



**John R. Kasich**, Governor  
**Mary Taylor**, Lt. Governor  
**Craig W. Butler**, Director

6/19/2015

BETH MOWREY  
 SHELLY MATERIALS PLANT # 4132  
 PO BOX 266  
 THORNVILLE, OH 43076

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

Facility ID: 0448010386  
 Permit Number: P0119075  
 Permit Type: Administrative Modification  
 County: Lucas

Certified Mail

No	TOXIC REVIEW
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT/GACT
Yes	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, Toledo Blade. 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](http://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 Toledo Department of Environmental Services  
 348 South Erie Street  
 Toledo, OH 43604

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 Toledo Department of Environmental Services at (419)936-3015.

Sincerely,

Michael E. Hopkins, P.E.  
 Assistant Chief, Permitting Section, DAPC

Cc: U.S. EPA Region 5 Via E-Mail Notification  
 TDES; Michigan; Indiana; Canada



## PUBLIC NOTICE

The following matters are the subject of this public notice by the Ohio Environmental Protection Agency. The complete public notice, including any additional instructions for submitting comments, requesting information, a public hearing, or filing an appeal may be obtained at: <http://epa.ohio.gov/actions.aspx> or Hearing Clerk, Ohio EPA, 50 W. Town St., Columbus, Ohio 43215. Ph: 614-644-2129 email: [HClerk@epa.ohio.gov](mailto:HClerk@epa.ohio.gov)

Draft Air Pollution Permit-to-Install and Operate Administrative Modification

SHELLY MATERIALS PLANT # 4132

2435 DORR ST., TOLEDO, OH 43607

ID#:P0119075

Date of Action: 6/19/2015

Permit Desc:Administrative Permit modification to reflect July 2014 stack testing emission factors.

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 ID # or: Mary Lehman-Schmidt, Toledo Department of Environmental Services, 348 South Erie Street, Toledo, OH 43604. Ph: (419)936-3015



## Permit Strategy Write-Up

1. Check all that apply:

Synthetic Minor Determination

Netting Determination

2. Source Description:

Shelly Materials operates an asphalt plant operation (Plant #4132) including roadways, storage piles, and a 210 tph batch mix hot mix asphalt plant. The facility is located at 2435 Dorr Street in Toledo, Ohio (Lucas County). The facility has requested a modification to increase the NOx emissions using plant specific testing data. The existing source will not be physically modified.

The hourly short term emission limit of nitrogen oxide (NOx) will be increased from 0.025 lb/ton to 0.034 lb/ton while burning natural gas based on a stack test performed on July 30-31, 2014. The facility has requested a NOx limit 15% greater than that recorded during the most recent stack test based on the following calculation:

$$5.06 \text{ lb NOx/hr} \div 170.06 \text{ tons asphalt/hr} = 0.0298 \text{ lb NOx/ton asphalt} \times 1.15\% = 0.034 \text{ lb NOx/ton asphalt}$$

### Other permit changes

Alan Lloyd of the Ohio EPA (Central Office) has directed this office to use the No. 2 fuel oil or on-spec fuel oil emission factors as worst case and to revise the synthetic minor restriction to account for the removal of the use of No. 4 fuel oil. The calculations for SO<sub>2</sub> and VOC will be revised based on higher emissions factors submitted for the Chapter 31 modification permitted under P0105892, issued September 16, 2010.

3. Facility Emissions and Attainment Status:

With federally enforceable restrictions, the facility is a minor source for all criteria pollutants. The facility is a true minor source for HAPs. Lucas County is designated attainment for all criteria pollutants.

4. Source Emissions:

The asphalt plant emissions (P901) are restricted under FEPTIO P0105892 by a federally enforceable asphalt production restriction of 400,000 tons asphalt per rolling, 12-month period.

This permit will modify the NOx emission factor when burning natural gas (0.034 lb NOx/ton). Annual NOx emissions will not increase since the calculation is based on the worst case emission factor from No. 2 and used oil (0.12 lb NOx/ton). Because of the removal of burning No. 4 fuel oil, this permit will lower the SO<sub>2</sub> emission factor from 0.15 lb/ton to 0.088 lb/ton using the worst case No.2 fuel oil.

This permit will modify the SO<sub>2</sub> and VOC emission factors as submitted in the application for the Chapter 31 modification permitted under P0105892.

CO emission factors will remain unchanged.

The emissions from this source include both stack and fugitive emissions. The fugitive emissions are from the cold end loading and conveying/transferring operations. The hot end fugitive emissions are from silo filling and asphalt load out. The permittee will be restricted to a production limitation of 400,000 tons of asphalt per year. Short term emissions are based on a maximum production rate of 210 tons per hour. Emissions are based on the worst-case emission factor for the types of fuel burned in this emissions unit.

### CO Emissions

stack For all fuel types

$$210 \text{ tons/hr} \times 0.4 \text{ lb/ton} = 84.0 \text{ lb/hr}$$

$$400,000 \text{ tons/yr} \times 0.4 \text{ lb/ton} \times \text{ton}/2000 \text{ lb} = 80 \text{ tpy CO, stack}$$

fugitive based on Asphalt Loadout (AP-42, Table 11.1-14 and 11.1-16 dated 03/2004):

$$400,000 \text{ tons/yr} \times 0.00135 \text{ lb CO/ton} \times 1 \text{ ton}/2000 \text{ lb} = 0.27 \text{ tpy CO, fugitive}$$

fugitive based on Silo filling (AP-42 Table 11.1-14 dated 03/2004):

$$400,000 \text{ tons/yr} \times 0.00118 \text{ lb CO/ton} \times 1 \text{ ton}/2000 \text{ lb} = 0.236 \text{ tpy CO, fugitive}$$

PTE allowable:  $80 \text{ tpy} + 0.27 \text{ tpy} + 0.236 \text{ tpy} = 80.5 \text{ tons CO per rolling, 12-month period}$

### NOx Emissions

stack No. 2 fuel oil and used oil

$$210 \text{ tons/hr} \times 0.12 \text{ lb/ton} = 25.2 \text{ lb/hr}$$

$$400,000 \text{ tons/yr} \times 0.12 \text{ lb/ton} \times \text{ton}/2000 \text{ lb} = 24.0 \text{ tpy NOx, stack}$$

### Particulate Emissions

stack all fuel types

$$400,000 \text{ tons/yr} \times 0.065^1 \text{ lb/ton} \times \text{ton}/2000 \text{ lbs} = 13.0 \text{ tons/yr}$$

<sup>1</sup>Note: The 0.065 lb/ton of PE was calculated as follows.

