



MINOR SOURCE OPERATING PERMIT RENEWAL

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
and
INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES

SVC Manufacturing dba Pepsico - QTG
5858 Decatur Boulevard
Indianapolis, Indiana 46241

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

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 097-19967-00365	
Issued by:	Issuance Date: 8-12-05
Original signed by Felicia A. Robinson, Manager of Environmental Planning Indianapolis Office of Environmental Services	Expiration Date: 8-11-10

TABLE OF CONTENTS

A	SOURCE SUMMARY	3
A.1	General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]	
A.2	Emission Units and Pollution Control Equipment Summary	
B	GENERAL CONDITIONS	4
B.1	Permit No Defense [IC 13]	
B.2	Definitions	
B.3	Effective Date of the Permit [IC 13-15-5-3]	
B.4	Permit Term and Renewal [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5]	
B.5	Modification to Permit [326 IAC 2]	
B.6	Annual Notification [326 IAC 2-6.1-5(a)(5)]	
B.7	Preventive Maintenance Plan [326 IAC 1-6-3]	
B.8	Permit Revision [326 IAC 2-5.1-3(e)(3)][326 IAC 2-6.1-6]	
B.9	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] [IC 13-17-3-2][IC 13-30-3-1]	
B.10	Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]	
B.11	Annual Fee Payment [326 IAC 2-1.1-7]	
B.12	Credible Evidence [326 IAC 1-1-6]	
C	SOURCE OPERATION CONDITIONS	8
C.1	Permit Revocation [326 IAC 2-1.1-9]	
C.2	Opacity [326 IAC 5-1]	
C.3	Fugitive Dust Emissions [326 IAC 6-4]	
C.4	Asbestos Abatement Projects [326 IAC 14-10][326 IAC 18][40 CFR 61, Subpart M]	
C.5	Performance Testing [326 IAC 3-6]	
	Compliance Requirements [326 IAC 2-1.1-11]	
C.6	Compliance Requirements [326 IAC 2-1.1-11]	
C.7	Monitoring Methods [326 IAC 3][40 CFR 60][40 CFR 63]	
	Record Keeping and Reporting Requirements	
C.8	Malfunctions Report [326 IAC 1-6-2]	
C.9	General Record Keeping Requirements [326 IAC 2-6.1-5]	
C.10	General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-5] [IC 13-14-1-13]	
D.1	EMISSIONS UNIT OPERATION CONDITIONS - Natural Gas Boilers	12
	Emission Limitations and Standards	
D.1.1	General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]	
D.1.2	Particulate Matter Emission Limitations for Sources of Indirect Heating [326 IAC 6-2-4]	
	Compliance Determination Requirements	
D.1.3	Testing Requirements [326 IAC 2-7-6(1)]	
	Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]	
D.1.4	Record Keeping Requirements	
	Annual Notification	14
	Malfunction Report.....	15

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ), and Indianapolis Office of Environmental Services (OES). The information describing the source contained in conditions A.1 and 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 beverages manufacturing source.

Authorized Individual: Engineering and Manufacturing Manager
Source Address: 5858 Decatur Boulevard, Indianapolis, Indiana 46241
Mailing Address: 5858 Decatur Boulevard, Indianapolis, Indiana 46241
General Source Phone: (317)-788-5423
SIC Code: 2033
County Location: Marion County
Nonattainment for ozone under the 8-hour standard
Nonattainment for PM2.5
Attainment for all other criteria pollutants.
Source Status: Minor Source Operating Permit
Minor Source, under PSD and Emission Offset Rules
Minor Source, Section 112 of the Clean Air Act

A.2 Emissions Units and Pollution Control Equipment Summary

This stationary source is approved to operate the following emissions units and pollution control devices:

