Florida Department of Environmental Protection

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Rick Scott
Governor

Jennifer Carroll
Lt. Governor

Herschel T. Vinyard Jr.
Secretary

Electronically Sent- Received Receipt Requested

FINAL PERMIT

PERMITTEE

Wolverine Advanced Materials
10825 County Road 44
Lisbon, Florida 34788

Authorized Representative:
Mr. Terry Ray, Plant Manager

Air Permit No. 0690008-009-AC
Permit Expires: 12/31/2012
Site Name: Wolverine Advanced Materials
Minor Source Air Construction
Project Name: Modification-Increased Utilization Rates

This is the final air construction permit, which authorizes **modification of emission unit (EU) 001 to increase the utilization rates, removal of EU 002 and 003 and all associated permit conditions, and addition of an emergency fire pump**. The work will be conducted at Wolverine Advanced Materials (Standard Industrial Classification No. 3479). The facility is located in Lake County at 10825 County Road 44 in Lisbon, Florida. The UTM coordinates are Zone 17, 424.16 km East, and 3194.26 km North.

This final permit is organized by the following sections:

Section 1. General Information

Section 2. Administrative Requirements

Section 3. Facility-wide and Emissions Unit Specific Conditions

Section 4. Appendices

Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 4 of this permit.

This air pollution permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to conduct the proposed work in accordance with the conditions of this permit. This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. and is not subject to the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Upon issuance of this final permit, any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) and by filing a copy of the notice of appeal accompanied by

the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Department.

Executed in Orange County, Florida

Caroline Shine

June 18, 2012

Caroline D. Shine
District Air Program Administrator
Central District

Effective Date

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Final Determination, the Final Permit and the Appendices) was sent by electronic mail (or a link to these documents made available electronically on a publicly accessible server) with received receipt requested before the close of business on June 19, 2012 to the persons listed below.

Mr. Terry Ray, Wolverine Advanced Materials **(terry.ray@wamglobal.com)**
Mr. Gary Richards, Wolverine Advanced Materials **(gary.richards@wamglobal.com)**
Mr. Kennard F. Kosky, P.E., Golder Associates Inc. **(kkosky@golder.com)**
Ms. Katy Forney, U.S. EPA Region 4: **(forney.kathleen@epamail.epa.gov)**
Ms. Ana Oquendo, EPA Region 4: **(oquendo.ana@epamail.epa.gov)**
Ms. Barbara Friday, DEP BAR: **(barbara.friday@dep.state.fl.us)** (for posting with U.S. EPA, Region 4)

Clerk Stamp

FILED, on this date, pursuant to Section 120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Tracy L Agner

Digitally signed by Tracy L Agner
DN: cn=Tracy L Agner, o=Central District, ou=FDEP, email=tracy.agner@dep.state.fl.us, c=US
Date: 2012.06.19 08:38:03 -04'00'

June 19, 2012

(Clerk) (Date)

FACILITY AND PROJECT DESCRIPTION

Wolverine Advanced Materials

Wolverine Advanced Materials operates a manufacturing facility that consists of a surface coating operation that includes a coil coater. The facility produces rubber-coated sealing materials utilized in the automotive industry. The coil coating line includes a permanent total enclosure to ensure 100 percent of the volatile organic compound (VOC)/hazardous air pollutants (HAP) emissions are captured and conveyed to a single regenerative thermal oxidizer (Durr Environmental, Model R25-V2-85) with a destruction efficiency of approximately 98.8 percent. **The facility has permanently shut down and removed the Hylene Drying and Hylene Dip Coating Lines, emissions unit (EU) 002 and 003, respectively.**

The existing facility consists of the following emissions units.

Facility ID No. 0690008	
ID No.	Emission Unit Description
001	Coil Coater
002	Hylene Parts Drying Line **(Equipment Removed)**
003	Hylene Dip Coating Line **(Equipment Removed)**

Project Description and Affected Emission Units

This project authorizes the following changes:

1) Increase of maximum permitted utilization rates (tons per any consecutive 12-month period) of EU 001:

   From: 2,880 tons per any consecutive 12-month period of coating,
   199 tons per any consecutive 12-month period of primer,
   233 tons per any consecutive 12-month period of sulfur solution, and
   54 tons per any consecutive 12-month period of accelerator.

   To: 4,600 tons per any consecutive 12-month period of coating,
   318 tons per any consecutive 12-month period of primer,
   372 tons per any consecutive 12-month period of sulfur solution, and
   86 tons per any consecutive 12-month period of accelerator.

