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1.0 SOURCE IDENTIFICATION

1.1 Source

Owens-Brockway Glass Container, Inc.  
901 North Shabbona Street  
Streator, Illinois 61364  
815/673-5150

I.D. No.: 099490AAD  
Standard Industrial Classification: 3221, Glass Container  
Manufacturing Facility

1.2 Owner/Parent Company

One SeaGate  
901 North Shabbona Street  
Toledo, Ohio 43666

1.3 Operator

Owens-Brockway Glass Container, Inc.  
901 North Shabbona Street  
Streator, Illinois 61364

H. Wiechman, Source Environmental Contact Person  
815/673-5150

1.4 General Source Description

Owens-Brockway Glass Container, Inc. is located at 901 North Shabbona Street, Streator. Raw materials used at the Owens-Brockway Streator facility include sand, soda ash, lime, syenite, salt cake, slag, salt oxides, sodium and trace amounts of various metallic oxides added to change the color of the glass. Raw materials are received in packages or in bulk, and are stored in separate elevated bins in the Raw Material Elevator System. In addition to bulk raw materials, certain minor constituents are stored in their original containers until they are mixed with the batch. All equipment used in handling and preparing the raw material is housed separately from the furnace and is referred to as the batch plant. Before they are fed into the melting unit, the raw materials are mixed according to the desired product recipe in the A and B Line Batch System. The materials are transferred to the batch systems through a gravity feed system. The batch system includes a weigher and mixer, where the material is mixed with cullet to ensure homogeneous melting. The mixture is conveyed to a batch storage bin where it is held prior to being dropped into the feeder to the melting furnace by the I, H and J batch elevator systems.

Raw materials are heated at high temperature to enable conversion to glass in the H, I, J and K furnaces. The furnace has three purposes in the glass making process: to bring raw materials together to react; to hold the molten glass until it is free of bubbles and inclusions; and to condition the glass for forming in the Refiners. Although day pots and day tanks are used to melt glass, most glass tonnage is melted in larger capacity, continuously operating regenerative furnaces. Regenerative furnaces use two refractory chambers called checkerworks in the following manner: At any one time, while combustion flue gases heat the refractory in one checker work chamber, the other checkerwork preheats combustion air; the, after intervals ranging from 10 to 30 minutes, the gas flow is diverted so that combustion air is drawn through the chamber previously heated by flue gases, and flue gases heat the refractory in the other chamber previously used to preheat combustion air.

After refining, the molten glass leaves the furnace through forehearths and is shaped to the desired product. The molten glass is drawn quickly from the furnace and worked in Bottle forming machines. This formed glass undergoes hot end Surface Treatment and is immediately conveyed to continuous annealing ovens called Lehrs, where controlled cooling is used to remove internal stresses in the glass. The final product is then either inspected, packaged and shipped or sent for further finishing such as tempering or decorating. The Corrugated system is used for recovery of scrap paperboard from the facility.

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
cu. ft	Cubic feet
ERMS	Emissions Reduction Market System
g	gram
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
lbs	pounds
Mg	megagram
mmBtu	Million British thermal units
MW	Megawatt
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

VOM	Volatile Organic Material
VMT	Vehicle miles traveled
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:

Surface Treatment of Bottles  
Refiners (3)  
Forehearths (6)  
Lehrs (6)

- 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:

Small Mineral Spirits Parts Cleaner

- 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)].

Coating operations (excluding powder, architectural and industrial maintenance coating) with aggregate VOM usage that never exceeds 15 lbs/day from all coating lines at the source, including VOM from coating, dilutents, and cleaning materials [35 IAC 201.210(a)(13)].

Printing operations with aggregate organic solvent usage that never exceeds 750 gallons per year from all printing lines at the source, including organic solvent from inks, dilutents, fountain solutions, and cleaning materials [35 IAC 201.210(a)(14)].

- 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/ Modified	Emission Control Equipment
01	Process Emission Source:		
	Raw Material Elevator System:	1/73	Bag House 1, 4, 7, 5, 6, 3, 10, 8, 15
	A Line Batch System	1/73	Bag House 2
	B Line Batch System	1/73	Bag House 9
	Color Room Weight Scales	1/73	Bag house 11
	I Batch Elevator System	1/73	Bag House 12
	H Batch Elevator System	1/73	Baghouse 13
J Batch Elevator System	1/73	Baghouse 14	
02	Furnace I (NSPS Source)	1/73 10/99*	None
03	Furnace H (NSPS Source)	1/73 2/01*	None
04	Bottle Forming Machines	1973	None
05	Surface Treatment	1/73	Baghouse
06	Corrugated System	3/73	Baghouses (2)
07	Fugitive Emissions - Unpaved Roads	73	None
08	Furnace J	7/73	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 PM, NO<sub>x</sub>, and SO<sub>2</sub> emissions.

5.1.2 This permit is issued based on the source not being a major source of HAPs.

### 5.2 Applicable Regulations

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

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

- a. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.