- (a) Three (3) Steam Boilers manufactured by Cleaver Brooks, identified as Emission Units SG-01, SG-02, and SG-04, with a maximum heat input capacity of 33.48 million British Thermal Units per hour (MMBtu/hr) each, capable of firing natural gas only. The emissions from these boilers are not controlled and are exhausted out the stacks identified as Stack ID 01, ID 02, and ID 04 respectively. Boilers SG-01 and SG-02 were constructed in 2000, boiler SG-04 - in 2003.
- (b) One (1) Steam Boiler, identified as Emission Unit SG-03, with a maximum heat input capacity of 25.11 million British Thermal Units per hour (MMBtu/hr), capable of firing natural gas only. The emissions from this boiler are not controlled and are exhausted out one stack identified as Stack I.D. 03. Boiler SG-03 was constructed in 2000.
- (c) Line Cleaning Operation, identified as Emission Unit LC-01, using Acidic Halogen Sanitizer, Chlorinated Foam Cleaner, and Low Foam Chlorinated Detergent with maximum usage of 400 gallons per year.
- (d) Cap and Bottle Coding Process, identified as Emission Unit CC-01, involves the application of videojet ink on the bottle caps. The maximum estimated ink usage rate is 0.07 gallons per hour. Emissions generated by this process are not controlled and are vented into the building.

SECTION B GENERAL CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

B.1 Permit No Defense [IC 13]

This permit to operate does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.2 Definitions

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.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

B.4 Permit Term and Renewal [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5]

This permit 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 13-15-5-3. Subsequent revisions of this permit do not affect the expiration date.

The Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date. If a timely and sufficient permit application for a renewal has been made, this permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.

B.5 Modification to Permit [326 IAC 2]

All requirements and conditions of this operating permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

B.6 Annual Notification [326 IAC 2-6.1-5(a)(5)]

(a) Annual notification shall be submitted 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) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.

(c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

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

and

Indianapolis OES
Air Compliance

2700 South Belmont Ave.
Indianapolis, IN 46221

- (d) 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, and OES on or before the date it is due.

B.7 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) The Permittee shall implement the PMPs, including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, and OES upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ, and OES. IDEM, OAQ, and OES 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 PMP does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) 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.8 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

- (a) Permit revisions are governed by the requirements of 326 IAC 2-6.1-6.
- (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

and

Indianapolis OES
Air Compliance
2700 South Belmont Ave.
Indianapolis, IN 46221

Any such application shall be certified by an "authorized individual" as defined by 326 IAC 2-1.1-1.

- (c) The Permittee shall notify the OAQ and OES within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]
- (d) No permit amendment or modification is required for the addition, operation or removal of a non-road engine, as defined in 40 CFR 89.2.

**B.9 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, OES, and 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 this title or the conditions of this permit or any operating permit revisions;
- (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 processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;
- (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.10 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)]:

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch, and OES, Air Permits, within thirty (30) days of the change.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).
- (c) IDEM, OAQ, and OES shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

B.11 Annual Fee Payment [326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to OES within thirty (30) calendar days of receipt of a billing.
- (c) The Permittee may call the following telephone number: (317) 327-2234 (ask for OES Air Compliance), to determine the appropriate permit fee.

B.12 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

C.1 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 and OES, the fact that continuance of this permit is not consistent with purposes of this article.

C.2 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 thirty percent (30%) 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 non-overlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.3 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.4 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

and

Indianapolis OES
Air Enforcement
2700 South Belmont Ave.
Indianapolis, IN 46221

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 2-7-1(34).

- (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

C.5 Performance Testing [326 IAC 3-6]

- (a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. 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, and OES.

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

and

Indianapolis OES
Air Compliance
2700 South Belmont Ave.
Indianapolis, IN 46221

no later than thirty-five (35) days prior to the intended test date.

- (b) The Permittee shall notify IDEM, OAQ, and OES of the actual test date at least fourteen (14) days) prior to the actual date.
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ, and OES not later than forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, and OES, if the Permittee submits to IDEM, OAQ, and OES 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.6 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 IDEM commissioner or the U.S. EPA.

C.7 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.

