	10.34	17.21	51.00	162.00	111.00

The above limitations were established in Permit 07070036, 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]

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).

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 affected furnace to demonstrate compliance with 5.5.1 and 7.2.3(b)(c) and (d), pursuant to Section 39.5(7)(b) of the Act:

- a. Hours of operation
- b. Material throughput, ton/day
- c. Records for Startup

The Permittee shall maintain the following records, pursuant to Section 39.5(7)(b) of the Act, for the affected furnace subject to Condition 7.2.3(e), which at a minimum shall include:

- i. The following information for each startup of the affected furnace:
  - A. Date and duration of the startup, i.e., start time and time normal operation achieved;
  - B. If normal operation was not achieved within 22 days, an explanation why startup could not be achieved;
  - C. A detailed description of the startup, including reason for operation and why measures to minimize emissions, to minimize the duration and to minimize the frequency of startups failed;

- D. An explanation why established startup procedures could not be performed, if not performed;
  - E. The nature of opacity, i.e., severity and duration, during the startup and the nature of opacity at the conclusion of startup, if above normal; and
  - F. Whether exceedance of Condition 5.2.2 may have occurred during startup, with explanation and estimated duration (minutes).
- ii. A maintenance and repair log for the affected furnace, listing each activity performed with date.
  - iii. Fuel consumption, as determined directly from fuel meters or indirectly from operating hours of the burners and their rated capacity.
  - iv. The Permittee shall also fulfill the applicable recordkeeping and reporting requirements of the PSD rules, 40 CFR 52.21(r)(6), for modifications per condition 7.2.2.

#### 7.2.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected furnace 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.

#### 7.2.11 Operational Flexibility/Anticipated Operating Scenarios

None

#### 7.2.12 Compliance Procedures

- a. Compliance with Condition 7.2.3(d) is demonstrated under inherent operating conditions of an affected furnace, so that no compliance procedures are set in this permit addressing this requirement.
- b. Compliance of the affected furnace with Conditions 7.2.3(c) shall be based on the recordkeeping requirements of 7.2.9, and by the use of the emission factors and formula listed below:

A = Material throughput X appropriate emission factor\* X 1 day/hrs

$$B = A \div \text{hr/year} \times 1 \text{ Ton}/2000 \text{ lb}$$

Where:

A = Emission rate, lb/hr

B = Emission rate, ton/year

\* Emission factor tables (as provided in the Title V app)

Pollutant	Emission Factor (lb/Ton throughput)
NO <sub>x</sub>	8.0
Particulate	2.0
SO <sub>2</sub>	3.2
VOM	0.1
Lead	0.0003
Sulfuric Acid	0.515
CO	0.1

HAPs	Emission Factor (lb/Ton throughput)
Chromium Compounds	0.0041
Hexavalent Chromium	0.0004
Metal HAP 1	0.00092
Metal HAP 2	0.00481
Metal HAP 3	0.130

7.3 Unit 03: Float Glass Melting Furnace Tin Bath  
Control: None

7.3.1 Description

Molten glass is cooled on a bath of molten tin. Chlorine gas is injected into the molten tin bath above the glass to reduce the surface tension of the condensed tin about 1 to 2 times a week. No reactions occur; all gas is assumed to be a HAP emission.

7.3.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Unit 03	Float Glass Melting Furnace Tin Bath	1969	None

7.3.3 Applicability Provisions and Applicable Regulations

The "affected tin bath" for the purpose of these unit-specific conditions, is the unit described in conditions 7.3.1 and 7.3.2.

7.3.4 Non-Applicability of Regulations of Concern

The affected tin bath is not subject to 40 CFR 60 Subpart CC (Standards of Performance for Glass Manufacturing Plants) since the affected tin bath is used to cool molten glass; applicability requires that the unit be defined as a glass melting furnace comprising a refractory vessel in which raw materials are charged, melted at high temperature, refined and conditioned to produce molten glass.

7.3.5 Operational Production Limits and Work Practices

Chlorine gas usage in the tin bath shall not exceed 0.30 lb/hour and 1.32 tons/year. Chlorine gas shall be ducted to roof ventilators no more than 20 times a year. [T1N]

7.3.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected tin bath is subject to the following:

Emissions of hydrogen chloride from the tin bath shall not exceed 0.31 lb/hour and 1.36 tons/year. [T1N]

The above limitations were established in Permit 04010035, 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. [T1N]

7.3.7 Testing Requirements

None

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 tin bath to demonstrate compliance with condition 5.5.1, pursuant to Section 39.5(7)(b) of the Act:

Chlorine usage, lb/mo

Operating hours per year.