$$0.04 \text{ gr/drscf} \times 40,000 \text{ cf/min} \times 60 \text{ min/hr} \times 1 \text{ lb}/7000 \text{ gr} \times 1 \text{ hr}/210 \text{ tons asphalt} = 0.065 \text{ lb PE/ton}$$

fugitive based on Weigh hopper (AP-42 Table 11.12-2 dated 06/2006):

$$400,000 \text{ tons/yr} \times 0.95 \times 0.0048 \text{ lb PM/ton raw mat.} \times 1 \text{ ton}/2000 \text{ lb} = 0.912 \text{ tpy PE, fugitive}$$

fugitive based on Aggregate processing (AP-42 Table 11.12-2 dated 06/2006):

$$400,000 \text{ tons/yr} \times 0.95 \times 0.0069 \text{ lb PM/ton agg.} \times 1 \text{ ton}/2000 \text{ lb} = 1.31 \text{ tpy PE, fugitive}$$

fugitive based on Sand processing (AP-42 Table 11.12-2 dated 06/2006):

$$400,000 \text{ tons/yr} \times 0.50 \times 0.0021 \text{ lb PM/ton sand} \times 1 \text{ ton}/2000 \text{ lb} = 0.21 \text{ tpy PE, fugitive}$$

fugitive based on Silo filling (AP-42 Table 11.1-14 dated 03/2004):

$$400,000 \text{ tons/yr} \times 0.000586 \text{ lb PM/ton asph.} \times 1 \text{ ton/2000 lb} = 0.117 \text{ tpy PE, fugitive}$$

fugitive based on Asphalt Loadout (AP-42 Table 11.1-14 dated 03/2004):

$$400,000 \text{ tons/yr} \times 0.000522 \text{ lb PM/ton asph.} \times 1 \text{ ton/2000 lb} = 0.104 \text{ tpy PE, fugitive}$$

fugitive based on Conveying (AP-42 Table 11.19.2-2 08/2004):

$$400,000 \text{ tons/yr} \times 0.00014 \text{ lb PM/ton asph.} \times 11 \text{ transfer points} \times 1 \text{ ton/2000 lb} = 0.31 \text{ tpy PE, fugitive}$$

PTE allowable:  $13.0 \text{ tpy} + 0.912 \text{ tpy} + 1.31 \text{ tpy} + 0.21 \text{ tpy} + 0.117 \text{ tpy} + 0.104 \text{ tpy} + 0.31 \text{ tpy} = 16.0 \text{ tons PE per rolling, 12-month period}$

### **SO2 Emissions**

stack based on No. 2 fuel oil, assuming 0.5% sulfur content in the fuel (AP-42 Table 11.1-5 dated 03/2004))

$$210 \text{ tons/hr} \times 0.088 \text{ lb/ton} = 18.48 \text{ lb/hr}$$

$$400,000 \text{ tons/yr} \times 0.088 \text{ lb/ton} \times \text{ton/2000 lb} = 17.6 \text{ tons/yr, stack}$$

### **VOC Emissions**

stack For all fuel types, based on stack tests reports submitted by Shelly

$$210 \text{ tons/hr} \times 0.14 \text{ lb/ton} = 29.4 \text{ lb/hr}$$

$$400,000 \text{ tons/yr} \times 0.14 \text{ lb/ton} \times \text{ton/2000 lb} = 28.0 \text{ tpy, stack}$$

fugitive based on Asphalt Loadout (AP-42, Table 11.1-14 and 11.1-16 dated 03/2004):

$$400,000 \text{ tons/yr} \times 0.00386 \text{ lb VOC/ton asph.} \times 1 \text{ ton/2000 lb} = 0.772 \text{ tpy, fugitive}$$

fugitive based on Silo filling (AP-42 Table 11.1-14 dated 03/2004):

$$400,000 \text{ tons/yr} \times 0.0120 \text{ lb VOC/ton asph.} \times 1 \text{ ton/2000 lb} = 2.4 \text{ tpy, fugitive}$$

PTE allowable:  $28.0 \text{ tpy} + 0.772 \text{ tpy} + 2.4 \text{ tpy} = 31.2 \text{ tons VOC per rolling, 12-month period}$

### **Total FEPTIO Allowable Emissions**

$$\text{CO} = 80 + 0.27 + 0.24 = 80.5 \text{ tpy (unchanged)}$$

$$\text{NOx} = 24.0 \text{ tpy (unchanged)}$$

$$\text{PE} = 13 + 0.912 + 1.31 + 0.21 + 0.117 + 0.104 + 0.31 = 16.0 \text{ tpy (1.1 tpy increase)}$$

$$\text{SO2} = 17.6 \text{ tpy (12.4 tpy decrease)}$$

$$\text{VOC} = 28 + 0.772 + 2.4 = 31.2 \text{ tpy (0.4 tpy increase)}$$

5. Conclusion:

With federally enforceable restrictions on the production from P901, this facility will remain a synthetic minor source. The permit needs to be issued draft in order to secure federally enforceable terms due to the changes from the previously issued synthetic minor permitting action and to secure comments from the company.

6. Please provide additional notes or comments as necessary:

**BAT Analysis**

P901 was modified under FEPTIO P0105892, issued September 16, 2010, to increase the annual production rate to 400,000 tons of asphalt. Because the increase in emissions occurred after August 3, 2009, this permit will trigger a new BAT analysis based on the most current guidance.

For all sources modified or constructed after August 3, 2009, BAT will be expressed based on the February 7, 2014 interoffice memorandum which supersedes the BAT Requirements for Permit Applications Filed on or After August 3, 2009 interoffice memorandums dated August 30, 2013 and December 10, 2009, issued after the February 2, 2010 U.S. District Court for the Southern District of Ohio ruling in Sierra Club v. Christopher Korleski, Director of Ohio EPA; a court decision which does not recognize the less than 10 tpy BAT exemption.

Under this memorandum, the November 30, 2001 version of the BAT rule (OAC rule 3745-31-05) is the current version of the BAT rule ([http://www.epa.ohio.gov/dapc/regs/3745\\_31/3745\\_31\\_Historic.aspx](http://www.epa.ohio.gov/dapc/regs/3745_31/3745_31_Historic.aspx)) contained in the approved SIP for sources emitting less than 10 tons per year. This means the Senate Bill 265 (S.B. 265) exemption cannot be used. The memorandum directs permit writers to follow a three-step procedure to determine the BAT limit: 1) Does a MACT/BACT/LAER limit apply? 2) does a RACT limit apply? 3) Case by Case BAT.

P901 was modified so it is subject to the 2/7/2014 BAT guidance. Uncontrolled potential emissions of CO, NO<sub>x</sub>, PE, SO<sub>2</sub> and VOC are greater than 10 tons per year. P901 is a hot mix asphalt facility and is subject to 40 CFR 60, Subpart I (Standards of Performance for Hot Mix Asphalt Facilities). Therefore, BAT for PE will be equivalent to the applicable NSPS requirements.

There are no MACT/BACT/LAER or RACT limits that apply to CO, NO<sub>x</sub>, SO<sub>2</sub> or VOC. BAT will be determined using the case-by-case determination. BAT will be based on work practices, source design characteristics or design efficiency, raw material/throughput, or monthly allowables as applicable to this emissions unit. BAT will be established based on the design to meet approach and will be set as equivalent to the tons per rolling, 12-month synthetic minor limits.

**Air Dispersion Modeling Analysis**

The current SO<sub>2</sub> tons per year did not trigger state modeling in FEPTIO P0117587 because the overall SO<sub>2</sub> emissions increase was less than 39 tons per year.

The calculated SO<sub>2</sub> pounds per hour allowable emissions calculation for Lucas County per OAC rule 3745-18-06(E)(2) was completed as follows.

$$\text{AER} = 30P^{0.67} = 30(210 \text{ tons/hr})^{0.67} = 1079 \text{ lbs SO}_2/\text{hr}$$

NO<sub>x</sub> limit of 30 ppm taken from stack test performed on July 30<sup>th</sup>-31<sup>st</sup> (average of 27 ppm rounded to 30 ppm).