Record Keeping and Reporting Requirements

C.8 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 IDEM, OAQ, and OES 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 IDEM, OAQ, and OES 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.9 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 IDEM Commissioner or OES Administrator makes a request for records to the Permittee, the Permittee shall furnish the records to the IDEM Commissioner or OES Administrator within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented when operation begins.

C.10 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-5] [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

and

Indianapolis OES
Air Compliance
2700 South Belmont Ave.
Indianapolis, IN 46221
- (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, and OES on or before the date it is due.
- (c) Unless otherwise specified in this permit, any report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The reports do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

SECTION D.1 EMISSIONS UNITS OPERATION CONDITIONS

Emissions Unit Description:

- (a) Three (3) Steam Boilers manufactured by Cleaver Brooks, identified as Emission Units SG-01, SG-02, and SG-04, with a maximum heat input capacity of 33.48 million British Thermal Units per hour (MMBtu/hr) each, capable of firing natural gas only. The emissions from these boilers are not controlled and are exhausted out the stacks identified as Stack ID 01, ID 02, and ID 04 respectively. Boilers SG-01 and SG-02 were constructed in 2000, boiler SG-04 - in 2003.
- (b) One (1) Steam Boiler, identified as Emission Unit SG-03, with a maximum heat input capacity of 25.11 million British Thermal Units per hour (MMBtu/hr), capable of firing natural gas only. The emissions from this boiler are not controlled and are exhausted out one stack identified as Stack ID 03. Boiler SG-03 was constructed in 2000.

(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 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the facility described in this section except when otherwise specified in 40 CFR Part 60, Subpart Dc.

D.1.2. Particulate Matter Emission Limitations for Sources of Indirect Heating [326 IAC 6-2-4]

- (a) Pursuant to 326 IAC 6-2-4 (Particulate Matter Emission Limitations for Sources of Indirect Heating) the Particulate Matter (PM) emissions from emission units SG-01, SG-02, and SG-03 shall be limited to 0.32 lbs/MMBtu.
- (b) Pursuant to 326 IAC 6-2-4 (Particulate Matter Emission Limitations for Sources of Indirect Heating) the Particulate Matter (PM) emissions from emission unit SG-04 shall be limited to 0.31 lbs/MMBtu.
- (c) This limitation is based on the following equation:

$$P_t = 1.09 / Q^{0.26}$$

where:

P_t = emission rate limit (lbs./MMBtu/hr)

Q = total source heat input capacity (MMBtu/hr). The total source maximum operating capacity is 117.18 MMBtu/hr for Boilers SG-01, 02, 03, all constructed in 2000, and 125.55 MMBtu/hr for Boiler SG-04, constructed in 2003.

Compliance Determination Requirements

D.1.3 Testing Requirements [326 IAC 2-7-6(1)] [326 IAC 2-1.1-11]

The Permittee is not required to test emission units SG-01, 02, 03 or 04 by this permit. However, IDEM, OAQ and Indianapolis OES may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, OAQ and OES, compliance with the Particulate Matter limit specified in Condition D.1.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.4 Record Keeping Requirements

- (a) That pursuant to 40 CFR Part 60.48c (Reporting and Recordkeeping Requirements) records shall be maintained of the amounts of fuel combusted during each month by the four (4) natural gas fired boilers, identified as SG-01, 02, 03 and 04.

- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

**Indiana Department of Environmental Management
Office of Air Quality
Compliance Data Section
and
Indianapolis OES
Air Compliance**

**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: SVC Manufacturing dba Pepsico - QTG
Address: 5858 Decatur Boulevard, Indianapolis, Indiana 46241
City: Indianapolis
Phone #: (317)-788-5423
MSOP #: 097-19967-00365

I hereby certify that SVC Manufacturing dba Pepsico - QTG is still in operation.
 no longer in operation.

I hereby certify that SVC Manufacturing dba Pepsico - QTG is in compliance with the requirements of MSOP **097-19967-00365**.
 not in compliance with the requirements of MSOP **097-19967-00365**.