2) Removal of EU 002 and 003 and all associated permit conditions;

3) The addition of an emergency fire pump that is subject to 40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.

This project will modify (EU 001), delete (EU 002 & 003), and add (EU 006) the following emissions units.

Facility ID No. 0690008	
ID No.	Emission Unit Description
001	Coil Coater
002	Hylene Parts Drying Line **(permanently shutdown)**
003	Hylene Dip Coating Line **(permanently shutdown)**
006	Emergency Fire Pump

NOTE: *Please reference the Permit No., Facility ID, and Emission Unit ID in all correspondence, test report submittals, applications, etc.*

FACILITY REGULATORY CLASSIFICATION

- The facility is a major source of hazardous air pollutants (HAP).
- The facility has no units subject to the acid rain provisions of the Clean Air Act (CAA).
- The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is a major source of HAPs.
- EU 001 is subject to 40 CFR 63, Subpart SSSS, Surface Coating of Metal Coil.
- **Newly added EU 006 is subject to 40 CFR 60, Subpart IIII and 40 CFR 63, Subpart ZZZZ.**

PERMIT HISTORY/AFFECTED PERMITS

Concurrently processing with project no. 0690008-008-AV

SECTION 2. ADMINISTRATIVE REQUIREMENTS (FINAL)

1. Permitting Authority: The permitting authority for this project is the Florida Department of Environmental Protection, Central District Air Resource Management Section. The Central District's mailing address and phone number is:

   Florida Department of Environmental Protection
   Central District Office
   Air Resource Management Section
   3319 Maguire Blvd., Ste. 232
   Orlando, FL 32803-3767 Telephone: 407-897-4100

   All documents related to applications for permits shall be submitted to the above address.

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Central District Air Resource Management Section (see above mailing address and phone number).

3. Appendices: The following Appendices are attached as part of this permit:

   a. Appendix A. Citation Formats and Glossary of Common Terms;
   b. Appendix B. General Conditions;
   c. Appendix C. Common Conditions;
   d. Appendix D. Common Testing Requirements;
   e. Appendix E. 40 CFR 60, Subpart A-NSPS General Provisions;
   f. Appendix F. 40 CFR 60, Subpart IIII-Stationary Compression Ignition Internal Combustion Engines;
   g. Appendix G. 40 CFR 63, Subpart A-General Provisions;
   h. Appendix H. 40 CFR 63, Subpart SSSS–Surface Coating of Metal Coil; and
   i. Appendix I. 40 CFR 63, Subpart ZZZZ-Stationary Reciprocating Internal Combustion Engines

4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.

5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]

6. Modifications: Unless otherwise exempt by rule, the permittee shall not initiate any construction, reconstruction, or modification at the facility and shall not install/modify any pollution control device at the facility without obtaining prior authorization from the Department. Modification is defined as: Any physical change or changes in the method of operations or addition to a facility

that would result in an increase in the actual emissions of any air pollutant subject to air regulations, including any not previously emitted, from any emission unit or facility.
[Rules 62-210.200 - Definition of "Modification" and 62-210.300(1)(a), F.A.C.]

7. Annual Operating Report: On or before **April 1** of each year, the permittee shall submit a completed DEP Form 62-210.900(5), "Annual Operating Report for Air Pollutant Emitting Facility" (AOR) for the preceding calendar year. The report may be submitted electronically in accordance with the instructions received with the AOR package sent by the Department, or a hardcopy may be sent to the Compliance Authority.
[Rule 62-210.370(3), F.A.C.]

8. Application for Title V Air Operation Permit Revision: This permit authorizes construction or modification of the permitted emissions unit(s) and initial operation to determine compliance with Department rules. A Title V air operation permit is required for continued operation of the permitted emissions unit(s). **The Title V air operation permit renewal and revision application has already been submitted to the Permitting Authority in concurrence with this project on December 02, 2011**. [Rules 62-4.030, 62-4.050, 62-4.220 and Chapter 62-213, F.A.C.]

A. EU No. 001–Coil Coater

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
001	The coil coating line includes a permanent total enclosure to ensure that 100 percent of the VOC/HAP emissions from the coil coating line are captured and conveyed to a single regenerative thermal oxidizer (Durr Environmental, Model R25-V2-85) with reduction efficiency of 99.8 percent at peak load.

