



Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

TO: Interested Parties / Applicant
DATE: September 19, 2006
RE: Gemtron Corporation / 083-22688-00012
FROM: Nisha Sizemore
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNPER.dot 03/23/06



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 Indianapolis, Indiana 46204-2251
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Minor Source Operating Permit Renewal OFFICE OF AIR QUALITY

**Gemtron Corporation
 2000 Chestnut Street
 Vincennes, Indiana 47591**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain an MSOP under 326 IAC 2-6.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 083-22688-00012	
Original signed by: Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date: September 19, 2006 Expiration Date: September 19, 2011

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SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in Conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-5.1-3(c)][326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary glass products tempering source.

Authorized Individual:	Dale Biehl (Business Manager)
Source Address:	2000 Chestnut Street, Vincennes, IN 47591
Mailing Address:	2000 Chestnut Street, Vincennes, IN 47591
General Source Phone Number:	812 – 882 – 2680
SIC Code:	3231
County Location:	Knox
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Minor Source Operating Permit Program Minor Source, under PSD Minor Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary

This stationary source consists of the following emission units and pollution control devices:

- (a) Three (3) heat treatment lines, identified as EU-01, installed in 1991, capacity: 4,854 pounds of glass per hour total, including the following equipment:
 - (1) Three (3) silk screening machines, capacity: 1.35 pounds of paint per hour, each.
 - (2) One (1) glass tech electric tempering furnace, equipped with one (1) tank of SO₂, exhausted to stack SO₂-01, capacity: 200 pounds of SO₂.
 - (3) One (1) air quenching operation.
 - (4) Six (6) glass edging units, which is a wet glass operation.
- (b) Two (2) heat treatment lines, identified as EU-02, installed in 1988, exhausted to Stack DO-1C and Stack DO-2C, capacity: 3,049 pounds of glass per hour total, including the following equipment:
 - (1) Two (2) silk screening machines, capacity: 0.81 pounds of paint per hour, each.
 - (2) One (1) electric tempering furnace, equipped with one (1) tank of SO₂, exhausted to stack SO₂-02, capacity: 200 pounds of SO₂.
 - (3) One (1) air quenching operation.
- (c) One (1) CERAN processing line, identified as EU-03, installed in 1993, exhausted to stacks CO-1B through CO-9B and stacks C0-1C through C0-5C, capacity: 4,193 pounds of glass per hour, including the following equipment:

- (1) Three (3) silk screening machines, capacity: 2.50 pounds of paint per hour, each.
 - (2) Three (3) electric tempering furnaces.
 - (3) Three (3) cooling conveyors.
 - (4) One (1) laser cutter, identified as CERAN Laser, equipped with a baghouse for particulate control, identified as EU-LAS, exhausted to stack EU-LAS, capacity: 600 pounds of glass per hour.
- (d) One (1) spray cleaning operation, identified as EU-04, installed in 1991, equipped with solids filters, exhausted to stack XY-1C, capacity: 1.5 gallons of solvent per hour, consisting of the following equipment:
- (1) One (1) solvent recovery still.
 - (2) One (1) wash booth #1 used for air grinding.
 - (3) One (1) wash booth #2 used for silk screen and paint removal, capacity: 5.49 pounds of solvent per hour.
 - (4) One (1) automatic screen washer, with a capacity of 55 gallons of solvent, and a solvent usage rate of 0.0445 gallons per hour.
- (e) One (1) heat treatment line 5, identified as EU-13, installed in 2001, capacity: 3,050 pounds of glass per hour, total, including the following equipment:
- (1) One (1) silk screening machine, capacity: 0.81 pounds of paint per hour.
 - (2) Two (2) glass edging units, which is a wet glass operation.
- (f) One (1) heavy tempering line (HT-6), identified as EU-14, installed in 2003, exhausted to stack W-01, capacity: 893 pounds of glass per hour total, including the following equipment:
- (1) Two (2) silk screening machines, capacity: 2.45 pounds of paint per hour, each.
 - (2) One (1) slitting unit, with negligible emissions.
 - (3) Three (3) glass edging units, which is a wet glass operation.
 - (4) Two (2) small washer units.
 - (5) One (1) Rhonehouse 42 electric drying oven, equipped with one (1) tank of SO₂, exhausted to stack SO₂-14, capacity: 200 pounds of SO₂.
 - (6) One (1) whopper machine, used to cut circles in the glass, with negligible emissions.
 - (7) One (1) nubber operation, which is a wet glass edging operation.
- (g) One (1) heavy tempering line (HT-7), identified as EU-15, installed in 2003, exhausted to stack W-01, capacity: 893 pounds of glass per hour total, including the following equipment:
- (1) One (1) silk screening machine, capacity: 2.45 pounds of paint per hour.
 - (2) One (1) slitting unit, with negligible emissions.

- (3) Two (2) glass edging units, which is a wet glass operation.
 - (4) One (1) washer unit.
 - (5) One (1) stripcutter unit, used to cut the glass, with negligible emissions.
 - (6) One (1) nubber operation, which is a wet glass edging operation.
- (h) One (1) circle glass line (F-8), identified as EU-16, installed in 2003, exhausted to stack H-02, capacity: 488 pounds of glass per hour, including the following equipment:
- (1) One (1) silk screening machine, capacity: 1.34 pounds of paint per hour.
 - (2) One (1) slitting unit, with negligible emissions.
 - (3) One (1) edging unit, which is a wet glass operation.
 - (4) One (1) washer unit.
 - (5) One (1) whopper machine, used to cut circles in the glass, with negligible emissions.
- (i) One (1) small parts line (F-9), identified as EU-17, installed in 2003, exhausted to stacks W-01 or H-02, capacity: 425 pounds of glass per hour, including the following equipment:
- (1) One (1) silk screening machine, capacity: 1.34 pounds of paint per hour.
 - (2) Two (2) edging units, which is wet type glass operation.
 - (3) One (1) washer unit.
 - (4) One (1) nubber operation, which is a wet glass edging operation.
 - (5) One (1) Intermac edger machine, which is a wet glass operation.
 - (6) Two (2) vertical edger units, which is a wet glass operation.
 - (7) One (1) small part edger, which is a wet glass operation.
 - (8) One (1) circle cutter, with negligible emissions.
 - (9) Two (2) drills, which is a wet glass drilling operation.
 - (10) Four (4) belt sanders.
 - (11) One (1) 2-inch edger, which is a wet glass edging operation.
- (j) One (1) CERAN new furnace line, identified as EU-18, exhausted to stacks #1 through #3, installed in 2004, capacity: 1,398 pounds of glass per hour, including the following equipment:
- (1) One (1) electric tempering furnace.
 - (2) One (1) cooling conveyer.
- (k) Sixteen (16) plastic molding machines, identified as EU-05, installed in 1995, capacity: 32.15

pounds of polypropylene per hour, each.

- (l) Two (2) diesel fired emergency generators, identified as EU-06, installed in 1998, exhausted to stacks EP-1C and EP-2C, rated at 0.5 million British thermal units per hour, total, operating at 500 hours per year or less, each.
- (m) Forty-nine (49) building work natural gas-fired space heaters, identified as EU-07, installed in 1998, rated at 4.785 million British thermal units per hour, total.
- (n) Maintenance welding operations, identified as EU-08, consisting of the following:
 - (1) Eight (8) Metal Inert Gas (MIG) welding stations, capacity: 0.05 pounds of wire per hour, each.
 - (2) Four (4) Stick welding stations, capacity: 0.20 pounds of wire per hour, each.
 - (3) Two (2) Tungsten Inert Gas (TIG) welding stations, capacity: 0.10 pounds of wire per hour, each.
- (o) One maintenance metal grinding operation, identified as EU-09, installed prior to 2001, with a potential to emit PM of 0.06 tons per year.
- (p) One (1) glass edge grinding operation, identified as EU-10, installed in 1991, equipped with a particulate fiber filter for PM control, exhausted to Stack WR-01, and relocated within the source in 2002, capacity: 0.274 pounds of glass per hour.
- (q) One (1) CERAN strip wash operation, identified as EU-12, installed in 1995, exhausted to stack WV-1D, capacity: 60 glass panels per hour.
- (r) One (1) maintenance degreaser, identified as EU-19, installed prior to 2001, with a potential to emit VOC of 0.139 tons per year.
- (s) Four (4) natural gas-fired space heaters, identified as SH1, installed prior to 2001, exhausted to stacks GF-1D, GF-2D, GF-3D and GF-1H, rated at 0.45 million British thermal units per hour, total.
- (t) Four (4) refrigerator heat stamping machines, including one (1) refrigerator shelf stamping decal removal area, identified as HSM, installed prior to 2004, capacity: 110 gallons of Ethyl Acetate per year.

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-1.1-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-1.1-1) shall prevail.

B.2 Permit Term and Renewal [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]

- (a) This permit, MSOP 083-22688-00012, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-3-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including until the renewal permit has been issued or denied.

B.3 Term of Conditions [326 IAC 2-1.1-9.5]

Notwithstanding the permit term of a permit to construct, a permit to operate, or a permit modification, any condition established in a permit issued pursuant to a permitting program approved in the state implementation plan shall remain in effect until:

- (a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or
- (b) the emission unit to which the condition pertains permanently ceases operation.

B.4 Enforceability

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.5 Severability

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.6 Property Rights or Exclusive Privilege

This permit does not convey any property rights of any sort or any exclusive privilege.