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:

**Indiana Department of Environmental Management
Office of Air Quality
Compliance Data Section
FAX NUMBER – 317-233-5967
and
Indianapolis OES
Air Compliance
FAX NUMBER – 317-327-2274**

MALFUNCTION REPORT

PAGE 1 OF 2

**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 PERM 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 ____/____/19____ _____ 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: _____

***SEE PAGE 2**

INTERIM CONTROL MEASURES: (IF APPLICABLE) _____

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

MALFUNCTION RECORDED BY: _____ DATE: _____ TIME: _____

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
and
INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES**

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

Source Background and Description

Source Name:	SVC Manufacturing dba Pepsico - QTG
Source Location:	5858 Decatur Boulevard, Indianapolis, Indiana 46241
County:	Marion
SIC Code:	2033
Operation Permit No.:	097-11620-00365
Operation Permit Issuance Date:	February 7, 2000
Permit Renewal No.:	097-19967-00365
Permit Reviewer:	Boris Gorlin

The Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and Indianapolis Office of Environmental Services (OES) have reviewed an application from SVC Manufacturing dba Pepsico - QTG (formerly - Quaker Oats Co. - Mayflower Midwest Facility) relating to the operation of a beverage manufacturing and packaging plant.

Permitted Emission Units and Pollution Control Equipment

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

- (a) Three (3) Steam Boilers manufactured by Cleaver Brooks, identified as Emission Units SG-01, SG-02, and SG-04, with a maximum heat input capacity of 33.48 million British Thermal Units per hour (MMBtu/hr) each, capable of firing natural gas only. The emissions from these boilers are not controlled and are exhausted out the stacks identified as Stack ID 01, ID 02, and ID 04 respectively. Boilers SG-01 and SG-02 were constructed in 2000, boiler SG-04 - in 2003.
- (b) One (1) Steam Boiler, identified as Emission Unit SG-03, with a maximum heat input capacity of 25.11 million British Thermal Units per hour (MMBtu/hr), capable of firing natural gas only. The emissions from this boiler are not controlled and are exhausted out one stack identified as Stack ID 03. Boiler SG-03 was constructed in 2000.
- (c) Line Cleaning Operation, identified as Emission Unit LC-01, using Acidic Halogen Sanitizer, Chlorinated Foam Cleaner, and Low Foam Chlorinated Detergent with maximum usage of 400 gallons per year.
- (d) Cap and Bottle Coding Process, identified as Emission Unit CC-01, involves the application of videojet ink on the bottle caps. The maximum estimated ink usage rate is 0.07 gallons per hour. Emissions generated by this process are not controlled and are vented into the building.

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 097-11620-00365, issued on February 7, 2000, and

- (b) MSOP Minor Permit Revision 097-16522-00365, issued on March 12, 2003, for construction and operation of a new Steam Boiler, identified as emission unit SG-04, with a maximum heat input capacity of 33.48 MMBtu/hr, capable of firing Natural Gas only, replacing an existing boiler with a maximum heat input capacity of 25.11 MMBtu/hr.

All conditions from previous approvals were incorporated into this permit.

Enforcement Issue

IDEM OAQ and OES are aware that the source did not apply for a MSOP renewal in a timely manner. IDEM OAQ and OES are reviewing this matter and will take appropriate action.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
01	Boiler SG-01	41.5	2	10,460	390
02	Boiler SG-02	41.5	2	10,460	390
03	Boiler SG-03	41.5	2	7,850	390
04	Boiler SG-04	41.5	2	7,850	390

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 December 13, 2004.

Emission Calculations

See Appendix A of this document for detailed emission calculations (4 pages).

Potential to Emit 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/year)
PM	4.18
PM-10	4.18
SO ₂	0.33
VOC	5.74
CO	46.19
NO _x	54.99

HAP's	Potential To Emit (tons/year)
TOTAL	<10 tpy combined

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of CO and NOx are less than 100 tons per year and greater than 25 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 (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(29)) 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 Marion County.