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

- b. No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, pursuant to 35 IAC 212.123(a), except as allowed by 35 IAC 212.123(b) and 212.124.

#### 5.2.4 Ozone Depleting Substances

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

- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

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

#### 5.2.5 Risk Management Plan

Should this stationary source, as defined in 40 CFR Section 68.3, become subject to the Accidental Release Prevention regulations in 40 CFR Part 68, then the owner or operator shall submit [40 CFR 68.215(a)(2)(i) and (ii)]:

- a. A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR 68.10(a); or
- b. A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan (RMP), as part of the annual compliance certification required by 40 CFR Part 70 or 71.

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

#### 5.2.7 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.

#### 5.2.9 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)	43.15
Sulfur Dioxide (SO <sub>2</sub> )	606.30
Particulate Matter (PM)	310.62
Nitrogen Oxides (NO <sub>x</sub> )	1,114.75
HAP, not included in VOM or PM	-----
Total	2,074.82

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.

### 5.6.5 Records for Operating Scenarios

N/A

### 5.6.6 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 Source (Raw Material Handling)

7.1.1 Description

The Process Emission Source consists of the following:

Raw Material Elevator System:

Receiving and storage of raw material.

A and B Line Batch System:

Mixing of raw materials to desired recipe.

Color Room Weight Scales:

Weighing of raw materials

I Batch Elevator System:

Transporting of raw materials to the I furnace.

H Batch Elevator System:

Transporting of raw materials to the H furnace.

J Batch Elevator System:

Transporting of raw materials to the J furnace.

7.1.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
01: Process Emission Source (Raw Material Handling)	Raw Material Elevator System:	1/73	Bag House 1, 4, 7, 5, 6, 3, 10, 8, 15
	A Line Batch System	1/73	Bag House 2
	B Line Batch System	1/73	Bag House 9
	Color Room Weight Scales	1/73	Bag house 11
	I Batch Elevator System	1/73	Bag House 12
	H Batch Elevator System	1/73	Baghouse 13
	J Batch Elevator System	1/73	Baghouse 14

7.1.3 Applicability Provisions and Applicable Regulations

- a. The "affected Process Emission Source" for the purpose of these unit-specific conditions, is the unit described in conditions 7.1.1 and 7.1.2.
- b. The affected Process Emission Source is subject to the emission limits identified in Condition 5.2.2.
- c. The units that make up the affected Process Emission Source are 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 1) [35 IAC 212.321(a)]

7.1.4 Non-Applicability of Regulations of Concern

N/A

7.1.5 Operational and Production Limits and Work Practices

The Permittee shall operate, and maintain the bag collectors, including periodic inspection, routine maintenance and prompt repair of defects, if any, that assures compliance with the conditions of this section.

7.1.6 Emission Limitations

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

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

7.1.7 Operating Requirements

The owner or operator shall follow good operating practices for the bag filters including periodic inspection, routine maintenance, repair of defects and visual emission checks.

7.1.8 Inspection Requirements

None

7.1.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected process emission source to demonstrate compliance with 5.5.1, 7.1.3©, and 7.1.6, pursuant to Section 39.5(7)(b) of the Act:

- a. Operating rate for each unit of the affected process emission source.
- b. Records addressing use of good operating practices for the bag 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.

7.1.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected Process Emission Sources 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

N/A

7.1.12 Compliance Procedures

Compliance of the affected Process Emission Sources with Condition 7.1.3(b) shall be based on the recordkeeping requirements of 7.1.9 and by the use of the formula listed below:

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

For G-Batch:

$$E = R \times EF$$

Where:

E = Emission estimate

R = Operating rate

EF = Emission factor (see table below)

C = Control device efficiency (99 % each, per Title V application)

Emission Factors per Title V permit Application

Raw Material Elevator System: Part = 2.0 lb/Ton

A Line Batch System: Part = 0.6 lb/Ton

B line Batch System: Part = 0.6 lb/Ton

Color Room Weight Scales: Part = 0.4 lb/Ton

I Batch Elevator System: Part = 0.4 lb/Ton

H Batch Elevator System: Part = 0.4 lb/Ton

J Batch Elevator System: Part = 0.4 lb/Ton

7.2 Unit 02: Furnace I (NSPS Source)  
 Controls: None

7.2.1 Description

Furnace used to melt raw materials, or "batch". Natural gas is the fuel used in the furnace burners. The furnace is fed by the elevator system. The furnace has a refiner in which the molten glass is heat conditioned for delivery to the forming process. The furnace has foreheaths which transport the refined glass to the forming process. Since the foreheaths and the refiners are vented separately they are treated as separate sources.

7.2.2 List of Emission Units and Pollution Control Equipment

Unit	Description	Date Constructed/ Modified	Controls
02: Glass Melting Furnace I (NSPS Source)	Melts Required Raw Material for Glass Production	7/73 10/99*	None

\* This modification will not represent a major modification as defined by 40 CFR 52.21.

