



9/16/2014

Mr. MICHAEL Elenz
SCHWEBEL BAKING CO #1
965 E Midlothian Blvd
Youngstown, OH 44502

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

Facility ID: 1318538152
Permit Number: P0117275
Permit Type: Initial Installation
County: Cuyahoga

Certified Mail

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

Dear Permit Holder:

A draft of the Ohio Administrative Code (OAC) Chapter 3745-31 Air Pollution Permit-to-Install and Operate (PTIO) for the referenced facility has been issued for the emissions unit(s) listed in the Authorization section of 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 permit. A public notice will appear in the Ohio Environmental Protection Agency (EPA) Weekly Review and the local newspaper, The Plain Dealer. A copy of the public notice and the draft permit are enclosed. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Search for Permits" link under the Permitting topic on the Programs tab. Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

Andrew Hall Permit Review/Development Section Ohio EPA, DAPC 50 West Town Street Suite 700 PO Box 1049 Columbus, Ohio 43216-1049	and	Cleveland Division of Air Quality 2nd Floor 75 Erieview Plaza Cleveland, OH 44114
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Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified if a public hearing is scheduled. A decision on issuing a final permit-to-install will be made after consideration of comments received and oral testimony if a public hearing is conducted. Any permit fee that will be due upon issuance of a final Permit-to-Install is indicated in the Authorization section. Please do not submit any payment now. If you have any questions, please contact Cleveland Division of Air Quality at (216)664-2297.

Sincerely,

Erica R. Engel-Ishida, Interim Manager
Permit Issuance and Data Management Section, DAPC

Cc: U.S. EPA Region 5 Via E-Mail Notification
CDAQ; Pennsylvania; Canada



Permit Strategy Write-Up

1. Check all that apply:

Synthetic Minor Determination

Netting Determination

2. Source Description:

P004 - 175-foot Baker Perkins Tunnel Oven - 6.992 mmBtu/hr baking oven

3. Facility Emissions and Attainment Status:

P004 actual volatile organic compound (VOC) emissions based on the max daily run time per product for 260 days/yr is 59.05 TPY VOCs; actual maximum emissions calculated by CDAQ, using the recipe with the highest lb VOC/ton baked bread (Giant) for 260 days/yr. is 66.78 TPY VOCs, with an allowable set at 70 TPY VOCs as a rolling, 12-month summation. The facility will be subject to an annual operating limitation of 6,240 hours per year to ensure compliance with the annual VOC limitation.

P002 and P003 have a combined allowable of 25 TPY VOCs.

The combined facility wide allowable will be 95 TPY VOCs as a 12-month rolling limit. Based on the maximum actual emissions, the facility will not exceed 95 TPY VOCs.

All three ovens use natural gas fired boilers.

Cuyahoga County is marginal attainment for ozone, in maintenance for PM_{2.5}, and partial non-attainment for Pb.

4. Source Emissions:

The maximum hourly VOC emission rate generated by P004 was calculated to be 21.40 lbs VOC/hour (excluding products of combustion). The annual limitation of 70 TPY VOC was established by multiplying this worst case hourly VOC emissions rate by an annual hourly operating limitation of 6,240 hours per year (21.40 lbs VOC/hour x 6,240 hours/year x 1 ton/2,000 lbs = 66.77 TPY VOC. P004 will be limited to 70 TPY VOC per rolling, 12-month summation of 70 TPY VOCs.

5. Conclusion:

Schwebel Baking Co. will stay below Title V thresholds as long as the facility adheres to the proposed production schedule for P004 and the Terms and Conditions for all three ovens (P002, P003, and P004). Monthly record keeping of VOC emissions based on bread and buns baked is required for each unit - both separately and combined. In addition, Schwebel must calculate each new recipe's VOC emissions and inform CDAQ if a new recipe exceeds either (a) the highest lb VOC/hr or (b) the highest lb VOC/ton baked bread before the new recipe is used. In this case an adjustment in the allowable operating schedule may be necessary through a permit modification.

6. Please provide additional notes or comments as necessary:

Schwebel Baking Company #1 is requesting emission limitations to be based on the Maximum Actual Emission Calculations, where maximum actual emissions are equal to 60 tons/year. Based on historical production data for similar ovens currently operated by the company, Schwebel's is requesting the allowable emissions for the new Baker Perkins Tunnel Oven to be 70 tons VOCs/year.