Pollutant	Status
PM-2.5	non-attainment
PM-10	attainment
SO ₂	maintenance attainment
NO ₂	attainment
8-hour Ozone	basic nonattainment
1-hour Ozone	maintenance attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) 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 NOx emissions are considered when evaluating the rule applicability relating to the ozone standards. Marion County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.
- (b) Marion County has been classified as nonattainment for PM2.5 in 70 FR 943 dated January 5, 2005. Until U.S. EPA adopts specific New Source Review rules for PM2.5 emissions, it has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions, pursuant to the Non-attainment New Source Review requirements. See the State Rule Applicability for the source section.
- (c) Marion County has been classified as attainment or unclassifiable in Indiana for PM10, SO₂, NO₂, CO, and Lead. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.

Source Status

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

Pollutant	Emissions (ton/yr)
PM	4.18
PM10	4.18
SO ₂	0.33
VOC	5.63
CO	46.19
NO _x	54.99

- (a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.
- (b) This existing source is not a major stationary source because no nonattainment regulated pollutant is emitted at a rate of 100 tons or greater per year. Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source, including the emissions from this permit **097-19967-00365**, is still not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons per year.

This status is based on all the air approvals issued to the source. This status has been verified by the OES inspector assigned to the source.

Federal Rule Applicability

- (a) The four (4) boilers identified as emission units SG-1, SG-2, SG-3, and SG-4 are subject to the New Source Performance Standard for Small Industrial - Commercial - Institutional Steam Generator Units, 40 CFR Part 60.40c, Subpart Dc (312 IAC 12), because they were constructed after June 9, 1989 and have heat input capacities greater than 10 million Btu per hour. Since these units are fired with natural gas and no other fuel, the recordkeeping requirements under 40 CFR Part 60.48c are the only applicable requirements of subpart Dc.
- (b) There are no other New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (c) This source is not subject to National Emission Standard for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63, Subpart DDDDD (Industrial, Commercial, Institutional Boilers and Process Heaters) because it is not a major source of Hazardous Air Pollutants.
- (d) This source is not subject to National Emission Standard for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63, Subpart T (Halogenated Solvent Cleaning) because solvents used

in the Line Cleaning Operation, identified as Emission Unit LC-01, do not contain methylene chloride, perchloroethylene, trichloroethylene, carbon tetrachloride, chloroform, or any combination of these halogenated HAP solvents.

- (b) There are no other National Emission Standards for Hazardous Air Pollutants (NESHAP)(326 IAC 14, 20 and 40 CFR Part 61, 63) applicable to this source.

State Rule Applicability – Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements) and 326 IAC 2-3 (Emission Offset)

This existing source is not a major stationary source because no attainment regulated pollutant emissions are equal to or greater than two hundred fifty (250) tons per year, this source is not one of the 28 listed source categories under 326 IAC 2-2 or 326 IAC 2-3 and no attainment or non-attainment regulated pollutant emissions are equal to or greater than one hundred (100) tons per year. This source commenced construction and operation in 1997. There have been no modifications or revisions to this source that were major modifications pursuant to 326 IAC 2-2 or 326 IAC 2-3. Therefore, 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements) and 326 IAC 2-3 (Emission Offset) are each not applicable to the source.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

This existing source does not have the potential to emit any single hazardous air pollutant (HAP) equal to or greater than ten (10) tons per year, nor does this source have the potential to emit HAP of equal to or greater than twenty-five (25) tons per year for any combination of HAP. This source did not undergo construction or reconstruction of a major HAP source after July 27, 1997. Therefore, this source is not subject to 326 IAC 2-4.1.

326 IAC 2-6 (Emission Reporting)

Pursuant to 326 IAC 2-6-1(a)(1), (2), and (3), this source is not subject to 326 IAC 2-6 (Emission Reporting) because, as an MSOP source, it is not required to have an operating permit under 326 IAC 2-7, it does not emit lead into the ambient air at levels equal to or greater than five (5) tons per year, and it is not located in Lake or Porter Counties.