7.2.3 Applicability Provisions and Applicable Regulations

- a. An "affected glass melting furnace" for the purpose of these unit-specific conditions, is each piece of equipment as described in Conditions 7.2.1 and 7.2.2 unless otherwise stated in the following conditions as unit specific.
- b. The affected glass melting furnace is subject to 35 IAC 212.321(a), which provides that no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321, [35 IAC 212.321(a)].
  - i. The emissions of particulate matter into the atmosphere in any one hour period from the affected glass melting furnace shall not exceed the allowable emission rates specified in the following equation

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

Where:

P = Process weight rate

E = Allowable emission rate

- A. For process weight rates up to 408 MG/hr (450 T/hr):

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

- B. For process weight rates in excess of 408 MG/hr (450 T/hr):

	<u>Metric</u>	<u>English</u>
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.160	0.16

Where:

P = Process weight rate in metric or English tons per hour, and

E = Allowable emission rate in kilograms or pounds per hour.

[35 IAC 212.321]

- c. The affected glass melting furnace is subject to a New Source Performance Standard (NSPS) for glass manufacturing plants, 40 CFR 60, Subparts A and CC, since the affected furnace was modified in 1999; according to the regulation any facility that meets the requirements of paragraph (a) of 40 CFR 60.290, Subpart CC and that commences construction or modification after June 15, 1979, is subject to the requirements of this subpart.
- d. On and after the date on which the performance test required to be conducted by Section 60.8 is completed, no owner or operator of a glass melting furnace with modified-processes subject to the provisions of this subpart shall cause to be discharged into the atmosphere from the affected facility:

- i. Particulate matter at emission rates exceeding 0.5 gram of particulate per kilogram of glass produced (g/kg) as measured according to paragraph (e) of this section for container glass, flat glass, and pressed and blown glass with a soda-lime recipe melting furnaces. [40 CFR 60.293(b)]
- e. An owner or operator may redetermine the opacity value corresponding to the 99 percent upper confidence level as described in paragraph (c)(4) of this section if the owner or operator:
  - i. Conducts continuous opacity monitoring during each test run of a performance test that demonstrates compliance with an emission limit of Condition 7.2.3(d).
  - ii. Recalculates the 6-minute opacity averages as described in condition 7.2.7.
  - iii. Uses the redetermined opacity value corresponding to the 99 percent upper confidence level for the purposes of condition 7.2.7. [40 CFR 60.293]

7.2.4 Non-Applicability of Regulations of Concern

N/A

7.2.5 Operational and Production Limits and Work Practices

- a. The affected glass melting furnaces shall not exceed the following material throughput limits:

Affected Equipment	Product	Process Weight Rate (Tons/Hr)	Production (Tons/Day)	Production (Tons/Yr)
Glass Melting Furnace I	Glass Containers	14.1	310	108,500

7.2.6 Emission Limitations

- a. Emissions from the affected glass melting furnace shall not exceed the following limits:

Glass Melting Furnace I	Emissions (Lb/Hour)	Emissions (Tons/Year)
PM	10.3	43.3
CO	2.42	10.6
NO <sub>x</sub>	68.37	287.2
SO <sub>2</sub>	39.99	168.0
VOM	2.42	10.6

These limits are based on the usage limits in Condition 7.2.5, 8400 operating hours per year and emission factors as listed in condition 7.2.12. [T1]

- b. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total). [T1]
- c. The source has addressed the applicability and compliance of 40 CFR 52.21, PSD (See Attachment 2). These limits continue to ensure that the construction and/or modification addressed in Construction Permit 99100020 does not constitute a new major source or major modification pursuant to these rules. [T1]

7.2.7 Testing Requirements

- a. Upon reasonable request by the Illinois EPA the emissions concentration(s), as listed below, in the effluent stream of the affected glass melting furnace shall be measured by an approved testing service.
- b. The following methods and procedures shall be used for testing of emissions. Refer to 40 CFR 60, Appendix A for USEPA test methods.

Location of Sample Points	USEPA Method 1
Gas Flow and Velocity	USEPA Method 2
Flue Gas Weight	USEPA Method 3
Moisture	USEPA Method 4
Particulate Matter	USEPA Method 5
Sulfur Dioxide	USEPA Method 6
Nitrogen Oxides	USEPA Method 7
Opacity	USEPA Method 9

- c. During the performance test required to be conducted by Section 60.8, the following operating parameters shall be monitored and recorded:
  - i. Continuous opacity monitoring shall be conducted during each test run.
  - ii. Pull rate (tons/day).
  - iii. Percent cullet.
  - iv. Electric boost (kW/hr).
  - v. Natural gas usage (cu. ft./hr).
- d. At least thirty (30) days prior to the actual date of testing, a written test plan shall be submitted to the Illinois EPA for review and approval. This plan shall describe the specific procedures for testing including as a minimum:

- i. The person(s) who will be performing sampling and analysis and their experience with similar tests.
- ii. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of the maximum emissions, the levels of operating parameters at or within which compliance is intended to be shown, if applicable, and the means by which the operating parameters for the process and any control equipment will be determined.
- iii. The specific determination of emissions and operations which are intended to be made, including sampling and monitoring locations.
- iv. The test methods which will be used, with the specific analysis method.
- v. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification.
- vi. Any proposed use of an alternative test method, with detailed justification.
- vii. The format and content of the Source Test Report prior to carrying out these test, the Illinois EPA shall be notified a minimum of thirty (30) days prior to the scheduled date of these tests with the exact date, time, and place of these tests, to enable the Illinois EPA to witness these tests.

