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Facility Name: **Givaudan-Roure Flavors Corporation**

Application Number: **14-4579**

Date: **October 15, 1998**

GENERAL PERMIT CONDITIONS

TERMINATION OF PERMIT TO INSTALL

Substantial construction for installation must take place within 18 months of the effective date of this permit. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

NOTICE OF INSPECTION

The Director of the Ohio Environmental Protection Agency, or his authorized representatives, may enter upon the premises of the above-named applicant during construction and operation at any reasonable time for the purpose of making inspections, conducting tests, or to examine records or reports pertaining to the construction, modification or installation of the source(s) of environmental pollutants identified within this permit.

CONSTRUCTION OF NEW SOURCE(S)

The proposed source(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources are inadequate or cannot meet applicable standards.

If the construction of the proposed source(s) has already begun or has been completed prior to the date the Director of the Ohio Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of Ohio Administrative Code

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(OAC) Rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities prove to be inadequate or cannot meet applicable standards.

PERMIT TO INSTALL FEE

In accordance with Ohio Revised Code 3745.11, the specified Permit to Install fee must be remitted within 15 days of the effective date of this permit to install.

PUBLIC DISCLOSURE

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC Rule 3745-49-03.

APPLICABILITY

This Permit to Install is applicable only to the contaminant sources identified. Separate application must be made to the Director for the installation or modification of any other contaminant sources.

BEST AVAILABLE TECHNOLOGY

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

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PERMIT TO OPERATE APPLICATION

A Permit to Operate application must be submitted to the appropriate field office for each air contaminant source in this Permit to Install. In accordance with OAC Rule 3745-35-02, the application shall be made at least 90 days prior to start-up of the source.

NINETY DAY OPERATING PERIOD

The facility will be permitted to operate during a 90-day period in accordance with OAC Rule 3745-35-02(C)(4)(b). The purpose of this period of operation is to fulfill the performance tests conditions used in the determination of compliance with the provisions of this Permit to Install or other applicable Ohio EPA rules.

SOURCE OPERATION AFTER COMPLETION OF CONSTRUCTION

This facility is permitted to operate each source described by this permit to install for period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies.

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<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
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AIR EMISSION SUMMARY

The air contaminant emissions units listed below comprise the Permit to Install for **Givaudan-Roure Flavors Corporation** located in **Hamilton** County. The emissions units listed below shall not exceed the emission limits/control requirements contained in the table. This condition in no way limits the applicability of any other state or federal regulations. Additionally, this condition does not limit the applicability of additional special terms and conditions of this permit.

P022

scrubber and
a regen-erative
thermal oxidizer

Ohio EPA Source Number

Source Identification Description

BAT Determination

P022 Cont'd

P021

Spray dryer no. 10 with wet cyclone scrubber and a regen-erative thermal oxidizer

BAT is the use of wet cyclone scrubber and regenerative thermal oxidizer for control

Spray dryer no. 11 with wet cyclone

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<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
BAT is the use of wet cyclone scrubber and regenerative thermal oxidizer for control	Applicable Federal & OAC Rules	3745-21-07 (G) (2) *	Permit Allowable Mass Emissions and/or Control/Usage Requirements	0.60 pound/hour OC 2.63 TPY OC Less stringent
	3745-15-07	3745-17-07 (A)	See Additional Special Term and Condition F.1	See Additional Special Term and Condition A.1.
	3745-31-05	3745-17-11 (B) (1) *	0.21 pound/hour PM/PM ₁₀ ** 0.92 TPY PM/PM ₁₀ ** 0.30 pound/hour OC 1.31 TPY OC	Less stringent
	3745-21-07 (G) (2) *		Less stringent	
	3745-17-07 (A)		See Additional Special Term and Condition A.1.	
	3745-17-11 (B) (1) *		Less stringent	
	3745-15-07		See Additional Special Term and Condition F.1	
	3745-31-05		0.41 pound/hour PM/PM ₁₀ ** 1.80 TPY PM/PM ₁₀ **	

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* The emission limitation established by this rule is less stringent than those established by OAC rule 3745-31-05 (BAT).

** All PM = PM₁₀

SUMMARY

TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons/Year</u>
Organic Compound	3.94
PM	2.72
PM ₁₀	2.72

REPORTING REQUIREMENTS

Unless otherwise specified, reports required by the Permit to Install need only be submitted to **Hamilton County Dept. of Env. Services, 1632 Central Parkway, Cincinnati, OH 45210.**

WASTE DISPOSAL

The owner/operator shall comply with any applicable state and federal requirements governing the storage, treatment, transport and disposal of any waste material generated by the operation of the sources.