B.7 Duty to Provide Information

- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ 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. The submittal by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U.S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Certification

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an "authorized individual" of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) An "authorized individual" is defined at 326 IAC 2-1.1-1(1).

B.9 Annual Notification [326 IAC 2-6.1-5(a)(5)]

- (a) An annual notification shall be submitted by an authorized individual to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) The annual notice shall be submitted in the format attached no later than March 1 of each year to:

Compliance Branch, Office of Air Quality
Indiana Department of Environmental Management
100 North Senate Avenue,
Indianapolis, 46204-2251
- (c) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

B.10 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs) including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.11 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of permits established prior to MSOP 083-22688-00012 and issued pursuant to permitting programs approved into the state implementation plan have been either incorporated as originally stated.
- (b) All previous registrations and permits are superseded by this permit.

B.12 Termination of Right to Operate [326 IAC 2-6.1-7(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least ninety (90) days prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-6.1-7.

B.13 Deviations from Permit Requirements and Conditions

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

B.14 Permit Renewal [326 IAC 2-6.1-7]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and shall include the information specified in 326 IAC 2-6.1-7. Such information shall be included in the application for each emission unit at this source. The renewal application does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

- (b) A timely renewal application is one that is:
- (1) Submitted at least ninety (90) days prior to the date of the expiration of this permit; and
 - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received

by IDEM, OAQ, on or before the date it is due.

- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-6.1 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.15 Permit Amendment or Revision [326 IAC 2-5.1-3(e)(3)][326 IAC 2-6.1-6]

- (a) Permit amendments and revision are governed by the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

Any such application shall be certified by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

B.16 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)][326 IAC 2-6.1-5(a)(4)][IC 13-14-2-2][IC13-17-3-2][IC 13-30-3-1]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.17 Transfer of Ownership or Operational Control [326 IAC 2-6.1-6]

- (a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:
- Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251
- The application which shall be submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) The Permittee may implement notice-only changes addressed in the request for a notice-only change immediately upon submittal of the request. [326 IAC 2-6.1-6(d)(3)]

B.18 Annual Fee Payment [326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing.
- (b) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.19 Credible Evidence [326 IAC 1-1-6]

For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 Permit Revocation [326 IAC 2-1.1-9]

Pursuant to 326 IAC 2-1.1-9 (Revocation of Permits), this permit to operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.4 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.5 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326

IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and Renovation**
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana Accredited Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

Testing Requirements [326 IAC 2-6.1-5(a)(2)]

C.6 Performance Testing [326 IAC 3-6]

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the Permittee submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.7 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U.S. EPA.

Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]

C.8 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

C.9 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

C.10 Instrument Specifications [326 IAC 2-1.1-11]

- (a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.

- (b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

Corrective Actions and Response Steps

C.11 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

within ninety (90) days after the date of issuance of this permit.

The ERP does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (f) Upon direct notification by IDEM, OAQ that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level.
[326 IAC 1-5-3]

C.12 Response to Excursions or Exceedances

- (a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:
 - (1) initial inspection and evaluation
 - (2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or

- (3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
 - (1) monitoring results;
 - (2) review of operation and maintenance procedures and records;
 - (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall maintain the following records:
 - (1) monitoring data;
 - (2) monitor performance data, if applicable; and
 - (3) corrective actions taken.

Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]

C.13 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.14 General Record Keeping Requirements[326 IAC 2-6.1-5]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records

may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.15 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) Reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description: Glass Grinding Line

- (a) Three (3) heat treatment lines, identified as EU-01, installed in 1991, capacity: 4,854 pounds of glass per hour total, including the following equipment:
 - (1) Three (3) silk screening machines, capacity: 1.35 pounds of paint per hour, each.
 - (2) One (1) glass tech electric tempering furnace, equipped with one (1) tank of SO₂, exhausted to stack SO2-01, capacity: 200 pounds of SO₂.
 - (3) One (1) air quenching operation.
 - (4) Six (6) glass edging units, which is a wet glass operation.
- (b) Two (2) heat treatment lines, identified as EU-02, installed in 1988, exhausted to stack DO-1C and stack DO-2C, capacity: 3,049 pounds of glass per hour total, including the following equipment:
 - (1) Two (2) silk screening machines, capacity: 0.81 pounds of paint per hour, each.
 - (2) One (1) electric tempering furnace, equipped with one (1) tank of SO₂, exhausted to stack SO2-02, capacity: 200 pounds of SO₂.
 - (3) One (1) air quenching operation.
- (c) One (1) CERAN processing line, identified as EU-03, installed in 1993, exhausted to stacks CO-1B through CO-9B and stacks CO-1C through CO-5C, capacity: 4,193 pounds of glass per hour, including the following equipment:
 - (1) Three (3) silk screening machines, capacity: 2.50 pounds of paint per hour, each.
 - (2) Three (3) electric tempering furnaces.
 - (3) Three (3) cooling conveyors.
 - (4) One (1) laser cutter, identified as CERAN Laser, equipped with a baghouse for particulate control, identified as EU-LAS, exhausted to stack EU-LAS, capacity: 600 pounds of glass per hour.
- (e) One (1) heat treatment line 5, identified as EU-13, installed in 2001, capacity: 3,050 pounds of glass per hour, total, including the following equipment:
 - (1) One (1) silk screening machine, capacity: 0.81 pounds of paint per hour.
 - (2) Two (2) glass edging units, which is a wet glass operation.
- (f) One (1) heavy tempering line (HT-6), identified as EU-14, installed in 2003, exhausted to stack W-01, capacity: 893 pounds of glass per hour total, including the following equipment:
 - (1) Two (2) silk screening machines, capacity: 2.45 pounds of paint per hour, each.
 - (2) One (1) slitting unit, with negligible emissions.
 - (3) Three (3) glass edging units, which is a wet glass operation.

- (4) Two (2) small washer units.
 - (5) One (1) Rhonehouse 42 electric drying oven, equipped with one (1) tank of SO₂, exhausted to stack SO2-14, capacity: 200 pounds of SO₂.
 - (6) One (1) whopper machine, used to cut circles in the glass, with negligible emissions.
 - (7) One (1) nubber operation, which is a wet glass edging operation.
- (g) One (1) heavy tempering line (HT-7), identified as EU-15, installed in 2003, exhausted to stack W-01, capacity: 893 pounds of glass per hour total, including the following equipment:
- (1) One (1) silk screening machine, capacity: 2.45 pounds of paint per hour.
 - (2) One (1) slitting unit, with negligible emissions.
 - (3) Two (2) glass edging units, which is a wet glass operation.
 - (4) One (1) washer unit.
 - (5) One (1) stripcutter unit, used to cut the glass, with negligible emissions.
 - (6) One (1) nubber operation, which is a wet glass edging operation.
- (h) One (1) circle glass line (F-8), identified as EU-16, installed in 2003, exhausted to stack H-02, capacity: 488 pounds of glass per hour, including the following equipment:
- (1) One (1) silk screening machine, capacity: 1.34 pounds of paint per hour.
 - (2) One (1) slitting unit, with negligible emissions.
 - (3) One (1) edging unit, which is a wet glass operation.
 - (4) One (1) washer unit.
 - (5) One (1) whopper machine, used to cut circles in the glass, with negligible emissions.
- (i) One (1) small parts line (F-9), identified as EU-17, installed in 2003, exhausted to stacks W-01 or H-02, capacity: 425 pounds of glass per hour, including the following equipment:
- (1) One (1) silk screening machine, capacity: 1.34 pounds of paint per hour.
 - (2) Two (2) edging units, which is wet type glass operation.
 - (3) One (1) washer unit.
 - (4) One (1) nubber operation, which is a wet glass edging operation.
 - (5) One (1) Intermac edger machine, which is a wet glass operation.
 - (6) Two (2) vertical edger units, which is a wet glass operation.
 - (7) One (1) small part edger, which is a wet glass operation.

- (8) One (1) circle cutter, with negligible emissions.
- (9) Two (2) drills, which is a wet glass drilling operation.
- (10) Four (4) belt sanders.
- (11) One (1) 2-inch edger, which is a wet glass edging operation.
- (j) One (1) CERAN new furnace line, identified as EU-18, exhausted to stacks #1 through #3, installed in 2004, capacity: 1,398 pounds of glass per hour, including the following equipment:
 - (1) One (1) electric tempering furnace.
 - (2) One (1) cooling conveyor.
- (k) Sixteen (16) plastic molding machines, identified as EU-05, installed in 1995, capacity: 32.15 pounds of polypropylene per hour, each.
- (l) Two (2) diesel fired emergency generators, identified as EU-06, installed in 1998, exhausted to stacks EP-1C and EP-2C, rated at 0.5 million British thermal units per hour, total, operating at 500 hours per year or less, each.
- (m) Forty-nine (49) building work natural gas-fired space heaters, identified as EU-07, installed in 1998, rated at 4.785 million British thermal units per hour, total.
- (n) Maintenance welding operations, identified as EU-08, consisting of the following:
 - (1) Eight (8) Metal Inert Gas (MIG) welding stations, capacity: 0.05 pounds of wire per hour, each.
 - (2) Four (4) Stick welding stations, capacity: 0.20 pounds of wire per hour, each.
 - (3) Two (2) Tungsten Inert Gas (TIG) welding stations, capacity: 0.10 pounds of wire per hour, each.
- (o) One maintenance metal grinding operation, identified as EU-09, installed prior to 2001, with a potential to emit PM of 0.06 tons per year.
- (p) One (1) glass edge grinding operation, identified as EU-10, installed in 1991, equipped with a particulate fiber filter for PM control, exhausted to Stack WR-01, and relocated within the source in 2002, capacity: 0.274 pounds of glass per hour.
- (s) Four (4) natural gas-fired space heaters, identified as SH1, installed prior to 2001, exhausted to stacks GF-1D, GF-2D, GF-3D and GF-1H, rated at 0.45 million British thermal units per hour, total.
- (t) Four (4) refrigerator heat stamping machines, including one (1) refrigerator shelf stamping decal removal area, identified as HSM, installed prior to 2004, capacity: 110 gallons of Ethyl Acetate per year.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.1.1 Particulate [326 IAC 6-3-2]