If the scheduled date for the test is changed for unforeseen reasons, the Permittee shall inform the Illinois EPA within five (5) working days of the scheduled test date and must specify the date of the rescheduled test.

A copy of the Final Reports for these tests and compliance status shall be submitted to the Illinois EPA within fourteen (14) days after the test results are compiled and finalized, prior to or accompanying the operating permit application. Satisfactory completion of these tests and compliance with the limitations of this permit shall be prerequisite to the issuance of an operating permit.

viii. A statement that the testing will be performed by a qualified independent testing service.

7.2.8 Monitoring Requirements

The owner or operator of an affected glass melting furnace shall install, calibrate, maintain, and operate a continuous monitoring system for the measurement of the opacity of emissions discharged into the atmosphere. [40 CFR 60.293(c)(1)]

7.2.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items for each affected glass melting furnace to demonstrate compliance with Conditions 7.2.3, 7.2.5, and 7.2.6, pursuant to Section 39.5(7)(b) of the Act:

- a. Glass Production (tons/day and tons/year).
- b. Emissions of: PM, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, and VOM (lb/hour and tons/year).
- c. Operating hours (monthly and yearly).

7.2.10 Reporting Requirements

- a. The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance of an affected glass melting furnace with the permit requirements, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken
- b. For the purposes of Section 60.7, report to the Administrator as excess emissions all of the 6-minute periods during which the average opacity, as measured by the continuous monitoring system exceeds the opacity value corresponding to the 99 percent upper confidence level as determined in condition 7.2.3(e)(iii). [40 CFR 60.293(c)(5)]

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

None

7.2.12 Compliance Procedures

Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 7.2.9 and the emission factors and formulas listed below:

- a. To determine compliance with Condition 7.2.6, emissions from the affected glass melting furnace shall be calculated based on the following emission factors:

Pollutant	(Lb/Ton)
PM	0.8
SO <sub>2</sub>	3.1
NO <sub>x</sub>	5.3
VOM	0.2
CO	0.2

Emissions shall be calculated using the following equation: Throughput x Emission Factor = Emissions

7.3 Unit 03: Furnace H (NSPS Source)  
 Controls: None

7.3.1 Description

Furnace used to melt raw materials, or "batch". Natural gas is the fuel used in the furnace burners. The furnace is fed by the elevator system. The furnace has a refiner in which the molten glass is heat conditioned for delivery to the forming process. The furnace has foreheaths which transport the refined glass to the forming process. Since the forehearths and the refiners are vented separately they are treated as separate sources.

7.3.2 List of Emission Units and Pollution Control Equipment

Unit	Description	Date Constructed/ Modified	Control
03: Glass Melting Furnace H (NSPS Source)	Melts Required Raw Material for Glass Production	7/73 2/01*	None

\* This modification will not represent a major modification as defined by 40 CFR 52.21.

7.3.3 Applicability Provisions and Applicable Regulations

- a. An "affected glass melting furnace" for the purpose of these unit-specific conditions, is each piece of equipment as described in Conditions 7.3.1 and 7.3.2 unless otherwise stated in the following conditions as unit specific.
- b. The affected glass melting furnace is subject to a New Source Performance Standard (NSPS) for glass manufacturing plants, 40 CFR 60, Subparts A and CC, since the affected furnace was modified in 2001; according to the regulation, any facility which meets requirements of paragraph (a) of 40 CFR 60.290, Subpart CC and that commences construction or modification after June 15, 1979, is subject to the requirements of this subpart.
- c. The affected glass melting furnace is subject to 35 IAC 212.321(a), which provides that no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321, [35 IAC 212.321(a)].

- i. The emissions of particulate matter into the atmosphere in any one hour period from the affected glass melting furnace shall not exceed the allowable emission rates specified in the following equation:

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

Where:

P = Process weight rate  
 E = Allowable emission rate

- A. For process weight rates up to 408 MG/hr (450 T/hr):

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

- B. For process weight rates in excess of 408 MG/hr (450 T/hr):

	<u>Metric</u>	<u>English</u>
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

Where:

P = Process weight rate in metric or English tons per hour, and

E = Allowable emission rate in kilograms or pounds per hour.

[35 IAC 212.321]

- d. An owner or operator may redetermine the opacity value corresponding to the 99 percent upper confidence level as described in paragraph (c)(4) of this section if the owner or operator:
  - i. Conducts continuous opacity monitoring during each test run of a performance test that demonstrates compliance with an emission limit of Condition 7.3.3(e).
  - ii. Recalculates the 6-minute opacity averages as described in condition 7.3.7.