Permit Strategy Write-Up
SCHWEBEL BAKING CO #1
Permit Number: P0117275
Facility ID: 1318538152

7. Total Permit Allowable Emissions Summary (for informational purposes only):

<u>Pollutant</u>	<u>Tons Per Year</u>
VOC (includes 0.24 TPY OC from products of combustion)	70.0
NO _x	2.14
CO	1.79
PE	0.16
SO ₂	0.013

PUBLIC NOTICE

9/16/2014 Issuance of Draft Air Pollution Permit-To-Install and Operate

SCHWEBEL BAKING CO #1

6250 CAMP INDUSTRIAL RD,

Solon, OH 44139

Cuyahoga County

FACILITY DESC.: Commercial Bakeries

PERMIT #: P0117275

PERMIT TYPE: Initial Installation

PERMIT DESC: Initial installation permit for one (1) 175-foot Baker Perkins Tunnel Oven - 6.992 mmBtu/hr baking oven (P004).

The Director of the Ohio Environmental Protection Agency issued the draft permit above. The permit and complete instructions for requesting information or submitting comments may be obtained at: <http://epa.ohio.gov/dapc/permitsonline.aspx> by entering the permit # or: David Hearne, Cleveland Division of Air Quality, 2nd Floor 75 Erieview Plaza, Cleveland, OH 44114. Ph: (216)664-2297



DRAFT

**Division of Air Pollution Control
Permit-to-Install and Operate
for
SCHWEBEL BAKING CO #1**

Facility ID:	1318538152
Permit Number:	P0117275
Permit Type:	Initial Installation
Issued:	9/16/2014
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance



Division of Air Pollution Control
Permit-to-Install and Operate
for
SCHWEBEL BAKING CO #1

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Draft Permit-to-Install and Operate

SCHWEBEL BAKING CO #1

Permit Number: P0117275

Facility ID: 1318538152

Effective Date: To be entered upon final issuance

Authorization

Facility ID: 1318538152
Application Number(s): A0051251
Permit Number: P0117275
Permit Description: Initial installation permit for one (1) 175-foot Baker Perkins Tunnel Oven - 6.992 mmBtu/hr baking oven (P004).
Permit Type: Initial Installation
Permit Fee: \$1,000.00 *DO NOT send payment at this time, subject to change before final issuance*
Issue Date: 9/16/2014
Effective Date: To be entered upon final issuance
Expiration Date: To be entered upon final issuance
Permit Evaluation Report (PER) Annual Date: To be entered upon final issuance

This document constitutes issuance to:

SCHWEBEL BAKING CO #1
6250 CAMP INDUSTRIAL RD
Solon, OH 44139

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

Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Cleveland Division of Air Quality
2nd Floor
75 Erievue Plaza
Cleveland, OH 44114
(216)664-2297

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

Craig W. Butler
Director



Draft Permit-to-Install and Operate

SCHWEBEL BAKING CO #1

Permit Number: P0117275

Facility ID: 1318538152

Effective Date: To be entered upon final issuance

Authorization (continued)

Permit Number: P0117275

Permit Description: Initial installation permit for one (1) 175-foot Baker Perkins Tunnel Oven - 6.992 mmBtu/hr baking oven (P004).

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

Emissions Unit ID:	P004
Company Equipment ID:	Baker Perkins Tunnel Oven
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



Draft Permit-to-Install and Operate
SCHWEBEL BAKING CO #1
Permit Number: P0117275
Facility ID: 1318538152
Effective Date: To be entered upon final issuance

A. Standard Terms and Conditions



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

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

2. Who is responsible for complying with this permit?

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

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

3. What records must I keep under this permit?

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

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

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

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

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

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

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

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is



very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.

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

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

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

7. What reports must I submit under this permit?

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

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

If you are required to obtain a Title V permit under OAC Chapter 3745-77 in the future, the permit-to-operate portion of this permit will be superseded by the issued Title V permit. From the effective date of the Title V permit forward, this PTIO will effectively become a PTI (permit-to-install) in accordance with OAC rule 3745-31-02(B). The following terms and conditions of this permit 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 Cleveland Division of Air Quality in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

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

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

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

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

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

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

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

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



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

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



Draft Permit-to-Install and Operate
SCHWEBEL BAKING CO #1
Permit Number: P0117275
Facility ID: 1318538152
Effective Date: To be entered upon final issuance

B. Facility-Wide Terms and Conditions



Draft Permit-to-Install and Operate

SCHWEBEL BAKING CO #1

Permit Number: P0117275

Facility ID: 1318538152

Effective Date: To be entered upon final issuance

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.