-
- (a) Pursuant to 326 IAC 6-3-2, the allowable particulate emission rate from the one (1) laser cutter identified as CERAN Laser, shall not exceed 1.83 pounds per hour when operating at a process weight rate of 600 pounds per hour (0.300 tons per hour).
 - (b) Pursuant to 326 IAC 6-3-2, the allowable particulate emissions rate from the four (4) belt sanders, associated with EU-17, shall be limited to 1.45 pounds per hour, total, at a process weight rate of 425 pounds per hour (0.213 tons per hour).
 - (c) Pursuant to 326 IAC 6-3-2, the allowable particulate emissions rate from the one (1) glass edge grinding operation, identified as EU-10, shall not exceed 0.722 pounds per hour when operating at a process weight rate of 150 pounds per hour (0.075 tons per hour).

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

Compliance Determination Requirements

There are no compliance determination requirements applicable to these facilities.

Compliance Monitoring Requirements

There are no compliance monitoring requirements applicable to these emission facilities.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description: Degreasing Operations

- (d) One (1) spray cleaning operation, identified as EU-04, installed in 1991, equipped with solids filters, exhausted to stack XY-1C, capacity: 1.5 gallons of solvent per hour, consisting of the following equipment:
 - (1) One (1) solvent recovery still.
 - (2) One (1) wash booth #1 used for air grinding.
 - (3) One (1) wash booth #2 used for silk screen and paint removal, capacity: 5.49 pounds of solvent per hour.
 - (4) One (1) automatic screen washer, with a capacity of 55 gallons of solvent, and a solvent usage rate of 0.0445 gallons per hour.
- (q) One (1) CERAN strip wash operation, identified as EU-12, installed in 1995, exhausted to stack WV-1D, capacity: 60 glass panels per hour.
- (r) One (1) maintenance degreaser, identified as EU-19, installed prior to 2001, with a potential to emit VOC of 0.139 tons per year.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.2.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), for cold cleaning operations (EU-4, EU-12, and EU-19) for which construction commenced after January 1, 1980, the Permittee shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

D.2.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]

- (a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the Permittee of a cold cleaner degreaser facility (EU-4, EU-12, and EU-19) for which construction commenced after July 1, 1990, shall ensure that the following control equipment requirements are met:

- (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF));
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.
 - (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kilopascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)) then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
 - (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
 - (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
 - (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kilopascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)), or if the solvent is heated to a temperature greater than forty-eight and nineteenth degrees Celsius (48.9EC) (one hundred twenty degrees Fahrenheit (120EF)):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the Permittee of a cold cleaning facility construction of which commenced after July 1, 1990, shall ensure that the following operating requirements are met:
- (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

D.2.3 Hours of Operation

Each of the two (2) emergency generators shall operate no more than five-hundred (500) hours per year.

Compliance Determination Requirements

There are no compliance determination requirements applicable to these facilities.

Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

There are no compliance monitoring requirements applicable to these facilities.

Record Keeping

D.2.4 Hours of Operation

In order to show compliance with D.2.3, the Permittee shall record the number of hours of operation of each emergency generator per month.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH**

**MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION**

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Company Name:	Gemtron Corporation
Address:	2000 Chestnut Street
City:	Vincennes
Phone #:	812 - 882 - 2680
MSOP #:	083-22688-00012

I hereby certify that **Gemtron Corporation** is still in operation.
 no longer in operation.

I hereby certify that **Gemtron Corporation** is in compliance with the requirements of MSOP **083-22688-00012**.
 not in compliance with the requirements of **083-22688-00012**.

Authorized Individual (typed):
Title:
Signature:
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:

MALFUNCTION REPORT

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
FAX NUMBER - 317 233-6865**

**This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6
and to qualify for the exemption under 326 IAC 1-6-4.**

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?_____, 25 TONS/YEAR SULFUR DIOXIDE ?_____, 25 TONS/YEAR NITROGEN OXIDES?_____, 25 TONS/YEAR VOC ?_____, 25 TONS/YEAR HYDROGEN SULFIDE ?_____, 25 TONS/YEAR TOTAL REDUCED SULFUR ?_____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?_____, 25 TONS/YEAR FLUORIDES ?_____, 100TONS/YEAR CARBON MONOXIDE ?_____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?_____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?_____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?_____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?_____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERMIT LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY: _____ PHONE NO. () _____
LOCATION: (CITY AND COUNTY) _____
PERMIT NO. _____ AFS PLANT ID: _____ AFS POINT ID: _____ INSP: _____
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: _____

DATE/TIME MALFUNCTION STARTED: ____/____/20____ _____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE ____/____/20____ _____ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER: _____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

MEASURES TAKEN TO MINIMIZE EMISSIONS: _____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES: _____

CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: _____

CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: _____

INTERIM CONTROL MEASURES: (IF APPLICABLE) _____

MALFUNCTION REPORTED BY: _____ TITLE: _____
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: _____ DATE: _____ TIME: _____

*SEE PAGE 2

Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

**Indiana Department of Environmental Management
Office of Air Quality**

Technical Support Document (TSD) for a Minor Source Operating Permit Renewal

Source Background and Description

Source Name:	Gemtron Corporation
Source Location:	2000 Chestnut Street, Vincennes, Indiana 47591
County:	Knox
SIC Code:	3231
Operation Permit No.:	MSOP 083-13656-00012
Operation Permit Issuance Date:	June 13, 2001
Permit Renewal No.:	MSOP 083-22688-00012
Permit Reviewer:	Brian J. Pedersen

The Office of Air Quality (OAQ) has reviewed an application from Gemtron Corporation relating to the operation of a glass products tempering source.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- (a) Three (3) heat treatment lines, identified as EU-01, installed in 1991, capacity: 4,854 pounds of glass per hour total, including the following equipment:
 - (1) Three (3) silk screening machines, capacity: 1.35 pounds of paint per hour, each.
 - (2) One (1) glass tech electric tempering furnace, equipped with one (1) tank of SO₂, exhausted to stack SO₂-01, capacity: 200 pounds of SO₂.
 - (3) One (1) air quenching operation.
 - (4) Six (6) glass edging units, which is a wet glass operation.
- (b) Two (2) heat treatment lines, identified as EU-02, installed in 1988, exhausted to stack DO-1C and stack DO-2C, capacity: 3,049 pounds of glass per hour total, including the following equipment:
 - (1) Two (2) silk screening machines, capacity: 0.81 pounds of paint per hour, each.
 - (2) One (1) electric tempering furnace, equipped with one (1) tank of SO₂, exhausted to stack SO₂-02, capacity: 200 pounds of SO₂.
 - (3) One (1) air quenching operation.
- (c) One (1) CERAN processing line, identified as EU-03, installed in 1993, exhausted to stacks CO-1B through CO-9B and stacks C0-1C through C0-5C, capacity: 4,193 pounds of glass per hour, including the following equipment:
 - (1) Three (3) silk screening machines, capacity: 2.50 pounds of paint per hour, each.
 - (2) Three (3) electric tempering furnaces.
 - (3) Three (3) cooling conveyors.

- (4) One (1) laser cutter, identified as CERAN Laser, equipped with a baghouse for particulate control, identified as EU-LAS, exhausted to stack EU-LAS, capacity: 600 pounds of glass per hour.
- (d) One (1) spray cleaning operation, identified as EU-04, installed in 1991, equipped with solids filters, exhausted to stack XY-1C, capacity: 1.5 gallons of solvent per hour, consisting of the following equipment:
- (1) One (1) solvent recovery still.
 - (2) One (1) wash booth #1 used for air grinding.
 - (3) One (1) wash booth #2 used for silk screen and paint removal, capacity: 5.49 pounds of solvent per hour.
 - (4) One (1) automatic screen washer, with a capacity of 55 gallons of solvent, and a solvent usage rate of 0.0445 gallons per hour.
- (e) One (1) heat treatment line 5, identified as EU-13, installed in 2001, capacity: 3,050 pounds of glass per hour, total, including the following equipment:
- (1) One (1) silk screening machine, capacity: 0.81 pounds of paint per hour.
 - (2) Two (2) glass edging units, which is a wet glass operation.
- (f) One (1) heavy tempering line (HT-6), identified as EU-14, installed in 2003, exhausted to stack W-01, capacity: 893 pounds of glass per hour total, including the following equipment:
- (1) Two (2) silk screening machines, capacity: 2.45 pounds of paint per hour, each.
 - (2) One (1) slitting unit, with negligible emissions.
 - (3) Three (3) glass edging units, which is a wet glass operation.
 - (4) Two (2) small washer units.
 - (5) One (1) Rhonehouse 42 electric drying oven, equipped with one (1) tank of SO₂, exhausted to stack SO₂-14, capacity: 200 pounds of SO₂.
 - (6) One (1) whopper machine, used to cut circles in the glass, with negligible emissions.
 - (7) One (1) nubber operation, which is a wet glass edging operation.
- (g) One (1) heavy tempering line (HT-7), identified as EU-15, installed in 2003, exhausted to stack W-01, capacity: 893 pounds of glass per hour total, including the following equipment:
- (1) One (1) silk screening machine, capacity: 2.45 pounds of paint per hour.
 - (2) One (1) slitting unit, with negligible emissions.
 - (3) Two (2) glass edging units, which is a wet glass operation.

