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Facility Name: **Delphi Harrison Thermal Systems**

Application Number: **08-3840**

Date: **July 15, 1998**

GENERAL PERMIT CONDITIONS

TERMINATION OF PERMIT TO INSTALL

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

NOTICE OF INSPECTION

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

CONSTRUCTION OF NEW SOURCE(S)

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

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

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

PERMIT TO INSTALL FEE

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

PUBLIC DISCLOSURE

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

APPLICABILITY

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

BEST AVAILABLE TECHNOLOGY

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

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PERMIT TO OPERATE APPLICATION

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

NINETY DAY OPERATING PERIOD

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

SOURCE OPERATION AFTER COMPLETION OF CONSTRUCTION

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

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

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

P107

Ohio
EPA
Source
Number
P106 P106
Cont'd

P107
Cont'd

P108

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			P111	P111 Cont'd
P108 Cont'd	P109 Cont'd	P110 Cont'd		
				P112
P109				
	P110			

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P112 Cont'd	Cont'd			
			P115	
				P116
P113				
				P116 Cont'd
	P114	P114 Cont'd	P115 Cont'd	
P113				

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		P118		
				P120
			P119	
				P120 Cont'd
P117	P117 Cont'd	P118 Cont'd	P119 Cont'd	P121

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P122	Source Identification <u>Description</u> Diesel engine hot test stand no. 1			
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Diesel engine hot
test stand no. 2

P122
Cont'd

Diesel engine
hot test stand
no. 3

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Diesel engine hot test stand no. 4				Diesel engine hot test stand no. 7
	Diesel engine hot test stand no. 5			
		Diesel engine hot test stand no. 6		

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			Diesel engine audit test stand no. 1	
				Diesel engine audit test stand no. 2
			Diesel engine hot test stand no. 8	
			Diesel engine hot test stand no. 9	

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operations

Wet machining
operations

Diesel
engine
audit
test
stand
no. 3

Electronic fuel
injection
calibration
stand

Diesel engine
audit test
stand no. 4

Heat treat

Dry machining

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BAT
Determination

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Applicable
Federal &
OAC Rules

3745-31-05

3745-17-07
(A)

3745-31-05

3745-17-07
(A)

3745-31-05

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3745-17- 07 (A)				(A)
				3745-31-05
3745-31- 05				
	3745-17-07 (A)			
	3745-31-05			
		3745-17-07 (A)		
		3745-31-05		
			3745-17-07	

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			(A)	3745-31-05
			3745-31-05	
3745-17-07 (A)				3745-17-07 (A)
				3745-17-11
			3745-17-07 (A)	
3745-31-05				3745-31-05
	3745-17-07 (A)		3745-17-11	
				3745-21-07 (G)
	3745-31-05		3745-21-07 (G)	3745-31-05
		3745-17-07		

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3745-17-07	Permit Allowable Mass Emissions and/or Control/Usage Requirements NO _x : 0.57 pound/hour, 2.50 TPY CO: 0.29 pound/hour 1.27 TPY SO ₂ : 0.13 pound/hour, 0.57 TPY VOC: 0.03 pound/hour, 0.13 TPY PM: 0.14 pound/hour, 0.61 TPY Annual limits are based upon a rolling 12-month summation.	and P114 are not to exceed 9.55 TPY NO _x ; 4.78 TPY CO; 2.22 TPY SO ₂ ; 0.48 TPY VOC; 2.39 TPY PM; as a rolling 12 month summation. Visible emissions shall not exceed 10 percent opacity, as a 6 minute average. Less stringent than the opacity limit established above for BAT. NO _x : 0.57 pound/hour, 2.50 TPY CO: 0.29 pound/hour 1.27 TPY SO ₂ : 0.13 pound/hour, 0.57 TPY VOC: 0.03 pound/hour, 0.13 TPY PM: 0.14 pound/hour, 0.61 TPY Annual limits are based upon a rolling 12-month summation.	P110, P111, P112, P113, and P114 are not to exceed 9.55 TPY NO _x ; 4.78 TPY CO; 2.22 TPY SO ₂ ; 0.48 TPY VOC; 2.39 TPY PM; as a rolling 12 month summation. Visible emissions shall not exceed 10 percent opacity, as a 6 minute average. Less stringent than the opacity limit established above for BAT.	The total combined emissions for P106, P107, P108, P109, P110, P111, P112, P113,

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<p>NO_x: 0.57 pound/h our, 2.50 TPY CO: 0.29 pound/h our 1.27 TPY SO₂: 0.13 pound/h our, 0.57 TPY PM: 0.14 pound/h our, 0.61 TPY Annual limits are based upon a rolling 12-mont h summati</p>	<p>on. The total combined emissions for P106, P107, P108, P109, P110, P111, P112, P113, and P114 are not to exceed 9.55 TPY NO_x; 4.78 TPY CO; 2.22 TPY SO₂; 0.48 TPY VOC; 2.39 TPY PM; as a rolling 12 month summation. Visible emissions shall not exceed 10 percent opacity, as a 6 minute average. Less stringent than the opacity limit established above for BAT.</p>	<p>NO_x: 0.57 pound/hour, 2.50 TPY CO: 0.29 pound/hour 1.27 TPY SO₂: 0.13 pound/hour, 0.57 TPY VOC: 0.03 pound/hour, 0.13 TPY PM: 0.14 pound/hour, 0.61 TPY Annual limits are based upon a rolling 12-month summation. The total combined emissions for P106, P107, P108, P109, P110, P111, P112, P113, and P114 are not to exceed 9.55 TPY NO_x; 4.78 TPY CO; 2.22 TPY SO₂; 0.48 TPY VOC; 2.39 TPY PM; as a rolling 12 month summation. Visible emissions shall not exceed 10 percent opacity, as a 6 minute average. Less stringent than</p>	<p>the opacity limit established above for BAT. NO_x: 0.57 pound/hour, 2.50 TPY CO: 0.29 pound/hour 1.27 TPY SO₂: 0.13 pound/hour, 0.57 TPY VOC: 0.03 pound/hour, 0.13 TPY PM: 0.14 pound/hour, 0.61 TPY Annual limits are based upon a rolling 12-month summation. The total combined emissions for P106, P107, P108, P109, P110, P111, P112, P113, and P114 are not to exceed 9.55 TPY NO_x; 4.78 TPY CO; 2.22 TPY SO₂; 0.48 TPY VOC; 2.39 TPY</p>	<p>PM; as a rolling 12 month summation. Visible emissions shall not exceed 10 percent opacity, as a 6 minute average. Less stringent than the opacity limit established above for BAT. NO_x: 0.57 pound/hour, 2.50 TPY CO: 0.29 pound/hour 1.27 TPY SO₂: 0.13 pound/hour, 0.57 TPY VOC: 0.03 pound/hour, 0.13 TPY PM: 0.14 pound/hour, 0.61 TPY Annual limits are based upon a rolling 12-month summation. The total</p>