The air toxics formaldehyde and toluene were specifically listed in the asphalt production template thus were calculated to verify air modeling requirement was not applicable due to being less than one ton per year. There are no air toxic emissions emitted at a rate equal to or greater than 1 ton/yr, so Ohio EPA's Air Toxics Policy does not apply.

Formaldehyde:  $(400,000 \text{ tons/yr}) \times (0.00074 \text{ lb/ton}) \times (1 \text{ ton}/2000 \text{ lbs}) = 0.148 \text{ TPY}$

Toluene:  $(400,000 \text{ tons/yr}) \times (0.0010 \text{ lb/ton}) \times (1 \text{ ton}/2000 \text{ lbs}) = 0.2 \text{ TPY}$

### Comments from Alan Lloyd (Ohio EPA Central Office)

EG #82 terms were added due to the sulfur containing fuels and per Alan Lloyd (OEPA). The 15 ppm limit was taken from 40 CFR 80, Subpart I and is sufficient to demonstrate compliance with sulfur dioxide (SO<sub>2</sub>) emissions limitations pursuant to OAC rule 3745-31-05.

On October 17<sup>th</sup>, 2014, Alan Lloyd advised us of the following.

- Include ultra-low sulfur diesel (ULSD) fuel terms (40 CFR 80.510(c)) for #2 fuel oil.
- BAT is 0.03 gr/dscf for PE which Shelly is currently permitted for 0.04 gr/dscf and the stack test results from July 31<sup>st</sup>, 2014, show 0.0369 gr/dscf.
- No lbs SO<sub>2</sub> / mmBtu limit for asphalt plants
- Updated version of EG #82 was also provided by Alan Lloyd in which the #2 fuel oil "Additional Terms and Conditions", "Monitoring and Recordkeeping", and "Emissions Testing" were referenced.

The following list summarizes permit changes as requested by OEPA.

- In B.2., NSPS 40 CFR 60, Subpart I, was added to facility wide terms (hyperlink to e-CFR was also added)
- In C.1., a more elaborate description of this emissions unit was added
- BAT was modified for NO<sub>x</sub> from a lbs/ton to a ppm, SO<sub>2</sub>/CO/VOC/ from a lbs/ton to a rolling 12-month TPY; Asphalt load out emissions, asphalt silo filling emissions, and cold end fugitive dust emissions were removed from BAT
- #2 fuel oil usage requirements were added to meet Ultra Low Sulfur Diesel (USLD) found in 40 CFR 80.510(c)
- #2 fuel oil dedicated storage vessel requirements were added
- record requirements added for #2 fuel oil to demonstrate compliance with the ULSD requirement
- a baghouse maintenance plan was added
- e-Business (Air Services) reporting requirements added
- specific NSPS reporting requirements were added via 40 CFR 60.7(a)(4)
- CO was added to the testing requirement. OEPA delegated CO testing authority requirements to TDOES.
- testing requirements were added for #2 fuel oil burned in this emissions unit to meet U.S. EPA's specification for Ultra Low Sulfur Diesel (USLD) found in 40 CFR 80.510(c)

Alan Lloyd reviewed the T&C on 03DEC2014, made two minor changes, and authorized sending the permit to the facility for their two week review period. The two changes were as follows.

- In C.1.d)(5), the words "natural gas" were removed from the monitoring/record-keeping section.
- In C.1.f)(1)j., the emission limit for on-spec oil of 0.5% by weight sulfur content was removed.

Alan Lloyd provided final terms and conditions on February 2, 2015. These terms and conditions reflect comments the facility made to the Ohio EPA and Ohio EPA's response.

- Apply BAT based on the February 7, 2014 guidance as applicable to the Toledo, Ohio facility.
- Remove the NOx burner ppm term
- Move the ULSD terms to c) Operational Restrictions
- Add an asterisk to the term for d)(1) Used Oil Analysis Records to allow the permittee to use their own used oil recordkeeping form upon approval from the Ohio EPA
- Rearrange the order of the monitoring and recordkeeping terms in d)
- Rearrange the order of the reporting terms in e) and move the used oil reporting term to the PER reporting requirements
- Remove the opacity compliance demonstrations for 20% as a 3-min average and 20% as a 6-min average and replace with the NSPS limit and compliance demonstration. The NSPS Subpart I requirements include a statement for Method 9 for opacity.
- Revise the statement for ULSD compliance demonstration

**Comments from Shelly Materials**

For the testing requirements, f)(1)a.ii., initial VOC testing was left in the permit because an email was received from Beth Mowrey on 30SEP2014 stating, "I believe all stone can/could contain hydrocarbons. Any materials that we have onsite from recycle to aggregates may contain hydrocarbons."

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

<u>Pollutant</u>	<u>Tons Per Year</u>
CO	80.5 (unchanged)
NOx	24.0 (unchanged)
PE	16.0 (1.1 increase)
SO <sub>2</sub>	17.6 (12.4 decrease)
VOC	31.2 (0.4 increase)



**DRAFT**

**Division of Air Pollution Control  
Permit-to-Install and Operate  
for  
SHELLY MATERIALS PLANT # 4132**

Facility ID:	0448010386
Permit Number:	P0119075
Permit Type:	Administrative Modification
Issued:	6/19/2015
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  
SHELLY MATERIALS PLANT # 4132

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**Draft Permit-to-Install and Operate**  
SHELLY MATERIALS PLANT # 4132  
**Permit Number:** P0119075  
**Facility ID:** 0448010386

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

## Authorization

Facility ID: 0448010386  
Application Number(s): M0003414  
Permit Number: P0119075  
Permit Description: Administrative Permit modification to reflect July 2014 stack testing emission factors  
Permit Type: Administrative Modification  
Permit Fee: \$625.00 *DO NOT send payment at this time, subject to change before final issuance*  
Issue Date: 6/19/2015  
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:

SHELLY MATERIALS PLANT # 4132  
2435 DORR ST  
TOLEDO, OH 43607

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:

Toledo Department of Environmental Services  
348 South Erie Street  
Toledo, OH 43604  
(419)936-3015

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**  
SHELLY MATERIALS PLANT # 4132  
**Permit Number:** P0119075  
**Facility ID:** 0448010386

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

## Authorization (continued)

Permit Number: P0119075

Permit Description: Administrative Permit modification to reflect July 2014 stack testing emission factors

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

<b>Emissions Unit ID:</b>	<b>P901</b>
Company Equipment ID:	Asphalt Batch Plant
Superseded Permit Number:	P0105892
General Permit Category and Type:	Not Applicable



**Draft Permit-to-Install and Operate**  
SHELLY MATERIALS PLANT # 4132  
**Permit Number:** P0119075  
**Facility ID:** 0448010386  
**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 Toledo Department of Environmental Services in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

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

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

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

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

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

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

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

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

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

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

SHELLY MATERIALS PLANT # 4132

**Permit Number:** P0119075

**Facility ID:** 0448010386

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

## **B. Facility-Wide Terms and Conditions**



**Draft Permit-to-Install and Operate**  
SHELLY MATERIALS PLANT # 4132  
**Permit Number:** P0119075  
**Facility ID:** 0448010386

**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.
2. The following emissions unit contained in this permit is subject to 40 CFR Part 60, Subpart I: P901. The complete NSPS requirements may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website [www.ecfr.gov](http://www.ecfr.gov) or by contacting the appropriate Ohio EPA District Office or local air agency.