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 this permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) 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 6-2-4 (Particulate Matter Emission Limitations for Sources of Indirect Heating)

Marion County is listed under 326 IAC 6-1-7. However, neither the source nor its facilities are listed in 326 IAC 6-1-12, and neither have the potential to emit one hundred (100) tons per year of PM or actuals of ten (10) tons or more of PM per year. Therefore, since all units are constructed on or after September 21, 1983, 326 IAC 6-2-4 limits apply.

Pursuant to 326 IAC 6-2-4 (Particulate Matter Emission Limitations for Sources of Indirect Heating) the Particulate Matter (PM) emissions from emission units SG-01, SG-02, SG-03 and SG-04 shall be limited to 0.32 lbs/MMBtu.

Pursuant to 326 IAC 6-2-4 (Particulate Matter Emission Limitations for Sources of Indirect Heating) the Particulate Matter (PM) emissions from emission unit SG-04 shall be limited to 0.31 lbs/MMBtu.

This limitation is based on the following equation:

$$P_t = 1.09 / Q^{0.26}$$

where:

P_t = emission rate limit (lbs/MMBtu/hr)
 Q = total source heat input capacity (MMBtu/hr). The total source maximum heat input capacity is 117.18 MMBtu/hr for Boilers SG-01, 02, 03, each constructed in 2000, and 125.55 MMBtu/hr for Boiler SG-04, constructed in 2003 (See Appendix A, page 4 of 4).

326 IAC 8-2-9 (Miscellaneous Metal Parts)

Since the cap and bottle coding process, emission unit CC-1, is not covered under the SIC codes listed in 326 IAC 8-2-9(a)(5) or any of the other applicability criteria in 326 IAC 8-2-9 (a) through (c), the Miscellaneous Metal Parts Regulation does not apply.

326 IAC 8-2-5 (Paper Coating Operations)

Since the cap and bottle coding process, emission unit CC-1, is not a saturation process, the requirements of 326 IAC 8-2-5 do not apply.

326 IAC 8-3 (Organic Solvent Degreasing Operations)

Pursuant to 326 IAC 8-3-1(b)(2), since the Line Cleaning Operation, Emission Unit ID LC-01, construction of which commenced after July 1, 1990, is not a Cold cleaner degreaser without remote solvent reservoirs, Open top vapor degreaser, or a Conveyorized degreaser, as described in 326 IAC 8-3-1(b)(1), rule 326 IAC 8-3 is not applicable to this operation.

326 IAC 8-5-5 (Graphic Arts Operations)

Since the cap and bottle coding process, emission unit CC-1, is not a flexographic, packaging rotogravure, or publication rotogravure printing operation, 326 IAC 8-5-5 does not apply.

Conclusion

The operation of this beverage manufacturing and packaging plant shall be subject to the conditions of the Minor Source Operating Permit 097-19967-00365.

**Appendix A: Emission Calculations
Natural Gas Combustion Only
MMBTU/HR<100
Steam Boiler**

Company Name: SVC Manufacturing dba Pepsico - QTG
Address City IN Zip: 5858 Decatur Blvd. Indianapolis, Indiana 46241
Permit ID: 097-19967-00365
Plt ID: 097-00365
Reviewer: BG

Small Industrial Boilers (Steam Boilers) SG-01, SG-02, and SG-04, 33.48 MMBtu/hr each

Heat Input Capacity MMBTu/hr	Potential Throughput MMCF/yr
100.4	879.9

Pollutant

	PM*	PM10*	SO ₂	NO _x	VOC	CO
Emission Factor in lb/MMCF	7.6	7.6	0.6	100.0	5.5	84.0
Potential Emission in tons/yr	3.343	3.343	0.264	43.99	2.420	36.95

*PM and PM₁₀ emission factors are filterable and condensable PM and PM₁₀ combined.