- iii. Uses the redetermined opacity value corresponding to the 99 percent upper confidence level for the purposes of condition 7.3.7. [40 CFR 60.293]

7.3.4 Non-Applicability of Regulations of Concern

N/A

7.3.5 Operational and Production Limits and Work Practices

- a. The affected glass melting furnaces shall not exceed the following material throughput limits:

Affected Equipment	Product	Process Weight Rate (Tons/Hr)	Production (Tons/day)	Production (Tons/Yr)
Glass Melting Furnace H	Glass Containers	14	290	105,850

7.3.6 Emission Limitations

- a. Emissions from the affected glass melting furnace shall not exceed the following limits:

Glass Melting Furnace H	Emissions (Lb/Hour)	Emissions (Tons/Year)
PM	10.4	45.5
CO	2.4	10.5
NO <sub>x</sub>	53.5	234.5
SO <sub>2</sub>	42.9	187.9
VOM	2.4	10.5

These limits are based on the usage limits in Condition 2.5, 8760 operating hours per year and emission factors as listed in condition 7.3.12.

- b. 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).
- c. The source has addressed the applicability and compliance of 40 CFR 52.21, PSD. These limits continue to ensure that the replacement of the existing electric boost transformer with two new transformers addressed in Construction Permit 01020067 does not constitute a new major source or major modification pursuant to these rules. [T1]

7.3.7 Testing Requirements

- a. Upon reasonable request by the Illinois EPA the emissions concentration(s), as listed below, in the effluent stream of the affected glass melting furnace shall be measured by an approved testing service.
- b. The following methods and procedures shall be used for testing of emissions. Refer to 40 CFR 60, Appendix A for USEPA test methods.

Location of Sample Points	USEPA Method 1
Gas Flow and Velocity	USEPA Method 2
Flue Gas Weight	USEPA Method 3
Moisture	USEPA Method 4
Particulate Matter	USEPA Method 5
Sulfur Dioxide	USEPA Method 6
Nitrogen Oxides	USEPA Method 7
Opacity	USEPA Method 9

- c. During the performance test required to be conducted by Section 60.8, the following operating parameters shall be monitored and recorded:
  - i. Continuous opacity monitoring shall be conducted during each test run.
  - ii. Pull rate (tons/day).
  - iii. Percent cullet.
  - iv. Electric boost (kW/hr).
  - v. Natural gas usage (cu. ft./hr).
- d. At least thirty (30) days prior to the actual date of testing, a written test plan shall be submitted to the Illinois EPA for review and approval. This plan shall describe the specific procedures for testing including as a minimum:
  - i. The person(s) who will be performing sampling and analysis and their experience with similar tests.
  - ii. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of the maximum emissions, the levels of operating parameters at or within which compliance is intended to be shown, if applicable, and the means by which the operating parameters for the process and any control equipment will be determined.

- iii. The specific determination of emissions and operations which are intended to be made, including sampling and monitoring locations.
- iv. The test methods which will be used, with the specific analysis method.
- v. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification.
- vi. Any proposed use of an alternative test method, with detailed justification.
- vii. The format and content of the Source Test Report prior to carrying out these test, the Illinois EPA shall be notified a minimum of thirty (30) days prior to the scheduled date of these tests with the exact date, time, and place of these tests, to enable the Illinois EPA to witness these tests.

If the scheduled date for the test is changed for unforeseen reasons, the Permittee shall inform the Illinois EPA within five (5) working days of the scheduled test date and must specify the date of the rescheduled test.

A copy of the Final Reports for these tests and compliance status shall be submitted to the Illinois EPA within fourteen (14) days after the test results are compiled and finalized, prior to or accompanying the operating permit application. Satisfactory completion of these tests and compliance with the limitations of this permit shall be prerequisite to the issuance of an operating permit.

- viii. A statement that the testing will be performed by a qualified independent testing service.

#### 7.3.8 Monitoring Requirements

The owner or operator of an affected glass melting furnace shall install, calibrate, maintain, and operate a continuous monitoring system for the measurement of the opacity of emissions discharged into the atmosphere. [40 CFR 60.293(c)(1)]

7.3.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items for each affected glass melting furnace to demonstrate compliance with Conditions 7.3.3, 7.3.5, and 7.3.6, pursuant to Section 39.5(7)(b) of the Act:

- a. Glass Production (tons/day and tons/year).
- b. Emissions of: PM, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, and VOM (lb/hour and tons/year).
- c. Operating hours (monthly and yearly).
- d. Natural gas usage (cu. ft./hr).

