

Synthetic Minor Determination and/or **Netting Determination**
Permit To Install **01-08950**

A. Source Description

T. Marzetti manufactures food products in Columbus, Ohio. T. Marzetti has one boiler (permitted) and several cookers (de minimis and un-permitted). The facility is currently a Minor Stationary Source pursuant to non-attainment review (installation) and Title V operating permit requirements for criteria pollutants and hazardous air pollutants (HAPs). In two of its cookers, T. Marzetti wants to resume making a product, Jack Daniels Whiskey Glaze (Glaze), which would emit ethanol [an organic compound (OC), a volatile organic compound (VOC) and an Ohio air toxic pollutant subject to Ohio EPA's air toxic policy] emissions from two of its cookers.

B. Facility Emissions and Attainment Status

The facility is currently a minor source for all air contaminants and is located in Franklin County, non-attainment for the 8-hour ozone standard and for particulate matter less than 2.5 microns in diameters (PM 2.5).

C. Source Emissions

Potential emissions of VOC from all emissions units, including the new cooker product, and without any federal enforceable restrictions are 264 tons per year. The applicant has selected 60 tons of VOC's per rolling 12-month summation for the cookers, P001 and P002, in order to avoid Title V major source status and to avoid a specific BAT demonstration. The potential to emit (PTE) calculation for T. Marzetti's boiler (B001) is 0.14 tons of VOC per year. Consequently, the applicant has selected 60.14 tons of VOC's per year as a voluntary facility-wide emission limit. For the cookers, VOC emission rates other than ethanol are assumed to be negligible. VOC (ethanol) emission reduction by the wet scrubber is assumed to be negligible.

Given 109.5 pounds of whiskey added to each batch of Glaze, actual volume of 94 proof whiskey per batch is $109.5 \text{ pound} / 7.832 \text{ pound/gallon} = 13.98 \text{ gallons}$ of whiskey, part of which is 6.834 gallons of ethanol.

Weight of ethanol per batch is $6.834 \text{ gallons of ethanol} \times (8.34 \text{ pounds of water/gallon of ethanol} \times 0.794 \text{ specific gravity ethanol}) = 45.25 \text{ pounds of ethanol}$;

$45.25 \text{ pounds of ethanol/batch} / 13.98 \text{ gallons of whiskey/batch} = 3.24 \text{ pounds of ethanol/gallon}$; and

$60 \text{ tons of ethanol/year} \times 2000 \text{ pounds/ton} / 3.24 \text{ pounds of ethanol/gallon} = 37,000 \text{ gallons whiskey/year}$.

Therefore, the annual consumption of 37,000 gallons of whiskey per year is the measurable voluntary restriction.

D. Conclusion

T. Marzetti will become a Synthetic Minor facility by means of limiting the volume of whiskey included in the ingredients to cookers P001 and P002, effectively restricting the PTE for VOC to below Major Stationary Source for both non-attainment review and Title V operating permits thresholds levels. Monthly monitoring and record keeping, along with quarterly deviation reports for emissions units P001 and P002, will be required to monitor compliance. Since allowable emissions are below Major Stationary Source for both non-attainment review and Title V operating permit requirements threshold levels, this facility will remain a minor source.



State of Ohio Environmental Protection Agency

**RE: DRAFT PERMIT TO INSTALL
FRANKLIN COUNTY**

CERTIFIED MAIL



Street Address:

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center

Application No: 01-08950

Fac ID: 0125040161

DATE: 9/8/2005

T Marzetti Allen Division
Jeffery Wallace
Post Office Box 453 1709 Frank Rd
Columbus, OH 43216

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43266-0149.

A Permit to Install may be issued in proposed or final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install a fee of **\$1000** will be due. Please do not submit any payment now.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469. If you have any questions about this draft permit, please contact the field office where you submitted your application, or Mike Ahern, Field Operations & Permit Section at (614) 644-3631.

Sincerely,

Michael W. Ahern, Manager
Permit Issuance and Data Management Section
Division of Air Pollution Control

CC: USEPA

CDO

Mid-Ohio Regional Planning Commission

FRANKLIN COUNTY

PUBLIC NOTICE
ISSUANCE OF DRAFT PERMIT TO INSTALL **01-08950** FOR AN AIR CONTAMINANT SOURCE FOR
T Marzetti Allen Division

On 9/8/2005 the Director of the Ohio Environmental Protection Agency issued a draft action of a Permit To Install an air contaminant source for **T Marzetti Allen Division**, located at **1709 Frank Rd, Columbus, Ohio**.

Installation of the air contaminant source identified below may proceed upon final issuance of Permit To Install 01-08950:

Two 400 gallon Chester-Jensen cooker/coolers.

