



State of Ohio Environmental Protection Agency

STREET ADDRESS:

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P.O. Box 1049
Columbus, OH 43216-1049

2/12/2009

Jack Dison
The Procter and Gamble Co.
5201 Spring Grove Avenue
Cincinnati, OH 45217

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 1431390903
Permit Number: 14-05991
Permit Type: Initial Installation
County: Hamilton

Certified Mail

Yes	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR
No	CEMS
Yes	MACT
Yes	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install and Operate ("PTIO") which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully.

Ohio EPA maintains a document entitled "Frequently Asked Questions about the PTIO". The document can be downloaded from the DAPC Web page, www.epa.state.oh.us/dapc, from the "Permits" link. This document contains additional information related to your permit, such as what activities are covered under the PTIO, who has enforcement authority over the permit and Ohio EPA's authorization to inspect your facility and records. Please contact the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469 if you need assistance.

The issuance of this PTIO is a final action of the Director and may be appealed to the Environmental Review Appeals Commission ("ERAC") under Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and describe the action complained of and the grounds for the appeal. The appeal must be filed with the ERAC within thirty (30) days after notice of the Director's action. A filing fee of \$70.00 must be submitted to the ERAC with the appeal, although the ERAC, has discretion to reduce the amount of the filing fee if you can demonstrate (by affidavit) that payment of the full amount of the fee would cause extreme hardship. If you file an appeal of this action, you must notify Ohio EPA of the filing of the appeal (by providing a copy to the Director) within three (3) days of filing your appeal with the ERAC. Ohio EPA requests that a copy of the appeal also be provided to the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the ERAC at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, OH 43215

If you have any questions regarding this permit, please contact the Hamilton County Dept. of Environmental Services. This permit has been posted to the Division of Air Pollution Control (DAPC) Web page www.epa.state.oh.us/dapc.

Sincerely,

Michael W. Ahern
Michael W. Ahern, Manager
Permit Issuance and Data Management Section, DAPC

Cc: HCDOES

Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korleski, Director



**State of Ohio Environmental Protection Agency
Division of Air Pollution Control**

FINAL

**Air Pollution Permit-to-Install and Operate
for
The Procter and Gamble Co.**

Facility ID: 1431390903
Permit Number: 14-05991
Permit Type: Initial Installation
Issued: 2/12/2009
Effective: 2/12/2009
Expiration: 11/26/2018



State of Ohio Environmental Protection Agency
 Division of Air Pollution Control

Air Pollution Permit-to-Install and Operate
 for
 The Procter and Gamble Co.

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Permit Number: 14-05991
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Authorization

Facility ID: 1431390903
Application Number(s): A0011088, A0035695
Permit Number: 14-05991
Permit Description: Chapter 31 modification of P023, P054 and P097.
Permit Type: Initial Installation
Permit Fee: \$3,250.00
Issue Date: 2/12/2009
Effective Date: 2/12/2009
Expiration Date: 11/26/2018
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

The Procter and Gamble Co.
5201 Spring Grove Avenue
Cincinnati, OH 45217

of a Permit-to-Install and Operate for the emissions unit(s) identified on the following page.

Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Hamilton County Dept. of Environmental Services
250 William Howard Taft Pkwy.
Cincinnati, OH 45219-2660
(513)946-7777

The above named entity is hereby granted this Permit-to-Install and Operate for the air contaminant source(s) (emissions unit(s)) listed in this section pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the described emissions unit(s) will operate in compliance with applicable State and federal laws and regulations.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director



Authorization (continued)

Permit Number: 14-05991
Permit Description: Chapter 31 modification of P023, P054 and P097.