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combine emissions shall not exceed 10 percent opacity, as a 6 minute average. Less stringent than the opacity limit established above for BAT. NO _x : 0.57 TPY 2.50 TPY CO: 0.29 TPY CO; 1.27 TPY SO ₂ : 0.13 TPY 0.57 TPY VOC: 0.03 TPY 0.13 TPY PM: 0.14 TPY as a rolling 12 month summation.	emissions shall not exceed 10 percent opacity, as a 6 minute average. Less stringent than the opacity limit established above for BAT. Annual limits are based upon a rolling 12-month summation.	combined emissions for P106, P107, P108, P109, P110, P111, P112, P113, and P114 are not to exceed 9.55 TPY NO _x ; 4.78 TPY CO; 2.22 TPY SO ₂ ; 0.48 TPY VOC; 2.39 TPY PM; as a rolling 12 month summation. Visible emissions shall not exceed 10 percent opacity, as a 6 minute average. Less stringent than the opacity limit established above for BAT. NO _x : 0.57 TPY 2.50 TPY CO: 0.29 TPY 1.27 TPY SO ₂ : 0.13 TPY 0.57 TPY VOC: 0.03 TPY 0.13 TPY PM: 0.14 TPY 0.61 TPY Annual limits are based upon a rolling 12-month summation.	summation. The total combined emissions for P106, P107, P108, P109, P110, P111, P112, P113, and P114 are not to exceed 9.55 TPY NO _x ; 4.78 TPY CO; 2.22 TPY SO ₂ ; 0.48 TPY VOC; 2.39 TPY PM; as a rolling 12 month summation. Visible emissions shall not exceed 10 percent opacity, as a 6 minute average. Less stringent than the opacity limit established above for BAT. NO _x : 0.57 TPY 2.50 TPY CO: 0.29 TPY 1.27 TPY SO ₂ : 0.13 TPY 0.57 TPY VOC: 0.03 TPY 0.13 TPY PM: 0.14 TPY 0.61 TPY Annual limits are based upon a rolling 12-month summation.	1.27 TPY SO ₂ : 0.13 pound/hour, 0.57 TPY VOC: 0.03 pound/hour, 0.13 TPY PM: 0.14 pound/hour, 0.61 TPY Annual limits are based upon a rolling 12-month summation. The total combined emissions for P106, P107, P108, P109, P110, P111, P112, P113, and P114 are not to exceed 9.55 TPY NO _x ; 4.78 TPY CO; 2.22 TPY SO ₂ ; 0.48 TPY VOC; 2.39 TPY PM; as a rolling 12 month summation. Visible emissions shall not exceed 10 percent opacity, as a 6 minute average.

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Less stringer than the opacity limit established above for BAT. NO _x : 1.76 pounds/hour, 2.94 TPY CO: 0.88 pound/hour, 1.47 TPY SO ₂ : 0.41 pound/hour, 0.68 TPY VOC: 0.09 pound/hour, 0.15 TPY PM: 0.44 TPY	0.73 TPY Annual limits are based upon a rolling 12-month summation. The total combined emissions for P115, P116, P117 and P118 shall not exceed 2.94 TPY NO _x ; 1.47 TPY CO; 0.68 TPY SO ₂ ; 0.73 TPY PM; as a rolling 12 month summation. Visible emissions shall not exceed 10 percent opacity, as a 6 minute average. Less stringent than the opacity limit established	above for BAT. NO _x : 1.76 pounds/hour, 2.94 TPY CO: 0.88 pound/hour, 1.47 TPY SO ₂ : 0.41 pound/hour, 0.68 TPY VOC: 0.09 pound/hour, 0.15 TPY PM: 0.44 pound/hour, 0.73 TPY Annual limits are based upon a rolling 12-month summation. The total combined emissions for P115, P116, P117, and P118 shall not to exceed 2.94 TPY NO _x ; 1.47 TPY CO; 0.68 TPY SO ₂ ; 0.15 TPY PM; as a rolling 12 month summation. Visible emissions shall not exceed 10 percent opacity, as a 6 minute average. Less stringent than the opacity limit established above	for BAT.	