PERFORMANCE RESTRICTIONS

A.1. Federal Regulatory Requirements: This emission unit is subject to 40 CFR 63, Subpart A-General Provisions and 40 CFR 63, Subpart SSSS–Surface Coating Metal Coil, which is adopted by reference in Rule 62-204.800, F.A.C.
[Rule 62-204.800(11), F.A.C.]

A.2. Permitted Capacity: The maximum permitted utilization rates are as follows:

Material	Maximum Utilization Rate (tons per any consecutive 12 months)
Coating	4,600
Primer	318
Sulfur Solution	372
Accelerator	86

[**Permit Application dated 12/02/2011**; Rule 62-210.200(PTE), F.A.C.]

A.3. Authorized Fuel: The incinerator shall be fired by propane or natural gas only.
[Rule 62-210.200(PTE), F.A.C.]

A.4. Restricted Operation: The hours of operation are not limited (8760 hours per year).
[Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

EMISSIONS STANDARDS AND LIMITATIONS

A.5. Visible Emissions: Visible emissions are limited to less than 20 percent opacity. [Rule 62-296.320(4)(b)1., F.A.C.]

A.6. HAP Emission Limitation. The coil coating source must limit organic HAP emissions to the level specified in paragraph (1), (2), or (3) of this condition (No. **A.6.**).

(1) No more than 2 percent of the organic HAP applied for each month during each 12-month compliance period (98 percent reduction); or

(2) No more than 0.046 kilogram (kg) of organic HAP per liter of solids applied during each 12-month compliance period; or

(3) If you use an oxidizer to control organic HAP emissions, operate the oxidizer such that an outlet organic HAP concentration of no greater than 20 parts per million by volume (ppmv) on a dry basis is achieved and the efficiency of the capture system is 100 percent.

You must demonstrate compliance with one of these standards by following the applicable procedures in §63.5170 of 40 CFR 63, Subpart SSSS, Surface Coating of Metal Coil.
[Rule 62-4.070(3), F.A.C. and 40 CFR 63, Subpart SSSS, Surface Coating of Metal Coil]

TESTING REQUIREMENTS

A.7. **Initial Compliance Test.** The coil coater shall be tested to demonstrate initial compliance with the applicable emissions limitations listed in Specific Condition No(s). **A.5.** and **A.6.** of Construction Permit No. 0690008-009-AC and Specific Condition No(s). **A.5.** and **A.6.** of Title V Permit No. 0690008-008-AV. The initial compliance tests shall be conducted within 60 days after achieving permitted capacity, but not later than 180 days after initial operation of the unit at the increased utilization rates.

A.8. Test Requirements: Tests shall be conducted in accordance with the applicable requirements specified in Appendix D (Common Testing Requirements) of this permit.
[Rule 62-297.310, F.A.C.]

A.9. Test Methods: Required tests shall be performed in accordance with the following reference methods.

EPA Methods	Description of Method and Comments
9	Visual Determination of the Opacity of Emissions from Stationary Sources **The compliance test shall be conducted for one hour.**
24	Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings
25 or 25A	Determination of Total Gaseous Nonmethane Organic Emissions as Carbon or Organic Concentration Using a Flame Ionization Analyzer

The above method(s) are described in Appendix A of 40 CFR 60 and are adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department.
[Rules 62-204.800 and 62-297.100, F.A.C.; and Appendix A of 40 CFR 60]

A.10. Operating Rate During Testing: Testing of emissions shall be conducted with the emissions unit operation at permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.
[Rule 62-297.310(2), F.A.C.]

A.11. EPA Procedure T: The following EPA Procedure T criteria shall be met:

a) Determine the equivalent diameters of the NDOs and determine the distances from each VOC emitting point to all NDO's. Determine the equivalent diameter of each exhaust duct or hood and its distance to all NDO's. Calculate the distances of equivalent diameters.

The number of equivalent diameters shall be at least 4.

b)Measure the total area (At) of the enclosure and the total area (An) of all NDO's of the enclosure. Calculate the NDO to enclosure area ratio (NEAR) as follows:

NEAR = An / At (NEAR must be less than 0.05)

c) Measure the actual volumetric flow rate of each gas stream exiting the enclosure through an exhaust duct or hood using EPA Method 2. Measure the actual volumetric flow rate of each gas stream entering the enclosure through a forced makeup air duct using EPA Method 2. Calculate FV using the following equation:

FV = (Qo - Qi) / An (FV shall be at least 3600 meter/hour or 200 fpm)
where
Qo = the sum of the volumetric flow from all gas streams exiting the enclosure through an exhaust duct or hood.
Qi = the sum of the volumetric flow from all gas streams into the enclosure through a forced makeup air duct; zero, if there is no forced makeup air into the enclosure.
An = total area of all NDO's in enclosure.

d) Verify that the direction of air flow through all NDO's is inward. Use streamers, smoke tubes, tracer gases, etc. Monitor the direction of air flow at intervals of at least terminates for at least one hour. [Rule 62-297.450(2)(b),F.A.C.]