Permits for the following emissions unit(s) or groups of emissions units are in this document as indicated below:

Emissions Unit ID:	P023
Company Equipment ID:	Liquid Detergents Process, IS-8 (HDL)
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P054
Company Equipment ID:	Kosher Glycerine Refining w/Carbon Adsorption, IS-16
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P097
Company Equipment ID:	Non-Kosher Glycerine Refining Process, IS-34
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



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Final Permit-to-Install and Operate

Permit Number: 14-05991

Facility ID: 1431390903

Effective Date: 2/12/2009

A. Standard Terms and Conditions



1. What does this permit-to-install and operate ("PTIO") allow me to do?

This permit allows you to install and operate the emissions unit(s) identified in this PTIO. You must install and operate the unit(s) in accordance with the application you submitted and all the terms and conditions contained in this PTIO, including emission limits and those terms that ensure compliance with the emission limits (for example, operating, recordkeeping and monitoring requirements).

2. Who is responsible for complying with this permit?

The person identified on the "Authorization" page, above, is responsible for complying with this permit until the permit is revoked, terminated, or transferred. "Person" means a person, firm, corporation, association, or partnership. The words "you," "your," or "permittee" refer to the "person" identified on the "Authorization" page above.

The permit applies only to the emissions unit(s) identified in the permit. If you install or modify any other equipment that requires an air permit, you must apply for an additional PTIO(s) for these sources.

3. What records must I keep under this permit?

You must keep all records required by this permit, including monitoring data, test results, strip-chart recordings, calibration data, maintenance records, and any other record required by this permit for five years from the date the record was created. You can keep these records electronically, provided they can be made available to Ohio EPA during an inspection at the facility. Failure to make requested records available to Ohio EPA upon request is a violation of this permit requirement.

4. What are my permit fees and when do I pay them?

There are two fees associated with permitted air contaminant sources in Ohio:

- PTIO fee. This one-time fee is based on a fee schedule in accordance with Ohio Revised Code (ORC) section 3745.11, or based on a time and materials charge for permit application review and permit processing if required by the Director.

You will be sent an invoice for this fee after you receive this PTIO and payment is due within 30 days of the invoice date. You are required to pay the fee for this PTIO even if you do not install or modify your operations as authorized by this permit.

- Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. For facilities that are permitted as synthetic minor sources, the fee schedule is adjusted annually for inflation. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

5. When does my PTIO expire, and when do I need to submit my renewal application?

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.



If a complete renewal application is submitted before the expiration date, Ohio EPA considers this a timely application for purposes of ORC section 119.06, and you are authorized to continue operating the emissions unit(s) covered by this permit beyond the expiration date of this permit until final action is taken by Ohio EPA on the renewal application.

6. What happens to this permit if my project is delayed or I do not install or modify my source?

This PTIO expires 18 months after the issue date identified on the "Authorization" page above unless otherwise specified if you have not (1) started constructing the new or modified emission sources identified in this permit, or (2) entered into a binding contract to undertake such construction. This deadline can be extended by up to 12 months, provided you apply to Ohio EPA for this extension within a reasonable time before the 18-month period has ended and you can show good cause for any such extension.

7. What reports must I submit under this permit?

An annual permit evaluation report (PER) is required in addition to any malfunction reporting required by OAC rule 3745-15-06 or other specific rule-based reporting requirement identified in this permit. Your PER due date is identified in the Authorization section of this permit.

8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit?

If you are required to obtain a Title V permit under OAC Chapter 3745-77 in the future, the permit-to-operate portion of this permit will be superseded by the issued Title V permit. From the effective date of the Title V permit forward, this PTIO will effectively become a PTI (permit-to-install) in accordance with OAC rule 3745-31-02(B). The following terms and conditions will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).

The PER requirements in this permit remain effective until the date the Title V permit is issued and is effective, and cease to apply after the effective date of the Title V permit. The final PER obligation will cover operations up to the effective date of the Title V permit and must be submitted on or before the submission deadline identified in this permit on the last day prior to the effective date of the Title V permit.

9. What are my obligations when I perform scheduled maintenance on air pollution control equipment?

You must perform scheduled maintenance of air pollution control equipment in accordance with OAC rule 3745-15-06(A). If scheduled maintenance requires shutting down or bypassing any air pollution control equipment, you must also shut down the emissions unit(s) served by the air pollution control equipment during maintenance, unless the conditions of OAC rule 3745-15-06(A)(3) are met. Any emissions that exceed permitted amount(s) under this permit (unless specifically exempted by rule) must be reported as deviations in the annual permit evaluation report (PER), including nonexempt excess emissions that occur during approved scheduled maintenance.