7.3.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected tin bath 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.

7.3.11 Operational Flexibility/Anticipated Operating Scenarios

None

7.3.12 Compliance Procedures

Compliance with the limits of condition 7.3.6 shall be based on the recordkeeping requirements in Condition 7.3.9 and the emission factors and formulas listed below:

As provided in the Title 5 application all chlorine gas fed to the system becomes an emission.

HAP Emissions = Chlorine Usage

HAPs	Emission Factor (lb/lb chlorine used)
Chlorine gas	1.0

7.4 Unit 04: Low-E Vapor Deposition Coating Process  
 Control: Afterburner, Heat Exchanger, Lime Neutralization System, Baghouse Scrubbers I and I

7.4.1 Description

Chemical vapor deposition of materials onto glass surface as it is drawn from the furnace.

7.4.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Unit 04	Low-E Vapor Deposition Coating Process	1988	Afterburner, Heat Exchanger, Lime Neutralization System, Baghouse

7.4.3 Applicability Provisions and Applicable Regulations

- a. The "affected low-e deposition coating process" for the purpose of these unit-specific conditions, is the emission unit identified in conditions 7.4.1 and 7.4.2.
- b. The affected low-e deposition coating process is subject to 35 IAC 215.301 which states that no person shall cause or allow the discharge of more than 3.6 kg (8 lb/hr) of organic material into the atmosphere from any emission source, except as provided in Sections 215.302, 215.303, 215.304 and the following exception: If no odor nuisance exists the limitation of this Subpart shall apply only to photochemically reactive material. [35 IAC 215.301]
- c. The affected low-e deposition coating process is subject to 35 IAC 215.302 which states that emissions of organic material in excess of those permitted by 35 IAC 215.301 (condition 7.4.3(b)) are allowed if such emissions are controlled by flame, thermal or catalytic incineration so as either to reduce such emissions to 10 ppm equivalent methane (molecular weight 16), or less, or to convert 85 percent of the hydrocarbons to carbon dioxide and water. [35 IAC 215.302(a)]
- d. The affected low-e deposition coating process 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 process emission unit for which construction or modification commenced on or after April 14, 1972, which, either alone or in combination with the emission of particulate matter from all

other similar process emission at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321. (See also Attachment 2) [35 IAC 212.321(a)]

7.4.4 Non-Applicability of Regulations of Concern

The affected low e deposition coating process is not subject to 35 IAC 214.204, VOM Emission Limitations for Manufacturing Plants due to applicability of 35 IAC 214.205(b) which provides that emissions of VOM from emission units subject to 35 IAC 214.204, are allowable, notwithstanding the limitations in Section 215.204 if emissions are controlled by an afterburner system which provides 81% reduction in the overall emission of VOM from the coating lines and oxidation to carbon dioxide and water of 90% of nonmethane VOM (measured at total combustible carbon) which enters the afterburner.

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 emission limitations in Condition 5.5, the affected low-e deposition coating process is subject to the following:

- a. Emissions and operation of the CVD Glass Coating System shall not exceed the following limits:

<u>Material</u>	<u>Usage</u>		<u>Emissions</u>	
	<u>(Lb/Mo)</u>	<u>(Tons/Yr)</u>	<u>(Lb/Mo)</u>	<u>(Tons/Yr)</u>
VOM	133,515	802	6,676	39.9
Chlorides	26,881	162	1,390	8.29
Fluorides	2,267	13.6	113.4	0.68

The above limitations contain revisions to previously issued Permit 88110041. 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, VOM limit of 40.06 ton/yr was reduced to 39.9 ton/yr, below levels deemed "Significant" per 40 CFR 52.21, fluoride emission rates were amended from 45 lb/mo and 0.27 ton/yr to 113.4 lb/mo and 0.68 ton/yr. [T1R]

These limits are based on the maximum VOM, chlorides, and fluorides content of the "worst case" raw material usage as provided in the permit application and a minimum 95% control efficiency from the dry scrubbing/afterburner system in reducing VOM, chlorides, and fluorides emissions. Compliance with annual limits shall be determined from a running total of 12 months of data. [T1R]