**Emission Factors for NO_x: Uncontrolled = 100, Low NO_x Burner = 50, Low NO_x 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 from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (AP-42 Supplement D 3/98)

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

HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMCF	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	9.238E-04	5.279E-04	3.299E-02	7.919E-01	1.496E-03

HAPs - Metals

Emission Factor in lb/MMCF	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	2.200E-04	4.839E-04	6.159E-04	1.672E-04	9.238E-04

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: Emission Calculations
MSOP 097-19667-00365

Natural Gas Combustion Only
MMBTU/HR<100
Steam Boiler

Small Industrial Boiler (Steam Boiler) SG-03, 25.11 MMBtu/hr

Heat Input Capacity
 MMBtu/hr

25.11

Potential Throughput
 MMCF/yr

220.0

Pollutant

	PM*	PM10*	SO2	NO _x	VOC	CO
Emission Factor in lb/MMCF	7.6	7.6	0.6	100.0	5.5	84.0
Potential Emission in tons/yr	0.836	0.836	0.066	11.00	0.605	9.238

*PM and PM₁₀ emission factors are filterable and condensable PM and PM₁₀ combined.

**Emission Factors for NO_x: Uncontrolled = 100, Low NO_x Burner = 50, Low NO_x 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 from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (AP-42 Supplement D 3/98)

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

HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMCF	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	2.310E-04	1.320E-04	8.249E-03	1.980E-01	3.739E-04

HAPs - Metals

Emission Factor in lb/MMCF	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	5.499E-05	1.210E-04	1.540E-04	4.179E-05	2.310E-04

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

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: Emission Calculations**MSOP 097-19667-00365****Line Cleaning Operation**

Maximum Usage Rate:	400	gal/yr					
Density of Solvent (non-HAP):	9.19	lbs/gal					
% VOC by Weight:	0.2						
Potential VOC emissions:	0.37	tons/yr					
Permit Status:	Insignificant; less than 10 tons/yr, and source is not major for VOC						
Applicable Regulations:	None						

Cap Coding Operation - Videojet ink and makeup fluid usage

Maximum Usage Rate:	613.2	gal/yr					
Density of ink as applied:	6.91	lbs/gal					
Lbs VOC/Gal as applied:	6.58	lb/gal					
Potential VOC emission:	2.02	tons/yr					
% MEK by Wt.:	51.00%						
Potential MEK emission:	1.08	tons/yr					
% Methanol by Wt.:	41.00%						
Potential Methanol emission:	0.87	tons/yr					
Permit Status:	Significant, since individual HAP > 1 tons/yr						
Applicable Regulations:	None						

Bottle Coding - Marsh ink usage

Maximum Usage Rate:	980	gal/yr					
Density of ink as applied:	8.43	lbs/gal					
Lbs VOC/Gal:	0.675						
Potential VOC emissions:	0.33	tons/yr					
% Glycol Ether by Wt.:	7.50%						
Potential Glycol Ether emissions:	0.31	tons/yr					
Permit Status:	Insignificant; less than 10 tons/yr, and source is not major for VOC						
Applicable Regulations:	None						
Combined HAPs emission:	2.26	tons/yr					

Appendix A: Emission Calculations
MSOP 097-19667-00365
POTENTIAL TO EMIT IN TONS PER YEAR

Source	PM*	PM10*	SO₂	NO_x	VOC	CO	Indiv. HAP
Three (3) 800 HP Boilers	3.34	3.34	0.26	43.99	2.42	36.95	
One (1) 600 HP Boiler	0.84	0.84	0.07	11.00	0.60	9.24	
Line Cleaning Operation					0.37		
Cap Coding					2.02		2.26
Bottle Coding					0.33		0.31
Total:	4.18	4.18	0.33	54.99	5.74	46.19	2.57
							Combined

Particulate Matter 326 IAC 6-2-4 (SG-04)
Particulate Matter 326 IAC 6-2-4 (SG-01, 02, & 03)

Boilers SG-01 to 03			
SG-01 - 03	92.07	SG-01 - 03	92.07
SG-04 (old)	25.11	SG-04 (new)	33.48
Q	117.18	Q	125.55
Pt	0.32	Pt	0.31