



Environmental Protection Agency

John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

3/9/2011

DAVE RENNER
MIDWEST SPRAY DRYING CO
422 W. Gutrie St.
Upper Sandusky, OH 43351

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 0388010122
Permit Number: P0104855
Permit Type: Renewal
County: Wyandot

Certified Mail

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED
No	SYNTHETIC MINOR TO AVOID TITLE V
No	FEDERALLY ENFORCABLE PTIO (FEPTIO)

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. Please complete a survey at www.epa.ohio.gov/dapc/permitsurvey.aspx and give us feedback on your permitting experience. We value your opinion.

The issuance of this PTI is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00, made payable to "Ohio Treasurer Josh Mandel," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

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

If you have any questions, please contact Ohio EPA DAPC, Northwest District Office at (419)352-8461 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. This permit can be accessed electronically on the DAPC Web page, www.epa.ohio.gov/dapc, by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

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

Cc: Ohio EPA-NWDO



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for
MIDWEST SPRAY DRYING CO**

Facility ID:	0388010122
Permit Number:	P0104855
Permit Type:	Renewal
Issued:	3/9/2011
Effective:	3/9/2011
Expiration:	3/9/2021



Division of Air Pollution Control
Permit-to-Install and Operate
for
MIDWEST SPRAY DRYING CO

Table of Contents

Authorization 1
A. Standard Terms and Conditions 3
1. What does this permit-to-install and operate ("PTIO") allow me to do?..... 4
2. Who is responsible for complying with this permit? 4
3. What records must I keep under this permit? 4
4. What are my permit fees and when do I pay them?..... 4
5. When does my PTIO expire, and when do I need to submit my renewal application? 4
6. What happens to this permit if my project is delayed or I do not install or modify my source? 5
7. What reports must I submit under this permit? 5
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? 5
9. What are my obligations when I perform scheduled maintenance on air pollution control equipment? ... 5
10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report? 6
11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located? 6
12. What happens if one or more emissions units operated under this permit is/are shut down permanently? 6
13. Can I transfer this permit to a new owner or operator?..... 7
14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"? 7
15. What happens if a portion of this permit is determined to be invalid? 7
B. Facility-Wide Terms and Conditions..... 8
C. Emissions Unit Terms and Conditions 10
1. P001, Spray dryer 11

Authorization

Facility ID: 0388010122
Application Number(s): M0000444
Permit Number: P0104855
Permit Description: Administrative modification to PTI 03-13894 issued 9/4/07 to address operational restrictions and monitoring and recordkeeping requirements due to installation of new venturi scrubber and include NOx emissions from natural gas combustion.
Permit Type: Renewal
Permit Fee: \$0.00
Issue Date: 3/9/2011
Effective Date: 3/9/2011
Expiration Date: 3/9/2021
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

MIDWEST SPRAY DRYING CO
422 W GUTHRIE STREET
UPPER SANDUSKY, OH 43351

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

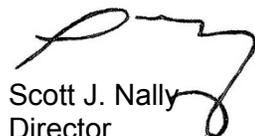
Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Northwest District Office
347 North Dunbridge Road
Bowling Green, OH 43402
(419)352-8461

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


Scott J. Nally
Director



Authorization (continued)

Permit Number: P0104855
Permit Description: Administrative modification to PTI 03-13894 issued 9/4/07 to address operational restrictions and monitoring and recordkeeping requirements due to installation of new venturi scrubber and include NOx emissions from natural gas combustion.

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

Emissions Unit ID:	P001
Company Equipment ID:	Spray dryer
Superseded Permit Number:	03-13894
General Permit Category and Type:	Not Applicable

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. Unless otherwise specified, facilities subject to one or more synthetic minor restrictions must use Ohio EPA's "Air Services" to submit annual emissions associated with this permit requirement. 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 Ohio EPA DAPC, Northwest District Office 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 submitting¹ 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 emissions 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.

¹ Permittees that use Ohio EPA's "Air Services" can mark the affected emissions unit(s) as "permanently shutdown" in the facility profile along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).

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 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.

B. Facility-Wide Terms and Conditions

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.

C. Emissions Unit Terms and Conditions



1. P001, Spray dryer

Operations, Property and/or Equipment Description:

Spray Dryer with 2.5 mmBtu/hr, natural gas fired burner

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)(6), d)(7) and d)(8).

(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(A)(3)	9.60 lbs organic compounds (OC)/hour, 42.00 tons OC/year 4.10 lbs particulate emissions (PE)/hour, 17.96 tons PE/year Visible PE shall not exceed 15% opacity as a six-minute average 0.25 lb nitrogen oxides (NOx)/hour, 1.10 tons NOx/year (natural gas combustion) See b)(2)a.
b.	OAC rule 3745-17-07(A)	See b)(2)b.
c.	OAC rule 3745-17-11(B)	See b)(2)b.