- b. Emissions of particulate matter from the CVD Glass Coating System baghouse of the dry scrubbing system shall not exceed 764.4 pounds per month and 4.59 tons per year. These limits are based on the baghouse manufacturer's emission guarantee of 0.015 gr/dscf and the maximum gas flow rates through the baghouse. The majority of these emissions are due to the injection of lime during the dry scrubbing process for the purpose of air pollution control. As a result, usage limits are not established. [T1]

Note: Permit 88110041, Low E Chemical Vapor Deposition Coating Process, was issued based on the CVD Glass Coating System not constituting a major modification under the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21, because it was developed as two projects. The initial project was addressed by Construction Permit 94070074 and the subsequent expansion was addressed by Construction Permit 97030136.

#### 7.4.7 Operating Requirements

- a. The afterburner shall be in operation at all times when the CVD glass coater is in operation and emitting air contaminants.
- b. The afterburner combustion chamber shall be preheated to at least the manufacturer's recommended temperature but no less than the temperature at which compliance was demonstrated in the most recent compliance test, or 1400°F in the absence of a compliance test. This temperature shall be maintained during operation.
- c. At least two weeks prior to the initiation of any research and development product runs on the CVD

glass coater involving experimental materials not described in the application, the Permittee shall submit a written notification to perform such experimentation to the IEPA. The written notification shall include the following information:

- i. A description of the proposed experiments;
- ii. The expected duration of the experiment;
- iii. The types and amounts of raw materials to be used during the experiment; and
- iv. The estimated maximum quantities and characteristics of any emissions that could result from the proposed experiments and the means and extent to which these emissions will be controlled.

7.4.8 Monitoring and Testing Requirements

- a. The afterburner shall be equipped with a continuous monitoring device which is installed, calibrated, maintained, and operated according to vendor's/manufacture's specifications at all times that the afterburner is in use. This device shall monitor the afterburner combustion chamber temperature.
- b. Within 90 days of a written request by the Illinois EPA, the Permittee shall perform testing to measure concentrations of organic material, particulate matter, chlorides, and/or fluorides concentrations in the effluent stream of the control device on the CVD glass coater by using the following USEPA Reference Methods, pursuant to 35 Ill. Adm. Code 215.105:

Volumetric Flow Rate	Method 1 and 2
Dry Molecular Weight	Method 3
Moisture	Method 4
Particulate Matter	Method 5
Volatile Organic Material	Method 25 or 25A
Chlorides	Method 26
Fluorides	Method 13B

These tests shall be conducted during circumstances which are representative of maximum emissions, and equipment data and material usage during the test shall be recorded.

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 low-e deposition coating process to

demonstrate compliance with conditions 5.5.1, 7.4.3(b) and (c), and 7.4.6, pursuant to Section 39.5(7)(b) of the Act:

- a.
  - i. Raw material usage for each product run in pounds per run.
  - ii. VOM usage, in pounds per month and tons per year, calculated from the VOM content and usage of each raw material for each run during the given month. Annual usage shall be determined from data for the given month plus the previous eleven months.
  - iii. VOM emissions, in pounds per month and tons per year, calculated from the VOM usage for the given month controlled by 95%. Annual emissions shall be determined from data for the given month plus the previous eleven months.
  - iv. Chloride usage, in pounds per month and tons per year, calculated from the chlorine content and usage of each raw material for each run during the given month. Annual usage shall be determined from data for the given month plus the previous eleven months.
  - v. HCL emissions, in pounds per month and tons per year, calculated from the chlorine usage for the given month controlled by 95%. Annual emissions shall be determined from data for the given month plus the previous eleven months.
  - vi. Fluoride usage, in pounds per month and tons per year, calculated from the fluorine content and usage of each raw material for each run during the given month. Annual usage shall be determined from data for the given month plus the previous eleven months.
  - vii. HF emissions, in pounds per month and tons per year, calculated from the fluorine usage for the given month controlled by 95%. Annual emissions shall be determined from data for the given month plus the previous eleven months.
  - viii. Lime usage by the lime injection system, in pounds per month and tons per year. Annual emissions shall be determined from data for the given month plus the previous eleven months.