10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report?

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the Hamilton County Dept. of Environmental Services in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

If you have a malfunction, but determine that it is not a reportable malfunction under OAC rule 3745-15-06(B), it is recommended that you maintain records associated with control equipment breakdown or process upsets. Although it is not a requirement of this permit, Ohio EPA recommends that you maintain records for non-reportable malfunctions.

11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located?

Yes. Under Ohio law, the Director or his authorized representative may inspect the facility, conduct tests, examine records or reports to determine compliance with air pollution laws and regulations and the terms and conditions of this permit. You must provide, within a reasonable time, any information Ohio EPA requests either verbally or in writing.

12. What happens if one or more emissions units operated under this permit is/are shut down permanently?

Ohio EPA can terminate the permit terms associated with any permanently shut down emissions unit. "Shut down" means the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31.

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emission unit once the certification has been submitted to Ohio EPA by the authorized official.

You must comply with all recordkeeping and reporting for any permanently shut down emissions unit in accordance with the provisions of the permit, regulations or laws that were enforceable during the period of operation, such as the requirement to submit a PER, air fee emission report, or malfunction report. You must also keep all records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, for at least five years from the date the record was generated.

Again, you cannot resume operation of any emissions unit certified by the authorized official as being permanently shut down without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

13. Can I transfer this permit to a new owner or operator?

You can transfer this permit to a new owner or operator. If you transfer the permit, you must follow the procedures in OAC Chapter 3745-31, including notifying Ohio EPA or the local air agency of the



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install and Operate

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change in ownership or operator. Any transferee of this permit must assume the responsibilities of the transferor permit holder.

14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"?

This permit and OAC rule 3745-15-07 prohibit operation of the air contaminant source(s) regulated under this permit in a manner that causes a nuisance. Ohio EPA can require additional controls or modification of the requirements of this permit through enforcement orders or judicial enforcement action if, upon investigation, Ohio EPA determines existing operations are causing a nuisance.

15. What happens if a portion of this permit is determined to be invalid?

If a portion of this permit is determined to be invalid, the remainder of the terms and conditions remain valid and enforceable. The exception is where the enforceability of terms and conditions are dependent on the term or condition that was declared invalid.



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

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B. Facility-Wide Terms and Conditions



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install and Operate

Permit Number: 14-05991

Facility ID: 1431390903

Effective Date: 2/12/2009

1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) None.
 - b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (1) None.



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install and Operate

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Facility ID: 1431390903

Effective Date: 2/12/2009

C. Emissions Unit Terms and Conditions



1. P023, Liquid Detergents Process, IS-8 (HDL)

Operations, Property and/or Equipment Description:

Liquid Detergent Manufacturing Process with ESP and Scrubber Modification

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - a. d)(4) through d)(7).
 - (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - a. b)(2)a., c)(1), d)(1), e)(2) and e)(3).
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D) Voluntary Limitations to Avoid Title V Permit, Prevention of Significant Deterioration and Nonattainment New Source Review Requirements	See b)(2)a.
b.	OAC rule 3745-31-05(A)(3)	<p>Volatile Organic Compound (VOC) emissions shall not exceed 3.7 pounds per hour and 16.21 tons per year.</p> <p>See b)(2)a. in terms of pounds per hour and tons per year units of measure.</p> <p>See b)(2)d.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1).</p>
c.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
e.	OAC rule 3745-21-07(G)	This emissions unit is exempt from the requirements of OAC rule 3745-21-07(G).
f.	OAC rule 3745-114	See d)(4).
g.	40 CFR Part 60 Subpart RRR	See b)(2)d.
h.	OAC rule 3745-18-06(E)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