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NO _x : 1.76 pounds/ hour, 2.94 TPY CO: 0.88 pound/h our 1.47 TPY SO ₂ : 0.41 pound/h our, 0.68 TPY VOC: 0.09 pound/h our, 0.15 TPY PM: 0.44 pound/h our, 0.73 TPY Annual limits are based upon a rolling 12-mont h summati	on. The total combined emissions for P115, P116, P117, and P118 shall not to exceed 2.94 TPY NO _x ; 1.47 TPY CO; 0.68 TPY SO ₂ ; 0.15 TPY VOC; 0.73 TPY PM; as a rolling 12 month summation. Visible emissions shall not exceed 10 percent opacity, as a 6 minute average. Less stringent than the opacity limit established above for BAT. NO _x : 1.76 pounds/hour, 2.94 TPY CO: 0.88	pound/hour 1.47 TPY SO ₂ : 0.41 pound/hour, 0.68 TPY VOC: 0.09 pound/hour, 0.15 TPY PM: 0.44 pound/hour, 0.73 TPY Annual limits are based upon a rolling 12-month summation. The total combined emissions for P115, P116, P117 and P118 shall not exceed 2.94 TPY NO _x ; 1.47 TPY CO; 0.68 TPY SO ₂ ; 0.15 TPY VOC; 0.73 TPY PM; as a rolling 12 month summation. Visible emissions shall not exceed 10 percent opacity, as a 6 minute average. Less stringent than the opacity limit established above for BAT. PM: 1.13 pounds/hour, 5.52 TPY	VOC: 3.9 pounds/hour, 10.32 TPY Annual limits are based upon a rolling, 12 month summation. Visible emissions shall not exceed 10 percent opacity as a 6 minute average. Less stringent than the opacity limit established above for BAT. Less stringent than the mass emission limit established above for BAT. Rule limit less stringent than BAT 0.7 pound/hour PM, 2.93 TPY PM, as a rolling, 12-month summation.	Visible emissions shall not exceed 10 percent opacity as a 6 minute average. Less stringent than the opacity limit established above for BAT. Less stringent than the mass emissions limit established above for BAT. 2.8 pounds VOC/hour 7.30 TPY VOC, as a rolling, 12-month summation. Rule limit less stringent than BAT 0.41 pound/hour PM, 1.81 TPY PM; 0.37 pound/hour NH ₃ , 1.62 TPY NH ₃ ; 0.05 pound/hour NO _x , 0.23 TPY NO _x ; 0.01 pound/hour

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CO, 0.05 TPY CO; as a rolling 12 month summati on.	mass emission limit established above for BAT.			
				Visible emissio ns shall not exceed 20 percent opacity , as a 6 minute average .
				Less stringe nt than the opacity limit establi shed above for BAT.
				Same as the

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- * BAT is compliance with applicable OAC rules and specified emission limitations; recordkeeping and reporting requirements. For emissions unit P120 BAT shall include the use of a fabric filter with an operating control efficiency of at least 90 percent. For emissions unit P119 the use of photochemically reactive materials, as defined in OAC rule 3745-21-01(C) (5), is prohibited per BAT.
- ** BAT is compliance with applicable OAC rules, specified emission limitations and the Air Toxics Policy; recordkeeping and reporting requirements. In addition, for emissions unit P122 BAT shall include the use of a thermal incinerator with an operating control efficiency of at least 80 percent.

SUMMARY

TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons/Year</u>
VOC	18.25
NO _x	12.72
PM	13.38
CO	6.30
SO ₂	2.90
NH ₃	1.62

PERFORMANCE TEST REQUIREMENTS

The permittee shall conduct, or have conducted, performance testing on the air contaminant source(s) in accordance with procedures approved by the Agency. Two copies of the written report describing the test procedures followed and the results of such tests shall be submitted and signed by the person

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responsible for the test. The Director, or an Ohio EPA representative, shall be allowed to witness the test, examine testing equipment, and require the acquisition or submission of data and information necessary to assure that the source operation and testing procedures provide a valid characterization of the emissions from the source and/or the performance of the control equipment.

- A. A completed Intent to Test form shall be submitted to the appropriate Ohio EPA District Office or Local Air Pollution Control Agency where the original permit application was filed. This notice shall be made 30 days in advance and shall specify the source operating parameters, the proposed test procedures, and the time, date, place and person(s) conducting such tests.
- B. Two copies of the test results shall be submitted within 30 days after the completion of the performance test.
- C. Tests shall be performed for the following source(s) and pollutants(s):

<u>Source</u>	<u>Pollutant(s)</u>
P106	CO, NO _x , SO ₂
P115	CO, NO _x , SO ₂
P119	PM
P120	PM
P122	NH ₃ , PM

REPORTING REQUIREMENTS

Unless otherwise specified, reports required by the Permit to Install need only be submitted to **Regional Air Pollution Control Agency, 451 West Third Street, Dayton, OH 45422.**

WASTE DISPOSAL

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

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MAINTENANCE OF EQUIPMENT

This source and its associated air pollution control system(s) shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers in order to minimize air contaminant emissions.

MALFUNCTION/ABATEMENT

In accordance with OAC RULE 3745-15-06, any malfunction of the source(s) or associated air pollution control system(s) shall be reported immediately to the **Regional Air Pollution Control Agency, 451 West Third Street, Dayton, OH 45422.**

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

AIR POLLUTION NUISANCES PROHIBITED

The air contaminant source(s) identified in this permit may not cause a public nuisance in violation of OAC Rule 3745-15-07.

NINETY DAY OPERATING PERIOD

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

CONSTRUCTION COMPLIANCE CERTIFICATION

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

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

ADDITIONAL SPECIAL TERMS AND CONDITIONS

A. Operational Restrictions

1. The maximum annual production rate for this facility shall not exceed 200,000 engines, based upon a rolling, 12-month summation of monthly production records.

To ensure enforceability during the first 12 calendar months of operation following the startup of the engine plant, the permittee shall not exceed the production levels specified in the following table:

<u>Month(s)</u>	<u>Engine Production</u>
1 to 3	50,000 engines
1 to 6	100,000 engines
1 to 9	150,000 engines
1 to 12	200,000 engines

After the first 12 calendar months of operation following the startup of this facility, compliance with the annual production limitation shall be based upon a rolling, 12-month summation of the monthly production records.