Draft Permit-to-Install and Operate

SCHWEBEL BAKING CO #1

Permit Number: P0117275

Facility ID: 1318538152

Effective Date: To be entered upon final issuance

C. Emissions Unit Terms and Conditions



1. P004, Baker Perkins Tunnel Oven

Operations, Property and/or Equipment Description:

175-foot Baker Perkins Tunnel Oven - 6.992 mmBtu/hr baking oven

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

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

a. None.

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

a. b)(1)d., c)(1), c)(3), c)(4), d)(2), e)(3), and f)(1)c.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(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 are identified below. 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) ORC 3704.03(T)	The requirements of this rule include compliance with OAC rule 3745-31-05(D)(1)(b). See b)(1)d. below.
b.	OAC rule 3745-31-05(A)(3) as effective 11/30/01	Natural Gas Combustion: Nitrogen Oxide (NOx) emissions shall not exceed 0.18 tons per month averaged over a rolling, 12-month period. Carbon Monoxide (CO) emissions shall not exceed 0.15 tons per month averaged over a rolling, 12-month period. See b)(2)a. below.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-31-05(A)(3)(ii) as effective 12/01/06	See b)(2)b. below.
d.	OAC rule 3745-31-05(D)(1)(b) Synthetic Minor to avoid Title V	Volatile organic compound (VOC) emissions shall not exceed 70 tons per rolling, 12-month summation. See c)(1) through c)(4) below.
e.	OAC rule 3745-17-07(A)	Visible particulate emissions from the stack(s) serving this emissions unit shall not exceed 20% opacity as a six-minute average, except as provided by rule.
f.	OAC rule 3745-17-10(B)(1)	0.020 lbs. of particulate emissions per mmBtu of actual heat input.
g.	OAC rule 3745-18-06	Exempt. See c)(2) below.
h.	OAC rule 3745-21-12(C)(4)d.	Exempt. See b)(2)c. below.

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limitations/control measures no longer apply.
- b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to NO_x and CO emissions from this air contaminant source since the calculated annual



emissions rates for NOx and CO are less than 10 TPY taking into account the federally enforceable annual hours of operation limit.

- c. The requirements of this rule do not apply to this emissions unit because federally enforceable restrictions limit annual emissions below the applicability threshold.

c) Operational Restrictions

- (1) This emissions unit shall not be operated more than 6,240 hours per year.
- (2) The permittee shall burn only natural gas in this emissions unit.
- (3) The permittee shall determine the emission factor (EF) established by the following equation for VOC emissions for each different recipe used in bread and bun baking operations taken from AP-42, Volume 1, Fifth Edition (January, 1995), section 9.9.6 "Bread Baking":

$$VOC_{EF} = 0.95Y_i + 0.195t_i - 0.51S - 0.86t_s + 1.90$$

Where:

VOC_{EF} = pounds of VOC per ton of baked bread

Y_i = initial baker's percentage of yeast

t_i = total yeast action time in hours

S = final (spike) baker's percentage of yeast

t_s = spiking time in hours

The total bread and buns produced in P004 shall be restricted on a rolling, 12-month summation using the following equation:

$$\sum_{i=1}^n [EF VOC_i \times (tons\ product_i/month)] / (2,000\ pounds/ton) + X$$

70.0 tons VOC/rolling, 12-month summation

Where:

i = each different recipe used in baking operations

X = total VOC emissions for the past 11 months

The total emissions of VOC from P004 shall not exceed 70.0 tons per year, based upon a rolling, 12-month summation of the VOC emissions using the above formula.

- (4) To ensure enforceability during the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the levels specified in the following table:



Month(s)	Maximum Allowable Emissions of VOC (in tons) from P004
1	5.83
1-2	11.66
1-3	17.49
1-4	23.32
1-5	29.15
1-6	34.98
1-7	40.81
1-8	46.64
1-9	52.47
1-10	58.30
1-11	64.13
1-12	70

d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
- (2) The permittee shall maintain monthly records of the following information for P004:
 - a. the name and identification of each recipe produced;
 - b. the total amount of baked goods produced per recipe, in tons per month;
 - c. the emission factor for each recipe as calculated in c)(3);
 - d. the total monthly VOC emissions, in tons, for each recipe by summing [(b. x c.)/2,000] for all recipes produced in accordance with c)(3) above; and
 - e. the rolling, 12-month summation of total VOC emissions, in tons



- (3) 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) 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.