Comments concerning this draft action, or a request for a public meeting, must be sent in writing to the address identified below no later than thirty (30) days from the date this notice is published. All inquiries concerning this draft action may be directed to the contact identified below.

Isaac Robinson, Ohio EPA, Central District Office, 3232 Alum Creek Drive, Columbus, OH 43207-3417
[(614)728-3778]



**Permit To Install
Terms and Conditions**

**Issue Date: To be entered upon final issuance
Effective Date: To be entered upon final issuance**

DRAFT PERMIT TO INSTALL 01-08950

Application Number: 01-08950
Facility ID: 0125040161
Permit Fee: **To be entered upon final issuance**
Name of Facility: T Marzetti Allen Division
Person to Contact: Jeffery Wallace
Address: Post Office Box 453 1709 Frank Rd
Columbus, OH 43216

Location of proposed air contaminant source(s) [emissions unit(s)]:
**1709 Frank Rd
Columbus, Ohio**

Description of proposed emissions unit(s):
Two 400 gallon Chester-Jensen cooker/coolers.

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) 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 above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

T Marzetti Allen Division

Facility ID: 0125040161

PTI Application: 01-08950

Issued: To be entered upon final issuance

Part I - GENERAL TERMS AND CONDITIONS

A. Permit to Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting Requirements

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 appropriate Ohio EPA District Office or local air agency.
- 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 recordkeeping 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 appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a 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 31, April 30, July 31, and October 31 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 3745-15-06.)

3. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections,

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conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

6. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

7. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

8. Termination of Permit to Install

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. 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.

9. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental

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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 cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the 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 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 cannot meet the requirements of this permit or cannot meet applicable standards.

10. 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.

11. Applicability

This Permit To Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

12. 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.

13. Source Operation and Operating Permit Requirements After Completion of Construction

**T Mar
PTI A**

Emissions Unit ID: **P001**

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This facility is permitted to operate each source described by this Permit to Install for a 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. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the emissions unit(s) covered by this permit.

14. 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.

15. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

B. Permit to Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons Per Year</u>
VOC	60.00

T Mar
PTI A

Emissions Unit ID: P001

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PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P001 - 400-gallon Chester-Jensen Cooker/Cooler No. 1 with oxidizing wet scrubber.	OAC rule 3745-31-05(A)(3)	Volatile organic compound (VOC) emissions shall not exceed 60.3 pounds per hour.
	OAC rule 3745-31-05(C) (to avoid non-attainment review) OAC rule 3745-35-07(B) (to avoid being subject to Title V)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(C) and 3745-35-07(B).
	OAC rule 3745-21-07(G)(9)(f)	See A.2.c, B.3 and 4, below.
		See A.2.d, below.

2. Additional Terms and Conditions

- 2.a All gases from P001 shall be vented to the oxidizing wet scrubber whenever whiskey glaze, or any other type of batch that would cause a nuisance odor, is cooked.
- 2.b Odor emissions from P001 shall not cause a nuisance, in violation of OAC rule 3745-15-07.
- 2.c The emissions of VOC from emissions units P001 and P002 shall not exceed 60 tons per year, based upon a rolling, 12-month summation of the monthly

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emissions.

- 2.d Exempt from the requirements of OAC rule 3745-21-07(G)(2) by using non-photochemically reactive materials.
- 2.e The hourly VOC emission limitation is based upon the emissions unit's potential to emit. Therefore no additional monitoring, record keeping, or reporting is necessary to determine compliance with this limit.

B. Operational Restrictions

1. The oxidizing wet scrubber shall be operated during the cooking process when any whiskey glaze, or any other type of batch that would cause a nuisance odor, is cooked.
2. The permittee shall operate the oxidizing wet scrubber in a manner that complies with the following restrictions:
 - a. the recirculating water flow rate shall not be less than 15 gallons per minute (gpm);
 - b. the pH of the hypochlorite scrubber solution shall be maintained within the range of 10 to 13.5;
 - c. the oxidation reduction potential (ORP) of the scrubber solution at the discharge from the scrubber shall be maintained between 875 millivolts and 1,175 millivolts (at a level that ensures that a residual amount of active chlorine is always present); and
 - d. there shall be no objectionable cooking odors in the exhaust gases from the oxidizing wet scrubber, detectable by smell off the permittee's property.
3. Compliance with the emission limitations as stated in Section A.2.c shall be achieved by restricting annual usage of whiskey. The maximum annual whisky usage for P001 and P002 shall not exceed 37,000 gallons, based upon a rolling, 12-month summation of the whisky gallon usage figures.