- (4) One (1) washer unit.
- (5) One (1) stripcutter unit, used to cut the glass, with negligible emissions.
- (6) One (1) nubber operation, which is a wet glass edging operation.
- (h) One (1) circle glass line (F-8), identified as EU-16, installed in 2003, exhausted to stack H-02, capacity: 488 pounds of glass per hour, including the following equipment:
 - (1) One (1) silk screening machine, capacity: 1.34 pounds of paint per hour.
 - (2) One (1) slitting unit, with negligible emissions.
 - (3) One (1) edging unit, which is a wet glass operation.
 - (4) One (1) washer unit.
 - (5) One (1) whopper machine, used to cut circles in the glass, with negligible emissions.
- (i) One (1) small parts line (F-9), identified as EU-17, installed in 2003, exhausted to stacks W-01 or H-02, capacity: 425 pounds of glass per hour, including the following equipment:
 - (1) One (1) silk screening machine, capacity: 1.34 pounds of paint per hour.
 - (2) Two (2) edging units, which is wet type glass operation.
 - (3) One (1) washer unit.
 - (4) One (1) nubber operation, which is a wet glass edging operation.
 - (5) One (1) Intermac edger machine, which is a wet glass operation.
 - (6) Two (2) vertical edger units, which is a wet glass operation.
 - (7) One (1) small part edger, which is a wet glass operation.
 - (8) One (1) circle cutter, with negligible emissions.
 - (9) Two (2) drills, which is a wet glass drilling operation.
 - (10) Four (4) belt sanders.
 - (11) One (1) 2-inch edger, which is a wet glass edging operation.
- (j) One (1) CERAN new furnace line, identified as EU-18, exhausted to stacks #1 through #3, installed in 2004, capacity: 1,398 pounds of glass per hour, including the following equipment:
 - (1) One (1) electric tempering furnace.
 - (2) One (1) cooling conveyor.
- (k) Sixteen (16) plastic molding machines, identified as EU-05, installed in 1995, capacity: 32.15 pounds of polypropylene per hour, each.

- (l) Two (2) diesel fired emergency generators, identified as EU-06, installed in 1998, exhausted to stacks EP-1C and EP-2C, rated at 0.5 million British thermal units per hour, total, operating at 500 hours per year or less, each.
- (m) Forty-nine (49) building work natural gas-fired space heaters, identified as EU-07, installed in 1998, rated at 4.785 million British thermal units per hour, total.
- (n) Maintenance welding operations, identified as EU-08, consisting of the following:
 - (1) Eight (8) Metal Inert Gas (MIG) welding stations, capacity: 0.05 pounds of wire per hour, each.
 - (2) Four (4) Stick welding stations, capacity: 0.20 pounds of wire per hour, each.
 - (3) Two (2) Tungsten Inert Gas (TIG) welding stations, capacity: 0.10 pounds of wire per hour, each.
- (o) One maintenance metal grinding operation, identified as EU-09, installed prior to 2001, with a potential to emit PM of 0.06 tons per year.
- (p) One (1) glass edge grinding operation, identified as EU-10, installed in 1991, equipped with a particulate fiber filter for PM control, exhausted to Stack WR-01, and relocated within the source in 2002, capacity: 0.274 pounds of glass per hour.
- (q) One (1) CERAN strip wash operation, identified as EU-12, installed in 1995, exhausted to stack WV-1D, capacity: 60 glass panels per hour.
- (r) One (1) maintenance degreaser, identified as EU-19, installed prior to 2001, with a potential to emit VOC of 0.139 tons per year.
- (s) Four (4) natural gas-fired space heaters, identified as SH1, installed prior to 2001, exhausted to stacks GF-1D, GF-2D, GF-3D and GF-1H, rated at 0.45 million British thermal units per hour, total.
- (t) Four (4) refrigerator heat stamping machines, including one (1) refrigerator shelf stamping decal removal area, identified as HSM, installed prior to 2004, capacity: 110 gallons of Ethyl Acetate per year.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted emission units operating at this source during this review process.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

- (a) MSOP 083-13656-00012 issued on June 13, 2001;
- (b) NOC 083-14672-00001 issued on August 21, 2001;
- (c) MPR 083-15882-00012 issued on November 18, 2002;
- (d) NOC 083-17490-00012 issued on August 13, 2003;

- (e) NOC 083-18371-00012 issued on December 31, 2003;
- (f) NOC 083-18687-00012 issued on August 1, 2005; and
- (g) NOC 083-22360-00012 issued on April 6, 2006.

All conditions from previous approvals were incorporated into this permit.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (ft)	Diameter (ft)	Flow Rate (acfm)	Temperature (°F)
DO-1C	Lines 3 and 4 (EU-02)	20.0	1.51	575	188
DO-2C	Lines 3 and 4 (EU-02)	20.0	1.51	586	174
CO-1B	CERAN Line (EU-03)	26.2	1.08	9,582	252
CO-2B	CERAN Line (EU-03)	27.9	1.08	9,938	252
CO-3B	CERAN Line (EU-03)	31.5	2.28	1,801	65
CO-4B	CERAN Line (EU-03)	30.9	2.28	1,289	99
CO-5B	CERAN Line (EU-03)	32.5	2.44	1,982	191
CO-6B	CERAN Line (EU-03)	30.2	1.68	2,046	189
CO-7B	CERAN Line (EU-03)	24.8	2.35	1,443	229
CO-8B	CERAN Line (EU-03)	25.1	2.02	432	218
CO-9B	CERAN Line (EU-03)	25.8	1.71	9,506	212
CO-1C	CERAN Line (EU-03)	26.8	1.10	10,469	185
CO-2C	CERAN Line (EU-03)	31.3	2.28	1,781	60
CO-3C	CERAN Line (EU-03)	31.3	2.28	1,099	88
CO-4C	CERAN Line (EU-03)	32.4	2.44	1,781	387
CO-5C	CERAN Line (EU-03)	29.7	1.75	1,099	115
XY-1C	Solvent Cleaning (EU-04)	22.5	2.26	1,602	80
EP-1C	Generator (EU-06)	8.50	0.813	104	420
EP-2C	Generator (EU-06)	8.50	0.813	167	420
WV-1D	Washer Vent (EU-12)	6.50	4.51	560	75

Recommendation

The staff recommends to the Commissioner that the operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on February 21, 2006, with additional information received on May 23, 2006.

Emission Calculations

See pages 1 through 16 of Appendix A of this document for detailed emission calculations.

(a) Potential to Emit of EU-13 (heat treatment line number 5)

Pursuant to the provisions of 326 IAC 2-6.1-6(d)(13), which states that "a modification that adds an emission unit or units of the same type that are already permitted and that will comply with the same applicable requirements and permit terms and conditions as the existing emission unit or units, except if the modification would result in a potential to emit greater than the thresholds in 326 IAC 2-2 or 326 IAC 2-3" the permit was revised through a notice only change. The letter from the source stated that this unit is comparable to EU-02. The potential to emit VOC from EU-02 is 2.11 tons per year. The Notice Only Change (083-14672-00012) indicated that the potential to emit VOC from unit EU-13 was 1.74 tons per year, which has been retained in this renewal.

(b) Potential to Emit of the four (4) refrigerator heat stamping machines, including one (1) refrigerator shelf stamping decal removal area.

The four (4) refrigerator heat stamping machines, including one (1) refrigerator shelf stamping decal removal area, identified as HSM, will use Ethyl Acetate to remove wrong or misplaced decals from the shelves. The maximum usage of Ethyl Acetate from this process is 110 gallons per year. The Ethyl Acetate has a density of 7.67 pounds per gallon. The potential to emit from this operation is $110 \text{ gal/yr} \times 7.67 \text{ lbs/gal} = 844$ pounds, or 0.422 tons per year of VOC per year.

(c) Potential to Emit of SO₂ tanks (part of process lines EU-01, EU-02, and EU-14)

Gemtron Corporation had built enclosures around existing SO₂ tanks which are associated with the tempering furnaces located on process lines EU-01, EU-02, and EU-14. The potential to emit of SO₂ has been estimated as follows: Gemtron Corporation changes out approximately 1 of the 3 tanks every month. Each tank holds 200 lbs of SO₂. The source operates approximately 480 hours per month. Therefore, the estimated emission rate is 0.416 pounds per hour, or 1.83 tons per year. This is a very conservative estimate as this assumes that all the SO₂ from the tank escapes into the atmosphere.

(d) Potential to Emit of the screen washer (part of the existing EU-04 line)

The screen washer has a capacity of 55 gallons of 6-96 solvent. However, the washer will re-use most of the solvent. Therefore, only 0.0445 gallons per hour of solvent will actually be used. This number is based on tests by the source which showed that 15 gallons of solvent were used over a two week time period. The density of the 6-96 solvent is 7.92 lbs per gallon. The potential to emit VOC is calculated as follows: 0.0445

gal/hr x 8,760 hrs/yr = 390 gallons per year. 390 gal/yr x 7.92 lbs/gal = 3,089 lbs/yr.
 3,089 lbs/yr x 1 ton/ 2000 lbs = 1.54 tons per year of VOC.