- (4) The permittee may, upon receipt of written approval from the Cleveland Division of Air Quality (Cleveland DAQ), modify the above-mentioned frequencies for performing the visible emissions checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements.
- (5) The permittee shall calculate the rolling, 12-month VOC emissions (as calculated under f)(1)c. below) associated with the addition of any new recipe prior to processing by this emissions unit to determine compliance with the allowable annual VOC emission limitation identified in b)(1)d. above and monthly VOC emission limitations identified in c)(4) above.

e) **Reporting Requirements**

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted 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 submit quarterly deviation (excursion) reports that identify:
- a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the Potential to Emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
 - i. any exceedance of the annual hourly operating restriction identified in c)(1); and
 - ii. all exceedances of the rolling, 12-month emission limitation for cumulative VOC emissions levels identified in b)(1)d. and c)(4).
 - b. the probable cause of each deviation (excursion);
 - c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
 - d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

- (4) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
- (5) The permittee shall notify the Cleveland DAQ within fifteen (15) days prior to the usage of any new recipe where an exceedance of the allowable hourly VOC emission limitation may occur.
- f) Testing Requirements
- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in b) of these terms and conditions shall be determined in accordance with the following methods:
- a. Emission Limitation:
0.18 tons/month of NO_x emissions averaged over a rolling, 12-month summation.



Applicable Compliance Method:

The average monthly allowable emissions limitation was determined by multiplying the calculated hourly emissions rate of 0.685 lb NO_x/hr by 6,240 hours per year divided by 2000 pounds. The resultant ton per year emission rate was then divided by 12 months to arrive at the average tons of NO_x per month. Therefore, provided compliance with the federally enforceable annual operating hour limitation is maintained, compliance with the monthly averaged allowable emission limitation will also be maintained.

The emissions limitation was determined by multiplying the emission factor from Section 1.4 (“Natural Gas Consumption”) of AP-42, Fifth Edition, Volume 1, Chapter 1 by the mmBtu/hour rating of the natural gas-fired burner. Since the emissions factor is given in a volume format, it was converted to an energy basis by dividing the given factor by 1,020 mmBtu/10⁶scf:

Emission factor of NO_x = 100 lbs NO_x/mmcf

$$(100 \text{ lbs NO}_x/\text{mmcf}) / (1,020 \text{ mmBtu}/10^6\text{scf}) = 0.098 \text{ lb NO}_x/\text{mmBtu}$$

$$(0.098 \text{ lb NO}_x/\text{mmBtu}) \times (6.992 \text{ mmBtu}/\text{hr}) = 0.685 \text{ lb NO}_x/\text{hr}$$

$$(0.685 \text{ lb NO}_x/\text{hr}) \times (6240 \text{ hrs}/\text{year}) \times (1 \text{ ton}/2000 \text{ lbs}) = 2.14 \text{ TPY NO}_x$$

$$(2.14 \text{ TPY}) \times (1 \text{ year}/12 \text{ months}) = 0.18 \text{ ton per month NO}_x$$

b. Emission Limitation:

0.15 tons /month of CO emissions averaged over a rolling, 12-month summation.

Applicable Compliance Method:

The average monthly allowable emissions limitation was determined by multiplying the calculated hourly emissions rate 0.573 lb CO/hr by 6,240 hours per year divided by 2000 pounds. The resultant ton per year emission rate was then divided by 12 months to arrive at the average tons of CO per month. Therefore, provided compliance with the federally enforceable annual operating hour limitation is maintained, compliance with the monthly averaged allowable emission limitation will also be maintained.