**Draft Permit-to-Install and Operate**  
SHELLY MATERIALS PLANT # 4132  
**Permit Number:** P0119075  
**Facility ID:** 0448010386  
**Effective Date:** To be entered upon final issuance

## **C. Emissions Unit Terms and Conditions**



**1. P901, Asphalt Batch Plant**

**Operations, Property and/or Equipment Description:**

210 ton per hour (design) asphalt plant controlled by a baghouse. The operation produces hot mix asphalt (HMA) by heating and mixing aggregate material, sand, and asphalt cement in a 210 tons per hour (design) batch plant. The aggregate material may consist of fine and coarse aggregates and reclaimed recyclable material. Reclaimed recyclable material reduces the amount of new aggregate and asphalt needed to produce HMA. Material is crushed and screened to the appropriate size and transported to the plant for further processing.

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)(11).

(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)h., b)(2)b., d)(2), e)(2), f)(1)a.-f.

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.	ORC 3704.03(T) and OAC rule 3745-31-05(A)(3).	Best Available Technology (BAT) for sulfur dioxide (SO <sub>2</sub> ), carbon monoxide (CO), nitrogen oxides (NO <sub>x</sub> ), and volatile organic compounds (VOC) are all equivalent to the tons per rolling 12-month synthetic minor limits established in b)(2)b. below.  BAT for particulate emissions (PE <sup>1</sup> ) is equivalent to the gr/dscf limitation specified in 40 CFR 60 Subpart I.

<sup>1</sup> In this permit, PE are being used as surrogate for both particulate emissions 10 microns or less in diameter (PM<sub>10</sub>) and particulate emissions 2.5 microns or less in diameter (PM<sub>2.5</sub>).



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
b.	NSPS 40 CFR Part 60, Subpart I [In accordance with 40 CFR Part 60 Subpart I 60.90(a) and (b), this emissions unit is a hot mix asphalt plant that has commenced construction or modification after June 11, 1973, and is subject to the emissions limitations/control measures specified in 40 CFR Part 60 Subpart I.]	No owner or operator subject to the provisions of this subpart shall discharge or cause the discharge into the atmosphere from any affected facility any gasses which contain PE in excess of 0.04 gr/dscf or exhibit 20 percent opacity, or greater.
c.	Stack Particulate OAC rule 3745-17-11(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to b)(1)b. above for PE.
d.	Stack Opacity OAC rule 3745-17-07(A)(1)	The emission limitation specified by this rule is equivalent to the emission limitation established pursuant to 40 CFR Part 60, Subpart I.
e.	Fugitive Opacity OAC rule 3745-17-07(B)	Visible particulate emission of fugitive dust shall not exceed 20% opacity, as a 3-minute average.
f.	Fugitive Operational Restrictions OAC rule 3745-17-08(B)	See b)(2)a.
g.	Stack SO <sub>2</sub> OAC rule 3745-18-06(E)	SO <sub>2</sub> emissions shall not exceed 1079 lbs./hr.
h.	Synthetic Minor OAC rule 3745-31-05(D)	See b)(2)b. for restrictions to avoid Prevention of Significant Deterioration (PSD), non-attainment review (NNSR), and/or Title V permitting requirements.
i.	Air Toxics OAC rule 3745-114 ORC 3704.03(F)	See d)(11).

(2) Additional Terms and Conditions

a. Appendix A, Area Fugitive Dust Control Measures

- i. The drop height of the front end loader bucket shall be minimized to the extent possible in order to minimize or eliminate visible particulate emissions of fugitive dust from the aggregate storage bins.
- ii. The aggregate loaded into the cold aggregate bins shall have a moisture content sufficient to minimize or eliminate visible particulate emissions of fugitive dust from conveyors and all transfer points to the dryer.

- iii. Installation and use of hoods, fans, and other equipment to adequately enclose, contain, capture, vent and control fugitive dust. Such equipment shall be sufficient to minimize or eliminate visible particulate emissions of fugitive dust.

b. Synthetic Minor Restrictions

For purposes of securing federally enforceable terms to avoid federal PSD, and/or Title V rules, the following production limitations and emission limitations apply:

- i. 16.0 tons of PE/rolling 12-month period (stack and fugitive emissions) and 0.065 lb. of PE/Ton of asphalt produced;
- ii. 24.0 tons of NO<sub>x</sub>/rolling 12-month period and 0.12lb. of NO<sub>x</sub>/Ton of asphalt produced;
- iii. 80.5 tons of CO/rolling 12-month period (stack and fugitive emissions) and 0.40lb. of CO/Ton of asphalt produced;
- iv. 31.2 tons of VOC/rolling 12-month period (stack and fugitive emissions) and 0.14 lb. of VOC/Ton asphalt produced;
- v. 17.6 tons of SO<sub>2</sub>/rolling 12-month period;
- vi. the amount of asphalt produced is restricted by the following equation:

$$[(0.0046)*(a) + (0.088)*(b)]/2000 \leq 17.6\text{tons of SO}_2 \text{ per rolling 12-month period where}$$

a = tons of asphalt produced while burning natural gas per rolling, 12-month period;

b = tons of asphalt produced while burning on-spec used oil and/or #2 fuel oil per rolling, 12-month period; and

\*lb/ton emission factors may be revised based upon Ohio EPA validated emissions testing and shall be revised if emissions testing results demonstrate higher emissions; and

- vii. The maximum annual asphalt production rate for this emissions unit shall not exceed 400,000 tons per year, based upon a rolling, 12-month summation of the production rates.

c) Operational Restrictions

(1) Raw Material and Fuel Use Restrictions

- a. The permittee shall only burn natural gas, #2 fuel oil, and/or on-spec used oil in this emissions unit. In order to use a fuel on an ongoing basis, the permittee shall complete the emission testing for that fuel in section f).

- b. The permittee may not receive or burn any used oil which does not meet the standards in OAC rule 3745-279-11 and the specifications listed in this permit without first obtaining a permit-to-install or permit-to-install and operate that authorizes the burning of off-specification used oil. The burning of off-specification used oil, subject to OAC rule 3745-279-60 through 67, is prohibited as a fuel in this emissions unit.
- c. The permittee may substitute reclaimed asphalt pavement (RAP) or shingles in the raw material feed mix in amounts not to exceed 50 percent of all aggregate materials.
- d. The permittee may substitute asphalt shingles. Asphalt shingles removed from buildings (tear-off material) may be used but only if it has been determined that they do not contain asbestos. Verification that the shingles do not contain asbestos can either be done by actual testing of a representative sample of the shingles, or by verification from the shingle manufacturer that the shingles do not contain asbestos. Records shall be kept documenting the asbestos verification of any shingles used in the feed mix consistent with the language requirements in the standard terms and conditions.