2. The maximum annual engines tested by the audit test stands, emissions units **P115, P116, P117 and P118**, shall not exceed a combined total of 20,000 engines tested, based upon a rolling, 12-month summation of monthly testing records.

To ensure enforceability during the first 12 calendar months of operation following the startup of emissions units **P115, P116, P117 and P118**, the permittee shall not exceed the engine audit tests specified in the following table:

<u>Month(s)</u>	<u>Engine Audit Tests</u>
1 to 3	5,000 engines
1 to 6	10,000 engines
1 to 9	15,000 engines

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1 to 12	20,000 engines
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After the first 12 calendar months of operation following the startup of emissions units **P115, P116, P117 and P118**, compliance with the maximum annual engines tested limitation shall be based upon a rolling, 12-month summation of the monthly engines tested.

- The maximum annual coolant usage employed by emissions unit **P119** shall not exceed 258,000 gallons, based upon a rolling, 12-month summation of monthly production records.

To ensure enforceability during the first 12 calendar months of operation following the startup of emissions unit **P119**, the permittee shall not exceed the coolant usage specified in the following table:

<u>Month(s)</u>	<u>Coolant Usage (gal)</u>
1 to 3	64,500
1 to 6	129,000
1 to 9	193,500
1 to 12	258,000

After the first 12 calendar months of operation following the startup of emissions unit **P119**, compliance with the annual coolant usage limitation shall be based upon a rolling, 12-month summation of the monthly coolant usage.

- The VOC content of the coolant employed in emissions unit **P119**, Coolant System for Wet Machining, shall not exceed 0.08 pounds per gallon.
- The use of photochemically reactive materials, as defined by OAC rule 3745-21-01(C)(5), in emissions unit P119 is prohibited.

Prior to employing any photochemically reactive materials, the permittee shall provide written notification to, and obtain approval from, the Regional Air Pollution Control Agency. Such notification shall include information sufficient to determine that the emissions associated with the proposed change in materials will comply with the emission limits and/or control requirements as defined in OAC rule 3745-21-07(G)(2). This notification, at a minimum, shall include the company identification of the

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new material to be employed, the solvent composition of the material, and the maximum amount to be used, in pounds per hour.

6. The maximum annual diesel fuel usage for the diagnostic checks performed on the engines by the Fuel Injection Stands, emissions unit **P121**, shall not exceed 2,000 gallons, based upon a rolling, 12-month summation of monthly production records.

To ensure enforceability during the first 12 calendar months of operation following the startup of emissions unit **P121**, the permittee shall not exceed the diesel fuel usage specified in the following table:

<u>Month(s)</u>	<u>Fuel Injection Tests</u>
1 to 3	500 gal
1 to 6	1,000 gal
1 to 9	1,500 gal
1 to 12	2,000 gal

After the first 12 calendar months of operation following the startup of emissions unit **P121**, compliance with the annual diesel fuel usage limitation shall be based upon a rolling, 12-month summation of the monthly diesel fuel usage.

7. The pressure drop across the fabric filter shall be maintained within the range established during the most recent emission test that demonstrated that the emission

unit **P120**, Dry Machining Operations, was in compliance or by the manufacturer's recommendation.

8. The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that emissions unit **P122**, Heat Treat, was in compliance.

B. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information:

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- a. the total number of engines produced; and,
- b. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the production rates.

Also, during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative production rate of engines produced for each calendar month .

2. The permittee shall maintain monthly records of the following information for emissions units **P115, P116, P117 and P118**, Diesel Engine Audit Test Stands:
 - a. the total number of engines tested by the audit test stands; and,
 - b. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the total number of engines tested by the audit test stands.

Also, during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative total number of engines tested by the audit test stands for each calendar month.

3. The permittee shall maintain monthly records of the following information for emissions unit **P119**, the Coolant System for Wet Machining:
 - a. the total amount, in gallons, of coolant usage;
 - b. the total VOC emissions from the coolant usage, in pounds; and,
 - c. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the total amount, in gallons, of coolant usage.

Also, during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative total amount, in gallons, of coolant usage for each calendar month; and,

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- d. the rolling, 12-month summation of the VOC emissions from the coolant usage, in tons.
4. For the dry machining operations, emissions unit **P120**:

The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the fabric filter while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the fabric filter on a once per shift basis.

5. The permittee shall maintain monthly records of the following information for emissions unit **P121**, the Fuel Injection Calibration Stand:
 - a. the total amount, in gallons, of diesel fuel usage;
 - b. the total VOC emissions from the diesel fuel usage; and,
 - c. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the total amount, in gallons, of diesel fuel usage.

Also, during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative total amount, in gallons, of diesel fuel usage for each calendar month.

- d. the rolling, 12-month summation of the VOC emissions, in tons.
6. For emissions unit **P122**, the Heat Treat, the permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

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

- a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance; and,
 - b. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
7. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

C. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across the fabric filter, for emission unit **P120**, did not comply with the allowable range as specified in Additional Special Term and Condition A.7.
2. The permittee shall submit quarterly deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, for emissions unit **P122**, does not comply with the temperature limitation specified in Additional Special Term and Condition A.8.
3. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month engine production limitation, engines tested by audit test stands limitation, coolant usage limitation, coolant VOC content limitation, diesel fuel usage limitation, and for the first 12 calendar months of operation, all exceedances of the

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maximum allowable cumulative production levels, engines tested by audit test stand levels, coolant fuel usage levels and diesel fuel usage levels.