- ix. A log of inspections, monitoring, shutdowns, and maintenance of the dry scrubbing system and its individual components including the afterburner, lime injection system, and baghouse.
  - x. The results of any stack test(s) performed on the dry scrubbing system including capture and control.
- b. Operating hours per year.
  - c. Total natural gas usage for the afterburner (ft<sup>3</sup>/month).
  - d. Records addressing use of good operating practices for the dust collector:
    - i. Records for periodic inspection of the bag collector with date, name of individual performing the inspection, and the nature of the inspection.
    - ii. Records of prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

#### 7.4.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected low-e deposition coating process 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.

#### 7.4.11 Operational Flexibility/Anticipated Operating Scenarios

None

#### 7.4.12 Compliance Procedures

- a. Compliance of the affected low-e deposition coating process with the particulate emissions limitations of Conditions 7.4.3(d) and 7.4.6 shall be demonstrated by the inherent operating conditions of the coating process and the recordkeeping requirements in Condition 7.4.9.
- b. Compliance of the affected low-e deposition coating process with the Conditions 7.4.3(b) and (c) and 7.4.6 shall be based on the recordkeeping

requirements in Condition 7.4.9 and the emission factors and formulas listed below:

For VOM/HAPs Emissions:

C = Rate of feed VOM (lb/mo) X (1 - afterburner removal efficiency)

D = A X 1 T/2000 lb X hours per year

Where:

C = VOM Emissions, lb/month

D = VOM emissions, T/yr

E = Rate of chlorides or fluorides, lb/mo x (1 - scrubber removal efficiency)

F = E/2000

Where:

E = Chlorides or Fluoride Emissions, lb/mo

F = Chlorides or Fluoride Emissions, T/yr

- c. Compliance of the afterburner of the affected low-e deposition coating process with condition 5.5.1 shall be determined by the recordkeeping requirements of 7.4.9 and the formulas and emission factors as follows:

Emissions from the afterburner burning natural gas shall be calculated based on the following emission factors:

<u>Pollutant</u>	<u>Emission Factor</u> <u>(lb/Mft<sup>3</sup>)</u>
NO <sub>x</sub>	100
PM	7.6
SO <sub>2</sub>	0.6
VOM	5.5
CO	84

These are the emission factors for uncontrolled natural gas combustion in commercial boilers (< 100 mmBtu/hr), Tables 1.4-1, 1.4-2, and 1.4-3, AP-42, Volume I, Supplement D, July 1998. VOM emission factor based on TOC factor corrected for 52% methane contribution.

Fuel Combustion Unit Emissions (ton) = natural  
gas consumed multiplied by the appropriate  
emission factor/2000.

7.5 Unit 05: Float Glass Annealing Lehr  
Control: None

7.5.1 Description

Float glass is heat treated to remove strains developed during the molding or shaping operations and then subjected to slow, controlled cooling.

7.5.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Unit 05	Float Glass Annealing Lehr: 18 Burners, Max. Firing Rate 10 mmBtu/hr	1992	None

7.5.3 Applicability Provisions and Applicable Regulations

- a. The "affected float glass annealing lehr" for the purpose of these unit-specific conditions, is the unit described in conditions 7.5.1 and 7.5.2.
- b. No person shall cause or allow the emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission unit with actual heat input greater than 2.9 MW (10 mmBtu/hr) to exceed 200 parts per million, corrected to 50 percent excess air [35 IAC 216.121].

7.5.4 Non-Applicability of Regulations of Concern

- a. The affected float glass annealing lehr is not subject to 35 IAC 217.121, Nitrogen Oxides Emissions for New Fuel Combustion Emission Sources, since the affected float glass annealing lehr has a maximum firing rate of 10 mmBtu/hr; rule applicability requires greater than 250 mmBtu/hr.
- b. The affected float glass annealing lehr is not subject to 40 CFR 60, Subpart CC (Standards of Performance for Glass Manufacturing Plants) since the lehr functions as a unit used to remove strains developed during the molding or shaping operations; applicability requires that the unit be classified as a glass melting furnace comprising a refractory vessel in which raw materials are charged, melted at high temperature, refined and conditioned to produce molten glass.