(e) Potential to Emit of the belt sanders (part of existing EU-17 small parts line)

0.0283 in³/piece removed

400 pieces/hr X 0.0283 in³/piece = 11.32 in³/hr

(11.32 in³/hr / 1728 in³/ft³) X (2.8 spec. grav. glass X 62.4 lbs/ft³) = 1.144 lbs/hr PM produced

(1.144 lbs/hr X 24 hrs/day X 365 days/yr) / 2000 lbs/ton = 5.01 tons/yr of PM produced

Potential to Emit of the Source Before Controls

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA, the department, or the appropriate local air pollution control agency.”

Pollutant	Potential to Emit (tons/yr)
PM	9.43
PM ₁₀	9.56
SO ₂	1.88
VOC	70.6
CO	1.97
NO _x	2.75

HAPs	Potential to Emit (tons/yr)
Cobalt	0.726
Manganese	0.034
Nickel	0.992
Phosphorus	0.012
Total	1.82

The potential to emit of HAPs also includes the HAPs related to combustion. The potential to emit of each single HAP associated with combustion is negligible but the total potential to emit of all HAPs associated with combustion is 0.038 tons per year.

- (a) The potential to emit of all criteria pollutants is less than one hundred (100) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-6.1. An MSOP will be issued.
- (b) The potential to emit of any single HAP is less than ten (10) tons per year and the potential to emit of a combination of HAPs is less than twenty-five (25) tons per year.
- (c) **Fugitive Emissions**
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

County Attainment Status

The source is located in Knox County.

Pollutant	Status
PM _{2.5}	Attainment
PM ₁₀	Attainment
SO ₂	Attainment
NO ₂	Attainment
1-Hour Ozone	Attainment
8-Hour Ozone	Attainment
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) and nitrogen oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to ozone. Knox County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability - Entire Source section of this document.
- (b) Knox County has been classified as unclassifiable or attainment for PM_{2.5}. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM_{2.5} emissions. Therefore, until the U.S.EPA adopts specific provisions for PSD review for PM_{2.5} emissions, it has directed states to regulate PM₁₀ emissions as a surrogate for PM_{2.5} emissions. See the State Rule Applicability - Entire Source section of this document.
- (c) Knox County has been classified as attainment or unclassifiable in Indiana for all criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability - Entire Source section of this document.

Source Status

Existing Source PSD, Part 70, or FESOP Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/yr)
PM	5.30
PM ₁₀	5.43
SO ₂	1.88
VOC	70.6
CO	1.97
NO _x	2.75
Single HAP (Nickel)	0.003
Combination HAPs	0.057

- (a) This existing source is **not** a major stationary source because no attainment regulated pollutant is emitted at a rate of two-hundred fifty (250) tons per year or greater and it is not in one of the twenty-eight (28) listed source categories.
- (b) Emissions were based on the MSOP renewal application M 083-22688-00012 submitted on February 21, 2006, with additional information received on May 23, 2006.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source, including the emissions from this permit MSOP 083-22688-00012, is still not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) criteria pollutant is less than one-hundred (100) tons per year,
- (b) a single hazardous air pollutant (HAP) is less than ten (10) tons per year, and
- (c) the combination of HAPs is less than twenty-five (25) tons per year.

This status is based on all the air approvals issued to the source.

Federal Rule Applicability

- (a) This requirements of the New Source Performance Standards, 326 IAC 12, (40 CFR 60.290 Subpart CC), Standards of Performance for Glass Manufacturing, are not included in the permit because the source does not contain glass melting furnaces as defined in this subpart. These furnaces are used to bake paint onto the glass, there is no actual melting of the glass.
- (b) There are no other New Source Performance Standards included in the permit for this source.

- (c) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), (40 CFR 63.200 Subpart T), Halogenated Solvent Cleaning, are not included in the permit for this source because no halogenated solvents are used in the degreasing operation.
- (d) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), (40 CFR 63.5780 Subpart WWW), Reinforced Plastic Composite Production, are not included in the permit for this source because this source is not a major source of HAPs, as defined in 40 CFR 63.2.
- (e) There are no other National Emission Standards for Hazardous Air Pollutants included in the permit for this source.

State Rule Applicability – Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

The unrestricted potential emissions of each attainment criteria pollutant are less than two-hundred fifty (250) tons per year. Therefore, this source, which is not one of the twenty-eight (28) listed source categories, is a minor source pursuant to 326 IAC 2-2, PSD.

326 IAC 2-4.1-1 (New source toxics control)

The operation of a glass products tempering source will emit less than ten (10) tons per year of a single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 2-6 (Emission Reporting)

This source is not located in Lake or Porter County and does not require a Part 70 Operating Permit. Therefore, the requirements of 326 IAC 2-6 do not apply.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity limitations), except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following, unless otherwise stated in the permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability – Individual Facilities

326 IAC 6-3-2 (Particulate emission limitations, work practices and control technologies)

The surface coating being applied through the use of silk screening machines do not emit particulate matter because the transfer efficiency is 100%. Therefore, the silk screening machines shall not be subject to the requirements of 326 IAC 6-3-2.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

- (a) Pursuant to 326 IAC 6-3-2, the allowable particulate emission rate from the one (1) laser cutter identified as CERAN Laser, shall not exceed 1.83 pounds per hour when operating at a process weight rate of 600 pounds per hour (0.300 tons per hour). According to page 14 of 16 of Appendix A, the uncontrolled potential to emit particulate from this laser cutter is 0.67 pounds per hour, which is less than the allowable of 1.83 pounds per hour. Therefore, the laser cutter can comply with this rule and the baghouse does not have to be in operation at all times the laser cutter is in use.
- (b) Pursuant to 326 IAC 6-3-2, the allowable particulate emissions rate from the four (4) belt sanders, associated with EU-17, shall be limited to 1.45 pounds per hour, total, at a process weight rate of 425 pounds per hour (0.213 tons per hour). As shown under the Emission Calculations section of the TSD, the uncontrolled potential to emit particulate from this sanding operation is 1.14 pounds per hour, which is less than the allowable of 1.45 pounds per hour. Therefore, the four (4) belt sanders can comply with this rule.
- (c) Pursuant to 326 IAC 6-3-2, the allowable particulate emissions rate from the one (1) glass edge grinding operation, identified as EU-10, shall not exceed 0.722 pounds per hour when operating at a process weight rate of 150 pounds per hour (0.075 tons per hour). According to page 2 of 16 of Appendix A, the uncontrolled potential to emit particulate from this glass edge grinding operation is 0.277 tons per hour, which is less than the allowable of 0.722 pounds per hour. Therefore, the one (1) glass edge grinding operation, identified as EU-10, can comply with this rule.

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

- (d) The maintenance welding consumes less than 625 pounds of weld wire or rod per day. Therefore, pursuant to 326 IAC 6-3-1(b)(9), the maintenance welding is exempt from the requirements of 326 IAC 6-3-2.
- (e) The maintenance welding metal grinding operation has a potential to emit of less than 0.551 pounds per hour. Therefore, pursuant to 326 IAC 6-3-1(b)(14), the maintenance welding is exempt from the requirements of 326 IAC 6-3-2.
- (f) The electric tempering furnaces, molding machines and air quenching operations do not emit any particulate matter. Therefore these units shall not be subject to the requirements of 326 IAC 6-3-2.

326 IAC 8-1-6 (New facilities; General reduction requirements)

The emission units identified as EU-01, EU-02, EU-03, EU-04, EU-05, EU-12 through EU-17, EU-19 and HSM are not subject to the requirements of 326 IAC 8-1-6 because the potential to emit VOC from each unit is less than twenty-five (25) tons per year.

326 IAC 8-3-2 (Cold Cleaner Operations)

Pursuant to 326 IAC 8-3-2, for the cold cleaner operations, identified as EU-4, EU-12, and EU-19, which were constructed after January 1, 1980, the Permittee shall:

- (1) equip the cleaner with a cover;

- (2) equip the cleaner with a facility for draining cleaned parts;
- (3) close the degreaser cover whenever parts are not being handled in the cleaner;
- (4) drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (5) provide a permanent, conspicuous label summarizing the operating requirements;
- (6) store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

326 IAC 8-3-5 (Cold Cleaner Degreaser Operation and Control)

The one (1) CERAN strip wash operation, one (1) maintenance degreaser, and the one (1) spray cleaning operation, identified as EU-12, EU-19, and EU-4, respectively, are subject to the provisions of 326 IAC 8-3-5 (Organic solvent degreasing operations: cold cleaner degreaser operation and control) because they are performing organic solvent degreasing operations and were constructed after 1990.

- (a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the Permittee of a cold cleaner degreaser facility construction of which commenced after July 1, 1990, shall ensure that the following control equipment requirements are met:
 - (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kilopascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.
 - (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kilopascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
 - (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
 - (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
 - (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kilopascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or

if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):

- (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), for a cold cleaning facility construction of which commenced after July 1, 1990, the Permittee shall ensure that the following operating requirements are met:
- (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

Conclusion

The operation of this glass products tempering source shall be subject to the conditions of the **Minor Source Operating Permit 083-22688-00012**.

**Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations**

**Company Name: Gemtron Corporation
Address City IN Zip: 2000 Chestnut Street, Vincennes, Indiana 47591
MSOP: 083-22688
Plt ID: 083-00012
Reviewer: Brian J. Pedersen
Date: February 21, 2006**

*Note: One unit is equal to 1000 pounds of glass

Material	Density (lbs/gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (units/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC (pounds per hour)	Potential VOC (pounds per day)	Potential VOC (tons per year)	Particulate Potential (tons/yr)	lbs VOC/gal solids	Transfer Efficiency
Heat Treatment Lines (EU-01)																
Paint Used in Silkscreening Booth 1	23.00	30.00%	13.0%	17.0%	0.0%	70.00%	0.01210	4.854	3.91	3.91	0.23	5.51	1.01	0.00	5.59	100%
Paint Used in Silkscreening Booth 2	23.00	30.00%	13.0%	17.0%	0.0%	70.00%	0.01210	4.854	3.91	3.91	0.23	5.51	1.01	0.00	5.59	100%
Paint Used in Silkscreening Booth 3	23.00	30.00%	13.0%	17.0%	0.0%	70.00%	0.01210	4.854	3.91	3.91	0.23	5.51	1.01	0.00	5.59	100%
Solvent 6-96 (Used at EU-01)	7.92	100.00%	0.0%	100.0%	0.0%	0.00%	0.00650	4.854	7.92	7.92	0.25	6.00	1.09	0.00	n/a	100%

PM Control Efficiency 0.00%
Uncontrolled 0.939 22.5 4.11 0.00 16.8
Controlled 0.939 22.5 4.11 0.00

Material	Density (lbs/gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (units/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC (pounds per hour)	Potential VOC (pounds per day)	Potential VOC (tons per year)	Particulate Potential (tons/yr)	lbs VOC/gal solids	Transfer Efficiency
Heat Treatment Lines (EU-02)																
Paint Used in Silkscreening Booth 1	23.00	30.00%	13.0%	17.0%	0.0%	70.00%	0.01150	3.049	3.91	3.91	0.14	3.29	0.60	0.00	5.59	100%
Paint Used in Silkscreening Booth 2	23.00	30.00%	13.0%	17.0%	0.0%	70.00%	0.01150	3.049	3.91	3.91	0.14	3.29	0.60	0.00	5.59	100%
Solvent 6-96	7.92	100.00%	0.0%	100.0%	0.0%	0.00%	0.00860	3.049	7.92	7.92	0.21	4.98	0.91	0.00	n/a	100%

PM Control Efficiency 0.00%
Uncontrolled 0.482 11.6 2.11 0.00 11.2
Controlled 0.482 11.6 2.11 0.00

Material	Density (lbs/gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (units/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC (pounds per hour)	Potential VOC (pounds per day)	Potential VOC (tons per year)	Particulate Potential (tons/yr)	lbs VOC/gal solids	Transfer Efficiency
CERAN Processing Line (EU-03)																
Paint Used in Silkscreening Booth 1	40.00	30.00%	14.2%	15.8%	0.0%	70.00%	0.01490	4.193	6.32	6.32	0.39	9.48	1.73	0.00	9.03	100%
Paint Used in Silkscreening Booth 2	40.00	30.00%	14.2%	15.8%	0.0%	70.00%	0.01490	4.193	6.32	6.32	0.39	9.48	1.73	0.00	9.03	100%
Paint Used in Silkscreening Booth 3	40.00	30.00%	14.2%	15.8%	0.0%	70.00%	0.01490	4.193	6.32	6.32	0.39	9.48	1.73	0.00	9.03	100%
CERDEC 80452		100.00%	0.0%	100.0%	0.0%	0.00%		4.193			0.21	5.04	0.92	0.00	n/a	100%
Prestoline HG	7.58	100.00%	0.0%	100.0%	0.0%	0.00%	0.00584	4.193	7.58	7.58	0.19	4.45	0.81	0.00	n/a	100%

PM Control Efficiency 0.00%
Uncontrolled 1.58 37.9 6.92 0.00
Controlled 1.58 37.9 6.92 0.00

Material	Density (lbs/gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (units/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC (pounds per hour)	Potential VOC (pounds per day)	Potential VOC (tons per year)	Particulate Potential (tons/yr)	lbs VOC/gal solids	Transfer Efficiency
Spray Cleaning Operation (EU-04)																
Solvent 6-96	7.92	100.00%	0.0%	100.0%	0.0%	0.00%	0.0385	18.04	7.92	7.92	5.50	132.02	24.09	0.00	n/a	100%

PM Control Efficiency 0.00%
Uncontrolled 5.50 132 24.1 0.00
Controlled 5.50 132 24.1 0.00

State Potential Emissions Add worst case coating to all solvents

*Note: Potential VOC emissions from CERDEC 80452 used at EU-03 was obtained from calculations received from source. The density and Gallons of material were unknown

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lbs/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lbs/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lbs/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lbs/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lbs/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1-Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used

**Appendix A: Emission Calculations
Baghouse Operations**

Company Name: Gemtron Corporation
Address City IN Zip: 2000 Chestnut Street, Vincennes, Indiana 47591
MSOP: 083-22688
Plt ID: 083-00012
Reviewer: Brian J. Pedersen
Date: February 21, 2006

PM/PM10 Emissions

Unit ID	Control Efficiency (%)	Grain Loading per Actual Cubic foot of Outlet Air (grains/cub. ft.)	Gas or Air Flow Rate (acfm.)	Emission Rate before Controls (lb/hr)	Emission Rate before Controls (tons/yr)	Emission Rate after Controls (lb/hr)	Emission Rate after Controls (tons/yr)
EU-10 (Glass Grinding Operation)	99.7%	0.00006	1602.0	0.277	1.21	0.001	0.004

Methodology

Emission Rate in lbs/hr (after controls) = (grains/cub. ft.) (sq. ft.) ((cub. ft./min.)/sq. ft.) (60 min/hr) (lb/7000 grains)

Emission Rate in tons/yr = (lbs/hr) (8760 hr/yr) (ton/2000 lb)

Emission Rate in lbs/hr (before controls) = Emission Rate (after controls): (lbs/hr)/(1-control efficiency)

Emission Rate in tons/yr = (lbs/hr) (8760 hr/yr) (ton/2000 lb)

**Appendix A: Emission Calculations
HAP Emission Calculations**

**Company Name: Gemtron Corporation
Address City IN Zip: 2000 Chestnut Street, Vincennes, Indiana 47591
MSOP: 083-22688
Plt ID: 083-00012
Reviewer: Brian J. Pedersen
Date: February 21, 2006**

Material	Density (lbs/gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Xylene Emissions (tons/yr)
CERAN Process Line (EU-03)					
Prestoline HG	7.58	0.00584	4.193	1.20%	0.010
Individual Total					0.010
Overall Total					0.010

METHODOLOGY

HAPS Emission Rate(tons/yr)=Density(lbs/gal)* Gal of Material(gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr* 1 ton/2000lbs

Material	Potential Grinding Emissions (tons/yr)	Weight % Cobalt	Weight % Manganese	Weight % Nickel	Weight % Phosphorus	Cobalt Emissions (tons/yr)	Manganese Emissions (tons/yr)	Nickel Emissions (tons/yr)	Phosphorus Emissions (tons/yr)
Glass Edge Grinding (EU-10)									
Redress Grinder Wheels	1.21	60.00%	3.00%	82.00%	1.00%	0.726	0.036	0.992	0.012
Individual Total						0.726	0.036	0.992	0.012
Overall Total						1.77			
The Emissions Are Solids and There is a 99.7% Control on EU-10									
Individual Total After Control						0.002	0.0001	0.003	0.00004
Overall Total After Control						0.005			

METHODOLOGY

HAPS emission rate (tons/yr) =Potential Grinding Emissions (tons/yr) * Weight % HAP

**Appendix A: Emissions Calculations
VOC Potential Emissions**

Company Name: Gemtron Corporation
Address City IN Zip: 2000 Chestnut Street, Vincennes, Indiana 47591
MSOP: 083-22688
Plt ID: 083-00012
Reviewer: Brian J. Pedersen
Date: February 21, 2006

Material	Maximum Rate (units/hr)	Emission Factor (lb/units)	Emission Rate (lb/hr)	Recycled By Solvent System (tons/yr)	Percent of Solvent Recycled	Maximum Potential Emissions (tons/yr)
Solvent Recovery (EU-12)						
Solvent 6-96	60	0.125	7.50	32.85	88%	3.942

Methodology

VOC Emission Rate (lbs/hr)=Maximum Rate (units/hr) * Emission Factor (lb/units)
 Recycled By Solvent System(tons/yr)=Emission Rate (lbs/hr) * 8760 hours per year / 2000 pounds per ton
 Maximum Potential Emissions(tons/yr)=Recycled By Solvent System (tons/yr) x (1-Percent Solvent Recycled)
 *Note: Estimated Solvent Loss Rate From Inventory

Sixteen (16) Injection Molding Machines (EU-05)

Raw Material Rate Polypropylene lbs/hr	Total Raw Material For 16 Machines Polypropylene lbs/hr	Total Raw Material For 16 Machines Polypropylene tons/hr
32.150	514.40	0.257

	Pollutant
Emission Factor in lbs/ton	VOC 0.7
Potential Emission in tons/yr	0.789

Methodology

The VOC emission factor is from AP-42, Section 6.64, Table 6.6.4-1

**Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations**

**Company Name: Gemtron Corporation
Address City IN Zip: 2000 Chestnut Street, Vincennes, Indiana 47591
MSOP: 083-22688
Plt ID: 083-00012
Reviewer: Brian J. Pedersen
Date: February 21, 2006**