The permittee shall submit required quarterly deviation (excursion) reports in the following manner:

- a. reports of any required monitoring and/or record keeping information shall be submitted to the Regional Air Pollution Control Agency; and,
 - b. except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations and operational restrictions that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Regional Air Pollution Control Agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)
4. The permittee shall submit, in writing, an annual report to the Director (the Regional Air Pollution Control Agency) which specifies: the total engine production; hours of operation; engines tested by the audit test stand; coolant usage; diesel fuel usage; the combined emissions for the Diesel Engine Hot Test Stands (emissions units **P106, P107, P108, P109, P110, P111, P112, P113 and P114**); the combined emissions for the Diesel Engine Audit Test Stands (emissions units **P115, P116, P117 and P118**); the particulate and VOC emissions from the Wet Machining Operations (emissions unit **P119**); the particulate emissions from the Dry Machining Operations (emissions unit **P120**); the VOC emissions from the Electronic Fuel Injection Stand (emissions unit **P121**); the PM, NH₃, NO_x and CO emissions from the Heat Treat (emissions unit **P122**). These reports shall be submitted by January 31 of each year and shall cover the previous 12 calendar months.

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D. Compliance Method Determination:

1. Compliance with the emission limitation(s) of these terms and conditions shall be determined in accordance with the following method(s):

For P106 thru P114

a. Emission Limitation

0.57 pound NO_x per hour (common hourly emission limitation for emissions units: P106, P107, P108, P109, P110, P111, P112, P113 and P114)

Applicable Compliance Method

Compliance for each hot test stand shall be determined by multiplying the company derived emission rate of (A.) 4.0 grams per horsepower-hour by the average horsepower output during the test, 250 horsepower, and dividing 453.6 grams per pound. The result, 2.2 pounds per hour, is then multiplied by a factor of (B.) 0.04333 hour per test, and then multiplied by the maximum number of engines tested per hour, (C.) 6 engines per hour.

b. Emission Limitation

2.50 tons NO_x per year (common annual emission limitation for emissions units: P106, P107, P108, P109, P110, P111, P112, P113 and P114)

Applicable Compliance Method

Compliance for each hot test stand shall be determined by multiplying the hourly emission rate for NO_x, (A.) 0.57 lb/hr, by the maximum annual operating hours, (B.) 8,760 hrs/yr.

c. Emission Limitation

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9.55 tons NO_x per year (combined total emissions for emissions units: P106, P107, P108, P109, P110, P111, P112, P113 and P114)

Applicable Compliance Method

Compliance shall be determined by multiplying the company derived emission rate of (A.) 4.0 grams per horsepower-hour by the average horsepower output during the test, 250 horsepower, and dividing by 453.6 grams per pound. The result, 2.2 pounds per hour, is then multiplied by a factor of (B.) 0.04333 hour per test, and then multiplied by the maximum number of engines tested per year, (C.) 200,000 engines per year.

d. Emission Limitation

0.29 pound CO per hour (common hourly emission limitation for emissions units: P106, P107, P108, P109, P110, P111, P112, P113 and P114)

Applicable Compliance Method

Compliance for each hot test stand shall be determined by multiplying the company derived emission rate of (A.) 2.0 grams per horsepower-hour by the average horsepower output during the test, 250 horsepower, and dividing 453.6 grams per pound. The result, 1.1 pounds per hour, is then multiplied by a factor of (B.) 0.04333 hour per test, and then multiplied by the maximum number of engines tested per hour, (C.) 6 engines per hour.

e. Emission Limitation

1.27 ton CO per year (common annual emission limitation for emissions units: P106, P107, P108, P109, P110, P111, P112, P113 and P114)

Applicable Compliance Method

Compliance for each hot test stand shall be determined by multiplying the hourly emission rate for CO, (A.) 0.29 lb/hr, by the

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maximum annual operating hours, (B.) 8,760 hrs/yr.

f. Emission Limitation

4.78 tons CO per year (combined total emissions for emissions units: P106, P107, P108, P109, P110, P111, P112, P113 and P114)

Applicable Compliance Method

Compliance shall be determined by multiplying the company derived emission rate of (A.) 2.0 grams per horsepower-hour by the average horsepower output during the test, 250 horsepower, and dividing by 453.6 grams per pound. The result, 1.1 pounds per hour, is then multiplied by a factor of (B.) 0.04333 hour per test, and then multiplied by the maximum number of engines tested per year, (C.) 200,000 engines per year.

g. Emission Limitation

0.13 pound SO₂ per hour (common hourly emission limitation for emissions units: P106, P107, P108, P109, P110, P111, P112, P113 and P114)

Applicable Compliance Method

Compliance for each hot test stand shall be determined by multiplying the AP-42 emission rate (Table 3.3-3) of (A.) 0.931 gram per horsepower-hour by the average horsepower output during the test, 250 horsepower, and dividing 453.6 grams per pound. The result, 0.51 pound per hour, is then multiplied by a factor of (B.) 0.04333 hour per test, and then multiplied by the maximum number of engines tested per hour, (C.) 6 engines per hour.

h. Emission Limitation

0.57 ton SO₂ per year (common annual emission limitation for emissions units: P106, P107, P108, P109, P110, P111, P112, P113 and P114)

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Applicable Compliance Method

Compliance for each hot test stand shall be determined by multiplying the hourly emission rate for SO₂, (A.) 0.13 lb/hr, by the maximum annual operating hours, (B.) 8,760 hrs/yr.

i. Emission Limitation

2.22 tons SO₂ per year (combined total emissions for emissions units: P106, P107, P108, P109, P110, P111, P112, P113 and P114)

Applicable Compliance Method

Compliance shall be determined by multiplying the AP-42 emission rate (Table 3.3-3) of (A.) 0.931 gram per horsepower-hour by the average horsepower output during the test, 250 horsepower, and dividing by 453.6 grams per pound. The result, 0.51 pound per hour, is then multiplied by a factor of (B.) 0.04333 hour per test, and then multiplied by the maximum number of engines tested per year, (C.) 200,000 engines per year.

j. Emission Limitation

0.03 pound VOC per hour (common hourly emission limitation for emissions units: P106, P107, P108, P109, P110, P111, P112, P113 and P114)

Applicable Compliance Method

Compliance for each hot test stand shall be determined by multiplying the company derived emission rate of (A.) 0.2 gram per horsepower-hour by the average horsepower output during the test, 250 horsepower, and dividing 453.6 grams per pound. The result, 0.11 pound per hour, is then multiplied by a factor of (B.) 0.04333 hour per test, and then multiplied by the maximum number of engines tested per hour, (C.) 6 engines per hour.

k. Emission Limitation

0.13 ton VOC per year (common annual emission limitation for

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emissions units: P106, P107, P108, P109, P110, P111, P112, P113 and P114)

Applicable Compliance Method

Compliance for each hot test stand shall be determined by multiplying the hourly emission rate for VOC, (A.) 0.03 lb/hr, by the maximum annual operating hours, (B.) 8,760 hrs/yr.