(2) Used Oil Specifications

Each shipment of oil burned in this emissions unit shall be on-specification (on-spec) oil and shall meet the used oil specifications contained in OAC rule 3745-279-11. The permittee shall determine that the used fuel oil meets these specifications by performing analyses or obtaining copies of analyses or other information from the supplier documenting that the used fuel oil does not exceed (except for flash point which shall not fall below) the following limitations:

Contaminant/Property	Allowable Specifications
arsenic	5 ppm, maximum
cadmium	2 ppm, maximum
chromium	10 ppm, maximum
lead	100 ppm, maximum
100 ppm, halogens	less than 1,000 ppm; or less than 4,000 ppm maximum if the presumption that the used oil contains hazardous waste is rebutted, as described below
flash point	100°F, minimum

The used oil burned in this emissions unit shall contain less than the quantifiable levels of PCBs as defined in 40 CFR 761.3; and shall also not exceed the following mercury limitation nor fall below the following heating value:

heat content	135,000 Btu/gallon, minimum
PCB's	2 ppm, maximum
mercury	1 ppm, maximum

Used oil containing 1,000 ppm or greater total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under paragraph (B)(1) of rule 3745-279-10 of the Administrative Code. The permittee may receive and burn used oil equaling or exceeding 1,000 ppm total halogens, but less than 4,000 ppm, only if the permittee has successfully demonstrated, pursuant to OAC rule 3745-279-63, that the used oil does not contain a listed hazardous waste, by either acquiring and maintaining source process information which demonstrates that the used oil was contaminated by halogenated constituents that would not be listed hazardous waste or by demonstrating that the used oil does not contain significant concentrations of halogens by acquiring and maintaining representative analytical data. Acceptable analytical test protocols that can be used to analyze used oil for halogenated hazardous constituents include SW-846 Test Methods 9075, 9076, and 9077.\*

If analytical results demonstrate that used oil containing 1,000 ppm or more total halogens, but less than 4,000 total halogens, does not contain greater than 100 ppm of any individual halogenated hazardous constituent found in the F001 and F002 listings in OAC rule 3745-51-31 and there is no information suggesting that any other halogenated hazardous constituent (e.g., chlorinated pesticides) has come in contact with the oil, then the presumption that the oil contains hazardous waste has been successfully rebutted.\*\* The rebuttable presumption does not apply to either metal working oils/fluids containing chlorinated paraffins, if processed through a tolling arrangement as described in OAC rule 3745-279-24(C), or used oils contaminated with chlorofluorocarbons removed from refrigeration units.

The burning of used oil not meeting the above limitations is prohibited in this emissions unit and the fuel oil analyses shall document compliance with each limitation before it is burned. The management and burning of used oil is subject to the Standards for the Management of Used Oil, OAC Chapter 3745-279, and the permittee shall document and assure that used oils burned in this emissions unit meet all of the applicable requirements of this Chapter. If the used oil analyses shows total halogens of 1,000 ppm or greater, the permittee shall obtain and maintain all the necessary records to successfully rebut the presumption that the used oil contains or has been mixed with a listed hazardous waste in accordance with this permit.

\*EPA publication SW-846, 3rd (or most current) edition, is available from the Government Printing Office, P.O. Box 371954, Pittsburgh, PA 15250-7954; 202/512-1800, document number 955-001-00000-1.

\*\*DHWM policy documented in "Used Oil Burners - New Guidance for Rebuttable Presumption", published April 2008 or most current policy.

(3) No. 2 fuel requirements

No. 2 fuel oil burned in this emissions unit shall meet U.S. EPA's specifications for Ultra Low Sulfur Diesel (ULSD) found in 40 CFR 80.510(c).

d) Monitoring and/or Recordkeeping Requirements

(1) Used Oil Analysis Records

The permittee shall receive and maintain the chemical analyses from the supplier/marketer for each shipment of used oil burned in this emissions unit (or if the oil is generated on site, the permittee shall conduct the chemical analyses), which shall contain the following information\*:

- a. the date the used oil was received at the facility and the amount received;
- b. the name, address, and U.S. EPA identification number (if applicable) of the generator, transporter, processor/refiner, supplier, and/or marketer;
- c. the results of the following chemical analyses, demonstrating that the used oil meets the standards in OAC rule 3745-279-11:
  - i. arsenic content, in ppm;
  - ii. the cadmium content, in ppm;
  - iii. the chromium content, in ppm;
  - iv. the lead content, in ppm;
  - v. total halogens, in ppm; and
  - vi. the flash point;
- d. where the chemical analysis shows a total halogen content between 1,000 ppm, and below 4,000 ppm, the successful demonstration for the rebuttal of the presumption that the used oil contains or has been mixed with a listed hazardous waste, as described in OAC rule 3745-279-63(C); and
- e. the results of the analyses demonstrating that the used oil meets the heating value and the mercury and PCB limitations contained in this permit.

Each analysis shall be kept in a readily accessible location for a period of not less than 5 years\*\* following the receipt of each shipment of used oil and shall be made available to the Ohio EPA Division of Materials and Waste Management and/or the Division of Air Pollution Control (the appropriate Ohio EPA District Office or local air agency) upon verbal or written request. Any authorized representative of the Ohio EPA may sample or require sampling of any used oil shipments received, stored, or burned by/at this facility for periodic detailed chemical analyses through an independent laboratory.

\*Permittee may use their own used oil recordkeeping form upon approval from Ohio EPA.

\*\*The Division of Air Pollution Control requires these records to be maintained for 5 years.

(2) Monthly Records

The permittee shall maintain monthly records of the following information:

- a. the asphalt production, in tons, for each month;
- b. the asphalt production, in tons, for each fuel type for each month;
- c. the maximum percentage RAP or shingles used for any mix;
- d. the rolling, 12-month summation of the total asphalt plant production, in tons;
- e. the rolling, 12-month summation of NO<sub>x</sub> and SO<sub>2</sub>\* emissions by fuel type; and
- f. the rolling, 12-month summation of the PE, SO<sub>2</sub>, NO<sub>x</sub>, VOC and CO emissions.

\*The rolling, 12-month summation of SO<sub>2</sub> shall be calculated by using the equation found in b)(2)b.vi. above.

- (3) For each day during which the permittee uses any raw material that is not specifically identified in the PTIO application M0003414 submitted on June 12, 2015 without prior approval from Ohio EPA, the permittee shall maintain a record of the type and quantity of raw material employed in this emissions unit.
- (4) The permittee shall maintain documentation verifying that any shingles employed do not contain asbestos as described in c)(1)e.
- (5) For each day during which the permittee burns a fuel other than natural gas, on-spec used oil, or #2 fuel oil, the permittee shall maintain a record of the type, per cent sulfur content, and quantity of fuel burned in this emissions unit.
- (6) The permittee shall maintain documents provided by the oil supplier for each shipment of #2 fuel oil to demonstrate compliance with the ULSD requirement. These documents must include the receipt or bill of loading that includes confirmation that the fuel meets the #2 diesel fuel ULSD standard.
- (7) For each shipment of on-spec used oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received and the permittees or oil supplier's analyses for sulfur content and heat content.
- (8) While performing each burner tuning, the permittee shall record the results of the burner tuning using the *Burner Tuning Reporting Form for Asphalt Concrete Plants* form (as found in g)(1)). An alternative form may be used upon approval of the Ohio EPA, District Office or local air agency.