- (2) Additional Terms and Conditions
- a. The “Best Available Technology” (BAT) control requirements for emissions unit P001 has been determined to be the use of a control system consisting of a spray chamber in series with a venturi scrubber and mist eliminator for PE and OC control.
 - b. The emission limitation from this rule is equal to or less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- c) Operational Restrictions
- (1) The permittee shall only process approved materials in this emissions unit.
 - (2) The permittee shall obtain approval from the Ohio EPA, Northwest District Office prior to processing any new type of raw material through this emissions unit.
 - (3) The permittee shall repair any malfunction from the spray dryer to the spray chamber within a three hour time span. If this malfunction is not repaired within the specified time frame, the process must be shut down and appropriate reporting to Ohio EPA, Northwest District Office is required as indicated in Section A.10 of this permit.
- d) Monitoring and/or Recordkeeping Requirements
- (1) For each day during which the permittee processes a material other than those that have been approved by the Ohio EPA, Northwest District Office, the permittee shall maintain a record of the type and quantity of material processed in this emissions unit.
 - (2) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item d)(2)d. above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were

representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

- (3) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable ranges for the scrubber liquid flow rates, that shall be maintained in order to demonstrate compliance, shall be:
- a. recycle tank serving the spray chamber- a rate of continuous overflow;
 - b. flow meter #1 serving venturi scrubber- between 5-8 gallons per minute; and
 - c. flow meter #2 serving venturi scrubber- between 45-65 gallons per minute.
- (4) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range for the pressure drop across the scrubber, that must be maintained in order to demonstrate compliance, shall be between 2 and 5 inches of water (gauge).
- (5) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop across the scrubber (in inches of water, gauge) and the scrubber liquid flow rate (in gallons per minute) during operation of this emissions unit, including periods of startup and shutdown. The permittee shall record the pressure drop across the scrubber and the scrubber liquid's flow rate on an hourly basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for any parameter deviates from the range(s) or minimum limit(s) established in accordance with this permit, 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 control equipment parameters within the acceptable range(s), or at or above the minimum limit(s) 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:

- a. a description of the corrective action;
- b. the date the corrective action was completed;
- c. the date and time the deviation ended;
- d. the total period of time (in minutes) during which there was a deviation;
- e. the pressure drop and flow rate readings immediately after the corrective action was implemented; and
- f. 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.

These range(s) and/or limit(s) for the pressure drop and liquid flow rate are 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 range or limit for the pressure drop or liquid flow rate based upon information obtained during future performance tests that demonstrate compliance with the allowable particulate emission rate for this/these emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

- (6) The Permit to Install for this emissions unit, P001, was evaluated based on actual raw materials (Lime, Apple Cider Vinegar, LO-100, TB-GAG), 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: Acetic Acid
TLV ($\mu\text{g}/\text{m}^3$): 24,539.9
Maximum Hourly Emission Rate (lbs/hr): 0.5086
Predicted 1-Hour Maximum Ground-Level Concentration ($\mu\text{g}/\text{m}^3$): 5.358
MAGLC ($\mu\text{g}/\text{m}^3$): 584.28

Pollutant: Turpentine
TLV ($\mu\text{g}/\text{m}^3$): 111,247.4
Maximum Hourly Emission Rate (lbs/hr): 10.5599
Predicted 1-Hour Maximum Ground-Level Concentration ($\mu\text{g}/\text{m}^3$): 122.3
MAGLC ($\mu\text{g}/\text{m}^3$): 2,648.74

Pollutant: Ethyl Acetate
TLV ($\mu\text{g}/\text{m}^3$): 1,441,472.4
Maximum Hourly Emission Rate (lbs/hr): 27.7558
Predicted 1-Hour Maximum Ground-Level Concentration ($\mu\text{g}/\text{m}^3$): 292.3
MAGLC ($\mu\text{g}/\text{m}^3$): 34,320.77

Pollutant: Ethanol
TLV ($\mu\text{g}/\text{m}^3$): 1,884,253.6
Maximum Hourly Emission Rate (lbs/hr): 137.20
Predicted 1-Hour Maximum Ground-Level Concentration ($\mu\text{g}/\text{m}^3$): 1,464
MAGLC ($\mu\text{g}/\text{m}^3$): 44,863.18