7.5.5 Operational and Production Limits and Work Practices

None

#### 7.5.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected float glass annealing Lehr is subject to the following:

Nitrogen Oxides		Carbon Monoxide		Sulfur Dioxide	
<u>(Lb/Hr)</u>	<u>(Tons/Yr)</u>	<u>(Lb/Hr)</u>	<u>(Tons/Yr)</u>	<u>(Lb/Hr)</u>	<u>(Tons/Yr)</u>
1.0	4.32	0.832	3.65	1.1	4.8

The above limitations contain revisions to previously issued Permit 72120139. 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, CO emissions have been increased to 0.832 lb/hr and 3.65 T/yr and emission limitations for Sulfur Dioxide have been added. [T1R]

#### 7.5.7 Testing Requirements

None

#### 7.5.8 Monitoring Requirements

None

#### 7.5.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected float glass annealing Lehr to demonstrate compliance with condition 5.5.1 and 7.5.6, pursuant to Section 39.5(7)(b) of the Act:

- a. NO<sub>x</sub>, CO, and SO<sub>2</sub> emissions in pounds per month and tons per year.
- b. Total natural gas usage for the burners (ft<sup>3</sup>/month).
- c. Operating hours per year.

7.5.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected float glass annealinglehr 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.

7.5.11 Operational Flexibility/Anticipated Operating Scenarios

None

7.5.12 Compliance Procedures

Compliance of the affected float glass annealinglehr with conditions 5.5.1, and 7.5.6 is demonstrated by the recordkeeping requirements of 7.5.9 and the following formulas and emission factors:

Emissions from the combustion of natural gas 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>
CO	84
PM	7.6
SO <sub>2</sub>	0.6
VOM	5.5
NO <sub>x</sub>	100

These are the emission factors for uncontrolled natural gas combustion in small boilers (<100 mmBtu/hr), Tables 1.4-1 and 1.4-2, AP-42, Volume I, Fifth Edition, July, 1998.

Combustion Emissions (ton) = natural gas consumed multiplied by the appropriate emission factor/2000.

7.6 Unit 06: Gasoline Storage Tank  
Control: None

7.6.1 Description

The facility operates a 250 gallon gasoline storage tank.

7.6.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Unit 06	250 Gallon Gasoline Storage Tank	1975	None

7.6.3 Applicability Provisions and Applicable Regulations

- a. Gasoline tank is an "affected tank" for the purpose of these unit-specific conditions.
- b. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 IAC 215.302, 215.303, or 215.304 and the following exemption: If no odor nuisance exists the limitation of 35 IAC 215 Subpart G shall only apply to photochemically reactive material [35 IAC 215.301].

7.6.4 Non-Applicability of Regulations of Concern

- a. The affected tank is not subject to the NSPS for volatile organic liquid storage vessels (including petroleum liquid storage vessels) for which construction, reconstruction, or modification commenced after July 23, 1984, 40 CFR 60 Subpart Kb; the affected tank was constructed prior to 1984.
- b. The affected tank is not subject to the requirements of 35 IAC 215.123, petroleum liquid storage tanks, pursuant to 35 IAC 215.123(a)(2), which exempts storage tanks with a capacity less than 151.42 m<sup>3</sup>.
- c. The affected tank is not subject to the requirements of 35 IAC 215.122(b) since the rule applies only to tanks with capacities of 250 gallons or greater.

7.6.5 Operational and Production Limits and Work Practices

The affected tank shall only be used for the storage of gasoline.

7.6.6 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.

Emission limits for VOM are not set for the affected tank, as potential to emit in the absence of permit limit is less than the significant and major source thresholds for these pollutants pursuant to Title I of the CAA, specifically the federal rules for the Prevention of Significant Deterioration (PSD), 40 CFR 52.21.

7.6.7 Testing Requirements

None

7.6.8 Monitoring Requirements

None

7.6.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected tank to demonstrate compliance with Conditions 5.5.1, 7.6.3, and 7.6.5, pursuant to Section 39.5(7)(b) of the Act:

- a. The throughput of the affected tank, gal/mo and gal/yr; and
- b. The monthly and aggregate annual VOM emissions from the affected tank based on the material stored, the tank throughput, and the applicable emission factors and formulas with supporting calculations.

7.6.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected 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. The storage of any VOL or VPL other than the material specified in Condition 7.6.5(a) 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.