To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the whiskey gallon usage levels specified in the following table:

Maximum Allowable

T Mar
PTI A

Emissions Unit ID: **P001**

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<u>Month(s)</u>	<u>Cumulative Whiskey Gallons Usage</u>
1	6,000
1-2	11,000
1-3	15,000
1-4	19,000
1-5	22,000
1-6	24,200
1-7	26,400
1-8	28,600
1-9	30,800
1-10	33,000
1-11	35,000
1-12	37,000

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual whiskey gallon usage limitation shall be based upon a rolling, 12-month summation of the whiskey gallon usage figures.

4. The ethanol content of the whiskey is restricted to 3.24 pounds per gallon.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, operate and maintain equipment to continuously monitor the scrubber water flow rate, the scrubber water pH, and the scrubber discharge water oxidation potential 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 following information shall be collect and recorded during the day when a batch of whiskey glaze, or any other type of batch that would cause a nuisance odor, is produced:

- a. the scrubber water flow rate, in gallons per minute;
- b. the scrubber water pH, measured in standard units;
- c. the scrubber water oxidation potential, in millivolts;

Emissions Unit ID: **P001**

- d. the operating times for the control device, monitoring equipment, and the associated emissions unit; and
 - e. the usage of whiskey, in gallons.
2. The permittee shall maintain monthly records of the following information:
- a. the ethanol content of the whiskey;
 - b. the total usage of whiskey, in gallons, for P001 and P002, combined, for each month; and
 - c. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the whiskey gallon usage figures.

Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative whiskey gallon usage for each calendar month.

3. The permit to install for these two (2) emissions units (P001 and P002) was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Ethanol

TLV (mg/m³): 1,880

Maximum Hourly Emission Rate (lbs/hr): $60.3 \times 2 = 120.6$

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m³): 23,378

MAGLC (ug/m³): 44,762

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Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include 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 compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value 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 pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" 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 the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of its evaluation and determination that the changed emissions

unit still satisfies the "Air Toxic Policy"; and

- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports for the oxidizing wet scrubber that identify all deviations (excursions) of the operational restrictions specified in term B.2:
 - a. recirculating water flow rate;
 - b. pH of the hypochlorite scrubber solution; and
 - c. oxidation reduction potential (ORP) of the scrubber solution at the discharge from the scrubber.
2. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time when the cooking process was in operation and the oxidizing wet scrubber was not operated in accordance with the requirements specified in term B.1.
3. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month limitation on whiskey gallon usage; and for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative whiskey gallon usage levels.
4. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the ethanol content of the whiskey specified in term B.4
5. These quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1 of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitations:

T Mar**PTI A**Emissions Unit ID: **P001****Issued: To be entered upon final issuance**

VOC emissions shall not exceed 60.3 pounds per hour

Applicable Compliance Method:

Compliance with this emission limitation may be demonstrated by multiplying, for this emissions unit, the amount of whiskey used per day, in gallons, times the weight of ethanol per gallon of whiskey, divided by the total number of hours of duration of the batches using whiskey during the day, according to the following formula:

$E = (V \times W) / T$, where

E = VOC emissions, in pounds per hour,

V = the amount of whiskey used per day, in gallons,

W = the weight of ethanol per gallon of whiskey (3.24 pounds of ethanol per gallon, for 94 proof), and

T = the total number of hours of duration of the batches using whiskey during the day.

b. Emission Limitation:

The emissions of VOC from emissions units P001 and P002 shall not exceed 60 tons per year, based upon a rolling, 12-month summation of the monthly emissions.

Applicable Compliance Method:

Compliance with this emission limitation shall be based upon the records maintained according to C.2.

F. Miscellaneous Requirements

None

PART III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P002 - 400-gallon Chester-Jensen Cooker/Cooler No. 2 with oxidizing wet scrubber	OAC rule 3745-31-05(A)(3)	Volatile organic compound (VOC) emissions shall not exceed 60.3 pounds per hour.
	OAC rule 3745-31-05(C) (to avoid non-attainment review) OAC rule 3745-35-07(B) (to avoid being subject to Title V)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(C) and 3745-35-07(B).
	OAC rule 3745-21-07(G)(9)(f)	See A.2.c and B.3, below
		See A.2.d, below

2. Additional Terms and Conditions

- 2.a All gases from P001 shall be vented to the oxidizing wet scrubber whenever whiskey glaze, or any other type of batch that would cause a nuisance odor, is cooked.
- 2.b Odor emissions from P002 shall not cause a nuisance, in violation of OAC rule 3745-15-07.
- 2.c The emissions of VOC from emissions units P001 and P002 shall not exceed 60 tons per year, based upon a rolling, 12-month summation of the monthly emissions.

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- 2.d Exempt from the requirements of OAC rule 3745-21-07(G)(2) by using nonphotochemically reactive materials.
- 2.e The hourly VOC emission limitation is based upon the emissions unit's potential to emit. Therefore no additional monitoring, record keeping, or reporting is necessary to determine compliance with this limit.