NOTIFICATION REQUIREMENTS

A.12. Test Notification: The permittee shall notify the Compliance Authority, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the permittee. [Rules 62-4.070(3) and 62-297.310(7)(a)9., F.A.C.]

RECORDS AND REPORTS

A.13. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix D (Common Testing Requirements) of this permit. [Rule 62-297.310(8), F.A.C.]

A. EU No. 001–Coil Coater

A.14. Monthly Recordkeeping Requirements: In order to demonstrate compliance with Specific Condition Nos. **A.2., A.3.,** and **A.6.,** the permittee shall maintain a log at the facility for a period of at least five (5) years from the date the data is recorded and made available to the Department upon request. The log, at a minimum, shall contain the following:

Monthly

a) Facility Name, Facility ID No. (i.e., 0090104);
b) Date (month/year);
c) Monthly total of material utilization rates;
d) Monthly total of VOC emissions, total HAP emissions, and individual HAP emissions;
e) Consecutive 12-month total of material utilization rates;
f) Consecutive 12-month total of VOC emissions, total HAP emissions, and individual HAP emissions; and
g) Type of fuel fired.

The monthly log shall be completed by the end of the following month.
[Rule 62-213.440(1)(b)2.b.,F.A.C.]

A.16. Supporting Documentation: Supporting documentation, such as Material Safety Data Sheets, purchase orders, etc., shall be kept to provide sufficient information to determine compliance. The log and documents shall be kept at the facility for at least five (5) years and made available to the Department. [Rule 62-4.070(3), F.A.C., Rule 62-213.440(1)(b)2.b., F.A.C.]

A.17. Additional Recordkeeping Requirements: Records specified in Specific Condition No. **A.15.**, must document the method, calculations, and formulas used in determining the usage rate and the emission rate. All calculations, including those used to derive emissions, must be clearly documented, and **may be presented in the form of a template of sample calculations** and available for review on site by the Department.
[Rule 62-4.070(3), F.A.C.]

BEST MANAGEMENT PRACTICES

A.18. Best Management Practices: The following management practices shall be utilized in the operation of the coil coating line and its permanent total enclosure.

a. Primer and Coating Storage and Handling: Containers of primer and coating will not be stored or applied in an open condition. All Containers will primarily be opened for the testing of drum contents or when a drum of primer and coating is opened for connection to the applicators. Transfer from one container to another will only occur when used primer or coating drums need to be emptied. All hose, valves and connectors that handle primer or coating will be checked on a regular basis to assure that each is sealed. The operation of the coil coater will be discontinued should any leak occur while handling primer or coating. Any leakage of primer or coating will be cleaned up as soon as it occurs and properly disposed. The cause of any leak will be identified and corrected prior to continued operation of the coil coater.

A. EU No. 001–Coil Coater

b. Primer and Coating Heads Enclosures: During coating the enclosure for the primer and coating heads will be closed except for the entry of personnel. Any adjustments to the equipment requiring the opening of a portion of the enclosure will not take greater than fifteen minutes in any three hour period. All seals for any enclosure opening will be airtight or have negative flow. Air flow around each enclosure will be tested using a hand held smoke generator. Any enclosure seals found to have positive flow will be replaced within twenty-four hours. A log sheet, designed to require company personnel to inspect and record the enclosure's operations (i.e.: make sure that the enclosure continues to operate under a negative pressure), will be utilized. The employee will visually inspect and record the exhaust vents manometer reading as well as the flow indicators at the NDO's of the enclosure. Thin plastic strips placed within the NDO's will provide quick and accurate determination of the air flow at the NDO's. The inspection will take place weekly.

c. Oven Operation: The oven doors will be closed at all times during operation of the coil coater. Any maintenance of adjustment must be performed as expeditiously as practical but in no case greater than fifteen minutes in any three hour period. All seals on oven doors will be kept in good operating conditions and checked monthly using a hand held smoke generator. Oven doors must be air tight or have negative flow. The seals for doors with positive flow must be changed when the oven is shut down.

d. Incinerator and Air Collection System: Each incinerator will be operated at or above the minimum temperature achieved during the last compliance test. Incinerator temperature for each incinerator will be recorded and be available for inspection. At no time will the coil coater be operated when the incinerators are not operating. All connecting duct work from the oven to the incinerators will be air tight or have negative flow to insure that no VOC emissions result.

e. Natural Draft Openings: The permanent total enclosure for each coating head of the coil will be under negative pressure during all normal coating operations. All natural draft openings will be under negative pressure.

f. Strip Chart Recorder: To provide a continuous record that doors are not left open during routine operation of the coater, each door has electrical contacts and are connected to a strip chart recorder. The strip chart recorder will record the opening of the door.