7.3.10 Reporting Requirements

- a. The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance of an affected glass melting furnace with the permit requirements, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken
- b. For the purposes of Section 60.7, report to the Administrator as excess emissions all of the 6-minute periods during which the average opacity, as measured by the continuous monitoring system exceeds the opacity value corresponding to the 99 percent upper confidence level as determined in condition 7.3.3(e)(iii). [40 CFR 60.293(c)(5)]

7.3.11 Operational Flexibility/Anticipated Operating Scenarios

None

7.3.12 Compliance Procedures

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

- a. To determine compliance with Condition 7.3.6, emissions from the affected glass melting furnace shall be calculated based on the following emission factors:

Pollutant	(Lb/Ton)
PM	0.86
SO <sub>2</sub>	3.55
NO <sub>x</sub>	4.43
VOM	0.2
CO	0.2

Emissions shall be calculated using the following equation: Throughput x Emission Factor x = Emissions

7.4 Unit 04: Bottle Forming Machines  
Controls: None

7.4.1 Description

Six Bottle forming mold lines shape the refined glass. The glass is sheared and gobbled and placed in a prepared mold. Preparation of the molds is a continual process consisting of mold repair (which may include welding), cleaning, lubricating, curing and heating the mold. Cleaning occurs in mold burn-out ovens and grit blasters. Solid film lubricant is applied in the mold coating spray booth and is cured in the mold curing ovens. The mold temperature is then increased in the mold burn-out ovens, mold curing ovens, mold heat ovens and quick fire ovens. Mold swabbing with a graphite/oil solution is performed periodically as part of the continual mold maintenance process.

7.4.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
04	Bottle Forming Machines (6)	1973	None

7.4.3 Applicability Provisions and Applicable Regulations

- a. The "affected bottle forming machines" for the purpose of these unit-specific conditions, are the units described in conditions 7.4.1 and 7.4.2.
- b. The affected bottle forming machines are subject to the emission limits identified in Condition 5.2.2.
- c. The affected bottle forming machines are subject to 35 IAC 215.301, which provides that 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 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 to photochemically reactive material. [35 IAC 215.301]
- d. The affected bottle forming machines are subject to 35 IAC 212.321(a), which provides that no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on

or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321, [35 IAC 212.321(a)].

7.4.4 Non-Applicability of Regulations of Concern

N/A

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 bottle forming machines are subject to the following:

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

7.4.7 Operating Requirements

None

7.4.8 Inspection Requirements

None

7.4.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the bottle forming machines 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. Gobb Delivery system oils, gal/mo;
- b. Swabbing materials, lb/mo;
- c. Shear spray, gal/mo; and
- d. Molten glass, tons/mo.

7.4.10 Reporting Requirements

The Permittee shall notify the Illinois EPA Compliance Section of noncompliance of the affected unit with the permit requirements within 30 days of the violation 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

N/A

7.4.12 Compliance Procedures

Compliance with the emission limits of this section shall be based on the recordkeeping requirements in Condition 7.4.9 and the use of material balance to determine VOM emissions from the affected glass forming machines.

Compliance with 7.4.3© shall be based on the recordkeeping requirements of 7.4.9 and use of the following formulas and emission factors as provided in the Title V permit application:

$$\text{Emissions (lb)} = (\text{Emission factor, lb Part/material used}) \times (\text{quantity of material used})$$

Emission Factors

Gob Delivery System Oils	1.0 lb pm/Gal Used
Swabbing Materials	1.0 lb pm/Lb Used
Shear Spray System Materials	0.1 lb pm/Gal Used

7.5 Unit 05: Surface Treatment  
Controls: Baghouse

7.5.1 Description

Molded glass is treated in the hot end surface treatment (HEST) process. Tin Tetrachloride and Butyltin trichloride is applied. The HEST units vent through an abatement system where injected ammonia enhances the collection of tin which is not incorporated into the surface glass during the HEST process. The injected ammonia acts as a reactant to convert the tin tetrachloride vapors into particulates which are collected by a baghouse and shipped offsite for recycling. Slightly excess ammonia is used to provide adequate reaction conditions; unreacted ammonia vents with the baghouse exhaust.

7.5.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
05	Surface Treatment	1973	Baghouse

7.5.3 Applicability Provisions and Applicable Regulations

- a. The "affected surface treatment" for the purpose of these unit-specific conditions, is the units described in conditions 7.5.1 and 7.5.2.
- b. The affected surface treatment is subject to the emission limits identified in Condition 5.2.2.
- c. The affected surface treatment 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 1) [35 IAC 212.321(a)]

7.5.4 Non-Applicability of Regulations of Concern

N/A

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 surface treatment are subject to the following:

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

7.5.7 Operating Requirements

The owner or operator shall follow good operating practices for the bag filters including periodic inspection, routine maintenance, repair of defects and visual emission checks.