B. Operational Restrictions

- 1. The oxidizing wet scrubber shall be operated during the cooking process when any whiskey glaze, or any other type of batch that would cause a nuisance odor, is cooked.
- 2. The permittee shall operate the oxidizing wet scrubber in a manner that complies with the following restrictions:
 - a. the recirculating water flow rate shall not be less than 15 gallon per minute (gpm);
 - b. the pH of the hypochlorite scrubber solution shall be maintained within the range of 10 to 13.5;
 - c. the oxidation reduction potential (ORP) of the scrubber solution at the discharge from the scrubber shall be maintained between 875 millivolts and 1,175 millivolts (at a level that ensures that a residual amount of active chlorine is always present); and
 - d. there shall be no objectionable cooking odors in the exhaust gases from the oxidizing wet scrubber, detectable by smell off the permittee's property.
- 3. Compliance with the emission limitations as stated in Section A.2.c shall be achieved by restricting annual usage of whiskey. The maximum annual whisky gallon usage for P001 and P002 shall not exceed 37,000 gallons, based upon a rolling, 12-month summation of the whisky gallon usage figures.

To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the whiskey gallon usage levels specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Whiskey Gallon Usage</u>
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T Mar
PTI A

Emissions Unit ID: P002

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1	6,000
1-2	11,000
1-3	15,000
1-4	19,000
1-5	22,000
1-6	24,200
1-7	26,400
1-8	28,600
1-9	30,800
1-10	33,000
1-11	35,000
1-12	37,000

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual whiskey gallon usage limitation shall be based upon a rolling, 12-month summation of the whiskey gallon usage figures.

4. The ethanol content of the whiskey is restricted to 3.24 pounds per gallon.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, operate and maintain equipment to continuously monitor the scrubber water flow rate, the scrubber water pH, and the scrubber discharge water oxidation potential 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 following information shall be collect and recorded during the day when a batch of whiskey glaze, or any other type of batch that would cause a nuisance odor, is produced:

- a. the scrubber water flow rate, in gallons per minute;
- b. the scrubber water pH, measured in standard units;
- c. the scrubber water oxidation potential, in millivolts;
- d. the operating times for the control device, monitoring equipment, and the

- associated emissions unit; and
 - e. the usage of whiskey, in gallons.
2. The permittee shall maintain monthly records of the following information:
- a. the ethanol content of the whiskey;
 - b. the total usage of whiskey, in gallons, for P001 and P002, combined, for each month; and
 - c. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the whiskey gallon usage figures.

Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative whiskey gallon usage for each calendar month.

3. The permit to install for these two (2) emissions units was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Ethanol

TLV (mg/m³): 1,880

Maximum Hourly Emission Rate (lbs/hr): $60.3 \times 2 = 120.6$

Predicted 1-Hour Maximum Ground-Level
 Concentration (ug/m³): 23,378

MAGLC (ug/m³): 44,762

Physical changes to or changes in the method of operation of the emissions unit after

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its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include 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 compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value 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 pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" 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 the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

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- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

1. The permittee shall submit quarterly reports for the oxidizing wet scrubber that identify all deviations (excursions) of the operational restrictions specified in term B.2:
 - a. recirculating water flow rate;
 - b. pH of the hypochlorite scrubber solution;
 - c. oxidation reduction potential (ORP) of the scrubber solution at the discharge from the scrubber.
2. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time when the cooking process was in operation and the oxidizing wet scrubber was not operated in accordance with the requirements specified in term B.1.
3. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month limitation on whiskey gallon usage; and for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative whiskey gallon usage levels.
4. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the ethanol content of the whiskey specified in term B.4 .
5. These quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1 of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitations:
VOC emissions shall not exceed 60.3 pounds per hour

Applicable Compliance Method:

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PTI A

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Compliance with this emission limitation may be demonstrated by multiplying, for this emissions unit, the amount of whiskey used per day, in gallons, times the weight of ethanol per gallon of whiskey, divided by the total number of hours of duration of the batches using whiskey during the day, according to the following formula:

$$E = (V \times W) / T, \text{ where}$$

E = VOC emissions, in pounds per hour,

V = the amount of whiskey used per day, in gallons,

W = the weight of ethanol per gallon of whiskey (3.24 pounds of ethanol per gallon, for 94 proof), and

T = the total number of hours of duration of the batches using whiskey during the day.

b. Emission Limitation:

The emissions of VOC from emissions units P001 and P002 shall not exceed 60 tons per year, based upon a rolling, 12-month summation of the monthly emissions.

Applicable Compliance Method:

Compliance with this emission limitation shall be based upon the records maintained according to C.2.

F. Miscellaneous Requirements

None