[Rule 62-4.070(3), F.A.C.; Permit AC35-261749, date June 1, 1995]

B. EU No. 006–Emergency Fire Pump

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
006	Installation date of the diesel-fired emergency fire water pump engine is January, 06, 1983. The diesel fire pump, Manufactured by Cummins Model No. V504F2 is emergency equipment and operated routinely for less than 100 hours per year. The engine contains a heat exchanger and the engine pre-heater is rated at 187 hp.

PERFORMANCE RESTRICTIONS

B.1. Federal Regulations: The diesel-fired Stationary Fire Pump Engine must meet the emission requirements of Table 4 (see below) to Subpart IIII of Part 60 as indicated in §60.4205(c) of 40 CFR Part 60, Subpart IIII. Additionally, the Engine must comply with §63.6640(f)(i),(ii), and (iii) and Table 2d, category 4 maintenance requirements of 40 CFR 63, Subpart ZZZZ. The engine is subject to 40 CFR 60, Subpart A-General Provisions (See Appendix NSPS-General Provisions), 40 CFR 60, Subpart IIII-Standards of Performance for Stationary Compression Ignition Internal Combustion (See Appendix NSPS, Subpart IIII-Stationary Compression Ignition Internal Combustion Engines), 40 CFR 63, Subpart A-General Provisions (See Appendix NESHAP-General Provisions), and 40 CFR 63, Subpart ZZZZ-National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (See Appendix NESHAP, Subpart ZZZZ-Stationary Reciprocating Internal Combustion Engine). These conditions are incorporated into this permit (attached and part of this permit). [Rule 62-204.800(8), F.A.C.]

From 40 CFR 60, Subpart IIII:

Table 4 to Subpart IIII of Part 60—Emission Standards for Stationary Fire Pump Engines

[As stated in §§60.4202(d) and 60.4205(c), you must comply with the following emission standards for stationary fire pump engines]

Maximum engine power	Model year(s)	NMHC + NO_X	CO	PM
KW<8 (HP<11)	2010 and earlier	10.5 (7.8)	8.0 (6.0)	1.0 (0.75)
	2011+	7.5 (5.6)		0.40 (0.30)
8≤KW<19 (11≤HP<25)	2010 and earlier	9.5 (7.1)	6.6 (4.9)	0.80 (0.60)
	2011+	7.5 (5.6)		0.40 (0.30)
19≤KW<37 (25≤HP<50)	2010 and earlier	9.5 (7.1)	5.5 (4.1)	0.80 (0.60)
	2011+	7.5 (5.6)		0.30 (0.22)
37≤KW<56 (50≤HP<75)	2010 and earlier	10.5 (7.8)	5.0 (3.7)	0.80 (0.60)
	2011+[1]	4.7 (3.5)		0.40 (0.30)
56≤KW<75 (75≤HP<100)	2010 and earlier	10.5 (7.8)	5.0 (3.7)	0.80 (0.60)

	2011+[1]	4.7 (3.5)		0.40 (0.30)
75≤KW<130 (100≤HP<175)	2009 and earlier	10.5 (7.8)	5.0 (3.7)	0.80 (0.60)
	2010+[2]	4.0 (3.0)		0.30 (0.22)
130≤KW<225 (175≤HP<300)	**2008 and earlier**	**10.5 (7.8)**	**3.5 (2.6)**	**0.54 (0.40)**
	2009+[3]	4.0 (3.0)		0.20 (0.15)
225≤KW<450 (300≤HP<600)	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2009+[3]	4.0 (3.0)		0.20 (0.15)
450≤KW≤560 (600≤HP≤750)	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2009+	4.0 (3.0)		0.20 (0.15)
KW>560 (HP>750)	2007 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2008+	6.4 (4.8)		0.20 (0.15)

[1]For model years 2011–2013, manufacturers, owners and operators of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 revolutions per minute (rpm) may comply with the emission limitations for 2010 model year engines.