7.5.8 Inspection 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 surface treatment to demonstrate compliance with conditions 5.5.1, 7.5.3 (b) and (c), pursuant to Section 39.5(7)(b) of the Act:

- a. Stannic Chloride usage, lb/mo
- b. Butyltin trichloride usage, lb/mo

7.5.10 Reporting Requirements

The Permittee shall notify the Illinois EPA Compliance Section of noncompliance of the affected unit with the permit requirements within 30 days of the violation 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

N/A

#### 7.5.12 Compliance Procedures

Compliance with condition 7.5.3© shall be based on the recordkeeping requirements in Condition 7.5.9 and the use of following formula:

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

Where:

E = Emission estimate

R = Operating rate, ton

EF = 1.5 lb/lb Stannic Chloride or 1.2 lb/lb butyltin trichloride

C = Control device efficiency (99 % each, per Title V application)

7.6 Unit 06: Corrugated System  
Control: Baghouse

7.6.1 Description

The corrugated system is a scrap recovery system. It comprises of a shredder, baler, cyclone and tow baghouses. It is used for separation and recovery of paperboard scrap material. Scrap corrugated material is fed into the shredder. A blower is used to transport the shredded material to the baler. Two 'After Filter' baghouse units are employed to control emissions from the corrugated cyclone which is used to separate and recover corrugated trim and scrap. The recovered scrap is sold to a paperboard recycler.

7.6.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
07	Corrugated System	3/73	Baghouses (2)

7.6.3 Applicability Provisions and Applicable Regulations

- a. The "affected Corrugated System" for the purpose of these unit-specific conditions, is the unit described in 7.6.1 and 7.6.2.
- b. The affected Corrugated System is subject to the emission limits identified in Condition 5.2.2.
- c. The affected Corrugated System 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 1) [35 IAC 212.321(a)]

7.6.4 Non-Applicability of Regulations of Concern

N/A

7.6.5 Operational and Production Limits and Work Practices

None

7.6.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the Corrugated System are subject to the following:

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

7.6.7 Operating Requirements

The owner or operator shall follow good operating practices for the bag filters including periodic inspection, routine maintenance, repair of defects and visual emission checks.

7.6.8 Inspection 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 corrugated system to demonstrate compliance with conditions 5.5.1, 7.6.3 (b) and (c), pursuant to Section 39.5(7)(b) of the Act:

Materials processed, ton/mo

7.6.10 Reporting Requirements

The Permittee shall notify the Illinois EPA Compliance Section of noncompliance of the affected corrugated system with the permit requirements within 30 days of the violation 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.

7.6.11 Operational Flexibility/Anticipated Operating Scenarios

None

7.6.12 Compliance of the affected corrugated system with Condition 7.6.3(b) and (c) shall be based on the recordkeeping requirements of 7.6.9 and by the use of the formula listed below:

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

Where:

E = Emission estimate

R = Operating rate, ton

EF = 2.4 lb/ton (per Title V permit application)

C = Control device efficiency (99 % each, per Title V application)

7.7 Unit 07: Fugitive Emissions

7.7.1 Description

Moving vehicles create particulate matter (road dust) emissions on 0.50 miles of unpaved roadways.

7.7.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description
07	Unpaved Roads

7.7.3 Applicability Provisions and Applicable Regulations

Refer to the source-wide conditions in Section 5 which address opacity requirements.

7.7.4 Non-Applicability of Regulations of Concern

N/A

7.7.5 Control Requirements

None

7.7.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, Unit 07 is subject to the following:

None

7.7.7 Testing Requirements

- a. 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 the 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].
- b. Upon reasonable request by the Illinois EPA, pursuant to Section 39.5(7)(d) of the Act, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR part 60, Appendix A, except that for roadways and parking areas the number of readings required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at

the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged. This test method shall be used to determine compliance with 35 IAC 212.301 [35 IAC 212.109].

7.7.8 Inspection Requirements

N/A

7.7.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items to demonstrate compliance with Conditions 5.5.1 and this section pursuant to Section 39.5(7)(b) of the Act:

For Unpaved Roads:

- a. E = Particulate emission factor (lb/VMT)
- b. k = Particle size multiplier (dimensionless)
- c. s = Silt content of road surface material (%)
- d. S = Mean vehicle speed (miles/hour)
- e. w = Mean number of wheels
- f. p = Number of days with at least 0.01 inch of precipitation per year
- g. VMT = Vehicle miles traveled (VMT/yr)
- h. Particulate matter emissions from unpaved roads (ton/yr)

Records for fugitive road dust shall be calculated on an annual basis, except this calculation shall be updated if substantial changes to the roads occur, i.e. additional roads added.

7.7.10 Reporting Requirements

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

7.7.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.7.12 Compliance Procedures

Compliance with the emission limits of section 5 shall be based on the recordkeeping and reporting requirements in this section and the emission factors and methods listed below:

Emissions from unpaved roads shall be calculated based on the following emission factors and formulas:

$$E = k(5.9) [s/12] [S/30] [W/3]^{0.7} [w/4]^{0.5} [(365-p)/365]$$

E is based upon the emission factor for PM from unpaved roads from Section 13.2.2 AP-42, Volume I, January, 1995.