*Note: One unit is equal to 100 pounds of glass

Material	Density (lbs/gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (units/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC (pounds per hour)	Potential VOC (pounds per day)	Potential VOC (tons per year)	Particulate Potential (tons/yr)	lbs VOC/gal solids	Transfer Efficiency
EU-14																
Paint Used in Silkscreening Booth 1	23.00	17.00%	0.0%	17.0%	0.0%	83.00%	0.01380	8.930	3.91	3.91	0.48	11.56	2.11	0.00	4.71	100%
Paint Used in Silkscreening Booth 2	23.00	17.00%	0.0%	17.0%	0.0%	83.00%	0.01380	8.930	3.91	3.91	0.48	11.56	2.11	0.00	4.71	100%
EU-15																
Paint Used in Silkscreening Booth	23.00	17.00%	0.0%	17.0%	0.0%	83.00%	0.01380	8.930	3.91	3.91	0.48	11.56	2.11	0.00	4.71	100%

Material	Density (lbs/gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (units/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC (pounds per hour)	Potential VOC (pounds per day)	Potential VOC (tons per year)	Particulate Potential (tons/yr)	lbs VOC/gal solids	Transfer Efficiency
EU-16																
Paint Used in Silkscreening Booth	23.00	17.00%	0.0%	17.0%	0.0%	83.00%	0.02210	4.880	3.91	3.91	0.42	10.12	1.85	0.00	4.71	100%

Material	Density (lbs/gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (units/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC (pounds per hour)	Potential VOC (pounds per day)	Potential VOC (tons per year)	Particulate Potential (tons/yr)	lbs VOC/gal solids	Transfer Efficiency
EU-17																
Paint Used in Silkscreening Booth	23.00	17.00%	0.0%	17.0%	0.0%	83.00%	0.0139	4.25	3.91	3.91	0.23	5.54	1.01	0.00	n/a	100%

PM Control Efficiency 0.00%

State Potential Emissions

Add worst case coating to all solvents

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lbs/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lbs/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lbs/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lbs/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lbs/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used

**Appendix A: Emissions Calculations
VOC Potential Emissions**

Company Name: Gemtron Corporation
Address City IN Zip: 2000 Chestnut Street, Vincennes, Indiana 47591
MSOP: 083-22688
Plt ID: 083-00012
Reviewer: Brian J. Pedersen
Date: February 21, 2006

Clean Up Solvents Used (All Solvents 100% VOC)

Material	Maximum Usage(lbs/month)	Maximum Usage (lbs/yr)	Maximum Usage (tons/yr)
EU-14 and EU-15			
Solvent 6-96	845	10140	5.07
Acetone	19.75	237	0.12
Total	865	10377	5.19
EU-16			
Solvent 6-96	559	6708	3.35
Acetone	11.25	135	0.07
Total	570.25	6843	3.42
EU-17			
Solvent 6-96	440	5280	2.64
Acetone	7.08	84.96	0.04
Total	447.08	5364.96	2.68
EU-18			
Sergussa 80452	48.4	580.8	0.290
Solvent 6-96	154	1848	0.924
Prestoline HG	44.53	534.36	0.267
Total	246.93	2963.16	1.48

Emissions from solvents used to clean the equipment after production:

Sergussa 80452	110	1320	0.66
Miscellaneous Solvent	323	3880	1.94
Total	433.3	5200	2.60

Total Clean Up Solvents Used:
15.37 tons/yr of VOC

Methodology

VOC Emission Rate (lbs/hr)=Maximum Rate (units/hr) * Emission Factor (lb/units)
 Recycled By Solvent System(tons/yr)=Emission Rate (lbs/hr) * 8760 hours per year / 2000 pounds per ton
 Maximum Potential Emissions(tons/yr)=Recycled By Solvent System (tons/yr) x (1-Percent Solvent Recycled)
 *Note: Estimated Solvent Loss Rate From Inventory

**Turbine (>250 and <600 HP)
Reciprocating**

Company Name: Gemtron Corporation
Address City IN Zip: 2000 Chestnut Street, Vincennes, Indiana 47591
MSOP: 083-22688
Pit ID: 083-00012
Reviewer: Brian J. Pedersen
Date: February 21, 2006

A. Emissions calculated based on heat input capacity (MMBtu/hr)

Two (2) Emergency Generators (EU-06)

Heat Input Capacity
MM Btu/hr

0.5

***Note: Potential Emissions Limited to 500 Hours of Operation**

Emission Factor in lb/MMBtu	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
0.31	0.31	0.29	4.41	0.4	0.95	
Potential Emission in tons/yr	0.039	0.039	0.036	0.551	0.045	0.119

Methodology

Potential Throughput (hp-hr/yr) = hp * 500 hr/yr

Emission Factors are from AP42 (Supplement B 10/96), Table 3.3-2

Emission (tons/yr) = [Heat input rate (MMBtu/hr) x Emission Factor (lb/MMBtu)] * 500 hr / (2,000 lb/ton)

Emission (tons/yr) = [Potential Throughput (hp-hr/yr) x Emission Factor (lb/hp-hr)] / (2,000 lb/ton)

*PM emission factors are assumed to be equivalent to PM10 emission factors.

**Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100**

**Company Name: Gemtron Corporation
Address City IN Zip: 2000 Chestnut Street, Vincennes, Indiana 47591
MSOP: 083-22688
Plt ID: 083-00012
Reviewer: Brian J. Pedersen
Date: February 21, 2006**

Forty-Nine (49) Space Heaters (EU-07)

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
4.79	40.227

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.038	0.153	0.012	2.01	0.111	1.69

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 9 for HAPs emissions calculations.

Appendix A: Emissions Calculations

Natural Gas Combustion Only

MM BTU/HR <100

HAPs Emissions

Company Name: Gemtron Corporation
Address City IN Zip: 2000 Chestnut Street, Vincennes, Indiana 47591
MSOP: 083-22688
Plt ID: 083-00012
Reviewer: Brian J. Pedersen
Date: February 21, 2006

Forty-Nine (49) Space Heaters (EU-07)

HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	0.002	0.001	0.075	1.800	0.003
Potential Emission in tons/yr	0.00004	0.00002	0.0015	0.0362	0.0001

HAPs - Metals

	Lead	Cadmium	Chromium	Manganese	Nickel	Total HAPs
Emission Factor in lb/MMcf	0.0005	0.0011	0.0014	0.0004	0.0021	
Potential Emission in tons/yr	0.00001	0.00002	0.00003	0.00001	0.00004	0.038

Methodology is the same as page 8.

The five highest organic and metal HAPs emission factors are provided above.
 Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100**

**Company Name: Gemtron Corporation
Address City IN Zip: 2000 Chestnut Street, Vincennes, Indiana 47591
MSOP: 083-22688
Plt ID: 083-00012
Reviewer: Brian J. Pedersen
Date: February 21, 2006**

Four (4) Space Heaters (SH1)

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
0.45	3.783

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.004	0.014	0.001	0.19	0.010	0.16

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 11 for HAPs emissions calculations.

Natural Gas Combustion Only

MM BTU/HR <100

HAPs Emissions

Company Name: Gemtron Corporation
Address City IN Zip: 2000 Chestnut Street, Vincennes, Indiana 47591
MSOP: 083-22688
Plt ID: 083-00012
Reviewer: Brian J. Pedersen
Date: February 21, 2006

Four (4) Space Heaters (SH1)

HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	0.002	0.001	0.075	1.800	0.003
Potential Emission in tons/yr	0.00000	0.00000	0.0001	0.0034	0.0000

HAPs - Metals

	Lead	Cadmium	Chromium	Manganese	Nickel	Total HAPs
Emission Factor in lb/MMcf	0.0005	0.0011	0.0014	0.0004	0.0021	
Potential Emission in tons/yr	0.00000	0.00000	0.00000	0.00000	0.00000	0.004

Methodology is the same as page 10.

The five highest organic and metal HAPs emission factors are provided above.
 Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Appendix A: State Potential Emissions Calculations
Maintenance Degreasing**

Company Name: Gemtron Corporation
Address City IN Zip: 2000 Chestnut Street, Vincennes, Indiana 47591
MSOP: 083-22688
Pit ID: 083-00012
Reviewer: Brian J. Pedersen
Date: February 21, 2006

Maintenance Degreasing

Material	Density (lb/gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Gal of Mat (gal/day)	Potential VOC (lb/day)	Potential VOC (ton/yr)
Safety-Kleen Solvent	7.60	100.00%	0.0%	100.0%	0.1	0.760	0.139
State Potential Emissions						0.760	0.139

METHODOLOGY

Potential VOC Pounds per Day = Solvent Density (lbs/gallon) * weight % volatiles * solvent consumption (gallons/day)

Potential VOC Tons per Year = Potential VOC Pounds per Day * (365 days/yr) * (1 ton/2000 lbs)