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 materials dried, 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.).
- (7) 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.
- (8) 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.
- e) Reporting Requirements
- (1) The permittee shall submit deviation (excursion) reports that identify each day when a material other than those that have been approved by the Ohio EPA, Northwest District Office were processed in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
 - (2) 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.
 - (3) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in d)(2). above:
 - a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and
 - b. any corrective actions taken to minimize or eliminate the visible particulate emissions.
 - (4) The permittee shall identify the following information in the annual permit evaluation report concerning the operations of the wet scrubber during the 12-month reporting period for this emissions unit:
 - a. each period of time (start time and date, and end time and date) when the pressure drop across the scrubber and/or the liquid flow rate was/were outside of the appropriate range or exceeded the applicable limit contained in this permit;
 - b. any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the scrubber;
 - c. each incident of deviation described in e)(4)a. or e)(4)b. (above) where a prompt investigation was not conducted;
 - d. each incident of deviation described in e)(4)a. or e)(4)b. where prompt corrective action, that would bring the pressure drop and/or liquid flow rate into compliance with the appropriate range or limit contained in this permit, was determined to be necessary and was not taken; and

- e. each incident of deviation described in e)(4)a. or e)(4)b. where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.
- f) Testing Requirements
- (1) The permittee shall perform an analyses on each type of raw material (e.g., lemon powder) which includes at least the following information:
 - a. water content (wt %);
 - b. total solids (wt %);
 - c. volatile solids (wt %); and
 - d. chemical substances contained in the raw material (identified by CAS number) and associated concentration ($\mu\text{g/l}$).

The analyses shall be performed in accordance with Method 24 of 40 CFR Part 60, Appendix A. Alternative approved test methods may be used with prior approval from the Ohio EPA, Northwest District Office. The results of the analyses performed will be used as part of the process for determining approval of the types of raw material that can be processed in this emissions unit [see c)(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 within 180 days after achieving the maximum production rate at which the emissions unit will be operated*.
 - b. The emission testing shall be conducted to demonstrate compliance with the mass emissions limitations for OC* and PE*. Emission testing shall be performed while the emissions unit is drying Natural Flavor Enhancer, Lemon or Lime material in order to demonstrate compliance with the emission limitations in Section A.1. of this permit.
 - c. The following test method(s) shall be employed to demonstrate compliance with the above emissions limitations: for PE, Methods 1-5 of 40 CFR Part 60, Appendix A; for OC, Methods 1-4 and 18, 25, or 25A of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Northwest District Office.
 - d. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Northwest District Office. 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 tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA Northwest District Office's refusal to accept the results of the emission tests.
 - e. Personnel from the Ohio EPA Northwest District Office shall be permitted to witness the tests, 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.

- f. A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Northwest District Office 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 Ohio EPA, Northwest District Office.

*The permittee has fulfilled the emission testing requirements of this permit by stack testing which was performed on 12/04/2001, 7/23/2003 and 12/5/08.

- (3) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:
9.6 pounds OC/hour and 42.00 tons OC/year

Applicable Compliance Method:

The permittee shall demonstrate compliance with the pounds per hour emission limitation by performance testing as specified in f)(2). The ton per year emission limitation was developed by multiplying the pound per hour limitation by a maximum operating schedule of 8760 hours per year, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitation, compliance with the annual emission limitation shall also be demonstrated.

- b. Emission Limitation:
4.10 pounds PE/hour and 17.96 tons PE/year

Applicable Compliance Method:

The permittee shall demonstrate compliance with the pounds per hour emission limitation by performance testing as specified in f)(2). The ton per year emission limitation was developed by multiplying the pound per hour limitation by a maximum operating schedule of 8760 hours per year, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitation, compliance with the annual emission limitation shall also be demonstrated.

- c. Emission Limitation:
Visible particulate emissions from any/the stack shall not exceed 15 percent opacity as a six-minute average.

Applicable Compliance Method:

Compliance shall be determined through visible emission observations performed in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

- d. Emission Limitation:
0.25 pound NOx/hour and 1.10 tons NOx/year (natural gas combustion)

Applicable Compliance Method:

The hourly allowable NOx emission limitation above represents the potential to emit for this emissions unit and was established by multiplying the maximum heat input rate of 2.5 mmBtu/hr by an emission factor of 100 lb/mmcf and dividing by 1020 Btu/cf (AP-42, Section 1.4, Table 1.4-1 [revised 7/98]).

If required, the permittee shall demonstrate compliance in accordance with Methods 1-4 and 7 of 40 CFR, Part 60, Appendix A.

The ton per year emission limitation was developed by multiplying the pound per hour limitation by a maximum operating schedule of 8760 hours per year, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitation, compliance with the annual emission limitation shall also be demonstrated.

g) Miscellaneous Requirements

- (1) Midwest Spray Drying has committed to operate the spray chamber and venturi scrubber with mist eliminator in accordance with the Operational Procedures submitted to Ohio EPA on April 28, 2009.