I. Emission Limitation

0.48 ton VOC per year (combined total emissions for emissions units: P106, P107, P108, P109, P110, P111, P112, P113 and P114)

Applicable Compliance Method

Compliance shall be determined by multiplying the company derived emission rate of (A.) 0.2 gram per horsepower-hour by the average horsepower output during the test, 250 horsepower, and dividing by 453.6 grams per pound. The result, 0.11 pound per hour, is then multiplied by a factor of (B.) 0.04333 hour per test, and then multiplied by the maximum number of engines tested per year, (C.) 200,000 engines per year.

m. Emission Limitation

0.14 pound PM per hour (common hourly emission limitation for emissions units: P106, P107, P108, P109, P110, P111, P112, P113 and P114)

Applicable Compliance Method

Compliance for each hot test stand shall be determined by multiplying the AP-42 emission rate (Table 3.3-2) of (A.) 1.0 gram per horsepower-hour by the average horsepower output during the test, 250 horsepower, and dividing 453.6 grams per pound. The result, 0.55 pound per hour, is then multiplied by a factor of (B.) 0.04333 hour per test, and then

multiplied by the maximum number of engines tested per hour, (C.)

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6 engines per hour.

n. Emission Limitation

0.61 ton PM per year (common annual emission limitation for emissions units: P106, P107, P108, P109, P110, P111, P112, P113 and P114)

Applicable Compliance Method

Compliance for each hot test stand shall be determined by multiplying the hourly emission rate for PM, (A.) 0.14 lb/hr, by the maximum annual operating hours, (B.) 8,760 hrs/yr.

o. Emission Limitation

2.39 tons PM per year (combined total emissions for emissions units: P106, P107, P108, P109, P110, P111, P112, P113 and P114)

Applicable Compliance Method

Compliance shall be determined by multiplying the AP-42 emission rate (Table 3.3-2) of (A.) 1.0 gram per horsepower-hour by the average horsepower output during the test, 250 horsepower, and dividing by 453.6 grams per pound. The result, 0.55 pound per hour, is then multiplied by a factor of (B.) 0.04333 hour per test, and then multiplied by the maximum number of engines tested per year, (C.) 200,000 engines per year.

p. Emission Limitation

Visible emissions shall not exceed 10 percent opacity for a 6-minute average (common visible emission limitation for emissions units: P106, P107, P108, P109, P110, P111, P112, P113 and P114)

Applicable Compliance Method

Compliance shall be determined through visible emission evaluations performed in accordance with OAC rule

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3745-17-03(B)(1) using the methods and procedures specified in USEPA Method Reference Method 9.

For P115 thru P118

q. Emission Limitation

1.76 pounds NO_x per hour (common hourly emission limitation for emissions units: P115, P116, P117 and P118)

Applicable Compliance Method

Compliance for each audit test stand shall be determined by multiplying the company derived emission rate of (A.) 4.0 grams per horsepower-hour by the average horsepower output during the test, 250 horsepower, and dividing 453.6 grams per pound. The result, 2.2 pounds per hour, is then multiplied by a factor of (B.) 0.1333 hour per test, and then multiplied by the maximum number of engines tested per hour, (C.) 6 engines per hour.

r. Emission Limitation

2.94 tons NO_x per year (common and combined total emissions for emissions units: P106, P107, P108, P109, P110, P111, P112, P113 and P114)

Applicable Compliance Method

Compliance shall be determined by multiplying the company derived emission rate of (A.) 4.0 grams per horsepower-hour by the average horsepower output during the test, 250 horsepower, and dividing by 453.6 grams per pound. The result, 2.2 pounds per hour, is then multiplied by a factor of (B.) 0.1333 hour per test, and then multiplied by the maximum number of engines tested per year, (C.) 20,000 engines per year.

s. Emission Limitation

0.88 pound CO per hour (common hourly emission limitation for emissions units: P115, P116, P117 and P118)

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Applicable Compliance Method

Compliance for each audit test stand shall be determined by multiplying the company derived emission rate of (A.) 2.0 grams per horsepower-hour by the average horsepower output during the test, 250 horsepower, and dividing 453.6 grams per pound. The result, 1.1 pounds per hour, is then multiplied by a factor of (B.) 0.1333 hour per test, and then multiplied by the maximum number of engines tested per hour, (C.) 6 engines per hour.

t. Emission Limitation

1.47 tons CO per year (common and combined total emissions for emissions units: P115, P116, P117 and P118)

Applicable Compliance Method

Compliance shall be determined by multiplying the company derived emission rate of (A.) 2.0 grams per horsepower-hour by the average horsepower output during the test, 250 horsepower, and dividing by 453.6 grams per pound. The result, 1.1 pounds per hour, is then multiplied by a factor of (B.) 0.1333 hour per test, and then multiplied by the maximum number of engines tested per year, (C.) 20,000 engines per year.

u. Emission Limitation

0.41 pound SO₂ per hour (common hourly emission limitation for emissions units: P115, P116, P117 and P118)

Applicable Compliance Method

Compliance for each audit test stand shall be determined by multiplying the AP-42 emission rate (Table 3.3-3) of (A.) 0.931 gram per horsepower-hour by the average horsepower output during the test, 250 horsepower, and dividing 453.6 grams per pound. The result, 0.51 pound per hour, is then multiplied by a factor of (B.) 0.1333 hour per test, and then multiplied by the maximum number of engines tested per hour, (C.) 6 engines per hour.