The emissions limitation was determined by multiplying the emission factor from Section 1.4 (“Natural Gas Consumption”) of AP-42, Fifth Edition, Volume 1, Chapter 1 by the mmBtu/hour rating of the natural gas-fired burner. Since the emissions factor is given in a volume format, it was converted to an energy basis by dividing the given factor by 1,020 mmBtu/10⁶scf:

Emission factor of CO = 84 lbs CO/mmcf

$$(84 \text{ lbs CO}/\text{mmcf}) / (1,020 \text{ mmBtu}/10^6\text{scf}) = 0.082 \text{ lb CO}/\text{mmBtu}$$



$$(0.082 \text{ lb CO/mmBtu}) \times (6.992 \text{ mmBtu/hr}) = 0.573 \text{ lb CO/hr}$$

$$(0.573 \text{ lb CO/hr}) \times (6240 \text{ hrs/year}) \times (1 \text{ ton}/2000 \text{ lbs}) = 1.79 \text{ TPY}$$

$$(1.79 \text{ TPY}) \times (1 \text{ year}/12 \text{ months}) = 0.15 \text{ ton per month}$$

c. Emission Limitation:

70 tons of VOC emissions per rolling, 12-month summation

Applicable Compliance Method:

Compliance with the rolling, 12-month summation shall be determined in accordance with the record keeping requirements established in d)(2) above.

The emission limitation was determined by multiplying the emission factor established by the equation for VOC emissions from bread baking operations was taken from AP-42, Volume 1, Fifth Edition (January, 1995), section 9.9.6, "Bread Baking" by the amount of bread produced, in tons. This is shown below in a one-time calculation of Potential-to-Emit for the worst case recipe at the maximum production rate:

$$\text{VOC EF} = 0.95Y_i + 0.195t_i - 0.51S - 0.86t_s + 1.90$$

Where:

VOC EF = pounds of VOC per ton of baked bread

Y_i = initial baker's percentage of yeast

t_i = total yeast action time in hours

S = final (spike) baker's percentage of yeast

t_s = spiking time in hours

The following example equation is based on the highest VOC emitting recipe, "Giant":

$$\text{VOC EF} = 0.95(2.5\%) + 0.195(3.00) - 0.51(0.70\%) - 0.86(1.00) + 1.90$$

$$= 3.64 \text{ pounds VOC/ton baked bread}$$

$$(3.64 \text{ pounds VOC/ton baked bread}) \times (5.88 \text{ tons baked bread/hour}) = 21.40 \text{ pounds VOC/hour}$$

$$21.40 \text{ pounds VOC/hour} \times 6,240 \text{ hours/year} \times 1 \text{ ton}/2,000 \text{ pounds} = 66.77 \text{ TPY VOC}$$

d. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity as a six-minute average, except as specified by rule.



Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9.

e. Emission Limitation:

0.020 pound of particulate emissions per mmBtu of actual heat input

Applicable Compliance Method:

Compliance with the pound per mmBtu emissions limit shall be shown by dividing the emission factor from Section 1.4 ("Natural Gas Consumption") of AP-42, Fifth Edition, Volume 1, Chapter 1 by 1,020 mmBtu/10⁶scf.

f. Emission Limitation:

The annual VOC emissions for P004 shall not exceed 70.0 tons/year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be determined based on the recordkeeping from d)(2) and the following:

$$\sum_{i=1}^n [EF VOC_i \times (tons\ product_i / month)] / (2,000\ pounds / ton) = tons\ VOC / month$$

Where

i = each different recipe used in baking operations

The permittee shall then sum the total monthly VOC emissions as a rolling, 12-month summation.

g) Miscellaneous Requirements

(1) Installation of this emissions unit is anticipated to be completed in October 2014.

(2) 70 TPY VOC emissions limitation includes products of combustion:

a. Potential OC emissions from natural gas combustion based on federally enforceable annual operating restriction of 6,240 hours/year:

$$(11\ bs\ OC / mmcf) / (1,020\ mmBtu / 10^6\ scf) = 0.011\ lb\ OC / mmBtu$$

$$(0.011\ lb\ OC / mmBtu) \times (6.992\ mmBtu / hr) \times (6,240\ hrs / yr) \times (1\ ton / 2000\ lbs) = 0.24\ TPY\ OC$$



Draft Permit-to-Install and Operate

SCHWEBEL BAKING CO #1

Permit Number: P0117275

Facility ID: 1318538152

Effective Date: To be entered upon final issuance

- b. Potential VOC emissions from bread production (BP):

See f)(1)a.

Note that the 5.88 comes from the BP (tons bread/day) calculation of 141.15 tons per day divided by 24 hrs/day = 5.88 tons baked bread/hr. The 141.15 was obtained using Schwebel's raw data.

- c. $0.24 \text{ TPY OC} + 66.77 \text{ TPY VOC} = 67.01 \text{ TPY VOC} < 70 \text{ TPY VOC}$