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PROCESS	Number of Stations	Max. electrode consumption per station (lbs/hr)		EMISSION FACTORS * (lb pollutant / lb electrode)				EMISSIONS (lb/hr)				TOTAL HAPS (lb/hr)
				PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
WELDING												
Submerged Arc	0	0		0.036				0.000	0	0.000	0	0.000
Metal Inert Gas (MIG)(ER5154)	8	0.05		0.0241	0.000034		0.00001	0.010	0.0000136	0.000	0.000004	0.000
Stick (E7018 electrode)	4	0.2		0.0211				0.017	0	0.000	0	0.000
Tungsten Inert Gas (TIG)(carbon steel)	2	0.1		0.0055				0.001	0	0.000	0	0.000
Oxyacetylene(carbon steel)	0	0		0.0055				0.000	0	0.000	0	0.000
FLAME CUTTING	Number of Stations	Max. Metal Thickness Cut (in.)	Max. Metal Cutting Rate (in./minute)	EMISSION FACTORS (lb pollutant/1,000 inches cut, 1" thick)				EMISSIONS (lbs/hr)				TOTAL HAPS (lb/hr)
				PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
Oxyacetylene	0	0	0	0.1622	0.0005	0.0001	0.0003	0.000	0.000	0.000	0.000	0.000
Oxymethane	0	0	0	0.0815	0.0002		0.0002	0.000	0.000	0.000	0.000	0.000
Plasma	0	0	0					0.000	0.000	0.000	0.000	0.000
EMISSION TOTALS								PM = PM10	Mn	Ni	Cr	Total HAPs
Potential Emissions lbs/hr								0.03	0.00	0.00	0.00	0.00
Potential Emissions lbs/day								0.66	0.00	0.00	0.00	0.00
Potential Emissions tons/year								0.121	0.000	0.00	0.00	0.000

METHODOLOGY

*Emission Factors are default values for carbon steel unless a specific electrode type is noted in the Process column. Consult AP-42 or other reference for different electrode types.

Welding emissions, lb/hr: (# of stations)(max. lbs of electrode used/hr/station)(emission factor, lb. pollutant/lb. of electrode used)

Cutting emissions, lb/hr: (# of stations)(max. metal thickness, in.)(max. cutting rate, in./min.)(60 min./hr.)(emission factor, lb. pollutant/1,000 in. cut, 1" thick)

Emissions, lbs/day = emissions, lbs/hr x 24 hrs/day

Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/day x 1 ton/2,000 lbs.

Plasma cutting emission factors are from the American Welding Society study published in Sweden (March 1994).

Welding and other flame cutting emission factors are from an internal training session document.

See AP-42, Chapter 12.19 for additional emission factors for welding.

**Appendix A: Emission Calculations
CERAN Laser**

Company Name: Gemtron Corporation
Address City IN Zip: 2000 Chestnut Street, Vincennes, Indiana 47591
MSOP 083-22688
Pit ID: 083-00012
Reviewer: Brian J. Pedersen
Application Date: February 21, 2006

Unit ID	Control Efficiency (%)	Grain Loading per Actual Cubic foot of Outlet Air (grains/cub. ft.)	Gas or Air Flow Rate (acfm.)	PM Emission Rate before Controls (lb/hr)	PM Emission Rate before Controls (tons/yr)	PM Emission Rate after Controls (lb/hr)	PM Emission Rate after Controls (tons/yr)
CERAN Laser	99.1%	0.0004	1766	0.67	2.95	0.0061	0.027

Methodology

Emission Rate in lbs/hr (after controls) = (grains/cub. ft.) (cub. ft./min.) (60 min/hr) (lb/7000 grains)

Emission Rate in tons/yr = (lbs/hr) (8760 hr/yr) (ton/2000 lb)

Emission Rate in lbs/hr (before controls) = Emission Rate (after controls): (lbs/hr)/(1-control efficiency)

Emission Rate in tons/yr = (lbs/hr) (8760 hr/yr) (ton/2000 lb)

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Address City IN Zip: 2000 Chestnut Street, Vincennes, Indiana 47591
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Date: February 21, 2006

Summary of Emissions

Uncontrolled Potential Emissions

Emission Unit	PM (tons/yr)	PM-10 (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	VOC (tons/yr)	CO (tons/yr)	HAPS (tons/yr)	
Process Lines 1 and 2 (EU-01)	0.00	0.00		0.00	0.00	4.11	0.00	0.00
Process Lines 3 and 4 (EU-02)	0.00	0.00		0.00	0.00	2.11	0.00	0.00
Two (2) Electric Tempering Furnaces, located on EU-01, EU-02, and EU-14	0.00	0.00		1.83	0.00	0.00	0.00	0.00
CERAN Processing Line (EU-03)	0.00	0.00		0.00	0.00	6.92	0.00	0.010
Solvent Cleaning Station (EU-04)	0.00	0.00		0.00	0.00	24.1	0.00	0.00
Closed Molding Operations (EU-05)	0.00	0.00		0.00	0.00	0.789	0.00	0.00
Two (2) Diesel Fired Emergency Generators (EU-06)	0.039	0.039		0.036	0.551	0.045	0.119	0.00
Two (2) heavy tempering lines (EU-14 and EU-15)	0.00	0.00		0.00	0.00	6.33	0.00	0.00
One (1) Heat Treatment Line (EU-13)	0.00	0.00		0.00	0.00	1.74	0.00	0.00
Four (4) Refrigerator Heat Stamp Machines (HSM)	0.00	0.00		0.00	0.00	0.422	0.00	0.00
One (1) Circle Glass Line (EU-16)	0.00	0.00		0.00	0.00	1.85	0.00	0.00
One (1) Small Parts Line (EU-17)	0.00	0.00		0.00	0.00	1.01	0.00	0.00
Clean Up Solvent used in EU-14, EU-15, EU-16, EU-17, and EU-18	0.00	0.00		0.00	0.00	15.4	0.00	0.00
Screen Washer in EU-04	0.00	0.00		0.00	0.00	1.54	0.00	0.00
Belt Sanders in EU-17	5.01	5.01		0.00	0.00	0.00	0.00	0.00
Ceran Laser in EU-03	2.95	2.95						
Forty-Nine (49) Space Heaters (EU-07)	0.038	0.153		0.012	2.01	0.111	1.69	0.038
Maintenance Degreasing (EU-19)	0.00	0.00		0.00	0.00	0.139	0.00	0.00
One (1) Glass Edge Grinding (EU-10)	1.21	1.21		0.00	0.00	0.00	0.00	1.77
Four (4) Space Heaters (SH1)	0.004	0.014		0.001	0.190	0.010	0.160	0.004
Maintenance Welding (EU-08)	0.121	0.121		0.00	0.00	0.00	0.00	0.00
Machining and Grinding	0.06	0.06		0.00	0.00	0.00	0.00	0.00
One (1) CERAN Glass Recovery Unit (EU-12)	0.00	0.00		0.00	0.00	3.94	0.00	0.00
Total	9.43	9.56		1.879	2.75	70.6	1.97	1.82

Company Name: Gemtron Corporation
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Controlled Emissions

Emission Unit	PM (tons/yr)	PM-10 (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	VOC (tons/yr)	CO (tons/yr)	HAPS (tons/yr)
Process Lines 1 and 2 (EU-01)	0.00	0.00	0.00	0.00	4.11	0.00	0.00
Process Lines 3 and 4 (EU-02)	0.00	0.00	0.00	0.00	2.11	0.00	0.00
Two (2) Electric Tempering Furnaces, located on EU-01, EU-02, and EU-14	0.00	0.00	1.83	0.00	0.00	0.00	0.00
CERAN Processing Line (EU-03)	0.00	0.00	0.00	0.00	6.92	0.00	0.010
Solvent Cleaning Station (EU-04)	0.00	0.00	0.00	0.00	24.1	0.00	0.00
Closed Molding Operations (EU-05)	0.00	0.00	0.00	0.00	0.789	0.00	0.00
Two (2) Diesel Fired Emergency Generators (EU-06)	0.039	0.039	0.036	0.551	0.045	0.119	0.00
Two (2) heavy tempering lines (EU-14 and EU-15)	0.00	0.00	0.00	0.00	6.33	0.00	0.00
One (1) Heat Treatment Line (EU-13)	0.00	0.00	0.00	0.00	1.74	0.00	0.00
Four (4) Refridgerator Heat Stamp Machines (HSM)	0.00	0.00	0.00	0.00	0.422	0.00	0.00
One (1) Circle Glass Line (EU-16)	0.00	0.00	0.00	0.00	1.85	0.00	0.00
One (1) Small Parts Line (EU-17)	0.00	0.00	0.00	0.00	1.01	0.00	0.00
Clean Up Solvent used in EU-14, EU-15, EU-16, EU-17, and EU-18	0.00	0.00	0.00	0.00	15.4	0.00	0.00
Screen Washer in EU-04	0.00	0.00	0.00	0.00	1.54	0.00	0.00
Belt Sanders in EU-17	5.01	5.01	0.00	0.00	0.00	0.00	0.00
Ceran Laser In EU-03	0.027	0.027					
Forty-Nine (49) Space Heaters (EU-07)	0.038	0.153	0.012	2.01	0.111	1.69	0.038
Maintenance Degreasing (EU-19)	0.00	0.00	0.00	0.00	0.139	0.00	0.00
One (1) Glass Edge Grinding (EU-10)	0.004	0.004	0.00	0.00	0.00	0.00	0.005
Four (4) Space Heaters (SH1)	0.004	0.014	0.001	0.190	0.010	0.160	0.004
Maintenance Welding (EU-08)	0.121	0.121	0.00	0.00	0.00	0.00	0.00
Machining and Grinding	0.06	0.06	0.00	0.00	0.00	0.00	0.00
One (1) CERAN Glass Recovery Unit (EU-12)	0.00	0.00	0.00	0.00	3.94	0.00	0.00
Total	5.30	5.43	1.879	2.75	70.6	1.97	0.057