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v. Emission Limitation

0.68 ton SO₂ per year (common and combined total

emissions for emissions units: P115, P116, P117 and P118)

Applicable Compliance Method

Compliance shall be determined by multiplying the AP-42 emission rate (Table 3.3-3) of (A.) 0.931 gram per horsepower-hour by the average horsepower output during the test, 250 horsepower, and dividing by 453.6 grams per pound. The result, 0.51 pound per hour, is then multiplied by a factor of (B.) 0.1333 hour per test, and then multiplied by the maximum number of engines tested per year, (C.) 20,000 engines per year.

w. Emission Limitation

0.09 pound VOC per hour (common hourly emission limitation for emissions units: P115, P116, P117 and P118)

Applicable Compliance Method

Compliance for each audit test stand shall be determined by multiplying the company derived emission rate of (A.) 0.2 gram per horsepower-hour by the average horsepower output during the test, 250 horsepower, and dividing 453.6 grams per pound. The result, 0.11 pound per hour, is then multiplied by a factor of (B.) 0.1333 hour per test, and then multiplied by the maximum number of engines tested per hour, (C.) 6 engines per hour.

x. Emission Limitation

0.15 ton VOC per year (common and combined total emissions for emissions units: P115, P116, P117 and P118)

Applicable Compliance Method

Compliance shall be determined by multiplying the company derived emission rate of (A.) 0.2 gram per horsepower-hour by the

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average horsepower output during the test, 250 horsepower, and dividing by 453.6 grams per pound. The result, 0.11 pound per hour, is then multiplied by a factor of (B.) 0.1333 hour per test, and then multiplied by the maximum number of engines tested per year, (C.) 20,000 engines per year.

y. Emission Limitation

0.44 pound PM per hour (common hourly emission limitation for emissions units: P115, P116, P117 and P118)

Applicable Compliance Method

Compliance for each audit test stand shall be determined by multiplying the AP-42 emission rate (Table 3.3-2) of (A.) 1.0 gram per horsepower-hour by the average horsepower output during the test, 250 horsepower, and dividing 453.6 grams per pound. The result, 0.55 pound per hour, is then multiplied by a factor of (B.) 0.1333 hour per test, and then multiplied by the maximum number of engines tested per hour, (C.) 6 engines per hour.

z. Emission Limitation

0.73 ton PM per year (common and combined total emissions for emissions units: P115, P116, P117 and P118)

Applicable Compliance Method

Compliance shall be determined by multiplying the AP-42 emission rate (Table 3.3-2) of (A.) 1.0 gram per horsepower-hour by the average horsepower output during the test, 250 horsepower, and dividing by 453.6 grams per pound. The result, 0.55 pound per hour, is then multiplied by a factor of (B.) 0.1333 hour per test, and then multiplied by the maximum number of engines tested per year, (C.) 20,000 engines per year.

aa. Emission Limitation

Visible emissions shall not exceed 10 percent opacity for a 6-minute average (common visible emission limitation for emissions units: P115, P116, P117 and P118)

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Applicable Compliance Method

Compliance shall be determined through visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures specified in USEPA Method Reference Method 9.

P119

ab. Emission Limitation

1.3 pounds PM per hour

Applicable Compliance Method

Compliance shall be determined by dividing the company derived emission rate of (A.) 0.0007 grain per dry standard cubic foot by 7000 grains per pound, and then multiply the result, 1.0 EE-7 lb/dscf, by the maximum air flow rate, (B.) 12.6 MMft³/hr.

ac. Emission Limitation

5.52 tons PM per year

Applicable Compliance Method

Compliance shall be determined by dividing the company derived emission rate of (A.) 0.0007 grain per dry standard cubic foot by 7000 grains per pound, then multiply the result, 1.0 EE-7 lb/dscf, by the maximum air flow rate, (B.) 12.6 MMft³/hr, and then multiply the result by the maximum number of hours operated per year (C.) 8,760 hours per year.

ad. Emission Limitation

3.9 pounds of VOC per hour

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Compliance shall be determined by multiplying the maximum hourly usage rate of coolant, 49.125 gallons per hour, by the maximum VOC content of coolant, 0.08 pounds VOC per gallon.

ae. Emission Limitation

10.32 tons VOC per year

Applicable Compliance Method

Compliance shall be determined by multiplying the maximum annual coolant usage, 258,000 gallons, by the VOC content of the coolant, 0.08 pound per gallon.

af. Emission Limitation

Visible emissions shall not exceed 10 percent opacity as a 6-minute average.

Applicable Compliance Method

Compliance shall be determined through visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures specified in USEPA Method Reference Method 9.

P120

ag. Emission Limitation

0.7 pound PM per hour

Applicable Compliance Method

Compliance shall be determined by dividing the company derived emission rate of (A.) 0.003 grain per dry standard cubic foot by 7000 grains per pound, and then multiply the result, 4.29 EE-7 lb/dscf, by the maximum hourly air flow rate, (B.) 1.56 MMft³/hr.

ah. Emission Limitation

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2.93 tons PM per year

Applicable Compliance Method

Compliance shall be determined by dividing the company derived emission rate of (A.) 0.003 grains per dry standard cubic foot by 7000 grains per pound, then multiply the result, 4.29 EE-7 lb/dscf, by the maximum hourly air flow rate, (B.) 1.56 MMft³/hr, and then multiply the result by the maximum number of hours operated per year (C.) 8,760 hours per year.

ai. Emission Limitation

Visible emissions shall not exceed 10 percent opacity as a 6-minute average.