- a. The following emission limitations for emissions unit P023 shall not be exceeded:
 - i. Sulfur Dioxide (SO₂) emissions shall not exceed the following: 4.50 pounds per hour during steady state operations, 6.71 pounds per hour during cold start-ups and 19.87 tons per year including cold start-up emissions based upon a rolling, 12-month summation.
 - ii. Particulate Emissions (PE) (H₂SO₄ as particulate emissions) shall not exceed 0.44 pound per hour and 1.93 tons per year based upon a rolling, 12-month summation.
 - iii. Particulate matter 10 microns and less in diameter (PM₁₀) shall not exceed 0.44 pound per hour and 1.93 tons per year based upon a rolling, 12-month summation.
- b. Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of an electrostatic precipitator and scrubber and compliance with the allowable mass emission limitations and the visible emission limitation.
- c. The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements of 40 CFR Part 60 are also federally enforceable.
- d. In accordance with 40 CFR Part 60, Subpart RRR, this emissions unit operates with a concentration of total organic compounds (TOC) in the vent stream of less than 150 ppmv as measured by Method 25A during a stack test performed on August 24, 2006. Therefore, this emission unit is exempt from all provisions of this subpart except for the test method and procedure and the reporting and recordkeeping requirements in 60.704(h) and paragraphs (j), (l)(8) and (p) of 40 CFR 60.705.



c) Operational Restrictions

- (1) The total maximum annual sulfur burn rate for trains 1 and 2 in this emissions unit shall not exceed 39,420,000 pounds, based upon a rolling, 12-month summation of the amount of sulfur burned. The permittee has existing records to demonstrate compliance with this limitation upon issuance of this permit.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information:
 - a. The sulfur burn rate for each month.
 - b. The rolling, 12-month summation of the sulfur burn rate.
 - c. The total sulfur dioxide emissions for each month.
 - d. The rolling, 12-month summation of SO₂ emissions.
 - e. The total PE and PM₁₀ for each month.
 - f. the rolling, 12-month summation of PE and PM₁₀.
- (2) The permittee shall properly install, operate and maintain equipment to continuously monitor the scrubber liquor flow rate of scrubber IS-8b and the pH of the scrubber liquor, during operation of this emissions unit, including periods of startup and shutdown. In addition, the permittee shall monitor the power to the ESPs to verify that the ESPs are energized. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with good engineering practices. The permittee shall record the scrubber liquor flow rate, the pH of the scrubber liquor and the ESP power status on a daily basis.

Whenever the monitored value for the scrubber liquor flow rate, the pH of the scrubber liquor and the power to the ESPs deviates from the specifications listed below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the scrubber liquor flow rate, the pH of the scrubber liquor, and the ESP power status immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.



The acceptable scrubber liquor flow rate of scrubber IS-8b shall be continuously maintained at: a value of not less than 500 gallons per minute at all times while the emissions unit is in operation.

The acceptable pH of the scrubber liquor for scrubber IS-8b shall be continuously maintained at: a value at or above 5 at all times while the emissions unit is in operation.

The power to the ESPs shall be continuously maintained such that the ESPs are energized and operated in accordance with good engineering practices at all times while the emissions unit is in operation.

- (3) In accordance with 40 CFR Part 60, Subpart RRR, the permittee shall keep up-to-date, readily accessible records of any change in equipment or process operation that increases the concentration of TOC in the vent stream of the affected facility.
- (4) The permit to install for this emissions unit P023 was evaluated based on the actual materials and the design parameters of the emissions unit's(s) exhaust system, as specified by the permittee in the permit application. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this emissions unit for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant emitted using an air dispersion model such as SCREEN 3.0, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:
 - a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
 - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices";
or
 - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
 - b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
 - c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., 24 hours per day and 7 days per week, from that of 8 hours per day and 5 days per week. The resulting



calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$TLV/10 \times 8/24 \times 5/7 = TLV/42 = MAGLC$$

- d. The following summarizes the results of dispersion modeling for the significant toxic contaminants or “worst case” toxic contaminant(s):

Toxic Contaminant: H2SO4

TLV (mg/m3): 0.2

Maximum Hourly Emission Rate (lbs/hr): 0.44

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 4.69

MAGLC (ug/m3): 4.76

The permittee, having demonstrated that emissions of H2SO4, from emissions unit P023, is estimated to be equal or greater than eighty per cent, but less than 100 per cent of the maximum acceptable ground level concentration (MAGLC), shall not operate the emissions unit at a rate that would exceed the daily emissions rate, process weight rate, and/or restricted hours of operations, as allowed in this permit; and any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F).