[2]For model years 2010–2012, manufacturers, owners and operators of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 rpm may comply with the emission limitations for 2009 model year engines.

[3]In model years 2009–2011, manufacturers of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 rpm may comply with the emission limitations for 2008 model year engines.

(1) § 60.4211 What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?

(a) If you are an owner or operator and must comply with the emission standards specified in this subpart, you must operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, owners and operators may only change those settings that are permitted by the manufacturer. You must also meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.

(b) If you are an owner or operator of a pre-2007 model year stationary CI internal combustion engine and must comply with the emission standards specified in §§60.4204(a) or 60.4205(a), **or if you are an owner or operator of a CI fire pump engine that is manufactured prior to the model years in table 3 to this subpart and must comply with the emission standards specified in §60.4205(c)**, you must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) through (5) of this section.

B. EU No. 006–Emergency Fire Pump

(1) Purchasing an engine certified according to 40 CFR part 89 or 40 CFR part 94, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.

(2) Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in this subpart and these methods must have been followed correctly.

(3) Keeping records of engine manufacturer data indicating compliance with the standards.

(4) Keeping records of control device vendor data indicating compliance with the standards.

(5) Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in §60.4212, as applicable.

From 40 CFR 63, Subpart ZZZZ:

(f) *Requirements for emergency stationary RICE.* (1) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a new or reconstructed emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that was installed on or after June 12, 2006, or **an existing emergency stationary RICE located at an area source of HAP emissions,** you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1)(i) through (iii) of this section. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1)(i) through (iii) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1)(i) through (iii) of this section, the engine will not be considered an emergency engine under this subpart and will need to meet all requirements for non-emergency engines.

(i) There is no time limit on the use of emergency stationary RICE in emergency situations.

(ii) You may operate your emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year.

(iii) You may operate your emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent

balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this paragraph (f)(1)(iii), as long as the power provided by the financial arrangement is limited to emergency power.

(2) Table 2dto Subpart ZZZZ of Part 63— Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions

As stated in §§63.6603 and 63.6640, you must comply with the following requirements for existing stationary RICE located at area sources of HAP emissions:

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
1. Non-Emergency, non-black start CI stationary RICE ≤300 HP	a. Change oil and filter every 1,000 hours of operation or annually, whichever comes first;[1]	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	
2. Non-Emergency, non-black start CI stationary RICE 300<HP≤500	a. Limit concentration of CO in the stationary	

	RICE exhaust to 49 ppmvd at 15 percent O_2; or	
	b. Reduce CO emissions by 70 percent or more.	
3. Non-Emergency, non-black start CI stationary RICE >500 HP	a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd at 15 percent O_2; or	
	b. Reduce CO emissions by 70 percent or more.	
4. Emergency stationary CI RICE and black start stationary CI RICE.[2]	**a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[1]**	
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	
5. Emergency stationary SI RICE; black start stationary SI RICE; non-emergency, non-black start 4SLB stationary RICE >500 HP that operate 24 hours or less per calendar year; non-emergency, non-black start 4SRB stationary RICE >500 HP that operate 24 hours or less per calendar year.[2]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[1] b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first; and c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	
6. Non-emergency, non-black start	a. Change oil and filter	

2SLB stationary RICE	every 4,320 hours of operation or annually, whichever comes first;[1]	
	b. Inspect spark plugs every 4,320 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first, and replace as necessary.	
7. Non-emergency, non-black start 4SLB stationary RICE ≤500 HP	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first;[1]	
	b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.	
8. Non-emergency, non-black start 4SLB stationary RICE >500 HP	a. Limit concentration of CO in the stationary RICE exhaust to 47 ppmvd at 15 percent O_2; or	
	b. Reduce CO emissions by 93 percent or more.	

9. Non-emergency, non-black start 4SRB stationary RICE ≤500 HP	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first;[1]	
	b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.	
10. Non-emergency, non-black start 4SRB stationary RICE >500 HP	a. Limit concentration of formaldehyde in the stationary RICE exhaust to 2.7 ppmvd at 15 percent O_2; or	
	b. Reduce formaldehyde emissions by 76 percent or more.	
11. Non-emergency, non-black start landfill or digester gas-fired stationary RICE	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first;[1]	
	b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.	

[1]Sources have the option to utilize an oil analysis program as described in §63.6625(i) in order to extend the specified oil change requirement in Table 2d of this subpart.

[2]If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the

unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

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