Applicable Compliance Method

Compliance shall be determined through visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures specified in USEPA Method Reference Method 9.

For P121

aj. Emission Limitation

2.8 pounds VOC per hour

Applicable Compliance Method

Compliance shall be determined by multiplying the maximum hourly usage rate of diesel fuel, 0.38 gallon per hour, by the VOC content of diesel fuel, 7.3 pounds VOC per gallon.

ak. Emission Limitation

7.3 tons VOC per year

Applicable Compliance Method

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Compliance shall be determined by multiplying the maximum annual diesel fuel usage, 2,000 gallons, by the VOC content of the diesel fuel, 7.3 pounds per gallon.

For P122

al. Emission Limitation

0.41 lb PM per hour

Applicable Compliance Method

Compliance shall be determined by multiplying the company derived emission rate, (A.) 1.42 EE-4 lbs PM/lbs of part, by the pounds per part, (B.) 65 lbs/part, and then multiply the result by the maximum number of parts per hour, (C.) 44 parts/hour.

am. Emission Limitation

1.81 tons PM per year

Applicable Compliance Method

Compliance shall be determined by summing the PM emissions from natural gas combustion with the PM emissions from the process. The annual PM emissions from natural gas combustion shall be determined by multiplying the maximum natural gas usage rate, (A.) 519 ft³/hr, by the AP-42 PM emission factor (Table 1.4-1), (B.) 0.000012 lb/ft³, then multiply the result by the maximum number of operating hours, (C.) 8,760 hours per year. The annual PM emissions from the process shall be determined by multiplying the company derived emission rate, (A.) 1.42 EE-4 pounds PM/pounds of part, by the pounds per part, (B.) 65 pounds/part, then multiplying the result by the maximum number of parts per hour, (C.) 44 parts/hour, and next multiply the result by the maximum number of hours operated per year, (D.) 8,760 hours/year.

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an. Emission Limitation

0.37 pound NH₃ per hour

Applicable Compliance Method

Compliance shall be determined by multiplying the company derived emission rate, (A.) 4.41 EE-7 lbs/ft³, by the maximum hourly air flow rate, (B.) 840,000 ft³/hr.

ao. Emission Limitation

1.62 tons NH₃ per year

Applicable Compliance Method

Compliance shall be determined by multiplying the company derived emission rate, (A.) 4.41 EE-7 lbs/ft³, by the maximum hourly air flow rate, (B.) 840,000 ft³/hr, then multiply the results by the maximum number of operating hours, (C.) 8,760 hours per year.

ap. Emission Limitation

0.05 pound NO_x per hour

Applicable Compliance Method

Compliance shall be determined by multiplying the maximum hourly natural gas usage rate, (A.) 519 ft³/hr, by the AP-42 NO_x emission factor (Table 1.4-1), (B.) 0.0001 lb/ft³.

aq. Emission Limitation

0.23 ton NO_x/yr

Applicable Compliance Method

Compliance shall be determined by multiplying the maximum hourly natural gas usage rate, (A.) 519 ft³/hr, by the AP-42 NO_x

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emission factor (Table 1.4-1), (B.) 0.0001 lb/ft³, then multiply the result by the maximum number of operating hours, (C.) 8,760 hours per year.

ar. Emission Limitation

0.01 pound of CO per hour

Applicable Compliance Method

Compliance shall be determined by multiplying the maximum hourly natural gas usage rate, (A.) 519 ft³/hr, by the AP-42 CO emission rate (Table 1.4-1), (B.) 0.000021 lb/ft³.

as. Emission Limitation

0.5 ton CO per year

Applicable Compliance Method

Compliance shall be determined by multiplying the maximum hourly natural gas usage rate, (A.) 519 ft³/hr, by the AP-42 CO emission factor (Table 1.4-1), (B.) 0.00021 lb/ft³, then multiply the result by the maximum number of operating hours, (C.) 8,760 hours per year.

at. Emission Limitation

Visible emissions shall not exceed 20 percent opacity for a 6-minute average.

Applicable Compliance Method

Compliance shall be determined through visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures specified in USEPA Method 9.

E. Miscellaneous Requirements

1. This permit allows the use of ammonia (NH₃) specified

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by the permittee in the application for PTI number 08-3840. In conjunction with the best available technology requirements of OAC rule 3745-31-05, the NH₃ emission limitation(s) specified in this permit was established in accordance with the Ohio EPA's "Air Toxics Policy" and is based on both data and the design parameters of the emissions unit's exhaust system, as specified in the application. Compliance with the Ohio EPA's "Air Toxics Policy" was demonstrated for NH₃ based on the Screen3 model and a comparison of the predicted 1 hour maximum ground-level concentration to the MAGLC. The following summarizes the results of the modeling for each pollutant:

Pollutant: NH₃

TLV (ug/m³): 17,000.0

Maximum Hourly Emission Rate (lbs/hr): 0.37

Predicted 1 Hour Maximum Ground-Level Concentration at the Fenceline (ug/m³): 7.5

Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m³): 170.0

Any of the following changes may be deemed a "modification" to the emissions unit and, as such, prior notification to and approval from the Regional Air Pollution Control Agency are required, including the possible issuance of modifications to PTI number 08-3840 and the operating permit:

- a. any changes in the composition of the nitriding materials, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value specified in the above table;
- b. any change to the emissions unit or its exhaust parameters (e.g., increased emission rate, reduction of exhaust gas flow rate, and decreased stack height) that would result in an exceedance of any MAGLC specified in the above table;

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- c. any change to the emissions unit or its method of operation that would either require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01; and,
- d. any change in the composition of the materials employed, or use of new materials, that would result in an increase in emissions of any "Hazardous Air Pollutants" (HAPS) as defined in OAC rule 3745-77-01(V).