PM emissions from unpaved roads = VMT x E

Conversion factors used: 2000 lb/ton

7.8 Unit 08: Furnace J  
 Controls: None

7.8.1 Description

Furnace used to melt raw materials, or "batch". Natural gas is the fuel used in the furnace burners. The furnace is fed by the elevator system. The furnace has a refiner in which the molten glass is heat conditioned for delivery to the forming process. The furnace has forehearths which transport the refined glass to the forming process. Since the forehearths and the refiners are vented separately they are treated as separate sources.

7.8.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Date Constructed/Modified	Control
Unit 08: Glass Melting Furnace J	Melts Required Raw Material for Glass Production	7/73	None

7.8.3 Applicability Provisions and Applicable Regulations

- a. An "affected glass melting furnace" for the purpose of these unit-specific conditions, is the unit as described in Conditions 7.8.1 and 7.8.2.
- b. The affected glass melting furnaces are subject to 35 IAC 212.321(a), which provides that no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321, [35 IAC 212.321(a)].
  - i. The emissions of particulate matter into the atmosphere in any one hour period from the affected glass melting furnace shall not exceed the allowable emission rates specified in the following equation

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

Where:

P = Process weight rate  
 E = Allowable emission rate

1. For process weight rates up to 408 MG/hr (450 T/hr):

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

2. For process weight rates in excess of 408 MG/hr (450 T/hr):

	<u>Metric</u>	<u>English</u>
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

Where:

P = Process weight rate in metric or English tons per hour, and

E = Allowable emission rate in kilograms or pounds per hour.

[35 IAC 212.321]

7.8.4 Non-Applicability of Regulations of Concern

N/A

7.8.5 Operational and Production Limits and Work Practices

Natural Gas shall be the only fuel combusted in the affected glass melting furnace.

7.8.6 Emission Limitations

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

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

7.8.7 Testing Requirements

None

7.8.8 Monitoring Requirements

None

7.8.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items for each affected glass melting furnace to demonstrate compliance with Conditions 7.8.3, and 7.8.6, pursuant to Section 39.5(7)(b) of the Act:

- a. Glass Production (tons/day and tons/year).
- b. Emissions of: PM, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, and VOM (lb/hour and tons/year).

7.8.10 Reporting Requirements

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

7.8.11 Operational Flexibility/Anticipated Operating Scenarios

None

7.8.12 Compliance Procedures

Compliance with emission limits for the affected glass melting furnaces shall be based on the recordkeeping requirements in Condition 7.8.6 and the following emission factors from AP 42, Section 11.15 (Glass Manufacturing), Melting furnace (uncontrolled):

Pollutant	(Lb/Ton)
PM	1.4
SO <sub>2</sub>	3.4
NO <sub>x</sub>	6.2
VOM	0.2
CO	0.2

Emissions shall be calculated using the following equation: Throughput x Emission Factor = Emissions

## 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 November 11, 2002 (the date of issuance of the draft permit) unless this permit has been modified to reflect such new requirements.

### 8.2 Applicability of Title IV Requirements (Acid Deposition Control)

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

### 8.3 Emissions Trading Programs

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

As of the date of issuance of this permit, there are no such economic incentive, marketable permit or emission trading programs that have been approved by USEPA.

### 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 - Emission of Particulate Matter from New Process Emission Units

10.1.1 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

E = Allowable emission rate

- 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 of 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	5.35
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

Where:

P = Process weight rate in metric or T/hr

E = Allowable emission rate in kg/hr or lbs/hr

(Source: Amended at 20 Ill. Reg. 7605, effective May 22, 2996)

10.2 Attachment 2

PSD Applicability

Table I - Emissions Increases Associated With The Proposed Modification

<u>Item of Equipment</u>	<u>Installation Date</u>	Permitted Emission Increases (Tons/Year)		
		<u>SO<sub>2</sub></u>	<u>NO<sub>x</sub></u>	<u>PM</u>
Glass Furnace I	2000	168.0	287.2	43.3

Table II - Source-Wide Creditable Contemporaneous Emission Decreases

<u>Item of Equipment</u>	<u>Removal Date</u>	Emission Decreases (Tons/Year) Based on Average Emissions Form 97-99		
		<u>SO<sub>2</sub></u>	<u>NO<sub>x</sub></u>	<u>PM<sub>10</sub></u>
Glass Furnace I	2000	133.56	251.41	35.36

Table IV - Net Emissions Change (Tons/Year)

	<u>SO<sub>2</sub></u>	<u>NO<sub>x</sub></u>	<u>PM</u>
Table I	168.0	287.2	43.3
Table II	<u>133.56</u>	<u>251.41</u>	<u>35.36</u>
Totals	34.44	35.79	7.94

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-between; margin-top: 10px;"> <div style="width: 45%; text-align: center;">           _____  <small>AUTHORIZED SIGNATURE</small> </div> <div style="width: 45%; text-align: center;">           _____  <small>TITLE OF SIGNATORY</small> </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="width: 45%; text-align: center;">           _____  <small>TYPED OR PRINTED NAME OF SIGNATORY</small> </div> <div style="width: 45%; 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

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

SIS:psj