7.6.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.6.12 Compliance Procedures

Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 7.6.9 and the emission factors and formulas listed below:

For the purpose of estimating VOM emissions from the affected tanks to determine compliance with Conditions 5.5.1 and 7.6.3(c), Versions 3.1 or 4.0 of the TANKS program are 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 July 3, 2003 (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	March 1

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

#### 8.6.2 Test Notifications

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

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

#### 8.6.3 Test Reports

Unless otherwise specified elsewhere in this permit, the results of any test required by this permit shall be

submitted to the Illinois EPA within 60 days of completion of the testing. The test report shall include at a minimum [Section 39.5(7)(e)(i) of the Act]:

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

#### 8.6.4 Reporting Addresses

- a. The following addresses should be utilized for the submittal of reports, notifications, and renewals:
  - i. Illinois EPA - Air Compliance Section  
Illinois Environmental Protection Agency  
Bureau of Air  
Compliance Section (MC 40)  
P.O. Box 19276  
Springfield, Illinois 62794-9276
  - ii. Illinois EPA - Air Regional Field Office  
Illinois Environmental Protection Agency  
Division of Air Pollution Control  
5415 North University  
Peoria, Illinois 61614
  - 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 - Emissions of Particulate Matter from Existing Process Emission Units

- a. Except as further provided in this Part, 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:

Where:

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

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

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lb/hr
A	1.985	4.10
B	0.67	0.67
C	0	0

- 2. For process weight rates in excess of 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/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	T/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

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
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
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 T/hr, and  
E = Allowable emission rate in kg/hr or lb/hr.

10.2 Attachment 2 Emissions of Particulate Matter from New Process Emission Units

10.2.1 Process Emission Units For Which Construction or Modification Commenced On or After April 14, 1972

- a. Except as further provided in this Part, 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,

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

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

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

	Metric	English
P	Mg/hr	T/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	E	P	E
Mg/hr	kg/hr	T/hr	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	5.15
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
3.	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

10.3 Attachment 3 - 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: \_\_\_\_\_

#### 10.4 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>
	I.D. 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. I.D. 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.

### Summary Of Application Contents

24.	Does the application address whether the proposed project would constitute a new major source or major modification under each of the following programs: 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?	<input type="checkbox"/> Yes <input type="checkbox"/> No
25.	Does the application identify and address all applicable emissions standards, including those found in the following: 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?	<input type="checkbox"/> Yes <input type="checkbox"/> No
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?	<input type="checkbox"/> Yes <input type="checkbox"/> No
27.	Does the application include a complete process description for the emission units and control equipment for which a permit is being sought?	<input type="checkbox"/> Yes <input type="checkbox"/> No
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.	<input type="checkbox"/> Yes <input type="checkbox"/> No
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?	<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.

### Signature Block

This certification must be signed by a responsible official. Applications without a signed certification will be returned as incomplete.	
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:  BY: _____ <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;">             _____  <small>AUTHORIZED SIGNATURE</small> </div> <div style="text-align: center;">             _____  <small>TITLE OF SIGNATORY</small> </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;">             _____  <small>TYPED OR PRINTED NAME OF SIGNATORY</small> </div> <div style="text-align: center;">             _____ / _____ / _____  <small>DATE</small> </div> </div>

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

SIS:psj

10.7 Attachment 7 - EVALUATION OF THE CHANGE IN EMISSIONS FROM CONSTRUCTION  
 PERMIT\_07030023 FOR UNIT 7.2 GLASS FURNACE MODIFICATOIN PROJECT

Table 1: Past Actual Emissions of the Glass Furnace  
 Highest two year average.

Past Actual Emissions (Tons)	
Time Period	NO <sub>x</sub> Losses
February 1999 - January 2001	610 TPY

Table 2: Future Projected Emissions of the Glass Furnace

Future Annual Emissions (Tons)	
NO <sub>x</sub>	649

Table 3: Change in Emissions

Time Period	Annual Emissions (Tons)
Future	649.0
Past	610.0
Change	39.0
PSD Sign.	40.0

SIS:psj

10.8 Attachment 8 - Past Actual Emissions (Tons/Year)

Based on 24 Months of Continues Operation  
February 1999 - January 2001

Pollutant	Baseline Actual Emissions	Projected Actual Emissions	Net Emissions Increase
NOx	610	648	38
SO2	295	318	23
VOM	9	10	1
CO	9	17	8
H2SO4	47	51	4
PM	109	118	9
PM10	104	112	8

SIS:psj