(9) Maintaining Baghouse Maintenance Plan

The owner/operator shall develop and implement a baghouse maintenance plan designed to ensure that the baghouse continues to operate as designed. This Baghouse Maintenance Plan can either be developed in-house or can be developed by the manufacturer of the baghouse. This Baghouse Maintenance Plan shall include, at a minimum, the following elements:

- a. The frequency of inspection of the baghouse for maintenance purposes;
- b. A description of the baghouse components to be inspected at each inspection. It is acceptable to have different inspection frequencies for different baghouse components;
- c. A description of any procedures to be used to verify the proper operation of any of the baghouse components to be inspected at each inspection;
- d. The identification of the record keeping form/record that will be used to track the maintenance inspection. This form/record should include, at a minimum, the following elements:
  - i. Date of the maintenance inspection
  - ii. Name of the employee who can verify that the inspection was completed;
  - iii. Result of the inspection (component repaired, in need of repair, replaced, adjusted, no adjustment needed, etc.);
  - iv. Date component repaired, replaced or adjusted;
  - v. Name of the employee who can verify that the component was repaired, replaced or adjusted;
  - vi. A description of how and where the records shall be maintained.

The permittee shall begin using the Baghouse Maintenance Plan within 30 days from the date Ohio EPA approved the initial plan. As needs warrant, the permittee can modify the Baghouse Maintenance Plan. The permittee shall submit a copy of proposed revisions to the Baghouse Maintenance Plan to the appropriate District Office or local air agency (DO/LAA) for review and approval. The permittee can begin using the revised Baghouse Maintenance Plan once the appropriate DO/LAA has approved its use.

e. Baghouse Maintenance Plan Inspections

Except as otherwise provided in this section, the permittee shall perform inspections of each of the baghouse components at frequencies described in the Baghouse Maintenance Plan. The purpose of the inspections is to determine the need for maintenance on components of the baghouse. Inspections may be delayed in the case of unsafe working conditions due to weather etc. Any required inspection that is not performed due to unsafe working conditions shall

be performed as soon as practical after the working conditions are considered safe.

f. Baghouse Maintenance Plan Record Keeping

The permittee shall maintain records of the following information:

- i. The records required to be collected under the Baghouse Maintenance Plan, and
- ii. The date and reason any element of the Baghouse Maintenance Plan was not implemented.

The permittee shall maintain these records in accordance to the Standard Terms and Conditions of A.3 of this permit.

(10) Appendix A, Daily Visible Particulate Emission Checks

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 hot aggregate elevator, the vibrating screens, and the weigh hopper serving this emissions unit. The presence or absence of any visible particulate emissions shall be noted in an operations log. If visible particulate 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 particulate emission incident; and
- e. any corrective actions taken to minimize or eliminate the emissions.

If visible particulate emissions are present, a visible particulate emission incident has occurred. The observer does not have to document the exact start and end times for the visible particulate emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible particulate 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 particulate 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 particulate emissions.

(11) Modeling to demonstrate compliance with, the “Toxic Air Contaminant Statute”, ORC 3704.03(F)(4)(b), was not necessary because the emissions unit’s maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be

less than 1.0 ton per year. OAC Chapter 3745-31 requires a permittee to apply for and obtain a new or modified federally enforceable permit-to-install and operate (FEPTIO) prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new FEPTIO.

e) Reporting Requirements

- (1) Within 30 days from the final issuance of this permit, the permittee shall submit their proposed Baghouse Maintenance Plan to the appropriate DO/local air agency.
- (2) Quarterly Deviation (Excursion) Reports

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. all exceedances of the rolling, 12-month asphalt production limitation;
  - ii. all exceedances of the tons per 12-month rolling period of PE, SO<sub>2</sub>, NO<sub>x</sub>, VOC, and CO emission limitations;
  - iii. all exceedances of the lbs. per ton emission rate limitations;
  - iv. all exceedances of the prohibition to utilize fuels other than natural gas, #2 fuel oil, and on-spec used oil.
- 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).

- (3) Annual Permit Evaluation Report (PER)

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.

In addition to the reporting the information as required by the PER instructions, the permittee shall provide the following additional information in the PER:

- a. For the quality of used oil burned in this emissions unit:
  - i. any exceedance of the used oil standards in OAC rule 3745-279-11;
  - ii. any occasion where used oil containing 1,000 ppm or more total halogens was burned prior to receiving information demonstrating a successful rebuttal of the presumption that the used oil contains or has been mixed with a listed hazardous waste;
  - iii. any exceedance of the limitations for mercury and/or PCBs; and
  - iv. any deviation from the minimum heat content of 135,000 Btu/gallon
- b. All exceedances of the RAP or shingles raw material mix limitations;
- c. All *Burner Tuning Reporting Form for Asphalt Concrete Plants* forms produced during the past calendar year shall be submitted to the appropriate Ohio EPA District Office or local air agency responsible for the permitting of the facility with the PER;
- d. A description of any failure to implement the Baghouse Maintenance Plan.
- e. All days during which any visible particulate emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc., serving this emissions unit);
- f. Any corrective actions taken to minimize or eliminate the visible particulate emissions from visible particulate emissions of fugitive dust;

The above information shall be provided as an attachment to the PER. If there is no exceedance(s), day(s) and/or corrective action(s) to identify as required above, the permittee shall indicate within the "Additional Information and Corrections" section of the PER that no exceedance(s), day(s) and/or corrective action(s) happen and/or were taken.

(4) Confirming No Permit Modification is Needed

If the permittee makes a physical change or change in the method of operation as specified in section d)(3) and determines that the change would not constitute a modification as defined in OAC rule 3745-31-01, then the permittee shall confirm with the appropriate District Office or local air agency that no permit modifications are needed prior to operating this emissions unit.

(5) General Report Submission Requirements

All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the District Office or Local Air Agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitations:

PE from the stack shall not exceed 0.04 gr/dscf;

PE emissions shall not exceed 0.065 lb./ton;

NOx emissions shall not exceed 0.12lb/ton;

CO emissions shall not exceed 0.40 lb./ton;

VOC emissions shall not exceed 0.14 lb./ton; and

SO<sub>2</sub> emissions shall not exceed 0.088 lb./ton.

SO<sub>2</sub> emissions shall not exceed any of the lb./ton mass emission limitations listed in b)(2)b.vi. Note emission stack testing of this value will be based upon the procedures listed within this term.

Applicable Compliance Method:

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

i. The emission testing shall be conducted within 3 months after issuance of this permit, except for PE and opacity where the tests shall be conducted in accordance with the appropriate provisions listed in 40 CFR Part 60.

- ii. Initial emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for PE, CO, NO<sub>x</sub>, SO<sub>2</sub>, and VOC. Emission testing for secondary fuels shall be conducted within 60 days after the switch to the secondary fuel. Prior to secondary fuel use emission testing, the permittee shall consult the appropriate Ohio EPA District Office or local air agency to determine which pollutants should be tested.
- iii. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s) for:

PE, Methods 1-5 of 40 CFR Part 60, Appendix A

NO<sub>x</sub>, Methods 1-4 and 7E of 40 CFR Part 60, Appendix A

CO, Methods 1-4 and 10 of 40 CFR Part 60, Appendix A

VOC, Methods 1-4 and 25 and/or 18 of 40 CFR Part 60, Appendix A

SO<sub>2</sub>, Methods 1-4 and 6 of 40 CFR Part 60, Appendix A

The VOC pounds per hour emission rate observed during the emission test shall be calculated in accordance with OAC paragraph 3745-21-10(C)(7) where the average molecular weight of the VOC emission equals 16. i.e., the VOC as carbon emission rate observed during testing shall be converted to the appropriate units by multiplying the VOC as carbon emission rate observed during testing by 16 and dividing by 12.