- (5) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration”, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
- c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the “Toxic Air Contaminant Statute”, ORC 3704.03(F), will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a “modification”, or if a new toxic is emitted, or the modeled toxic(s) is/are expected to exceed the previous modeled level(s), then the permittee shall apply for and



obtain a final permit-to-install prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit-to-install application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and may require the permittee to submit a permit-to-install application for the increased emissions.

- (6) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute":
 - a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
 - b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);
 - c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
 - d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.
- (7) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
- (2) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12 - month sulfur burn rate limitation. These reports shall be submitted in accordance with the terms and conditions of this permit.
- (3) The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month emission limitations for SO₂ and PE/PM₁₀. These reports shall be submitted in accordance with the terms and conditions of this permit.



- (4) Any change in equipment or process operation that increases the vent stream concentration above the low concentration exemption level in 60.700(c)(8), including a measurement of the new vent stream concentration, as recorded under 60.705(j). These must be reported as soon as possible after the change and no later than 180 days after the change. If the vent stream concentration is above 150 ppmv as measured using Method 25A, a performance test must be completed within the same time period to obtain the vent stream flow rate, heating value, and TOC. The performance test is subject to the requirements of 60.8 of the General Provisions. Unless the facility qualifies for an exemption under any of the exemption provisions listed in 60.700(c), except for the TRE index greater than 8.0 exemption in 60.700(c)(2), the facility must begin compliance with the requirements set forth in 60.702.
- (5) Each owner or operator that seeks to demonstrate compliance with 60.700(c)(8) must submit to the Administrator an initial report including a concentration measurement using the test method specified in 60.704.
- (6) Pursuant to the NSPS, the permittee is required to report the following information at the appropriate times (if the information has not already been reported):
 - a. construction date (no later than 30 days after such date);
 - b. actual start-up date (within 15 days after such date); and,
 - c. date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:

Hamilton County Department of Environmental Services
250 William Howard Taft Road
Cincinnati, OH 45219

f) Testing Requirements

- (1) Compliance with the emission limitation(s) specified in Section b) of the terms and conditions of this permit shall be determined in accordance with the following method(s):

Emission Limitation:

Volatile Organic Compound (VOC) emissions shall not exceed 3.7 pounds per hour and 16.21 tons per year.

Applicable Compliance Method:

The emission limitations specified above are based upon the emissions unit's potential to emit, emission factors and the operational parameters as provided in the confidential permit to install application 14-05991, submitted October 8, 2007.

If required, the permittee shall demonstrate compliance with these emission limitations through emission testing performed in accordance with methods 1 – 4, 25 and 25A found in 40 CFR Part 60, Appendix A.



(2) Emission Limitation:

20 percent opacity, as a six-minute average, except as specified by rule

Applicable Compliance Method:

If required, compliance shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002 and the procedures specified in OAC rule 3745-17-03(B)(1).

(3) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- a. The emission testing shall be conducted within within sixty (60) days after achieving maximum production levels but no later than one hundred and eighty (180) days after completion of construction and startup.
- b. The emission testing shall be conducted to demonstrate compliance with the PE and SO₂ emission limitations stated in b)(2).
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):
 - i. for Particulate Emissions (PE) (H₂SO₄ as particulate emissions), use Method 8 of 40 CFR Part 60, Appendix A; and
 - ii. for SO₂ emissions, use Method 6 of 40 CFR Part 60, Appendix A.

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
- e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
- f. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
- g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the



appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

- (4) Compliance with the rolling, 12-month summations of the sulfur burn rate, SO₂ emissions and PE/PM₁₀ emissions shall be demonstrated by the record keeping required by d)(1).

g) Miscellaneous Requirements

- (1) The terms and conditions of this permit to install, for emissions unit P023, shall supersede the terms and conditions of permit to install number 14-04633 issued May 24, 2005.
- (2) Emissions unit P023 has two natural gas fired pre-heaters that are exempt under OAC rule 3745-31-03(A)(1)(a).



2. P054, Kosher Glycerine Refining Process, IS-16

Operations, Property and/or Equipment Description:

Kosher Glycerine Refining Process, IS-16

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(E)	See b)(2)a.
b.	40 CFR Part 63, Subpart FFFF (40 CFR 63.2430-2550)	See d)3) and e)(2) – (4).

(2) Additional Terms and Conditions

a. Permit to Install 14-05991 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

Volatile Organic Compound (VOC) emissions shall be controlled to below 9.9 TPY by the use of a scrubber and carbon canister in series on each of the following systems associated with emissions unit P054: concentrator, still and dryer.

c) Operational Restrictions

(1) None.



d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall properly install, operate and maintain a continuous temperature monitor and recorder which measures and records the temperature of the exhaust gases from the spray chambers when the emissions unit(s) is/are in operation. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple/monitoring system shall be guaranteed by the manufacturer to be within ± 1 percent of the temperature being measured or ± 5 degrees Fahrenheit, whichever is greater. The carbon canister shall be installed, operated, and maintained in accordance with good engineering practices and the temperature monitor and recording device shall be installed, calibrated, operated and maintained in accordance with good engineering practices. The permittee shall collect and record the following information each day the emissions unit(s) is/are in operation:
 - a. all 3-hour blocks of time, when the systems controlled by the spray chambers were in operation, during which the average temperature of the exhaust gases from the spray chambers were more than 150 degrees Fahrenheit; and
 - b. a log of the downtime for the spray chambers and carbon canisters and monitoring equipment when the associated systems were in operation.

These records shall be maintained at the facility for a period of three years.

- (2) Whenever the monitored temperature of the exhaust gases deviates from the limit specified in this permit or the carbon canisters are not installed, operated, and maintained in accordance with good engineering practices, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:
 - a. the date and time the deviation began;
 - b. the magnitude of the deviation at that time;
 - c. the date the investigation was conducted;
 - d. the name(s) of the personnel who conducted the investigation; and
 - e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable limit specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- f. a description of the corrective action;
- g. the date corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was deviation;



- j. the exhaust gas temperature readings immediately after the corrective action was implemented; and
- k. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The exhaust gas temperature limit is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted exhaust gas temperature range/limit based upon information obtained during future emission tests that demonstrate compliance with the allowable VOC emission rate for the controlled emissions unit(s). In addition, approved revisions to the exhaust gas temperature range/limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a permit modification.

- (3) See 40 CFR Part 63, Subpart FFFF (40 CFR 63.2525(b)).

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
- (2) See 40 CFR Part 63, Subpart FFFF (40 CFR 63.2515(b)).
- (3) See 40 CFR Part 63, Subpart FFFF (40 CFR 63.2520(d)).
- (4) See 40 CFR Part 63, Subpart FFFF (40 CFR 63.2520(e)).

f) Testing Requirements

- (1) Compliance with the emission limitation(s) specified in b) of the terms and conditions of this permit shall be determined in accordance with the following method(s):

Emission Limitation:

Volatile Organic Compound (VOC) emissions shall not exceed 9.9 tons per year.

Applicable Compliance Method:

The VOC emission limitation is based on the emission factors, control efficiencies (if applicable) and the operational parameters as submitted in the confidential PTI application 14-05991 submitted on October 8, 2007. If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1-4 and 25 of 40 CFR, Part 60, Appendix A.



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install and Operate

Permit Number: 14-05991

Facility ID: 1431390903

Effective Date: 2/12/2009

g) Miscellaneous Requirements

- (1) The terms and conditions of this permit to install, for emission unit P054, shall supersede the terms and conditions of permit to install number 14-02098 issued November 7, 1990.



3. P097, Non-Kosher Glycerine Refining Process, IS-34

Operations, Property and/or Equipment Description:

Non-Kosher Glycerine Refining Process, IS-34

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(E)	See b)(2)a.
b.	40 CFR Part 63, Subpart FFFF (40 CFR 63.2430-2550)	See d)3) and e)(2) – (4).

(2) Additional Terms and Conditions

a. Permit to Install 14-05991 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

Volatile Organic Compound (VOC) emissions shall be controlled to below 9.9 TPY by the use of a scrubber and carbon canister in series on each of the following systems associated with emissions unit P097: concentrator, still and dryer.

c) Operational Restrictions

(1) None.



d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall properly install, operate and maintain a continuous temperature monitor and recorder which measures and records the temperature of the exhaust gases from the spray chambers when the emissions unit(s) is/are in operation. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple/monitoring system shall be guaranteed by the manufacturer to be within ± 1 percent of the temperature being measured or ± 5 degrees Fahrenheit, whichever is greater. The carbon canister shall be installed, operated, and maintained in accordance with good engineering practices and the temperature monitor and recording device shall be installed, calibrated, operated and maintained in accordance with good engineering practices. The permittee shall collect and record the following information each day the emissions unit(s) is/are in operation:
- a. all 3-hour blocks of time, when the systems controlled by the spray chambers were in operation, during which the average temperature of the exhaust gases from the spray chambers were more than 150 degrees Fahrenheit; and
 - b. a log of the downtime for the spray chambers and carbon canisters and monitoring equipment when the associated systems were in operation.

These records shall be maintained at the facility for a period of three years.

- (2) Whenever the monitored temperature of the exhaust gases deviates from the limit specified in this permit or the carbon canisters are not installed, operated, and maintained in accordance with good engineering practices, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:
- a. the date and time the deviation began;
 - b. the magnitude of the deviation at that time;
 - c. the date the investigation was conducted;
 - d. the name(s) of the personnel who conducted the investigation; and
 - e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable limit specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- f. a description of the corrective action;
- g. the date corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was deviation;



- j. the exhaust gas temperature readings immediately after the corrective action was implemented; and
- k. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The exhaust gas temperature limit is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted exhaust gas temperature range/limit based upon information obtained during future emission tests that demonstrate compliance with the allowable VOC emission rate for the controlled emissions unit(s). In addition, approved revisions to the exhaust gas temperature range/limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a permit modification.

- (3) See 40 CFR Part 63, Subpart FFFF (40 CFR 63.2525(b)).

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
- (2) See 40 CFR Part 63, Subpart FFFF (40 CFR 63.2515(b)).
- (3) See 40 CFR Part 63, Subpart FFFF (40 CFR 63.2520(d)).
- (4) See 40 CFR Part 63, Subpart FFFF (40 CFR 63.2520(e)).

f) Testing Requirements

- (1) Compliance with the emission limitation(s) specified in b) of the terms and conditions of this permit shall be determined in accordance with the following method(s):

Emission Limitation:

Volatile Organic Compound (VOC) emissions shall not exceed 9.9 tons per year.

Applicable Compliance Method:

The VOC emission limitation is based on the emission factors, control efficiencies (if applicable) and the operational parameters as submitted in the confidential PTI application 14-05991 submitted on October 8, 2007. If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1-4 and 25 of 40 CFR, Part 60, Appendix A.



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install and Operate

Permit Number: 14-05991

Facility ID: 1431390903

Effective Date: 2/12/2009

g) Miscellaneous Requirements

- (1) The terms and conditions of this permit to install, for emissions unit P097, shall supersede the terms and conditions of permit to install number 14-02684 issued May 12, 1993.