MAINTENANCE OF EQUIPMENT

This source and its associated air pollution control system(s)

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shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers in order to minimize air contaminant emissions.

MALFUNCTION/ABATEMENT

In accordance with OAC RULE 3745-15-06, any malfunction of the source(s) or associated air pollution control system(s) shall be reported immediately to the **Hamilton County Dept. of Env. Services, 1632 Central Parkway, Cincinnati, OH 45210.**

Except as provided by OAC Rule 3745-15-06(A)(3), scheduled maintenance of air pollution control equipment that requires the shutdown or bypassing of air pollution control system(s) must be accompanied by the shutdown of the associated air pollution sources.

CONSTRUCTION COMPLIANCE CERTIFICATION

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be

provided to Ohio EPA upon completion of construction but prior to startup of the source.

ADDITIONAL SPECIAL TERMS AND CONDITIONS

A. Applicable Emission Limitations and/or Control Requirements

1. Visible particulate emissions from any stack shall not exceed 20% percent opacity, as a six-minute average, except as specified by rule.
2. The organic compound emissions from emissions unit P021 shall not exceed 0.30 pound per hour and 1.31 tons per year.
3. The PM/PM₁₀ emissions from emissions unit P021 shall not exceed 0.21 pound per hour and 0.92 ton per year.

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4. The organic compound emissions from emissions unit P022 shall not exceed 0.60 pound per hour and 2.63 tons per year.
5. The PM/PM₁₀ emissions from emissions unit P022 shall not exceed 0.41 pound per hour and 1.80 tons per year.

B. Operational Restrictions

1. The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.
2. The pressure drop across the scrubber shall be continuously maintained at a value of not less than 0.25 inch of water for emissions unit P021 and 1.75 inches of water for emissions unit P022 at all times while the emissions unit is in operation.
3. The scrubber water flow rate shall be continuously maintained at a value of not less than 9 gallons of water per minute per 1,000 cubic feet per minute of air at all times while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal oxidizer when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information for each day:

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- a. all 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance; and,
 - b. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
2. The permittee shall properly install, operate and maintain equipment to continuously monitor the static pressure drop across the scrubber and the scrubber water flow rate while the emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each day:

- a. the pressure drop across the scrubber, in inches of water, on a once/shift basis;
 - b. the scrubber water flow rate, in gallons per minute, on a once/shift basis; and,
 - c. a log of the downtime for the capture (collection) system, control device and monitoring equipment, when the associated emissions unit was in operation.
3. All records required by this Permit to Install shall be retained on file for a period of not less than five years unless otherwise indicated by the Ohio Environmental Protection Agency. All records shall be made available to the Director, or any representative of the Director, for review during normal business hours.

D. Reporting Requirements

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1. The permittee shall submit deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer does not comply with the temperature limitation specified in Additional Special Term and Condition B.1.
2. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained at or above the required levels:
 - a. the static pressure drop across the scrubber; and,
 - b. the scrubber water flow rate.
3. The permittee shall submit required reports in the following manner:
 - a. reports of any required monitoring and/or recordkeeping information shall be submitted to the Hamilton County Dept. of Env. Services; and,
 - b. except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Hamilton County Dept. of Env. Services. If no deviations occurred during the calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 30, April 30, July 30, and October 30 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule

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3745-15-06).

E. Compliance Methods/Testing Requirements

1. Compliance with the visible emissions limitation in Additional Special Term and Condition A.1 shall be determined by the methods outlined in Ohio Administrative Code (OAC) rule 3745-17-03(B) (1).
2. 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 60 days after achieving the maximum production rate or 180 days after the initial startup, whichever date comes first;
 - b. the emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for OC and particulate;
 - c. the following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): For OC, 40 CFR 60, Appendix A, Method 25 and for PM, 40 CFR 60, Appendix A, Method 5. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA; and,
 - 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 Hamilton County Dept. of Env. Services.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Hamilton County Dept. of Env. Services. 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

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result in the Hamilton County Dept. of Env. Service's refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Dept. of Env. Service 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.

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 Hamilton County Dept. of Env. Services 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 Hamilton County Dept. of Env. Service.

F. Miscellaneous Requirements

1. If probable cause exist indicating the source is causing or contributing to a nuisance in violation of Ohio Administrative Code rule 3475-15-07, the owner or operator of this emissions unit shall be required to submit and implement a control program which will bring this source into compliance.
2. The hourly emission limitations outlined in this permit are based upon the emissions units potential to emit.

Therefore, no hourly records are required to demonstrate compliance with these limits.