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

- iv. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity employing RAP to verify VOC emissions, unless otherwise specified or approved by the Ohio EPA, District Office or local air agency.

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, District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Ohio EPA, District Office or local air agency's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid

characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, District Office or local air agency.

b. Emission Limitation:

PE emissions from this emissions unit (stack and fugitive) shall not exceed 16.0 tons per rolling 12-month period.

Applicable Compliance Method:

Compliance with the tons per rolling 12-month period limitation shall be determined by a sum of the following calculations:

- i. For the emissions from the baghouse stack, multiply the observed stack emission rate from the most recent emission test, in pounds of PE per ton of asphalt produced, by the actual rolling 12 month summation of asphalt produced, in tons per rolling 12-month period, (as derived from the records required by d)(2) above) and dividing by 2000.
- ii. For the emissions from raw material loaded in the weigh hopper, 0.912 tons of PE per rolling 12-month period derived from 400,000 tons of asphalt produced per year times 0.95 ton of aggregate used per ton of asphalt produced times the emission factor of 0.0048 lb. of PM/ton raw materials divided by 2,000. (AP-42, Table 11.12-2 (06/2006))
- iii. For the emissions from aggregate processing, 1.31 tons of PE per rolling 12-month period derived from 400,000 tons of asphalt produced per year times 0.95 ton of aggregate used per ton of asphalt produced times the emission factor of 0.0069 lb. of PM/ton of aggregate throughput divided by 2,000. (AP-42, Table 11.12-2 (06/2006))
- iv. For the emissions from sand processing, 0.21 tons of PE per rolling 12-month period derived from 400,000 tons of asphalt produced per year times 0.50 ton of sand used per ton of asphalt produced times the emission factor of 0.0021 lb. of PM/ton of sand throughput divided by 2,000. (AP-42 Table, 11.12-2 (06/2006))
- v. For the emissions from silo filling, 0.117 tons of PE per rolling 12-month period derived from 400,000 tons of asphalt produced per year multiplied by the 0.000586 lb. of PM/ton of asphalt produced for silo filling divided by 2,000. (AP-42, Table 11.1-14 (03/2004))

- vi. For the emissions from asphalt loadout, 0.104 tons of PE per rolling 12-month period derived from 400,000 tons of asphalt produced per year multiplied by the 0.000522 lb. of PM/ton of asphalt produced for loadout divided by 2,000. (AP-42, Table 11.1-14 (03/2004))
- vii. For the emissions from conveying, 0.31 tons of PE per rolling 12-month period derived from 400,000 tons of asphalt produced per year multiplied by the 0.00014 lb. of PM/ton of aggregate produced from conveying multiplied by eleven transfer points divided by 2,000 (AP-42 Table 11.19.2-2 (08/2004)).

c. Emission Limitation:

VOC emissions from this emissions unit (stack and fugitive) shall not exceed 31.2 tons per rolling 12-month period.

Applicable Compliance Method:

Compliance with the tons per rolling 12-month period limitation shall be determined by a sum of the following calculations:

- i. If an emission test has been conducted for VOC, then multiply the observed stack emission rate from the most recent emission test, in pounds of VOC per ton of asphalt produced, by the actual rolling 12 month summation of asphalt produced, in tons per rolling 12-month period, (as derived from the records required by d)(2) above) and dividing by 2000. If no emissions test has been conducted, multiply the 0.14lb VOC/ton of asphalt produced emission factor by the actual rolling 12 month summation of asphalt produced, in tons per rolling 12-month period, (as derived from the records required by d)(2) above) and dividing by 2000.
- ii. For the emissions from asphalt loadout, 0.772 tons per rolling 12-month period derived from 400,000 tons of asphalt produced per rolling 12-month period multiplied by 0.00386 lb. of VOC/ton of asphalt produced divided by 2000. (AP-42, Table 11.1-14 and 11.1-16 dated 03/2004)
- iii. For the emissions from asphalt silo filling, 2.4 tons per rolling 12-month period derived from 400,000 tons of asphalt produced per rolling 12-month period multiplied by 0.0120 lb. of VOC/ton asphalt produced divided by 2000. (AP-42, Table 11.1-14 and 11.1-16 dated 03/2004)

d. Emission Limitation:

CO emissions from this emissions unit (stack and fugitive) shall not exceed 80.5 tons per rolling 12-month period.

Applicable Compliance Method:

Compliance with the tons per rolling 12-month period limitation shall be determined by a sum of the following calculations:

- i. If an emission test has been conducted for CO, then multiply the observed stack emission rate from the most recent emission test, in pounds of CO per ton of asphalt produced, by the actual rolling 12 month summation of asphalt produced, in tons per rolling 12-month period, (as derived from the records required by d)(2) above) and dividing by 2000. If no emissions test has been conducted, multiply the 0.4lb. of CO/ton of asphalt produced emission factor by the actual rolling 12 month summation of asphalt produced, in tons per rolling 12-month period, (as derived from the records required by d)(2) above) and dividing by 2000.
- ii. For the emissions from asphalt loadout, 0.27 tons per rolling 12-month period derived from 400,000 tons of asphalt produced per rolling 12-month period multiplied by 0.00135 lb. of CO/ton of asphalt produced divided by 2000. (AP-42, Table 11.1-14 dated 03/2004)
- iii. For the emissions from asphalt silo filling, 0.24 tons per rolling 12-month period derived from 400,000 tons of asphalt produced per rolling 12-month period multiplied by 0.00118 lb. of CO/ton of asphalt produced divided by 2000. (AP-42, Table 11.1-14 dated 03/2004)

e. Emission Limitation:

SO<sub>2</sub> emissions from the stack shall not exceed 17.6 tons per rolling 12-month period.

Applicable Compliance Method:

Compliance with the tons per rolling 12-month period emission limitation shall be determined by multiplying the observed emission rate from the most recent emission testing in pounds of SO<sub>2</sub> per ton of asphalt produced, by the actual rolling 12 month summation of asphalt produced, in tons per rolling 12-month period, (as derived from the records required by d)(2) above) and dividing by 2000.

f. Emission Limitation:

NO<sub>x</sub> emissions shall not exceed 24.0 tons per rolling 12-month.

Applicable Compliance Method:

Compliance with the tons per rolling 12-month period emission limitation shall be determined by multiplying the observed emission rate from the most recent emission testing in pounds of NO<sub>x</sub> per ton of asphalt produced, by the actual rolling 12 month summation of asphalt produced, in tons per rolling 12-month

period, (as derived from the records required by d)(2) above) and dividing by 2000.

g. Emissions Limitation:

No owner or operator subject to the provisions of this subpart shall discharge or cause the discharge into the atmosphere from any affected facility any gasses which contain PE in excess of 0.04 gr/dscf and exhibit 20 percent opacity, or greater.

Applicable Compliance Method:

Visible particulate emissions shall be determined according to USEPA Method 9.

h. Emission Limitation:

See c)(3).

Applicable Compliance Method:

If required, the permittee shall perform sulfur content analysis of a fuel sample in accordance with 40 CFR 80.580 using the appropriate ASTM method(s).

(2) Burner Evaluation/Tuning

a. Introduction

The permittee is required to conduct periodic evaluation/tuning of the asphalt plant burner as set forth below. The purpose of this evaluation/tuning is to ensure that the burner is adjusted and maintained in order to make the burner as fuel efficient as possible.

b. Qualifications for Burner Evaluation/Tuning

Technicians who conduct the burner evaluation/tuning must be qualified to perform the expected burner evaluation/tuning tasks. In order to be qualified, the technician must have passed manufacturer's training concerning burner evaluation/tuning, or must have been trained by someone who has completed the manufacturer's training concerning burner evaluation/tuning. Burner evaluation/tuning technicians can be either permittee employees or outside parties.

c. Portable Monitor Requirements

Portable monitors used for burner evaluation/tuning shall be properly operated and maintained to monitor the concentration of NO<sub>x</sub>, O<sub>2</sub> and CO in the stack exhaust gases from this emissions unit. The monitor(s) shall be capable of measuring the expected concentrations of the measured gases. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The

owner or operator of the portable monitor shall maintain records of each portable monitoring device's calibration.

d. Burner Evaluation/Tuning Procedure

An alternative form may be used as long as it contains the same data elements as the Burner Evaluation/Tuning Reporting Form for Asphalt Concrete Plants form.

The burner shall be evaluated and, if necessary, tuned based on the frequency described in f)(2)e.

The general procedure for evaluating and, if necessary, tuning the burner involves the following steps:

- i. Review the plant operations to ensure the plant is operating normally based on weather conditions and production.
- ii. Confirm that the portable monitor is calibrated per the manufacturer's specifications.
- iii. Using the calibrated monitor and the monitor manufacturer's recommended sampling duration, measure the stack exhaust gas values for NO<sub>x</sub>, O<sub>2</sub>, and CO. These measurements shall be taken at a location representative of stack emissions. Record the values in the "Pre-Tuning" results column on the Burner Tuning Reporting Form for Asphalt Concrete Plants form (as found in g)(1)). An alternative form may be used as long as it contains the same data elements as the Burner Evaluation/Tuning Reporting Form for Asphalt Concrete Plants form.
- iv. Make any necessary adjustments and repairs to the burner in order to make the burner as fuel efficient as possible.
- v. If adjustments or repairs are made to the burner, then the technician shall re-measure the stack exhaust gas values for NO<sub>x</sub>, O<sub>2</sub>, and CO. This procedure shall be repeated until the technician is satisfied that the burner has been appropriately tuned. Once he/she is satisfied, then the technician shall record the post tune NO<sub>x</sub>, O<sub>2</sub>, and CO values in the "Post Tuning" results column on the Burner Tuning Reporting Form for Asphalt Concrete Plants (or equivalent) form.

Note that the Ohio EPA reserves the right to require permittees to conduct additional emissions tests to verify compliance. Operators who choose not to keep their burners in tune are more likely to be required by Ohio EPA to conduct additional emissions tests to verify compliance. Therefore, it is recommended that permittees make necessary adjustments and repairs to burners as soon as possible and verify that the burner is operating as designed.

- vi. Submit a copy of all Burner Evaluation/Tuning Reporting Form(s) for Asphalt Concrete Plants forms produced during the past calendar year to the appropriate Ohio EPA District Office or local air agency responsible for the permitting of the facility with the PER. Note: These forms are required to be submitted even if the burner is not actually adjusted.

e. Burner Tuning Frequency

The permittee shall conduct the burner evaluation/tuning procedure within 30 production days after commencement of the production season in the State of Ohio. The permittee shall conduct another burner evaluation/tuning procedure within 15 production days before or after June 1st of each year and within 15 production days before or after September 1st of each year. For purposes of this permit, the production season is defined as the time period between the date the first ton of asphalt is produced and the date that the last ton of asphalt is produced during the same calendar year. A burner evaluation/tuning is not required if the production season ends prior to the associated evaluation/tuning due date. If the initial season evaluation/tuning is done within 30 days prior to June 1 or September 1, the tuning associated with that due date is not required.

In addition to the burner evaluation/tuning procedure required above, the permittee shall conduct the burner evaluation/tuning procedure within 20 production days from the date the facility switches to a fuel that is different than the fuel burned during the most recent burner evaluation/tuning procedure.

- (3) The concentrations of contaminants (arsenic, barium, cadmium, chromium, lead, mercury, PCBs, and total halogens) in the used oil shall be analyzed using a "total constituent analysis" method, as specified in U.S. EPA publication SW-846, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods." The applicable test methods that should be used are as follows:

Arsenic, barium, cadmium, chromium, and lead: SW-846, Method 3031 or 3051 (digestion procedures) followed by analysis using Method 6010B or 6020;

Mercury: SW-846, Method 7471A;

PCBs: SW-846, Method 8270C or 8082; and

Total halogens: SW-846, Method 9075, 9076, or 9077.

The permittee shall submit a written request and receive approval from Ohio EPA Division of Materials and Waste Management and/or the Division of Air Pollution Control, of Central Office, before an alternative test method, not listed above, can be used for the total constituent analysis of the above-mentioned used oil contaminants.

g) Miscellaneous Requirements

- (1) Burner Tuning Form (See next page)





<b>BURNER EVALUATION/TUNING REPORTING FORM FOR ASPHALT CONCRETE PLANTS</b>	
Facility ID:	Evaluation/Tuning Date:
Legal Name:	Other Company Name (if different than legal name):
Mailing Address:	Other Company Site Address: (if different than mailing address):
City, State, Zip Code:	Other Company City, County, Zip Code:
Site Contact Person:	Site Contact Telephone Number:
Site Contact Title:	Site Contact Fax Number:
Name of company performing evaluation/tuning:	Name of company performing emission monitoring:
Type of plant (ie: batch, drum mix, etc.):	Calibration date for analyzers:

Reason for Evaluation/Tuning:    Season Initial Tuning    June Tuning    September Tuning  
 Fuel Switch    Other (describe)

Fuel employed during evaluation/tuning:    Natural Gas    Propane    # 2 Fuel Oil    # 4 Fuel Oil  
 Used Oil    Other (describe)

**Evaluation/Tuning Results:**

<b>Parameter</b>	<b>Results</b>	
	<b>Pre Tuning</b>	<b>Post Tuning<sup>2</sup></b>
Fuel flow to the burner (gallon/hr) (for fuel oil and on-spec used oil)		
Fuel pressure (psi)		
For burners that require compressed air for proper operation, pressure at the burner (psi)		
Carbon Monoxide (CO) concentrations (ppm) <sup>1</sup>		
NOx concentrations (ppm) <sup>2</sup>		



Oxygen concentrations (per cent) <sup>2</sup>		
Asphalt Production (tons/hr)		

<sup>1</sup> Specify whether on a dry or wet basis.

<sup>2</sup> If the burner did not require adjusting, please record N/A in the post tuning column.

Describe in detail a list of adjustments and/or repairs made to bring the operating parameters into conformance with the manufacturer's specifications. Use additional paper if necessary.

Authorized Signature: This signature shall constitute personal affirmation that all statements or assertions of fact made in this form are true and complete, comply fully with applicable state requirements, and shall subject the signatory to liability under applicable state laws forbidding false or misleading statements.

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Name of Official (Printed or Typed):	Title of Official and Phone Number:
Signature of Official:	Date: