



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

OCT 11 2012

Patricia Gallagher
Environmental Stewardship Group Leader
Los Alamos National Laboratory
P.O. Box 1663, MS J978
Los Alamos, New Mexico 87545

Re: RICE NESHAP Applicability Determination – Emergency Stationary Engines

Dear Ms. Gallagher:

This is in response to a letter you sent to Mr. Ned Jerabek with the New Mexico Environmental Department dated February 28, 2012, which was forwarded to us, requesting an applicability determination for certain existing emergency use engines at LANL concerning 40 CFR Part 63, Subpart ZZZZ, National Emission Standard for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE).

In the letter, LANL is described as a minor or area source with respect to hazardous air pollutants (HAP), and as a result new or existing stationary engines at LANL fall under the RICE NESHAP requirements for area sources. LANL also informed you that it has identified 40 existing stationary engines which potentially fall under this regulation, and of those, only one unit is not designated for emergency use only. LANL concludes that the remaining 39 engines meet the RICE NESHAP definition of emergency stationary RICE, and that their request is for an applicability determination for these existing emergency use engines.

Based on the information LANL provided, EPA has determined that the 39 existing emergency use engines at LANL are not subject to the RICE NESHAP. As you are aware, engines in the area source category listing used to develop the rule were from two categories: industrial processes and utility electric generation. As such, existing stationary emergency engines located at residential, commercial, or institutional facilities that are area sources of HAP were not included in the source category and are not subject to the RICE NESHAP. EPA concludes that LANL is an institutional facility and, therefore, existing emergency engines at LANL are not subject to the RICE NESHAP. Note that the engines must meet the definition of "Emergency stationary RICE" in 40 CFR 63.6675.

This determination has been made in coordination with EPA Headquarters, and is based on information you submitted to EPA Region 6. If any information is found that would reverse

this determination, then it would become invalid and a new determination would be needed. If you have any questions concerning this determination, please contact Tony Robledo, of my staff at (214) 665-8182.

Sincerely yours,

A handwritten signature in black ink that reads "Esteban" followed by a stylized flourish.

David F. Garcia
Chief
Air/Toxics and Inspection
Coordination Branch

cc: Mr. Ned Jerabek
New Mexico Environmental Department



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

AUG - 1 2013

OFFICE OF
ENFORCEMENT AND
COMPLIANCE ASSURANCE

Mr. Jon D. Wilson, P.E.
Environmental Compliance Coordinator
Readiness Branch
U.S. Army Corps of Engineers Memphis District
167 N. Main St., Rm. 137
Memphis, Tennessee 38103-1894

Re: Applicability Determination – National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE), U.S. Army Corps of Engineers (USACE), W.G. Huxtable Pumping Plant (Huxtable), Lee County, Arkansas.

Dear Mr. Wilson:

This letter is in response to your letter dated July 29, 2013, requesting an applicability determination as to whether the RICE powering floodwater pumps and associated generators at the W.G. Huxtable Pumping Plant meet the definition of institutional emergency RICE under 40 CFR 63, Subpart ZZZZ. Upon review of the information submitted, and after subsequent contact with the facility, the United States Environmental Protection Agency (EPA) has determined that the engines are existing institutional emergency stationary RICE located at an area source of hazardous air pollutant (HAP) emissions, not subject to the RICE NESHAP per the exemption in 40 CFR §63.6585(f)(3).

The RICE at the Huxtable Pumping Plant are identified as follows:

- SN-01 to SN-10 – Fairbanks Morse 3600 HP diesel powered floodwater pump engines, with a total pump capacity of 12,000 cubic feet per second (cfs) or 5.4 million gallons per minute (gpm).
- SN-11 and SN-12 – Caterpillar 750 HP diesel generators used to provide power to floodwater pump engines (SN-01 to SN-10) during pumping operations, or to the facility and the pump engines upon commercial power failure.
- SN-13 – Detroit Diesel 215 HP diesel backup generator required to start the main generators (SN-11 and SN-12) if commercial power fails. This source is rarely used other than for maintenance testing.

According to your incoming request, Huxtable is currently designated as an area source facility for HAPs. The pumping plant is dedicated to the removal of floodwaters to prevent damages within the St. Francis Basin as authorized under Public Law 516 and is part of a tiered level emergency response to alleviate flooding conditions of the Mississippi River. Pumping operations vary greatly from year-to-year (from zero hours of operation to all pumps operating for weeks at a time) depending on water levels in the Mississippi and St. Francis Basin. Pumping does not begin until the water level on the downstream (Mississippi River) side of the facility is higher than the water on the upstream side, a condition that would only happen in the case of significant flooding.

Because of this specific need for pumping that varies significantly from year-to-year, the operation of the Huxtable facility is unlike other pumping facilities that may move water around a community in anticipation of flooding. Based upon this information, RICE SN-01 through SN-13 meet the definition of existing emergency stationary RICE at 40 CFR §63.6675 which reads:

Emergency stationary RICE means any stationary reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. All emergency stationary RICE must comply with the requirements specified in §63.6640(f) in order to be considered emergency stationary RICE. If the engine does not comply with the requirements specified in §63.6640(f), then it is not considered to be an emergency stationary RICE under this subpart.

(1) The stationary RICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary RICE used to pump water in the case of fire or flood, etc.

(2) The stationary RICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in §63.6640(f).

(3) The stationary RICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in §63.6640(f)(2)(ii) or (iii) and §63.6640(f)(4)(i) or (ii).

Section 63.6675.

Also, these engines are located at a facility with a North American Industry Classification System (NAICS) code of 924110. This NAICS code is on the list of institutional codes provided as guidance by the EPA after the RICE NESHAP was published. See the EPA Memorandum *“Guidance Regarding Definition of Residential, Commercial, and Institutional Emergency*

Stationary RICE in the NESHAP for Stationary RICE', dated August 9, 2010 (EPA Docket EPA-HQ-OAR-2008-0708)

http://www.epa.gov/ttn/atw/rice/guidance_emergency_engine_def.pdf.

Should the operational status of RICE SN-01 through SN-13 change, or other facility specific factors change, (e.g., 40 CFR §63.6640(f) requirements are not met, or the facility becomes a major source of HAP emissions, or the facility operator changes NAICS codes), this determination may no longer apply, and the USACE would have to request a new determination of applicability from the appropriate delegated authority.

If you have any questions or concerns regarding this determination, please feel free to contact Sara Ayres of my staff at ayres.sara@epa.gov or (202) 564-5391.

Sincerely,



Edward J. Messina, Director
Monitoring, Assistance, and Media Programs Division
Office of Compliance

cc: Steve Thompson, U.S. EPA Region 6
Melanie King, U.S. EPA Office of Air Quality and Performance Standards
Michael Horowitz, U.S. EPA Office of General Council
Thomas Rheame, Arkansas Department of Environmental Quality



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

APR 24 2008

OFFICE OF
ENFORCEMENT AND
COMPLIANCE ASSURANCE

Jonathan Pettit
Air Quality Permit Analyst
Idaho Department of Environmental Quality
Air Quality Division
1410 N. Hilton
Boise, Idaho 83706-1255

Dear Mr. Pettit:

This is in response to your request for guidance regarding the use of Air to Fuel Ratio controllers (AFR) on lean burn and rich burn engines that are subject to the New Source Performance Standards for Stationary Spark Ignition Internal Combustion Engines at 40 CFR Part 60, Subpart JJJJ. Specifically, you request clarification of the provisions at 40 CFR Part 60, Section 60.4243(g) regarding: 1) whether use of an AFR is an enforceable requirement for engines that use three way catalysts; and 2) does the use of an AFR apply to both lean burn and rich burn engines that use three way catalysts.

Although not stated explicitly in 40 CFR Part 60, Subpart JJJJ, the use of an AFR is an enforceable requirement for rich burn engines that use three way catalysts. Question 10.2.2 in the 40 CFR Part 60, Subpart JJJJ Response To Comment document clarifies this requirement by stating that:

An AFR is necessary and must be included with the operation of three way catalysts on rich burn engines and will have to be operated in an appropriate manner to ensure the proper engine operation and to minimize emissions.

Three way catalysts simultaneously reduce oxides of nitrogen (NO_x), hydrocarbons (HC) and carbon monoxide (CO) through a series of reduction and oxidation reactions for engines that operate at or near stoichiometric conditions. The AFR is necessary because it maintains the appropriate air to fuel ratio so that these oxidation and reduction reactions can take place in the catalyst. In their absence, the three way catalyst would not work properly, and the engine would be unable to consistently comply with the emission requirements specified in 40 CFR Part 60, Subpart JJJJ.

The provisions at 40 CFR Part 60, Section 60.4243(g) are not intended to apply to lean burn engines. This is because three way catalysts are designed to reduce HC, CO and NO_x emissions from engines that run at or near stoichiometric conditions and not from lean burn engines that operate at very lean air to fuel ratios and emit exhaust gases with high levels of excess air.

This response has been coordinated with the Office of General Counsel and the Office of Air Quality Planning and Standards. If you have any questions, please contact John DuPree of my staff at (202) 564-5950.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "Ken Gigliello".

Kenneth A. Gigliello, Acting Director
Compliance Assessment and Media Programs Division
Office of Compliance



U.S. Environmental Protection Agency Applicability Determination Index

Control Number: M070023

Category: MACT
 EPA Office: Region 5
 Date: 09/19/2007
 Title: Request for Alternative Monitoring and Testing
 Recipient: Rios, Juan
 Author: Czerniak, George
 Comments:

Part 63, ZZZZ Stationary Reciprocating Internal Combustion Engines

References: 63.6620
63.6640(a)
63.6650

Abstract:

Q1: Should ANR Pipeline Company (ANR), which owns and operates reciprocating internal combustion engines (RICE) at a pipeline compressor station be required, under 40 CFR part 63, subpart ZZZZ, to start up the RICE for the sole purpose of recording the pressure drop across the catalyst as required by 40 CFR 63.6640(a) if it is not operating during a particular month? ANR requests this approval in reference to three compressor stations, the Woolfolk Compressor and the Reed City Compressor Stations in Michigan, and the St. John Compressor Station in Indiana.

A1: No. EPA finds that, however, ANR must document, under MACT subpart ZZZZ, periods when the RICE is not operating as required in 40 CFR 63.6650.

Q2: ANR Pipeline Company (ANR) requests EPA clarify requirements at 40 CFR Sec. 63.6640(a), in reference to its three compressor stations, the Woolfolk Compressor and the Reed City Compressor Stations in Michigan, and the St. John Compressor Station in Indiana. Should a RICE that is operated during a given month below the target window for percent load be required, under 40 CFR part 63, subpart ZZZZ, to increase the load for the sole purpose of measuring the pressure drop?

A2: No. EPA finds that, however, the ANR will be required, under MACT subpart ZZZZ, to measure the pressure drop once the load is increased to the target window, or when operations exceed 30 days (regardless of load), and to document the time periods when the RICE is operated below the target window in its semi-annual report.

Q3: May RICE that do not have the ability to operate at full load due to restrictive operating parameters associated with the gas service that they support be tested at a reduced load and the target window be established for measuring pressure drop across the catalyst, under 40 CFR part 63, subpart ZZZZ, at ANR Pipeline Company (ANR) facilities? ANR requests clarification in regards to three compressor stations, the Woolfolk Compressor and the Reed City Compressor Stations in Michigan, and the St. John Compressor Station in Indiana.

A3: Yes. EPA approves, under MACT subpart ZZZZ, provided that ANR establishes a lower maximum load rate and appropriate differential pressure ranges for the reduced load.

Q4: For a RICE that can never be operated at the target window, should ANR Pipeline Company (ANR), monitor the pressure drop when an established lower-load baseline is achieved in any given month, under 40 CFR part 63, subpart ZZZZ? ANR requests clarification in regards to three compressor stations, the Woolfolk Compressor and the Reed City Compressor Stations in Michigan, and the St. John Compressor Station in Indiana.

A4: Yes. EPA also recommends monthly pressure drop measurements when the units are operating to assure catalyst performance, even if the units are operating at a reduced load below the target window.

Letter:

Juan J. Rios
Senior Environmental Scientist
ANR Pipeline Company
P.O. Box 2446
Houston, Texas 77252-2446

Dear Mr. Rios:

The United States Environmental Protection Agency (U.S. EPA), Region 5, is in receipt of your July 18, 2007, letter addressed to Greg Fried, in which you formally request approval of alternate monitoring methods at three compressor stations. These stations - Woolfolk Compressor Station and Reed City Compressor Station in Michigan and St. John Compressor Station in Indiana - are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE) at 40 C.F.R. Part 63, Subpart ZZZZ. Your request also includes alternate performance testing for the Reed City station. U.S. EPA's Office of Enforcement and Compliance Assurance has referred your request to my office for review.

ANR Pipeline Company (ANR) makes three specific requests for alternative monitoring. First, ANR requests that should a RICE at one of these compressor stations not be operating during a particular month, the company will not be required to start up the RICE for the sole purpose of recording the pressure drop across the catalyst, as normally required at 40 C.F.R. Sec. 63.6640(a). This request is consistent with U.S. EPA's policy as articulated in its memorandum from Michael Alushin, dated September 30, 2005. Accordingly, U.S. EPA approves this request. ANR, however, must document periods when the RICE was not operating as required in 40 C.F.R. Sec. 63.6650.

Second, ANR requests that, should a RICE be operated during a given month below the "target window" for percent load, it not be required to increase the load for the sole purpose of measuring the pressure drop. U.S. EPA approves this request pursuant to the Alushin memorandum; however, ANR will be required to measure the pressure drop once the load is increased to the target window, or when operations exceed 30 days (regardless of load), and to document the time periods when the RICE is operated below the target window in its semi-annual report.

Third, ANR requests that, for a RICE that can never be operated at the target window, it monitor the pressure drop when the established lower-load baseline (see discussion below) is achieved in any given month. This is acceptable to U.S. EPA for NESHAP compliance purposes only. U.S. EPA recommends monthly pressure drop measurements when the units are operating to assure catalyst performance, even if the units are operating at a reduced load below the target window. Also, please be aware that State agencies may require additional monitoring for other purposes, and that this determination does not obviate the need to comply with any applicable State requirements.

ANR also requested an alternative test method for its two 660 horsepower RICE at Reed City. The NESHAP at 40 C.F.R. Sec. 63.6620 requires performance tests be conducted at any load condition within plus or minus 10 percent of 100 percent load. ANR wishes to test these units at 50 to 80 percent full load. These RICE, according to ANR, do not have the ability to operate at full load due to restrictive operating parameters associated with the gas service that they support. The additional information you supplied by means of electronic mail on August 30, 2007, indicates that an attempt to test at full load would cause undesirable pipeline pressures, thus causing pressure relief valves to be activated, and service to shut down.

This request is acceptable provided that ANR establishes a lower maximum load rate and appropriate

differential pressure ranges for the reduced load. Please contact Allen Retlewski of the Michigan Department of Environmental Quality's Cadillac District Office, at (231) 775-3960, to discuss details related to establishing the correct parameters and incorporating them into the facility permits as necessary.

If you have any questions, feel free to contact Jeffrey Gahrns, of my staff, at (312) 886-6794.

Sincerely yours,

George T. Czerniak, Chief
Air Enforcement and Compliance Assurance Branch

cc: Janis Denman, Supervisor, Cadillac District Michigan Department of Environmental Quality

Heidi Hollenbach, Supervisor, Grand Rapids District Michigan Department of Environmental Quality

Dave Cline, Chief, Compliance Data Section
Indiana Department of Environmental Management



U.S. Environmental Protection Agency Applicability Determination Index

Control Number: M090038

Category: MACT
 EPA Office: Region 5
 Date: 12/05/2008
 Title: Reciprocating Internal Combustion Engines
 Recipient: Seltz, Owen
 Author: Bagherian, Reza
 Comments:

Part 63, IIII	Auto and Light Duty Trucks (surface coating) ZZZZ	Stationary Reciprocating Internal Combustion Engines
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References:	63.6585(a) 1068.30 60.4200
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Abstract:

Q1: Does 40 CFR part 63, subpart ZZZZ, apply to non-road, non-stationary reciprocating internal combustion engines located at a major source of hazardous air pollutants?

A1: No. MACT subpart ZZZZ does not apply to non-road, non-stationary reciprocating internal combustion engines located at a major source of hazardous air pollutants.

Q2: Does 40 CFR part 60, subpart IIII, apply to non-road, non-stationary reciprocating internal combustion engines?

A2: No. NSPS subpart IIII does not apply to non-road, non-stationary reciprocating internal combustion engines.

Letter:

12/05/2008

Owen Seltz, Engineer
 Minnesota Pollution Control Agency
 Metallic Mining Sector
 Industrial Division
 520 Lafayette Road North
 St. Paul, MN 55155-4194

Dear Mr. Seltz:

This letter is in response to your letter dated October 29, 2008, requesting an applicability determination that a Reciprocating Internal Combustion Engine (RICE) at Hibbing Taconite Company's Hibbing,

Minnesota facility qualifies as a non-road, non-stationary engine. This request concerns the requirements of National Emissions Standards for Hazardous Air Pollutants for RICE, 40 C.F.R. Part 63, Subpart ZZZZ, and Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 C.F.R. Part 60, Subpart IIII, as related to non-road, non-stationary engines. Specifically, 40 C.F.R. Â§ 63.6585(a) states:

"a stationary RICE is any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differs from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition."

In a recent permit application, Hibbing Taconite Company proposed to add a 1,825 KW diesel generator to its facility. The proposed generator will be used to move electric rope shovels, electric power drills, and the electrically powered tailings basin dragline around the mine. In the permit application, Hibbing Taconite Company asserted that the engine qualifies as a non-road engine, because the generator is regularly moved throughout the facility, approximately once every seven days. U.S. Environmental Protection Agency's (EPA's) response is stated below.

Determination:

We have reviewed the information Minnesota Pollution Control Agency provided, the underlying regulations and previous determinations. Based on our review, we determine that the diesel generator at the Hibbing taconite Company qualifies as a non-road, non-stationary engine.

I. 40 C.F.R. Part 63, Subpart ZZZZ

The diesel engine used at the Hibbing Taconite Company is not subject to the requirements of 40 C.F.R. Part 63, Subpart ZZZZ. Specifically, 40 C.F.R. Â§ 1068.30 states:

"(1) a nonroad engine is any internal combustion engine: (iii) [t]hat, by itself or in or on a piece of equipment, is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform."

In addition, 40 C.F.R. Â§ 1068.30 states that which is not a non-road engine:

"(2) an internal combustion engine is not a nonroad engine if: (iii) [t]he engine otherwise included in paragraph (1)(iii) of this definition remains or will remain at a location for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source. A location is any single site at a building, structure, facility, or installation. Any engine that replaces an engine at a location and that is intended to perform the same or similar function as the engine replaced will be included in calculating the consecutive time period. An engine located at a seasonal source is an engine that remains at a seasonal source during the full annual operating period of the seasonal source. A seasonal source is a stationary source that remains in a single location on a permanent basis (i.e., at least two years) and that operates at that single location approximately three months (or more) each year."

The diesel engine used at the Hibbing Taconite Company is regularly moved through the facility. The engine is not stationary at one location for a period of more than 12 month. In fact, the engine is moved at least once every seven days. Therefore, the Hibbing Taconite Company's diesel engine is classified as a non-road engine.

II. 40 C.F.R. Part 60, Subpart IIII

The diesel engine used at the Hibbing Taconite Company is not subject to the requirements of 40 C.F.R. Part 60, Subpart IIII. Specifically, 40 C.F.R. Â§ 60.4200 states

"[t]he provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE)?"

The Hibbing Taconite Company's diesel engine is not a stationary source, because it does not remain in a single location on a permanent basis. Therefore, the diesel engine is not subject to the requirements of 40 C.F.R. Part 60, Subpart IIII.

The designation of the diesel engine as a non-road engine establishes that it is not subject to the specific requirements of 40 C.F.R. Part 63, Subpart ZZZZ. The designation of the diesel engine as a non-stationary engine establishes that it is not subject to the specific requirements of 40 C.F.R. Part 60, Subpart IIII. If you have any questions or concerns regarding this determination, please feel free to call Reza Bagherian at (312) 886-0674.

Sincerely yours,

George T. Czerniak, Chief
Air Enforcement and Compliance Assurance Branch

Cc: Robert Beresford, MPCA



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUN 9 2010

OFFICE OF
ENFORCEMENT AND
COMPLIANCE ASSURANCE

Kristen Poultney
NASA Langley Research Facility
Head, Environmental Management Branch
Building 1229, Room 236B
Mail Stop 213
Hampton, Virginia 23681

Dear Ms. Poultney:

This is in response to your request dated March 24, 2010, to Melanie King, and in follow up to the email message forwarded to you by John DuPree on May 18, 2010, regarding whether the emergency engines located at the National Aeronautics and Space Administration (NASA) Langley Research Center in Hampton, Virginia, are subject to the National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines (RICE NESHAP) at 40 CFR Part 63, Subpart ZZZZ. The requirements at 40 CFR Part 63, Section 63.6590(b)(3) state that emergency engines located at area sources classified as commercial, institutional, or residential are exempt from the requirements at 40 CFR Part 63, Subpart ZZZZ.

Based on information provided in your request, it is our understanding that the Langley Research Center is an area source. The compliance determination for the emergency engines is dependent upon whether the Langley Research Center is determined to be a commercial, industrial, or residential facility. The Agency has no precise definition for commercial, institutional, or residential; however, in the past, facilities subject to the Asbestos NESHAP provisions that function as part of a governmental entity have been classified as "Institutional" facilities. [See Applicability Determination Index (ADI) C103.]

In addition, the RICE NESHAP at 40 CFR Part 63, Section 63.6675 states that research facilities are to be classified as institutional facilities. Based on this information, we consider the Langley Research Center described

in your message to be an institutional facility. Therefore, as long as the Langley Research Center remains an area source, the emergency engines located there will be exempt from the requirements at 40 CFR Part 63, Subpart ZZZZ.

This response has been coordinated with the Office of General Counsel and the Office of Air Quality Planning and Standards. If you have any questions regarding this matter, contact John DuPree of my staff at (202) 564-5950.

Sincerely,

A handwritten signature in black ink, appearing to read "R. Duffy". The signature is stylized and written in a cursive-like font.

Richard F. Duffy, Acting Director
Compliance Assessment and Media Programs Division
Office of Compliance

Enclosure

Enclosure

ADI Letter:

Control Number: C103

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF AIR AND RADIATION

Mr. L. James Blackwood, II
Coggin, Hoyle, Blackwood, and Brannan
108 Commerce Place
Greensboro, North Carolina 27401

Dear Mr. Blackwood:

This is in response to your June 18, 1991 letter requesting clarification of two issues concerning the applicability of the asbestos NESHAP to residential structures acquired by a municipal corporation.

Issue 1: "The demolition of structures containing less than four residential units acquired by the Redevelopment Commission of Greensboro under its eminent domain authority;"

Response: In the preamble to the November 20, 1990 revisions to the asbestos NESHAP (FR 48412 November 20, 1990), EPA stated that, "[we do] not consider residential structures that are demolished or renovated as part of a commercial or public project to be exempt from the rule. For example, the demolition of one or more houses as part of an urban renewal project, a highway construction project, or a project to develop a shopping mall, industrial facility or other private development would be subject to the NESHAP." Residential buildings which are acquired and demolished for the purpose of an urban renewal project are considered institutional buildings and, as discussed above, are not exempt from the asbestos NESHAP.

In addition, as stated in the above mentioned Federal Register notice, "[a] group of residential buildings under the control of the same owner or operator is considered an 'installation' and is, therefore, covered by the rule." However, while a notification for demolition would be required, the work practice and waste disposal requirements in 40 CFR Section 61.145 and Section 61.150 would only apply where the combined asbestos in the buildings was over the threshold amounts (80 linear meters on pipes or at least 15 square meters on other facility components).

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

sent
6/10/10.

JUN 9 2010

Kristen Poultney
 NASA Langley Research Facility
 Head, Environmental Management Branch
 Building 1229, Room 236B
 Mail Stop 213
 Hampton, Virginia 23681

Dear Ms. Poultney:

This is in response to your request dated March 24, 2010, to Melanie King, and in follow up to the email message forwarded to you by John DuPree on May 18, 2010, regarding whether the emergency engines located at the National Aeronautics and Space Administration (NASA) Langley Research Center in Hampton, Virginia, are subject to the National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines (RICE NESHAP) at 40 CFR Part 63, Subpart ZZZZ. The requirements at 40 CFR Part 63, Section 63.6590(b)(3) state that emergency engines located at area sources classified as commercial, institutional, or residential are exempt from the requirements at 40 CFR Part 63, Subpart ZZZZ.

Based on information provided in your request, it is our understanding that the Langley Research Center is an area source. The compliance determination for the emergency engines is dependent upon whether the Langley Research Center is determined to be a commercial, industrial, or residential facility. The Agency has no precise definition for commercial, institutional, or residential; however, in the past, facilities subject to the Asbestos NESHAP provisions that function as part of a governmental entity have been classified as "Institutional" facilities. [See Applicability Determination Index (ADI) C103.]

5/27/10

In addition, the RICE NESHAP at 40 CFR Part 63, Section 63.6675 states that research facilities are to be classified as institutional facilities. Based on this information, we consider the ~~CONCURRENCS~~ Langley Research Center described

prepared by: jdupree:mlw:nasa:adi2[revised 05-27-10].doc

SYMBOL	2223A	2223A	2223A				
SURNAME	D.K.P.	Throul	PK				
DATE	4/1/10	6/3/10	6/9/10				

Subject: Re: RICE NESHAP Applicability Determination

Hi Kristen,

Thank you for your note. I don't actually do Applicability Determinations, they are handled by our Office of Enforcement and Compliance Assurance. I am copying David Schnare and John Dupree of OECA on this response so that they can review and respond to your email and let you know whether they have further questions.

Thanks,

Melanie King
Energy Strategies Group
Sector Policies and Programs Division
Office of Air Quality Planning and Standards
U.S. Environmental Protection Agency

Mail Code D243-01
RTP, NC 27711

Phone: (919) 541-2469
Fax: (919) 541-5450
king.melanie@epa.gov

-----"Poultney, Kristen K. (LARC-D402C)" <kristen.k.poultney@nasa.gov> wrote: -----

To: Melanie King/RTP/USEPA/US@EPA

From: "Poultney, Kristen K. (LARC-D402C)" <kristen.k.poultney@nasa.gov>

Date: 03/24/2010 12:50PM

cc: "katz.judith@epa.gov" <katz.judith@epa.gov>, "Mcgrath, James V. (LARC-D402C)[SAIC]" <james.v.mcgrath@nasa.gov>

Subject: RICE NESHAP Applicability Determination

Dear Ms. King:

NASA Langley Research Center is a research facility located in Hampton, Virginia. Our facility is an area source of HAPS and our NAICS Code is 927110 (Space Research and Technology). We would like to request an applicability determination regarding the recently promulgated Final Rule for the National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines (aka: RICE NESHAP) at 40 CFR Part 63 Subpart ZZZZ.

We have a number of existing stationary emergency reciprocating internal combustion engines (RICE) in operation at our facility. In the preamble to the Final Rule, it states that, "Existing stationary emergency engines at area sources located at residential, commercial, or institutional facilities are not part of the source category and therefore are not subject to any requirements under this final rule." Further, in the definitions section (40 CFR 63.6675), it defines "Residential/commercial/institutional emergency stationary RICE" as "an emergency stationary RICE used in residential establishments such as homes or residences, commercial establishments such as office buildings, hotels, or stores, or institutional establishments such as medical centers, research centers, and institutions of higher education."

Since research centers are specifically included in the definition as an example of institutional



RICE NESHAP Response

John Dupree to: Poultney, Kristen K. (LARC-D402C)

Cc: Leonard Hotham, Melanie King, Michael Horowitz

05/17/2010 04:56 PM

Kristen Poultney
NASA Langley Research Facility
Hampton, Virginia

Dear Ms. Poultney :

This is in response to our conversation on May 14, 2010 in which we discussed your request for a determination regarding whether the emergency engines located at the National Aeronautics and Space Administration (NASA) Langley Research Center in Hampton, Virginia are subject to the the National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines (RICE NESHAP) at 40 CFR Part 63, Subpart ZZZZ. The requirements at 40 CFR Part 63 Section 63.6675, state that emergency generators located at area sources classified as commercial, institutional or residential are exempt from the requirements at 40 CFR Part 63, Subpart ZZZZ.

Based on information provided in your request, it is our understanding that the Langley Research Center is an area source. The compliance determination for the emergency engine is dependent upon if the Research Center is determined to be a commercial, industrial or residential facility. The Agency has no precise definition for commercial, institutional or residential, however, in the past, facilities subject to the Asbestos NESHAP provisions that function as part of a governmental entity have been classified as "Institutional" facilities. (See Applicability Determination Index (ADI) C103) Additionally, the RICE NESHAP at 40 CFR Part 63.6675 states that research facilities are to be classified as institutional facilities. Based on this information, we consider the Langley Research Center described in your message to be an "Institutional Facility" Therefore, as long as the Langley Research Center remains an area source, the emergency engines located there will be exempt from the requirements at 40 CFR Part 63, Subpart ZZZZ.

As we discussed, this is an informal response to your email message. A formal determination response will be forwarded to you shortly. This response has been coordinated with the Office of General Counsel and the Office of Air Quality Planning and Standards. Feel free to contact me at 202-564-5950 should you have any questions regarding this matter.

Thanks

John DuPree
Wood Heater Program Team Leader
Telephone: 202-564-5950



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUN 3 2010

OFFICE OF
ENFORCEMENT AND
COMPLIANCE ASSURANCE

Chet Thompson, Esquire
Crowell and Moring, LLP
1001 Pennsylvania Avenue, N.W.
Washington, D.C. 20004

Dear Mr. Thompson;

This is in response to your letter dated March 30, 2010, wherein you seek confirmation that existing emergency engines located at telecommunications facilities that are area sources would be considered "commercial" facilities as defined in the National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines (RICE NESHAP). In your letter, you also request clarification regarding the regulatory status of emergency engines located at, and used exclusively by, telecommunication installations sited on property owned by industrial facilities.

Since your request does not reference a specific telecommunications facility, we are unable to provide a site-specific determination of applicability. However, we will clarify the applicability criteria by responding to the questions provided in your inquiry.

The requirements at 40 CFR Part 63, Section 63.6590(b)(3) state that emergency engines located at area sources that are classified as commercial, institutional or residential emergency stationary RICE, as defined in 40 CFR 63.6675, are not subject to the requirements of 40 CFR Part 63, Subpart ZZZZ. The RICE NESHAP preamble on page 9654 states these engines are not subject because they were not included as source categories in the original Urban Air Toxics Strategy inventory and were not included in the listing of urban area sources.

As stated in your letter, the RICE NESHAP was not intended to regulate emergency engines at commercial sources. The "Analysis of the Types of Engines Used to Estimate the CAA Section 112(k) Area Source Inventory for Stationary Reciprocating Internal Combustion Engines" memorandum includes source categories intended to be regulated under RICE NESHAP. (See Docket EPA-HQ-OAR-2008-0708.) Based on this information, the Agency concurs with your assertion that telecommunication facilities be classified as a commercial source category. Thus, emergency engines located at, or used by, area source telecommunication facilities are not subject to the RICE NESHAP.

The applicability of the RICE NESHAP regulations to emergency engines used by telecommunications facilities that are installed and located on property owned by industrial facilities is dependent upon which facility has common control over the emergency engine. If the industrial facility has common control over the emergency engine, then the emergency engine will be subject to RICE NESHAP. If the telecommunications facility is an area source and has common control over the emergency engine, then the emergency engine is not subject to the RICE NESHAP. Since common control of emission sources located at non-contiguous locations may vary based upon lease agreements, operational restrictions and ownership status, these cases will need to be evaluated on a case-by-case basis. The William Spratlin letter to the Iowa Department of Environmental Quality dated September 18, 1995, provides guidance on how to determine common control status for emission sources. (See Enclosure.)

This response was coordinated with the Office of General Counsel and the Office of Air Quality Planning and Standards. If you have any additional questions, please contact John DuPree of my staff at (202) 564-5950.

Sincerely,

A handwritten signature in black ink, appearing to read "R. F. Duffy".

Richard F. Duffy, Acting Director
Compliance Assessment and Media Programs Division
Office of Compliance

Enclosure



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VII
726 MINNESOTA AVENUE
KANSAS CITY, KANSAS 66101

SEP 18 1995

CON 10-22
Prevention of
Significant
Deterioration
CS

Peter R. Hamlin, Chief
Air Quality Bureau
Iowa Department of Natural Resources
Henry A. Wallace Building
900 East Grand
Des Moines, IA 50319

Dear Mr. Hamlin:

Recently, several questions have been raised about whether new facilities that locate on the site of a present major stationary source should be considered part of the existing major source or as a separate entity. In particular, concerns center around the question of control as interpreted under the New Source Review program. According to EPA's definition of a stationary source, "a building, structure, facility, or installation means all of the pollutant emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control)."

EPA's permit regulations do not provide a definition for control. Therefore, we rely on the common definition. Webster's Dictionary defines control as "to exercise restraining or directing influence over," "to have power over," "power of authority to guide or manage," and "the regulation of economic activity." Obviously, common ownership constitutes common control. However, common ownership is not the only evidence of control.

Typically, companies don't just locate on another's property and do whatever they want. Such relationships are usually governed by contractual, lease, or other agreements that establish how the facilities interact with one another. Therefore, we presume that one company locating on another's land establishes a "control" relationship. To overcome this presumption, the Region requires these "companion" facilities, on a case by case basis, to explain how they interact with each other. Some of the types of questions we ask include:

Do the facilities share common workforces, plant managers, security forces, corporate executive officers, or board of executives?



Do the facilities share equipment, other property, or pollution control equipment? What does the contract specify with regard to pollution control responsibilities of the contractee? Can the managing entity of one facility make decisions that affect pollution control at the other facility?

Do the facilities share common payroll activities, employee benefits, health plans, retirement funds, insurance coverage, or other administrative functions?

Do the facilities share intermediates, products, byproducts, or other manufacturing equipment? Can the new source purchase raw materials from and sell products or byproducts to other customers? What are the contractual arrangements for providing goods and services?

Who accepts the responsibility for compliance with air quality control requirements? What about for violations of the requirements?

What is the dependency of one facility on the other? If one shuts down, what are the limitations on the other to pursue outside business interests?

Does one operation support the operation of the other? what are the financial arrangements between the two entities?

The list of questions is not exhaustive; they only serve as a screening tool. If facilities can provide information showing that the new source has no ties to the existing source, or vice versa, then the new source is most likely a separate entity under its own control. However, if the facilities respond in the positive to one or more of the major indicators of control (e.g. management structures, plant managers, payroll, and other administrative functions), then the new company is likely under the control of the existing source, or under common control by both companies, and cannot be considered a separate entity for permitting purposes. Absent any major relationships, the new facility may still be considered to be under the control of the existing source if a significant number of the indicators point to common control.

If after asking the obvious control questions the permit authority has any remaining doubts, it may be necessary to look at contracts, lease agreements, and other relevant information. EPA's Dun and Bradstreet Retrieval System, available to anyone with mainframe access, is also useful for exploring any parent-subsidiary relationships and common corporate management

structures. Using these tools, we have found at least one case where a company set up an "unrelated" corporation in the middle of their property to split the property into multiple, distinct sites. After concluding that these "distinct" sites were in fact under the common control of the companion company's president, the split was later disallowed for permitting purposes.

The permit authority should be cautious of any short term or interim contracts that establish separate operating companies or separate operations on noncontacting parcels of land. While not likely, it is conceivable that such contracts could be used to shield the company's true intents. For example, a company may seek to avoid major new source review requirements in the short term, but merge later on to take advantage of the netting provisions. If the company's motives are unclear, but the permit authority elects to permit as two sources, we would encourage adding a condition to the permit requiring notification if the two sources merge operations. If the merger occurs within a short time frame, say two years, after permit issuance, the department may want to investigate such activities as circumvention of the major source permitting requirements and take the appropriate action.

If the affected sources are reluctant or refuse to provide documentation satisfactory to the permit authority, and the company's permit application is pending, then the permit authority may elect to find the permit application incomplete. If an application has not been submitted, then we recommend that the permit authority seek the necessary information under its statutory authorities.

Our approach to looking at control is based in part on regulatory background information, prior EPA guidance materials, common sense, and limited formal decisions on the matter. While no one single document answers the questions at hand, we encourage you and your staff to review the references listed in Table 1. Most are available on the New Source Review portion of the Technology Transfer Network Bulletin Board System.

We seriously urge you to consider the principles found in the various guidance documents and in this letter when evaluating requests to split properties for permitting purposes. We realize that in many cases it is easier not to second guess a company's motives. However, we also believe this administratively expedient approach can result in allowing circumvention of the permit requirements and ultimately jeopardize the goals and effectiveness of the permitting programs. This guidance has been reviewed by the Information Transfer and Program Integration Division, Office of Air Quality Planning and Standards, and

incorporates their suggestions and concerns. If you have any questions or need further advice, please contact our New Source Review team; Dan Rodriguez 913-551-7616, Ward Burns 913-551-7960, or Jon Knodel 913-551-7622.

Sincerely,

Handwritten signature of William A. Spratlin in cursive script.

William A. Spratlin
Director
Air, RCRA, and Toxics Division

Enclosure

cc: Christine Spackman, IDNR
Chuck Layman, KDHE
Randy Raymond, MDNR
Shelly Kaderly, NDEQ
David Solomon, OAQPS
Michele Dubow, OAQPS

Table 1. References on Common Control

"Definition of Source," March 16, 1979
The preamble to the August 7, 1980 PSD regulations, 45 FR
52693-52695
"PSD Applicability Request (General Motors)," June 30, 1981

"PSD Applicability Request, Valero Transmission Company,"
November 3, 1986
"PSD Applicability Determination for Multiple Owner/Operator
Point Sources Within a Single Facility (Denver Airport)
," August 11, 1989
"Comments on Draft Permit for Conoco Coker and Sulfur
Recovery Facility," March 22, 1990
"Definition of Source for PSD Purposes," August 22, 1991
"PSD Permit Remand, Reserve Coal Properties," July 6, 1992
"Temporary and Contracted Activities at Stationary Sources,"
John Seitz letter to Minnesota, November 16, 1994
"Watts Bar Nuclear Plant Title V Applicability," Region 4,
June 5, 1995
"Site Specific Determination of Common Control for United
Technologies Corporation," Region 4, July 20, 1995
"Georgetown Cogeneration Project," Westy McDermid
Memorandum, date unknown



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

FEB 28 2008

OFFICE OF
ENFORCEMENT AND
COMPLIANCE ASSURANCE

Mr. Michael Brand
Regulatory Affairs Director
Cummins, Incorporated
500 Jackson Street
Columbus, Indiana 47201

Dear Mr. Brand:

This is in response to your November 19, 2007 letter requesting a National Security Exemption (NSE) for 240 Cummins Model 6CT8.3-G2 Tier 1 engines to be installed at an Intercontinental Ballistic Missile (ICBM) facility at W.E. Warren Air Force Base that are subject to the Standards of Performance for Stationary Compressed Ignition Internal Combustion Engines at 40 CFR Part 60, Subpart IIII. Per 40 CFR Parts 60.4200(3)(d) and 89.908(a)(2), a letter of endorsement from the Air Force Space Command (AFSC) was received on May 22, 2007. (Enclosed.) The endorsement letter explains that the NSE you request is needed because the modifications made to these engines that allows them to operate in wartime conditions prevents them from meeting the Tier 3 emission requirements under 40 CFR Part 60, Subpart IIII.

In their letter, the AFSC states that the 240 Cummins 6CT8.3-G2 non road diesel engines used in this application will provide backup/emergency power to the ICBM Minuteman III Launch Facilities (LFs) and Missile Alert Facilities (MAFs) in the event of commercial power loss. The engines referenced here are rated between 100-175 kW and thereby are subject to the Tier 3 requirements under 40 CFR Part 60, Subpart IIII which apply to non road diesel engines rated between 37-560 kW. According to your letter, the engines to be used in this application are unable to comply with the Tier 3 requirements because the electronic fuel controls normally used by these engines to comply with the Tier 3 requirements are susceptible to electromagnetic pulse and shock which may occur during nuclear attack under wartime conditions and, therefore, are not used in this application.

Based on the information received, the United States Environmental Protection Agency (EPA) is granting an NSE for installation and operation of the Cummins Model 6CT8.3-G2 engines as standby generators at F.E. Warren Air Force Base. The granting of this NSE is contingent upon performance of the requirements specified under 40 CFR Part 89.908(c).

If you have any questions, please contact John DuPree of my staff at
(202) 564-5950.

Very truly yours

A handwritten signature in black ink, appearing to read "M. S. Alushin". The signature is fluid and cursive, with a prominent initial "M" and a long, sweeping underline.

Michael S. Alushin, Director
Compliance Assessment and Media Programs Division
Office of Compliance

Enclosure

cc: Earnest Glaser (Cummins Rocky Mountain, LLC)
Gregory Smith (Air Force Space Command)
Melvis Strickland (EPA, Office of Air and Radiation)
Michael S. Alushin (EPA, Office of Compliance)
John DuPree (EPA, Office of Compliance)



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS AIR FORCE SPACE COMMAND



22 MAY 2007

**MEMORANDUM FOR UNITED STATES ENVIRONMENTAL PROTECTION
AGENCY, ENGINE COMPLIANCE PROGRAMS GROUP
ATTN: MR. MELVIS STRICKLAND**

**FROM: Air Force Space Command, Civil Engineer Flight
250 South Peterson Blvd., Suite 218
Peterson AFB CO 80914-4554**

**SUBJECT: Endorsement to National Security Exemption (NSE) from Cummins
Engine Company**

1. Air Force Space Command, Civil Engineer Flight, endorses the attached Cummins Engine Company letter outlining the rationale for a NSE to the Tier 3, 75-129 kW (100-173 HP) Source Performance Standards for engine emissions per provisions of 40 CFR 60.4200(d), 1068.225(c), and 40 CFR 89.908(a)(2). The attached letter supports the procurement of a maximum of 240 Cummins 6CT8.3-G2 engines as part of an engine kit purchased from Cummins Rocky Mountain under contract number FA4613-05-D-0003-5000. The engine kits are used for renovation of existing ICBM standby power generators by F. E. Warren AFB, Wyoming.

2. The engine kits provided under subject contract provide the backup power to the ICBM Minuteman III Launch Facilities and Missile Alert Facilities in the event of commercial power loss. The Diesel Engine Units are a critical and integral part of the ICBM weapon system, and are absolutely essential to the accomplishment of the weapon system mission. The units must operate under specific nuclear environments specified by the weapon system specifications and have been designed and hardened to withstand specific radiation, electromagnetic pulse and shock which may occur during nuclear attack. Tier 3 is not capable of operating under these conditions due to the electronic fuel control and engine management systems, both of which are highly susceptible to electromagnetic pulse. Current long-range planning projects the weapon system to continue as an integral part of the United States deterrent force well past 2040.

3. If you have any additional questions or concerns, please contact my POC, Mr. Craig Highsmith, (719) 554-2933, or E-mail at Craig.Highsmith@Peterson.af.mil.

**GREGORY A. SMITH, YF-03
Chief, Civil Engineer Flight**

**Attachment:
Cummins Rocky Mountain LLC Ltr, 13 Apr 07**

GUARDIANS OF THE HIGH FRONTIER



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

MAR 24 2011

REPLY TO THE ATTENTION OF:

(AE-17J)

Kimberly Crame
Supervisor, Environmental Engineering
Allison Transmission, Inc.
4700 West 10th Street
MC: M-29
Indianapolis, IN 46222

Re: Applicability of the National Emission Standards for Hazardous Air Pollutants (NESHAP) at 40 CFR Part 63, Subpart ZZZZ.

Dear Ms. Crame,

This letter is in response to your February 17, 2011 letter regarding the applicability of the National Emission Standards for Hazardous Air Pollutants (NESHAP) at 40 CFR Part 63, Subpart ZZZZ. Specifically, you requested guidance regarding the applicability of subpart ZZZZ in terms of the applicable date that determines whether an engine would be considered "existing" or "new" under subpart ZZZZ. Section 63.6590(a) of subpart ZZZZ uses the date that construction commenced on the engine to determine whether the engine is "existing" or "new." The NESHAP General Provisions at 40 CFR 63.2 define construction to mean "... the on-site fabrication, erection, or installation of an affected source . . ." Commenced is defined at 40 CFR 63.2 to mean "... an owner or operator has undertaken a continuous program of construction or reconstruction or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or reconstruction." Therefore, the date that determines whether an engine is existing or new under §63.6590(a) would be the date that the owner/operator has entered into a contractual obligation to undertake and complete, within a reasonable amount of time, a continuous program for the on-site fabrication, erection, or installation of the stationary engine. Note that the definition of construction in §63.2 states the following: "Construction does not include the removal of all equipment comprising an affected source from an existing location and reinstallation of such equipment at a new location." Thus, relocation of the engine from one facility to another is not considered to be construction of the engine.

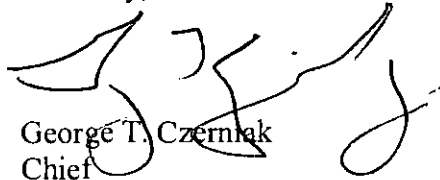
You also requested a determination regarding the applicability of subpart ZZZZ for stationary engines that have been rebuilt. Specifically, you asked about a scenario where the engine core is reused and the engine components, such as pistons, rings, bearings, etc. are replaced and conditioned. In this scenario, a determination would have

to be made regarding whether this would constitute reconstruction of the engine. Reconstruction is defined in the NESHAP General Provisions at 40 CFR 63.2. If it is determined that the engine was not reconstructed, then the engine would still be considered an existing engine under subpart ZZZZ if construction of the original engine was commenced prior to June 12, 2006, and the engine was located at an area source of hazardous air pollutants (HAP) or was less than or equal to 500 horsepower (HP) and located at a major source of HAP. If the engine was not reconstructed and it was located at a major source of HAP and was greater than 500 HP, the engine would still be considered an existing engine if construction of the original engine commenced before December 19, 2002.

This determination has been coordinated with the Office of Enforcement and Compliance Assurance, Office of Air Quality Planning and Standards and, the Office of General Counsel.

If you have any questions regarding this letter, feel free to contact Sarah Marshall, of my staff, at (312) 886-6797.

Sincerely,



George T. Czerniak
Chief

Air Enforcement and Compliance Assurance Branch

cc: Phil Perry
Air Compliance Branch
Indiana Department of Environmental Management



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

JUN 14 2011

REPLY TO THE ATTENTION OF:

Mary A. Recktenwalt, P.E.
Project Manager
Symbiont
6737 West Washington Street
Suite 3440
West Allis, Wisconsin 53214

Re: Rule Clarification and Testing Waiver Request – 40 C.F.R. Part 60 Subpart JJJJ –
City of Rock Island, Wastewater Treatment Plant

Dear Ms. Recktenwalt,

Thank you for your letter dated April 18, 2011 to the U.S. Environmental Protection Agency requesting clarification and a testing waiver for the engines to be installed at the Rock Island Wastewater Treatment Plant. The City of Rock Island Public Works Department (Rock Island) is constructing a wet weather treatment system designed to treat high volume wastewater flows that occur only during periods of extreme wet weather. As part of the project, Rock Island is installing five 880 HP spark ignition natural gas engine drive pumps to convey the influent wastewater to the new high rate system when wastewater volumes exceed 16 million gallons per day. The engines are subject to the Standards of Performance for Stationary Spark Ignition Internal Combustion Engines at 40 C.F.R. Part 60 Subpart JJJJ.

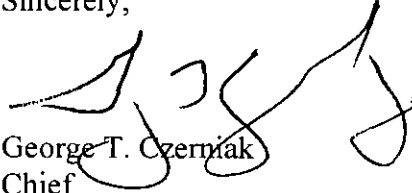
In your letter, you are requesting a clarification that the engines meet the definition of “emergency stationary internal combustion engines” as defined by the rule at 40 C.F.R. §60.4248. Emergency stationary internal combustion engines are defined as any stationary internal combustion engine whose operation is limited to emergency situations and required testing and maintenance. Rock Island said the engines would be operated approximately 16 times a year for approximately 270 hours a year. After follow-up discussions with you and with the EPA’s Office of Air Quality Planning and Standards (OAQPS), EPA has determined that the engines to be used at the City of Rock Island Wastewater Treatment Plant do not meet the definition of emergency stationary internal combustion engines.

In your letter you also requested a waiver from performance testing as required in 40 C.F.R. §60.4244. Based on follow-up discussions with you and with OAQPS, EPA cannot grant a waiver from the performance testing. The testing needs to be conducted to determine that the engines are meeting the emission standards in the rule. However, EPA understands the difficulty of testing these engines and suggests that the City of Rock

Island request an alternative test method or alternative testing parameters to demonstrate compliance with the emission standards.

If you have any questions regarding this letter, feel free to contact Sarah Marshall, of my staff, at (312) 886-6797.

Sincerely,

A handwritten signature in black ink, appearing to read "G. Czermak", written over the typed name.

George T. Czermak
Chief

Air Enforcement and Compliance Assurance Branch

cc: Ray Pilapil, Manager
Compliance and Systems Management Section
Bureau of Air
Illinois Environmental Protection Agency

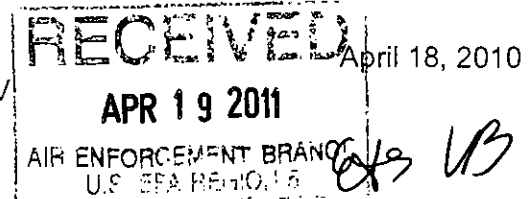


SYMBIONT

6737 West Washington Street
Suite 3440
West Allis, Wisconsin 53214

414 291 8840
Fax: 414 291 8841
www.symbiontonline.com

Mr. George Czerniak
Branch Chief for Air Enforcement & Compliance
United States Environmental Protection Agency-Region V
77 West Jackson
Chicago, Illinois 60604



**RE: Rule Clarification & Testing Waiver Request – 40 CFR Subpart JJJJ, Part 60
Wet Weather Treatment System
City of Rock Island, Wastewater Treatment Plant**

Dear Mr. Czerniak:

On behalf of the City of Rock Island Public Works Department we are contacting your office regarding modifications that will be made to the operations at the City of Rock Island Wastewater Treatment Plant located at 1299 Mill Street, Rock Island, Illinois. The City of Rock Island will be undertaking an extensive project to satisfy the requirements of its CSO Long Term Control Plan by constructing improvements to install a Wet Weather Treatment System. This wet weather conveyance and treatment system will be constructed in response to a USEPA Consent Decree.

The project will involve closing some of the combined sewer overflows (CSOs) and conveying the CSOs flow to a new high rate treatment system designed to treat high volume wastewater flows that occur only during periods of extreme wet weather. As a part of this project, five 880 HP (approximate) spark ignition natural gas engine drive pumps (plus one off-line spare), will be installed to convey the influent wastewater to the new high rate system when wastewater volumes exceed 16 million gallons per day (MGD), the peak capacity of the existing treatment plant. These engines will be subject to 40 CFR Subpart JJJJ, Part 60- Standards of Performance of Stationary Spark Ignition Internal Combustion Engines (published January 18, 2008). **We are seeking confirmation that these engines meet the definition of “emergency stationary internal combustion engine” as defined in the rule, and therefore, would be subject to the emission limitations for such units as listed in Table 1 to Subpart JJJJ of Part 60.**

Each engine can drive a pump to handle approximately 53 MGD of flow. The engines are required to pump the CSO flow (combined sanitary wastewater and stormwater) to the new high capacity treatment system to avoid street flooding, basement backups, and other related conveyance system capacity issues. The system will operate based on the duration and frequency of rainfall, but we estimate that one or more engines will run only approximately 16 times per year for various durations (from several minutes to hours depending upon the wet weather event). Based on modeling, during an average weather year, one or more engines will only operate approximately 270 hours per year. Only one engine will be required to run (@~ 50% capacity) during the majority of the 270 hours. It is expected that it will take a 10-yr 1-hour precipitation event to require all five pumps to operate at full capacity (i.e. 265 MGD). An emergency situation including flooding and

basement backups will occur if the engines do not operate during periods of extreme high wet weather flow.

Based on this description and the definition below we believe that the new engines will meet the definition of an emergency stationary internal combustion engine.

Emergency stationary internal combustion engine means any stationary internal combustion engine whose operation is limited to emergency situations and required testing and maintenance. Examples include stationary ICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary ICE used to pump water in the case of fire or flood, etc. Stationary SI ICE used for peak shaving are not considered emergency stationary ICE. Stationary ICE used to supply power to an electric grid or that supply power as part of a financial arrangement with another entity are not considered to be emergency engines.

Due to the unique application, only a limited number of engine suppliers are available, and none of these manufacturers can provide "certified" engines in the size and application of the design. Therefore performance testing is required by the rule (initial and every 3 years). The fact that these pumps require very high flow in order to operate will make it difficult, if not impossible, to perform the required performance testing. As mentioned previously only one engine will likely to run (@~50% capacity or 26 MGD) during the majority of the 270 hours per year, and it will take a 10-yr 1-hour precipitation event to require all five pumps to operate at full capacity (i.e. 265 MGD). The manufactures of these engines design them to meet the Subpart JJJJ standards when they are hot and running close to full load. Engine manufacturers will not provide a performance guarantee at very low loads. The higher flow conditions cannot be simulated for testing due to the lack of available water at a volume anywhere near full capacity. In addition, it is difficult to anticipate and predict with sufficient lead time when the city will receive enough flow in order to mobilize a testing company to be onsite for testing.

For these reasons we are requesting a waiver from performance testing in 40 CFR Part 60.4244. In lieu of the testing we will install engines that meet the Non-emergency SI Lean burn Natural Gas standards, which are significantly lower than the Emergency Engine standards.

Thank you for your assistance in this matter. Please contact the undersigned at 414-291-8440 or email me at mary.recktenwalt@symbiontonline.com if you have any questions or need anything further.

Sincerely,

SYMBIONT



Mary A. Recktenwalt, P.E., CHMM
Project Manager

Attachments

cc: Robert T. Hawes, P.E., City of Rock Island
Brian Till, Symbiont

(VP) 57-041-00517 (CAPITOL ONE N.A.)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

COPY

APR 05 2013

Ms. Tiffany Johnston
Environmental Resources Management
The Towers at Wildwood
3200 Windy Hill Road SE,
Suite 1500W
Atlanta, Georgia 30339

Dear Ms. Johnston,

On January 23, 2013, you advised the Environmental Protection Agency, Region III (EPA Region III) that your client Capitol One National Association (Capitol One) is constructing a data center located at 1401 Meadowville Technology Parkway in Chester, Virginia, and that Capitol One would be equipping this data center with 24 emergency generators powered by stationary compression ignition engines. In a follow-up telephone conversation with Mr. Ray Chalmers of my staff you stated that Capitol One did not expect construction of the data center to be completed, and commercial operation of the data center to begin, until about October, 2013.

You explained in your January 23, 2013 submittal that Capitol One anticipated that commissioning its new generators might require more than 100 hours per year of testing for each generator. You stated that this anticipated need "is precipitated by the complexity of the control system which has numerous permutations of possible sequences, each of which has to be tested in both utility (low and no-load) and generator modes (high load). In addition there are potential requirements (design engineering) for a 12 hour on site load test for each engine and/or a 24 hour test during final commissioning. This is not uncommon for complex data centers such as Capitol One's."

You said that Capitol One was concerned because the New Source Performance Standard for Stationary Compression Ignition Internal Compression Engines, 40 CFR 60, subpart IIII (NSPS IIII) provides that for engines to be considered emergency engines they must be operated for no more than 100 hours per year for maintenance checks and readiness testing, unless a source petitions for approval of additional hours for maintenance checks and readiness testing and the Administrator approves the petition. Submittal and approval of such petitions is provided for at 40 C.F.R. §60.4211(e).

Given this situation, you submitted a petition, on behalf of Capitol One, asking for permission "to use additional hours for commissioning of the generators and for required readiness testing during the first year of operations." In a subsequent follow-up call with Mr. Chalmers you clarified that the intent of the petition was to seek approval for additional hours for generator testing for commissioning purposes during the period when Capitol One's data center was still under construction, and not to seek approval for additional hours for generator testing for any period after Capitol One had placed its data center into commercial operation.

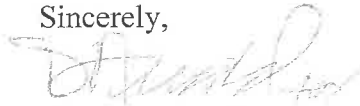
EPA's interpretation of NSPS subpart IIII is that when a new greenfield source is under construction any new emergency generator(s) installed as part of the construction project may be run as needed to complete the commissioning of the new source or of the emergency generators themselves. Thus, when a new greenfield source is under construction there is no need for that source to petition for approval of additional hours to operate any emergency generator(s) for testing needed to commission either the new source or the generators. Accordingly, Capitol One does not require approval of its petition in order to do whatever testing of its generators is required to commission either the new data center or its generators.

Given that Capitol One does not require approval of its petition in order to do whatever testing is necessary to commission its new data center or its generators, EPA does not consider action on Capitol One's petition to be necessary or appropriate, and EPA is therefore taking no action on the petition.

After Capitol One begins commercial operation of its new data center, Capitol One will be required to ensure that the data center's emergency generators meet the NSPS subpart IIII requirement that they operate for no more than 100 hours per year per engine for specified non-emergency purposes.

If you have any questions, please contact Mr. Ray Chalmers of my staff at 215-814-2061.

Sincerely,



Diana Esher, Director
Air Protection Division





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 10

1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

AUG 28 2009

OFFICE OF
AIR, WASTE AND TOXICS

Ryan Coleman
Regional Manager
Cargill Environmental Finance
3824 North 39th Street
Boise, Idaho 83703

Dear Mr. Coleman:

This letter is in response to a request for a waiver of performance testing based on the source test results of an identical unit for your recently installed biogas-fueled generators at Dry Creek Dairy in Hansen, Idaho. Cargill Environmental Finance (Cargill) installed three engines that are subject to 40 CFR 60 Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (Subpart JJJJ). As described below, the US Environmental Protection Agency (EPA) will accept the source testing completed on Generator #1 as representative of emissions from Generators #2 and #3.

Cargill's three engines are identical Guascor, Model SFGLD 560 each rated at 750 kW with a manufacture dates of February 25, 27, and 29 of 2008. The engines are all fueled by the same biogas produced by a digester that accepts manure wastewater from the adjacent Dry Creek Dairy in Hanson, Idaho. Subpart JJJJ requires an initial performance test to be conducted to demonstrate compliance with NO_x, CO, and VOC emissions standards. 40 CFR §§ 60.8(b)(4) gives EPA the authority to waive a performance test if the owner or operator of a source has demonstrated by other means to the Administrator's satisfaction that the affected facility is in compliance with the standard. According to National Stack Testing Guidance that was issued on September 30, 2005, waivers of initial performance could be considered if these criteria are met:

- (1) The units are located at the same facility.
- (2) The units are produced by the same manufacturer, have the same model number or other manufacturer's designation in common, and have the same rated capacity and operating specifications.
- (3) The units are operated and maintained in a similar manner; and
- (4) the delegated agency, based on documentation submitted by the facility.
 - (a) Determines that the margin of compliance for the identical units tested is significant and can be maintained on an on-going basis; or
 - (b) Determines based on a review of sufficient emissions data that, though the margin of compliance is not substantial, other factors allow for the determination that the variability of emissions for identical tested units is low enough for confidence that the untested unit will be in compliance.
- (4) These factors may include, but are not limited to, the following:
 - (i) Historical records at the tested unit showing consistent/invariant load.
 - (ii) Fuel characteristics yielding low variability (e.g., oil) and therefore assurance that emissions will be constant and below allowable levels;

determination that the variability of emissions for identical tested units is low enough for confidence that the untested unit will be in compliance.

- (4) These factors may include, but are not limited to, the following:
- (i) Historical records at the tested unit showing consistent/invariant load.
 - (ii) Fuel characteristics yielding low variability (e.g., oil) and therefore assurance that emissions will be constant and below allowable levels;
 - (iii) Statistical analysis of a robust emissions data set demonstrates sufficiently low variability to convey assurance that the margin of compliance, though small, is reliable.

The three Cargill engines are located at the same facility, produced by the same manufacturer, have the same model number, the same rated capacity and operating specifications, and are operated and maintained in a similar manner.

On October 22, 2008, source testing was conducted on Generator #1. With all values expressed in ppmvd at 15% O₂:

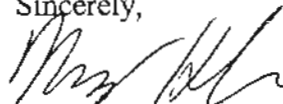
- o The results for NO_x were 86 compared to the limit of 220 (39%);
- o for CO were 150 compared to the limit of 610 (25%);
- o and for VOC were 5 compared to the limit of 80 (6%).

EPA has waived the requirement to conduct performance testing on identical units in similar situations provided the margin of compliance was at least 50%. Therefore, EPA determines that the margin of compliance for the Cargill unit tested was significant and can be maintained on an on-going basis.

Based upon the engines being identical in design, burning the same fuel, and source test showing results well below the standard, EPA will accept the source testing completed on Generator #1 as representative of emissions from Generators #2 and #3.

If you have any further questions or concerns, please contact Heather Valdez of the Region 10 Office of Air, Waste and Toxics at (206) 553-6220.

Sincerely,



Nancy Helm, Manager
Federal and Delegated Air Programs Unit
Office of Air, Waste, and Toxics

cc: Zach Klotovich, IDEQ



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 10

1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

AUG 10 2012

OFFICE OF
AIR, WASTE AND TOXICS

Ms. Katherine Stringham, GS-12, DAF
Air Program Manager
Department of the Air Force
Pacific Air Forces
354 CES/CEAN
2310 Central Ave Ste 100
Eielson AFB AK 99702-2299

Re: Request for Guidance on Engine Reclassification under National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines 40 CFR Part 63, Subpart ZZZZ

Dear Ms. Stringham:

This is in response to a request dated February 15, 2012, from the Department of the Air Force, Pacific Air Forces, Eielson Air Force Base (Eielson AFB) in Alaska. Eielson AFB operates an existing compression ignition, 2-stroke, greater than 500 horsepower, Electromotive Diesel (EMD) engine installed in 1987 at the base's Central Heat and Power Plant. Eielson's EMD engine is subject to the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines 40 CFR Part 63, Subpart ZZZZ (Subpart ZZZZ). The EMD engine's primary purpose meets the definition of a "black start engine" in Subpart ZZZZ, however the EMD engine is also used for peak shaving. Eielson AFB has requested guidance on whether the EMD engine can be designated as a black start engine exclusively and therefore subject to the corresponding requirements for that type of engine if the EMD engine is no longer used for any peak shaving. EPA is responding with guidance to clarify that if the engine subject to Subpart ZZZZ is not being used for peak shaving after the May 3, 2013, compliance date for the engine, and it meets the definition of a black start engine, it is subject to the requirements under Subpart ZZZZ for a black start engine.

Background

The facility where Eielson's engine is located became an area source for hazardous air pollutants (HAPs) on September 2, 2003 when the Title V permit was issued with a limit that was taken on the coal throughput to the power plant to keep the emissions of HCl and HF below HAP major source thresholds¹. NESHAP Subpart ZZZZ for major sources was finalized on June 15, 2004, therefore the facility became an area source prior to the first substantial requirements that would have applied to the EMD engine had the facility been a major source.

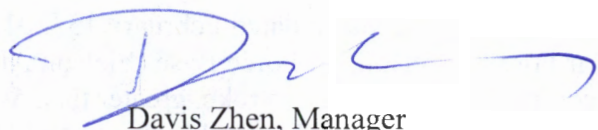
¹ A facility is a major source of hazardous air pollutants if the facility wide emissions are greater than 10 tons per year for any one HAP or greater than 25 ton per year of all HAPs combined.

Thus, the engine is considered an existing unit at an area source facility. According to Subpart ZZZZ the compliance date for existing compression ignition engines located at area sources is May 3, 2013.

The EMD engine must comply with the requirements of Subpart ZZZZ that apply for that type of engine upon the compliance date. If the engine meets the definition of a black start engine, which is defined in §63.6675 as an engine whose only purpose is to start up a combustion turbine, then it is subject to the requirements for a black start engine in Table 2d of Subpart ZZZZ, if at an area source facility. If an engine is used for some other purpose other than the start up of a combustion turbine after the compliance date of Subpart ZZZZ, such as peak shaving, it would no longer meet the definition of a black start engine, and it would need to be in compliance with all the applicable requirements for non-black start engines of that type of engine at the time you engaged in that activity.

If you have any further questions regarding this determination, please contact Heather Valdez of the Region 10 Office of Air, Waste and Toxics at (206) 553-6220.

Sincerely,



Davis Zhen, Manager
Office of Air, Waste, and Toxics

cc: Moses Coss,
Alaska Department of
Environmental Conservation



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

NCV 19 2012

ASSISTANT ADMINISTRATOR
FOR ENFORCEMENT AND
COMPLIANCE ASSURANCE

Kevin Lidbury
Fairbanks Morse Engine
701 White Avenue
Beloit, Wisconsin 53511

Re: Fairbanks Morse Engine (FME) request for determination regarding applicability of 40 CFR 60 Subparts IIII and JJJJ to the overhaul of an FME 38ETDD8-1/8 engine

Dear Mr. Lidbury:

This letter is in response to the Fairbanks Morse Engine (FME) request, dated May 1, 2012, for an Environmental Protection Agency (EPA) determination regarding whether the overhaul of the FME 38ETDD8-1/8 Enviro Design Reciprocating Internal Combustion Engine (RICE) will trigger applicability to the New Source Performance Standard (NSPS) in 40 CFR Part 60, Subparts IIII and JJJJ. The EPA has concluded that neither reconstruction nor modification would be triggered by the overhaul, so the RICE would not be subject to 40 CFR 60 Subparts IIII or JJJJ. However, the RICE will be subject to the requirements at 40 CFR Part 63, Subpart ZZZZ for existing sources once the overhaul is completed.

FME has stated that it intends to overhaul a 4400 horsepower RICE that combusts both natural gas and diesel fuel, has a displacement of 17.9 liters per cylinder, was manufactured in 1995, and has been in storage since 2007. The FME overhaul will involve disassembling the RICE down to the engine block and replacing worn components with new, identical components. FME has indicated that the installation of these new components will not change the horsepower rating, emission output, or normal operating load for this engine.

Reconstruction is triggered when the Fixed Capital Cost of New Components is greater than 50 percent of the Fixed Capital Cost of a Comparable New Facility, and it is technically and economically feasible for the reconstructed source to meet the relevant standards established by the EPA Administrator (40 CFR Section 60.15). Modification is triggered when changes are made that result in an increase in the emission rate of a regulated pollutant to the atmosphere (40 CFR Part 60.14(a)).

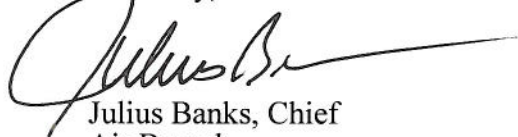
The Subpart IIII requirements, at 40 CFR Section 60.4200, state that an owner or operator of a stationary compression ignition RICE that was manufactured prior to April 1, 2006 is not subject to the NSPS, unless the engine was modified or reconstructed after July 11, 2005. In addition, the Subpart JJJJ requirements, at 40 CFR Section 60.4230, state that an owner or operator of a spark ignition RICE that was manufactured prior to July 1, 2008 is not subject to the NSPS, unless the engine was modified or reconstructed after June 12, 2006.

Based on our review of the FME provided overhaul project costs, EPA has verified that the cost of the new components and labor will be less than 50 percent of the cost of comparable new RICE. Since the total cost of the new components is less than 50 percent of the cost of a comparable new engine, we conclude that reconstruction has not been triggered. FME has indicated that it will replace worn components with new and identical components, and that the engine's emission output will not change in its remanufactured state. Based upon the FME provided information, EPA finds that the engine overhaul will not trigger modification. Since the overhaul of the RICE will not trigger reconstruction or modification, it will not need to comply with the Subpart IIII or Subpart JJJJ NSPS requirements for RICE.

However, once the engine is overhauled, it must comply with the RICE NESHAP provisions for existing engines at 40 CFR Part 63, Subpart ZZZZ. The applicable Subpart ZZZZ requirements will depend upon how much diesel fuel the RICE uses during a typical calendar year. Specifically, the requirements at 40 CFR Section 63.6675 state that if more than 2 parts diesel to 100 parts total fuel are used annually on an energy equivalent basis, then the RICE would have to meet the requirements for an existing nonemergency compression ignition engine. If less than 2 parts diesel to 100 parts total fuel are used, then the FME RICE would have to meet the requirements for an existing non-emergency spark ignition engine.

Please contact John DuPree of my staff at (202) 564-5950 should you have questions regarding this matter.

Sincerely,



Julius Banks, Chief
Air Branch
Monitoring, Assistance, and Media Programs Division

cc: Paul Roden, FME
Misty Vetterli, FME



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 1

5 POST OFFICE SQUARE, SUITE 100
BOSTON, MA 02109-3912

August 21, 2012

Ms. Diane C. Bellantoni
Murtha Cullina LLP
City Place
185 Asylum Street
Hartford, CT 06103

Re: Jacobs Vehicle Systems, Inc.; Applicability of National Emission Standards for Hazardous Air Pollutants and the Title V Operating Permit Program

Dear Ms. Bellantoni:

The U.S. Environmental Protection Agency (EPA) has reviewed your letter dated February 3, 2012 regarding Jacobs Vehicle Systems, Inc. located at 22 East Dudley Town Road, Bloomfield, Connecticut (Jacobs Vehicle) and the applicability of various National Emission Standards for Hazardous Air Pollutants (NESHAP) standards and the Title V operating permit program. Specifically, you have asked whether Jacobs Vehicle may restrict its potential to emit to below major hazardous air pollutant (HAP) source levels and thus no longer be subject to the NESHAP for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters, 40 CFR Part 63, Subpart DDDDD and the NESHAP for Engine Test Cells/Stands, 40 CFR Part 63, Subpart PPPPP. In addition, you have asked whether Jacobs Vehicle may restrict its potential to emit to below major HAP source levels and become an area source under the NESHAP for Reciprocating Internal Combustion Engines, 40 CFR Part 63, Subpart ZZZZ. You have also asked EPA to confirm the facility is no longer subject to the NESHAP for Halogenated Solvent Cleaning, 40 CFR Part 63, Subpart T. Lastly, you have requested confirmation from EPA that the facility would not be required to maintain its Title V operating permit if it is no longer a major source. This letter provides you with written applicability determinations on the various NESHAPS, but does not address the future applicability of Title V operating permit requirements.

The February 3, 2012 letter describes the operations at Jacobs Vehicle. In addition, in emails dated February 29, 2012 and April 5, 2012, you provided EPA with additional information about Jacobs Vehicle.

Applicability of 40 CFR Part 63, Subpart T, NESHAP for Halogenated Solvent Cleaning (Subpart T)

Jacobs Vehicle operates two degreasers which were subject to Subpart T because they used methylene chloride, a regulated HAP solvent. Jacobs Vehicle recently switched to Hubtron PB which is a degreasing solvent comprised of a minimum of 94% by weight n-propyl bromide and small quantities of t-butanol, 1,2 epoxybutane and n-propanol. Jacobs Vehicle provided a signed certification in its February 3, 2012 letter that it does not use and it has no present intention of using any of the listed HAP solvents in its degreasers in the future.

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Subpart T applies to cleaning machines that use any solvent containing methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride or chloroform in a total concentration greater than five percent by weight. Because Jacobs Vehicle no longer uses any of the listed solvents, and based on its commitment that it will continue in that mode for the foreseeable future, EPA has determined that Jacobs Vehicle's degreasers and Jacobs Vehicle's facility are no longer subject to Subpart T.

Applicability of 40 CFR Part 63, Subpart P, NESHAP for Engine Test Cells/Stands (Subpart 5P)

Jacobs Vehicle operates a total of 13 test cells in its Research and Development Laboratory. The test cells utilize mobile Class 8 heavy-duty diesel engines to conduct testing of engine braking systems developed by Jacobs Vehicle. The braking systems are tested in mobile, uninstalled engines which Jacobs Vehicle receives directly from engine manufacturers. Jacobs Vehicle designs tests to understand and demonstrate how its braking systems function and interrelate with engine performance. Jacobs Vehicle's engine braking systems are tested at several different performance levels in the test engines (at varying RPM's, speeds and horsepower load). The test cells were constructed prior to May 14, 2002 and have not undergone reconstruction after May 14, 2002.

Subpart 5P applies to owners or operators of engine test cells/stands at a major source of HAPs. An engine test cell/stand is any apparatus used for testing uninstalled stationary or uninstalled mobile (motive) engines. An uninstalled engine is an engine that is not installed in, or an integrated part of, the final product. Under Subpart 5P, an affected source is existing if it commenced construction or reconstruction on or before May 14, 2002. Under Subpart 5P, existing affected sources do not have to meet the requirements of Subpart 5P and Subpart A, the General Provisions.

EPA has determined that, because Jacobs Vehicle operates test cells constructed before May 14, 2002, and not reconstructed after May 14, 2002, for testing braking systems in uninstalled mobile engines, Jacobs Vehicle operates existing test cells subject to Subpart 5P which do not have to meet the requirements of Subpart 5P. Jacobs Vehicle would now like to take potential to emit restrictions to below major HAP source levels and no longer be subject to Subpart 5P. EPA's general policy is that sources that are major on the first substantive compliance date of a NESHAP (and, therefore, subject to the requirements of the NESHAP that apply to major sources) remain major sources for purposes of that NESHAP from that point forward, regardless of the level of their potential HAP emissions after that date.¹ The "first compliance date" is the first date a source must comply with an emission limitation or other substantive regulatory requirement (i.e., leak detection and repair programs, work practice measures, housekeeping measures, etc., but not a notice requirement) in the applicable NESHAP standard. Because Jacobs Vehicle does not have to meet the requirements of Subpart 5P, Subpart 5P does not set a substantive compliance date for Jacobs Vehicle. Therefore, EPA has determined that Jacobs Vehicle may now limit its potential to emit to below major HAP source levels and no longer be subject to Subpart 5P.

¹ See May 16, 1995 memorandum from John S. Seitz, Director, Office of Air Quality Planning and Standards, entitled "Potential to Emit for MACT Standards – Guidance on Timing Issues." The policy set forth in the memorandum is commonly referred to as the "once in, always in" policy.

Applicability of 40 CFR Part 63, Subpart ZZZZ, NESHAP for Reciprocating Internal Combustion Engines (Subpart 4Z)

Jacobs Vehicle operates a compression ignition emergency engine with less than 500 horsepower (HP) which commenced construction or reconstruction before June 12, 2006, and which was not reconstructed after June 12, 2006. Under Section 63.6590(a)(1)(ii), a compression ignition engine with less than 500 HP located at a major source of HAP which commenced construction or reconstruction before June 12, 2006 is an existing engine. The compliance date for existing compression ignition engines with less than 500 HP located at a major HAP source is May 3, 2013. As discussed above, EPA's "once in, always in" policy would allow Jacobs Vehicle to take restrictions on its facility-wide potential to emit to below major HAP source levels and become an area source of HAP for purposes of Subpart 4Z applicability before the first compliance date of May 3, 2013. If Jacobs Vehicle were to do so before May 3, 2013, its compression ignition engine would then be subject to the requirements for engines located at an area source of HAP.

Applicability of 40 CFR Part 63, Subpart DDDDD, NESHAP for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters (Subpart 5D) and 40 CFR Part 63, Subpart JJJJJJ, NESHAP for Area Sources: Industrial, Commercial and Institutional Boilers (Subpart 6J)²

Jacobs Vehicle operates two 10 million Btu/hour (MMBtu/hr) Cleaver Brooks boilers with the capability to burn natural gas and ultra-low sulfur diesel fuel. The Cleaver Brooks boilers burn only natural gas, except that they burn ultra-low sulfur diesel fuel for periodic testing (not to exceed 48 hours per year) or during periods of gas curtailment or gas supply emergencies. The Cleaver Brooks boilers were ordered July 5, 2006 and were fully operational by February 1, 2007. Jacobs Vehicle also has a 16.74 MMBtu/hr natural gas fired Johnston boiler that has been decommissioned. There are no plans to operate it in the future. The Johnston boiler was installed in January 1987. The Cleaver Brooks and Johnston boilers have not been reconstructed after June 4, 2010.

Subpart 5D applies to industrial, commercial and institutional boilers located at a major HAP source. A boiler is existing if it commenced construction or reconstruction before June 4, 2010. Subpart 5D sets requirements for gas-fired boilers. Under Section 63.7575, the "unit designed to burn gas 1 subcategory" includes any boiler that burns only natural gas, refinery gas, and/or other gas 1 fuels; with the exception of liquid fuels burned for periodic testing not to exceed 48 hours per year, or during periods of gas curtailment and gas supply emergencies. EPA has determined that because all of the boilers at the facility commenced construction prior to June 4, 2010, and were not reconstructed on or after June 4, 2010, the boilers are existing boilers in the "unit designed to burn gas 1 subcategory" (gas-fired boilers). The compliance date for existing gas-fired boilers under Subpart 5D is March 21, 2014. By March 21, 2014, an existing gas-fired boiler of 10 MMBtu/hr or greater must conduct a tune-up and have a one-time energy assessment performed, among other requirements. As discussed above, EPA's "once in, always in" policy would allow Jacobs

² Subpart 5D and Subpart 6J were promulgated as final rules in the Federal Register on March 21, 2011. On December 23, 2011, EPA proposed changes to Subpart 5D and Subpart 6J so certain requirements discussed in this letter may change (e.g. EPA proposed a revised compliance date for existing boilers subject to Subpart 5D).

Vehicle to take restrictions on its facility-wide potential to emit to below major HAP source levels to become an area source of HAP and no longer be subject to Subpart 5D before the first compliance date of March 21, 2014.

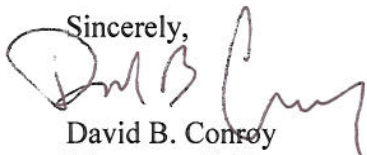
Subpart 6J applies to industrial, commercial and institutional boilers located at area sources of HAP. Subpart 6J does not apply to gas-fired boilers. Under Section 63.11237, a "gas-fired boiler" includes any boiler that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuels. Periodic testing of liquid fuel shall not exceed 48 hours per calendar year. Because Jacobs Vehicle's boilers meet the definition of gas-fired boilers, and provided they continue to do so, the boilers would not be subject to Subpart 6J if Jacobs Vehicle became an area source of HAP.

Applicability of the Title V Operating Permit Program

In addition to addressing the applicability of regulations discussed above, you have asked whether Jacobs Vehicle would need to continue to maintain its Title V operating permit if Jacobs Vehicle were no longer a major source of HAPs. EPA cannot confirm that Jacobs Vehicle would no longer be subject to Title V operating permit requirements under that scenario. As the relevant permitting authority, the Connecticut Department of Energy and Environmental Protection would need to determine whether the facility would continue to be subject to Title V.

This applicability determination is made in reliance on the accuracy of the information provided to EPA, and does not relieve Jacobs Vehicle of the responsibility for complying fully with any and all applicable federal, state and local laws, regulations and permits. If you have any questions about this letter, please Susan Lancey of my staff at (617) 918-1656.

Sincerely,



David B. Conroy
Manager, Air Programs Branch

Enclosure

cc: Gary Rose, CT DEEP



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 1

5 POST OFFICE SQUARE, SUITE 100
BOSTON, MA 02109-3912

OCT 12 2011

Richard P. Trubiano, Deputy Chief Operating Officer
Massachusetts Water Resources Authority
Charlestown Navy Yard
100 First Avenue
Boston, Massachusetts 02129

Re: Applicability of 40 CFR Part 63, Subpart ZZZZ, National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Dear Mr. Trubiano:

The U.S. Environmental Protection Agency, Region 1 (EPA) has reviewed your letter dated July 11, 2011 requesting a determination regarding the National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines (RICE), 40 CFR Part 63, Subpart ZZZZ (Subpart 4Z). Specifically, you asked whether the diesel engines operated at certain Massachusetts Water Resources Authority (MWRA) facilities in Cambridge, Massachusetts fit the definition of "emergency engines" under Subpart 4Z. This letter provides you with a written applicability determination.

MWRA's July 11, 2011 letter summarizes the operations of diesel engines connected to pumps used to pump wastewater at the Cottage Farm Combined Sewer Overflow (CSO) Facility and the Prison Point CSO Facility. The diesel engines and pumps are using during large rain events. At the Cottage Farm CSO Facility, three diesel engines are permitted to each operate 950 hours in any 12-month rolling period. The engines are expected to operate about 9 times a year on average, during a year with typical rainfall amounts. The durations of recent operation of the individual engines over the 12-month period ending April 30, 2011 were 15.6, 5.8, and 8.8 hours. At the Prison Point CSO Facility, four diesel engines are permitted to each operate 300 hours in any 12-month rolling period. The engines are expected to operate about 17 times a year on average, during a year with typical rainfall amounts. The durations of recent operation of the individual engines over the 12-month period ending April 30, 2011 were 21.4, 42.8, 35.6, and 40.7 hours.

Subpart 4Z applies to stationary RICE such as the diesel engines you describe, and sets requirements based on various criteria, including whether the engine is an emergency stationary RICE. An "emergency stationary RICE" is defined at 40 CFR §63.6675 as "any stationary internal combustion engine whose operation is limited to emergency situations and required testing and maintenance. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary RICE used to pump water in the case of fire or flood, *etc.*

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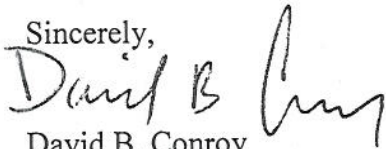
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Stationary RICE used for peak shaving are not considered emergency stationary RICE. Stationary RICE used to supply power to an electric grid or that supply non-emergency power as part of a financial arrangement with another entity are not considered to be emergency engines, except as permitted under §63.6640(f). All emergency stationary RICE must comply with the requirements specified in §63.6640(f) in order to be considered emergency stationary RICE. If the engine does not comply with the requirements specified in §63.6640(f), then it is not considered to be an emergency stationary RICE under this subpart.”

EPA has reviewed the information submitted by MWRA and has considered the function of the engines' operation. EPA has determined that the engines operated at MWRA's Cottage Farm CSO Facility and Prison Point CSO Facility do not meet the definition of emergency stationary RICE for purposes of Subpart 4Z, because these engines operate during typical large rainfall events and not only during emergencies or floods. Therefore, the engines must meet the requirements of Subpart 4Z applicable to non-emergency engines.

This applicability determination is made in reliance on the accuracy of the information provided to EPA, and does not relieve MWRA of the responsibility for complying fully with any and all applicable federal, state and local laws, regulations and permits. If you have any questions about this letter, please contact Susan Lancey of my staff at (617) 918-1656.

Sincerely,



David B. Conroy
Manager, Air Programs Branch

cc: Marc Wolman, MassDEP



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

APR 26 2013

OFFICE OF
AIR AND RADIATION

Captain L. R. Vasquez
Commanding Officer
Naval Base Ventura County
311 Main Road, Suite 1
Point Mugu, California 93042-5033

Dear Captain Vasquez;

This is in response to your request on August 29, 2012 for a National Security Exemption (NSE) from the Reciprocating Internal Combustion Engine (RICE) National Environmental Standards for Hazardous Air Pollutants (NESHAP) requirements at 40 CFR Part 63, Subpart ZZZZ and the New Source Performance Standards (NSPS) for Compression Ignition (CI) Internal Combustion Engines (ICE) at 40 CFR Part 60, Subpart IIII for the stationary RICE included in the attached spreadsheet and located at Naval Base Ventura County (NBVC), San Nicolas Island (SNI). Based on review of your inquiry and supporting documentation, the Agency is approving this request pursuant to 40 CFR 60.4200(d), 63.6585(e) and 1068.225 for those existing non-emergency stationary CI engines subject to Subpart ZZZZ greater than 300 horsepower and all of the stationary CI engines subject to the CI ICE subpart IIII regulations. The details of this approval are explained below.

The provisions in 40 CFR Part 1068 Subpart C give EPA the authority to allow for National Security Exemptions under certain conditions where a request demonstrates such a need.

NBVC SNI is located 60 nautical miles off the coast of Ventura County, California and serves as a fueling depot and outlying landing field for Navy aircraft. NBVC also provides communications, radar and tracking support for long range and over-the-horizon weapons systems for the Navy. As part of its mission, NBVC is required to store large reserves of JP5 fuel for NBVC base operations and to support Navy combat operations. The stationary RICE that provide power to NBVC were intended to use the same fuel as the Navy aircraft the facility supports to ensure that NBVC could operate in wartime conditions when civilian fuel refineries may be subject to enemy attack or converted to produce JP5 for military use.

Due to its remote location, NBVC is exempt from New Source Review (NSR) under the Ventura County Air Pollution District Rule 26.3. The exemption applies to all sources located on San Nicholas Island and Anacapa Island. However, this exemption does not relieve NBVC of complying with the CI ICE NSPS at Subpart IIII or the RICE NESHAP at Subpart ZZZZ.

To comply with the CI ICE NSPS Subpart IIII and RICE NESHAP Subpart ZZZZ, NBVC would need to:

- Convert from JP5 diesel to Ultra Low Sulfur Diesel (ULSD) fuel for all of its RICE subject to Subpart IIII and existing non-emergency RICE greater than 300 HP subject to Subpart ZZZZ,
- Install emission controls () for existing non-emergency RICE greater than 300 HP subject to Subpart ZZZZ and

- Purchase certified RICE for any newly installed engines required to comply with the NSPS Subpart IIII provisions.

These changes would degrade NBVC combat readiness because:

1. Adding ULSD on NBVC SNI, would require new undersea and underground pipelines and storage tanks to be built. The cost of this project would be approximately \$2.8 million dollars and would require the NBVC SNI facility to be closed until this infrastructure is developed (earliest funding available is 2019 and no guarantee of funding due to budget constraints). Closure of the NBVC SNI facility would directly impact Navy operations in the Pacific and jeopardize national security.
2. After conversion to ULSD, NBVC RICE would be vulnerable to fuel supply shortages since civilian fuel facilities and supplies can be targeted by enemy attacks or converted to JP5 for military use during wartime. NBVC facilities were intended to use the same fuel as the Navy assets it supplies and supports.

Based on review of your request, subsequent emails, Title V permit and Ventura County Air Pollution Control District Rule exemptions, the Agency has concluded that compliance with the RICE NESHAP and CI ICE NSPS provisions discussed above will adversely impact NBVC's ability to perform its mission and consequently, adversely impact National Security. Therefore, the Agency is granting NBVC a NSE for each of the stationary CI RICE that are subject to Subpart IIII and those existing non-emergency CI RICE greater than 300 horsepower that are subject to Subpart ZZZZ located on their facility and included in their Title V permit. The granting of this NSE is contingent upon performance of the requirements specified under 40 CFR Part 1068.225(d).

Please contact Sara Ayres at 202-564-5391 in EPA's Office of Compliance should you have questions regarding this matter.

Sincerely,



Justin G. Greuel, Director
Diesel Engine Compliance Center
Office of Transportation and Air Quality

Attachment

cc: Mr. Kerby Zozula
Ventura County APCD
669 County Square Drive
Ventura, California 93003

Naval Base Ventura County, San Nicolas Island Diesel Engine Regulatory Compliance Requirements

Bldg	Engine Brake Horsepower/Manufacturer	Status	Subject to 40 CFR 63, Subpart ZZZZ	Subject to 40 CFR 63, Subpart IIII	Subject to 40 CFR 80.510(b) 15 ppm Max Fuel Sulfur Content
			X		X
Powerhouse	1,440 BHP Caterpillar	Primary Power Generator	X		X
Powerhouse	2,205 Cummins	Primary Power Generator	X		X
Powerhouse	2,205 Cummins	Primary Power Generator	X		X
Powerhouse	1,440 BHP EMD-GM	Primary Power Generator		X	X
Powerhouse	1490 BHP Cummins	Primary Power Generator	X		X
Pier	325 PHP International/Perkins	Emergency Generator		X	X
Powerhouse	250 BHP Cummins	Emergency Generator	X		
SLAM	435 BHP Cummins	Emergency Generator		X	X
58	99 BHP Cummins (Medical)	Emergency Generator		X	X
58	56 BHP Cummins (Telephone System)	Emergency Generator	X		
111	364 BHP Cummins	Emergency Generator	X		
112	134 BHP Cummins	Emergency Generator	X		
113	134 BHP Cummins	Emergency Generator	X		
127	650 BHP Detroit	Emergency Generator		X	X
144	130 BHP CAT	Emergency Generator	X		
145	175 BHP Cummins	Emergency Generator		X	X
151	158 BHP Caterpillar	Emergency Generator	X		
166	175 BHP Cummins	Emergency Generator	X		
166	175 BHP Cummins	Emergency Generator	X		
170	175 BHP Cummins	Emergency Generator	X		
172	207 BHP Cummins	Emergency Generator	X		
178	235 BHP CAT	Emergency Generator	X		
182	1220 BHP Detroit	Emergency Generator		X	X
197	197 BHP John Deere (Runway Lighting)	Emergency Generator		X	X
211	97 BHP John Deere	Emergency Generator	X		
255	99 BHP Cummins	Emergency Generator	X		
299	145 BHP Duetz (Fire Pump)	Emergency Generator		X	X
324	113 BHP John Deere	Emergency Generator		X	X
327	113 BHP John Deere	Emergency Generator			



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6

1445 ROSS AVENUE, SUITE 1200
DALLAS, TEXAS 75202-2733

May 5, 2009

Mr. Dawson Lasseter
Chief Engineer
Air Quality Division
Oklahoma Department of Environmental Quality
P.O. Box 1677
Oklahoma City, Oklahoma 73101-1677

RE: Questions Regarding Applicability and Streamlined Compliance of Certain Engines under 40 CFR Part 63 National Emission Standards for Hazardous Air Pollutants (NESHAP), Subpart ZZZZ for Reciprocating Internal Combustion Engines (RICE) and 40 CFR Part 60 New Source Performance Standards (NSPS), Subpart JJJJ for Stationary Spark Ignition (SI) Internal Combustion Engines (ICE).

Dear Mr. Lasseter:

This letter is in response to your letter dated April 24, 2008, concerning applicability and compliance questions specific to stationary SI ICE that fall into the following categories:

1. Engines with a maximum engine power equal to or greater than 75 KW (100 HP) (except gasoline and rich burn engines that use LPG), were manufactured between 06/12/2006 and 07/01/2007, and for which the owner or operator commenced construction after 06/12/2006.
2. Lean Burn Engines with a maximum engine power equal to or greater than 500 HP, but less than 1,350 HP, manufactured between 06/12/2006 and 01/01/2008, and for which the owner or operator commenced construction after 06/12/2006.

The United States Environmental Protection Agency (EPA) has reviewed your letter and will clarify, within this letter, those applicability issues associated with streamlined compliance requirements pertaining to the various categories of engines in relation to the RICE NESHAP and the corresponding SI ICE NSPS.

In general, some confusion may exist regarding those engines that have no requirements to meet under the SI ICE NSPS, and yet are specifically referenced in the RICE NESHAP as only having to meet the NSPS requirements to comply with the NESHAP {see 40 CFR §63.6590(c)}. Due to the different engine categories being addressed by both rules, care must be exercised in interpreting requirements under each rule, as exemplified in your letter. In simplified terms, if an engine *specifically identified* in 40 CFR §63.6590(c) is not subject to any requirements in the SI NSPS {e.g., see 40 CFR §60.4230(a)}, or is exempted from certain requirements under the SI ICE NSPS {e.g., see 40 CFR §60.4230(e)}, then no further action is

necessary for the specified engine under the RICE NESHAP. However, all other engines must meet additional requirements if so delineated in the RICE NESHAP.

Specifically, engine size and whether or not the engine is located at a major or area source are the key factors in determining whether the owner/operator has any additional requirements to meet under the RICE MACT when the engine is not subject to NSPS. In summary, only those new and reconstructed engines smaller than 500 HP at major sources (except new and reconstructed 4SLB engines between 250 and 500 HP) and engines of all sizes that are located at area sources are delineated in 40 CFR §63.6590(c), whereby no further RICE NESHAP requirements apply. However, all other engines (i.e., new engines greater than 500 HP located at major sources and 4SLB engines between 250 and 500 HP) must meet requirements specified in both the RICE NESHAP and the SI ICE NSPS. In streamlining compliance requirements, the RICE NESHAP also specifies that SI lean burn engines equal to or greater than 250 HP located at major sources that comply with the RICE NESHAP only have to comply with the NOx and VOC standard in the SI ICE NSPS (Table 1 of the final NESHAP rule, footnote b). We have enclosed a copy of excerpts from the preamble discussion for detailed examples and future reference (January 18, 2008, Federal Register, Volume 73, No. 13, pages 3575-3576, and 3585-3586).

In your letter you correctly identify certain engines that do not meet the criteria of 40 CFR §60.4230(a) and consequently have no applicable requirements to meet under the NSPS. Your letter further proposes that since certain engines do not meet the requirement of 40 CFR §60.4230(a), they have no applicable requirements under NSPS and therefore have no requirements under the RICE NESHAP. Hopefully, we have clarified that consideration must be given to the engine size and whether or not the engine is located at a major or area source prior to making such a determination.

This response has been coordinated with EPA's Office of Air Quality Planning and Standards (OAQPS) and EPA's Office of Enforcement and Compliance Assistance (OECA). If you have any questions or concerns about this determination, please contact Ms. Cynthia Kaleri of my staff at 214-665-6772.

Sincerely,



David F. Garcia
Associate Director
Air/Toxics & Inspection
Coordination Branch

Enclosure

cc: Jaime Pagan (OAQPS)
John DuPree (OECA)

Enclosure



Federal Register

Friday,
January 18, 2008

Part III

Environmental Protection Agency

40 CFR Parts 60, 63, 85 et al.

**Standards of Performance for Stationary
Spark Ignition Internal Combustion
Engines and National Emission Standards
for Hazardous Air Pollutants for
Reciprocating Internal Combustion
Engines; Final Rule**

g/HP-hr, owners and operators may meet NO_x, CO, and VOC emission standards of 250, 540, and 86 ppmvd at 15 percent O₂, respectively.

Stationary non-emergency SI natural gas and lean burn LPG engines greater than or equal to 500 HP manufactured prior to July 1, 2007, (or January 1, 2008, for lean burn natural gas engines greater than or equal to 500 HP and less than 1,350 HP) that are modified after June 12, 2006, are required to meet a NO_x emission standard of 3.0 g/HP-hr, a CO standard of 4.0 g/HP-hr, and a VOC standard of 1.0 g/HP-hr. Again, instead of meeting emission standards in terms of g/HP-hr, owners and operators may meet NO_x, CO, and VOC emission standards of 250, 540, and 86 ppmvd at 15 percent O₂, respectively.

Stationary SI landfill and digester gas engines less than 500 HP manufactured prior to July 1, 2008, that are modified or reconstructed after June 12, 2006, are required to meet a NO_x emission standard of 3.0 g/HP-hr, a CO standard of 5.0 g/HP-hr, and a VOC standard of 1.0 g/HP-hr.

Stationary SI landfill and digester gas engines greater than or equal to 500 HP manufactured prior to July 1, 2007, that are modified after June 12, 2006, are required to meet a NO_x emission standard of 3.0 g/HP-hr, a CO standard of 5.0 g/HP-hr, and a VOC standard of 1.0 g/HP-hr. For all modified and reconstructed SI landfill and digester gas engines, instead of meeting emission standards in terms of g/HP-hr, owners and operators may meet NO_x, CO, and VOC emission standards of 220, 610, and 80 ppmvd at 15 percent O₂.

Stationary SI emergency engines greater than or equal to 130 HP manufactured prior to January 1, 2009, that are modified or reconstructed after June 12, 2006, are required to meet a NO_x emission standard of 3.0 g/HP-hr, a CO standard of 4.0 g/HP-hr, and a VOC standard of 1.0 g/HP-hr. Instead of meeting emission standards in terms of g/HP-hr, owners and operators may meet NO_x, CO, and VOC emission standards of 250, 540, and 86 ppmvd at 15 percent O₂. Stationary SI emergency engines between 25 HP and 130 HP manufactured prior to January 1, 2009, that are modified or reconstructed after June 12, 2006, are required to meet a HC+NO_x emission standard of 10.0 g/HP-hr and a CO standard of 387 g/HP-hr.

2. NESHAP

Similar concepts as those discussed above apply to engines subject to 40 CFR part 63 regulations; however, the concept of modification is not included in 40 CFR part 63. The final standards

apply to stationary engines subject to the NESHAP that commence reconstruction on or after June 12, 2006, and the reconstruction criteria are provided in 40 CFR 63.2.

E. What are the requirements for demonstrating compliance?

The following sections describe the requirements for demonstrating compliance under the stationary SI NSPS and NESHAP.

1. SI NSPS

Owners and operators subject to the emission standards specified in the final rule who use stationary SI engines with a maximum engine power of less than or equal to 19 KW (25 HP) or who use stationary SI engines with a maximum engine power greater than 19 KW (25 HP) and use gasoline or are rich burn engines greater than 19 KW (25 HP) using LPG must demonstrate compliance by using an engine certified to the emission standards specified in 40 CFR part 90 or 1048, as applicable.

Owners and operators subject to the final rule who use stationary SI engines with a maximum engine power greater than 19 KW (25 HP) that use fuels other than gasoline and that are not rich burn engines greater than 19 KW (25 HP) that use LPG, must demonstrate compliance by either using an engine certified to the emission standards specified in Tables 3 or 4 of this preamble, as applicable, or by conducting an initial performance test (and potentially subsequent performance testing depending on the engine size) to demonstrate compliance with the emission standards.

Owners and operators of all stationary engines subject to the requirements of the SI NSPS must keep records of maintenance conducted on the engine. Owners and operators of stationary non-certified engines, which include certified engines operating in a non-certified manner, must keep a maintenance plan. Owners and operators of certified engines may demonstrate compliance by operating and maintaining their stationary engine and aftertreatment control device (if any) according to the manufacturer's emission-related written instructions and do not have to conduct any performance testing.

Owners and operators of certified engines who do not follow the manufacturer's emission-related operation and maintenance procedures will be considered non-certified engines and will be subject to performance testing. Certified engines operating in a non-certified manner that are less than 100 HP do not have to conduct performance testing to demonstrate

compliance. Certified engines operating in a non-certified manner that are greater than or equal to 100 HP and less than or equal to 500 HP, however, must conduct an initial performance test within the first year of engine operation to demonstrate compliance with the emission standards. Finally, certified engines operating in a non-certified manner that are greater than 500 HP must conduct a performance test within the first year of operation and every 8,760 hours of operation or 3 years thereafter to demonstrate compliance. Owners and operators of engines that have never been certified that are greater than 25 HP and less than or equal to 500 HP must conduct an initial performance test to demonstrate compliance with the emission standards. As mentioned, all engines are subject to recordkeeping of maintenance, which includes these engines. Owners and operators of engines that have never been certified that are greater than 500 HP must conduct an initial performance test to demonstrate compliance and must test every 8,760 hours of operation or 3 years after that.

Manufacturers of stationary SI engines required to certify their engines must demonstrate compliance by certifying that their stationary SI engines meet the emission standards, as specified in 40 CFR part 60, subpart JJJJ, as applicable, using the certification procedures in subpart B of 40 CFR part 90 or subpart C of 40 CFR part 1048, as applicable, and must test their engines as specified in those parts. Manufacturers who conduct voluntary certification must follow the same test procedures that apply to large SI nonroad engines under 40 CFR part 1048, but must use the D-1 cycle in International Organization for Standardization (ISO) 8178-4: 1996(E) for stationary engines or the test cycle requirements specified in Table 5 to 40 CFR 1048.505, except that Table 5 to 40 CFR 1048.505 applies to high load engines only.

Manufacturers who opt to voluntarily certify their stationary SI engines to the emission standards specified in this subpart must certify their engines using fuel that meets the definition of pipeline-quality natural gas, which according to the definition must be composed of at least 70 percent methane by volume or have a gross calorific value between 950 and 1,100 British thermal units per standard cubic foot.

If the manufacturer chooses to certify its stationary SI engines to another fuel, the manufacturer must specify the properties of that fuel and what adjustments the owner or operator must make to the engine during installation in the field in order to meet the

emission standards. The manufacturer must also perform certification testing on the engine on that fuel, as it would if it was certifying to pipeline-quality natural gas, in order to assure compliance with the emission standards. Manufacturers who conduct voluntary certification of stationary SI ICE must also provide instructions to the owner and operator for configuring the stationary engine to meet the emission standards on fuels that meet the pipeline-quality natural gas specifications and fuels that do not meet the pipeline-quality natural gas specifications. The manufacturer must provide information to the owner and operator of the certified stationary SI engine regarding the particular fuels to which the engine is certified, and instructions regarding configuring the engine in a manner most appropriate for reducing pollutant emissions for engines operating on such fuels.

EPA allows owners and operators of natural gas engines to use propane as back up fuel for emergency purposes for no more than 100 hours per year. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, the owners and operators are required to conduct a performance test to demonstrate compliance with the emission standards.

Owners and operators that operate engines that have been certified by the engine manufacturer are not required to perform any performance testing unless the engine is operated outside of the fuel properties or emission-related operation and maintenance procedures specified by the manufacturer. If the owner or operator uses fuels that are outside of the fuel specifications or does not follow the emission-related adjustments or maintenance requirements specified by the manufacturer, the engine is no longer considered a certified engine and the owner or operator must test the engine to demonstrate compliance.

Regarding stationary rich burn engines operating with three-way catalysts or non-selective catalytic reduction, EPA expects that air-to-fuel ratio controllers will be used in conjunction with the control device. The AFR controller must be operated in an appropriate manner to ensure proper operation of the engine and control device in order to minimize emissions.

2. NESHAP

For most engines (i.e. except those discussed in the following paragraph), owners and operators of new and reconstructed stationary SI RICE equal to or less than 500 HP located at a major

source of HAP emissions and stationary RICE located at an area source, will be able to demonstrate compliance with the NESHAP if they meet the requirements of the final SI NSPS (40 CFR part 60, subpart JJJJ). Similarly, owners and operators of new and reconstructed stationary CI engines with a site rating of equal to or less than 500 HP located at a major source of HAP emissions, will be able to demonstrate compliance with the NESHAP if they meet the requirements of the final CI NSPS (40 CFR part 60, subpart III). If the owners and operators are in compliance with 40 CFR part 60, subpart JJJJ or III, as applicable, they will also be in compliance with 40 CFR part 63, subpart ZZZZ, for engines equal to or less than 500 HP located at a major source. The compliance requirements that apply under 40 CFR part 60, subpart JJJJ, were discussed in the previous section. For the majority of stationary CI engines, all that is required under 40 CFR part 60, subpart III, is that the owner or operator purchase a certified stationary CI engine and operate it properly and according to the manufacturer's specifications.

Owners and operators of new or reconstructed 4SLB stationary RICE greater than or equal to 250 HP and less than or equal to 500 brake HP located at major source are required to follow the compliance requirements specified in 40 CFR part 63, subpart ZZZZ, consistent with the compliance requirements for 4SLB stationary RICE greater than 500 HP located at a major source. Those compliance requirements include demonstrating compliance by conducting an initial performance test. These engines must also conduct a subsequent performance test semiannually if they are complying with the requirement to reduce CO emissions and not using a continuous emissions monitoring system, and if they are complying with the requirement to limit the concentration of formaldehyde in the stationary engine exhaust. Under the NESHAP, these engines must either reduce CO emissions or limit the concentration of formaldehyde. In addition, these engines would be required to meet the requirements in the final SI NSPS. However, these engines do not have to comply with the CO emission standards of the SI NSPS if in compliance with the NESHAP.

F. What are the reporting and recordkeeping requirements?

The following sections describe the reporting and recordkeeping requirements that are required under the SI NSPS and the NESHAP.

1. SI NSPS

Owners and operators of all engines (certified and non-certified) are required to maintain records of proper maintenance and non-certified engines must keep a maintenance plan. An initial notification is required for owners and operators of engines greater than 500 HP that are non-certified. Also, owners and operators who conduct performance testing are required to report the test results within 60 days of each performance test.

Owners and operators of emergency engines are required to keep records of their hours of operation. For emergency engines greater than or equal to 130 HP, this requirement starts for engines manufactured after the point when more stringent emission standards take effect for non-emergency engines, either in July 2010 or January 2011, depending on the power rating of the engine. For emergency engines below 130 HP, the requirement to keep records of the hours of operation begins for all engines manufactured after January 1, 2009. Owners and operators of emergency engines must install a non-resettable hour meter on their engines to record the necessary information. Emergency stationary engines may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by the 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. Owners and operators can petition the Administrator for additional hours, beyond the allowed 100 hours per year, if such additional hours should prove to be necessary for maintenance and testing reasons. A petition is not required if the hours beyond 100 hours per year for maintenance and testing purposes are mandated by regulation such as State or local requirements. There is no time limit on the use of emergency stationary engines in emergency situations, however, the owner or operator is required to record the length of operation and the reason the engine was in operation during that time. Records must be maintained documenting why the engine was operating to ensure the 100 hours per year limit for maintenance and testing operation is not exceeded. In addition, owners and operators are allowed to operate their emergency engines for non-emergency purposes for 50 hours per year, but those 50 hours are counted towards the total 100 hours provided for operation other than for true emergencies and owners and operators

engine but operate it according to their own procedures. In that case, appropriate emissions testing and monitoring should be all that is required.

One commenter's objection to the proposed requirement to follow the manufacturer's procedures was based on the assertion that most operators of these engines have developed proprietary procedures for their engines, varying from region to region and across the broad spectrum of applications of these engines; that reviewing procedures would subject engine manufacturers to an administrative burden. This requirement is unnecessary, the commenter noted, because owners/operators bear responsibility for compliance, and are already required to demonstrate such compliance through extensive testing.

Two commenters requested that EPA allow owners/operators to define O&M requirements for gas-fired engines, rather than the manufacturer O&M. These two commenters stated that owners/operators have developed and refined O&M practices to address the specific challenges, rigor, and accessibility of their application. However, if EPA chooses to mandate manufacturer O&M, then the commenters requested that the manufacturers be required to reasonably review and approve alternatives, and the cost of the program be borne by the manufacturer. One commenter stated that allowing owners/operators to follow their own O&M procedures is consistent with the requirements of the subpart A General Provisions. The commenter stated that the EPA should clearly indicate that owners/operators of gas-fired engines can choose compliance monitoring based on owners/operators defined O&M and periodic tests even if a certified engine is available.

Response: EPA agrees with some of the comments received on the issue of operating the engine according to manufacturer O&M procedures. EPA agrees that any requirement to operate and maintain engines according to manufacturer instructions should be limited to emission-related operation and maintenance. In addition, in the final rule, EPA has not included the requirement for owners/operators of non-certified engines to operate and maintain their engines according to the manufacturer's written instructions or procedures developed by the owners/operators that are approved by the engine manufacturer. Instead, owners/operators will be required to operate and maintain their engines in a proper manner, consistent with their own maintenance plan. Owners and

operators of non-certified engines will be required to keep records of the maintenance performed on the engine. In addition, EPA is requiring performance testing of non-certified engines to demonstrate compliance with the emission standards, consistent with the proposal.

Based on information received during the final rulemaking and in public comments, EPA does not believe it is appropriate to require manufacturer O&M procedures for all owners/operators of certified engines without allowing alternative procedures and is therefore providing an alternative option to owners/operators. However, if an owner/operator has a certified engine that it wishes to operate according to its own well-established procedures based on its own experience with operating that engine (or engines), that particular engine that was originally certified will no longer be considered certified and the engine must be tested. EPA will consider that engine to be operating in a non-certified manner, and will require testing if the engine is greater than or equal to 100 HP. Engines below 100 HP operating in a non-certified manner will be exempt from performance testing, but are required to keep a maintenance plan and records. EPA wishes to encourage the certified route for smaller engines and expects that the majority of engines in this size group will be certified. Engines greater than or equal to 100 HP and less than or equal to 500 HP will be required to conduct a performance testing within 1 year of startup to demonstrate compliance with the emission standards. These engines will in addition be required to keep a maintenance plan and records of conducted maintenance. Engines greater than 500 HP will in addition to conducting a performance testing within 1 year of startup, also have to conduct subsequent performance testing every 8,760 hours or 3 years (whichever comes first) thereafter.

F. Streamlined Compliance Requirements

Comment: Commenters asserted that the proposed rule is complex partly due to having a combined rulemaking. One commenter stated that the proposed rule is too complex for most small oil and gas operators to be able to fully understand and evaluate. The commenter also believed that the proposed rule requires a person with significant knowledge and experience with CAA rules and requirements to understand it. One commenter stated that the proposed rulemaking added much complexity to the 2004 rulemaking for stationary RICE greater

than 500 HP located at major sources, as it combined the adoption of a new NSPS, the expansion of the 2004 requirements to smaller sources, and the addition of the section 112(k) of the CAA requirements covering HAP emissions at area sources. The commenter believed that this complex interweaving of the area source requirements with the major source requirements make the rule very difficult to follow relative to area sources. This commenter recommended that EPA separate the major source from the area source requirements and suggested that one way of doing this would be to establish two separate subparts in 40 CFR part 63 for stationary RICE; one to cover area sources and another to cover major sources. According to the commenter, this approach would simplify and clarify the rule for small businesses and the various State and local agencies. In addition, the commenter recommended that EPA avoid similar interweaving of requirements, and strive to create simpler, easier to understand area source rulemakings under section 112(k) of the CAA in the future.

Two commenters were concerned that there are conflicting or duplicate requirements between the proposed NSPS, existing nonroad regulations, the RICE NESHAP, and the currently proposed NESHAP. Specifically, the existing RICE NESHAP requirements for formaldehyde and the currently proposed emission limit for non-methane hydrocarbons (NMHC) to control HAP are duplicative and may lead to conflicting or impractical reduction requirements for some engines, or may be technically infeasible, the commenters said. Other commenters noted that stationary natural gas engines greater than 500 HP located at a major source are required to comply with 40 CFR part 63, subpart ZZZZ, and the NSPS NMHC limits. According to one commenter, it also creates confusion, since it may not be technically feasible to meet the various standards required in the NSPS and the NESHAP simultaneously. Three commenters recommended that all engines greater than 500 HP and all 4SLB engines greater than 250 HP located at major sources be exempt from meeting the NMHC NSPS standards. The emissions controls needed to meet the NESHAP standards applicable to those engines are sufficient to reduce HAP and other HC emissions. Elimination of the NMHC standard for that group of engines in the NSPS will simplify the rules, eliminate confusing, redundant, and possibly conflicting

requirements, and will relieve owners/operators from unnecessary testing and monitoring requirements, according to commenters.

Response: EPA believes that the approach taken to have a combined rulemaking is more effective than having separate rules for the same types of facilities and will help reduce burden and EPA also believes that having a combined rulemaking, as well as regulations that refer to one another and are promulgated concurrently, actually simplifies compliance for affected sources. Commenters are reminded that Congress requires EPA to promulgate standards under both sections 111 and 112 of the CAA, which requires that owners and operators of sources covered under both sections are required to meet standards under both sections. However, EPA has made a major simplification in the final rule and has included a provision in section 63.6590 of the final NESHAP that owners/operators of new and reconstructed engines less than 500 HP located at major sources (except new and reconstructed 4SLB engines between 250 and 500 HP) and engines located at area sources will be in compliance with the NESHAP if they are in compliance with the NSPS. This approach is substantively the same as the approach in the notice of proposed rulemaking, at least in terms of emission requirements, but EPA believes this approach more clearly streamlines and simplifies compliance and greatly reduces the complexity that may be associated with demonstrating compliance for owners/operators and makes the rule easy to understand for all parties affected, including small business owners and State and local agencies. Additionally, for the most part the only thing required from small engine owners/operators is that they purchase a certified engine, which EPA believes will be available for most, if not all, of the smaller engines, and operate the engine according to the manufacturer's specifications. EPA further notes that even for non-certified engines, requirements are reduced, especially for smaller engines. However, EPA appreciates the commenters' concerns and has made changes to the proposed rule that will further help affected parties understand and evaluate the requirements, as discussed above.

EPA understands the commenters' concerns and agrees that there may be some duplication in the proposed rule and has taken steps in the final rule to simplify the compliance process for owners/operators by removing potential duplicative and/or conflicting requirements. Specifically, EPA realizes that certain engines will be subject to

two sets of emission standards and regulations. New engines over 500 HP located at major sources would be subject to the NESHAP as well as the NSPS. Stationary 4SLB engines between 250 and 500 HP located at major sources would also be subject to the NESHAP and NSPS. EPA does not agree with the commenters that recommend that EPA exempt all engines greater than 500 HP and 4SLB above 250 HP at major sources from meeting the NSPS NMHC (now VOC) standard. These stationary engines will be required to comply with both regulations. One regulation addresses HAP emissions and the other regulation addresses criteria pollutants. The commenters provide no data or analysis indicating that it would be infeasible to meet both regulations, and EPA has shown that the standards under both regulations are feasible.

For the current 40 CFR part 63, subpart ZZZZ, EPA did not find that there is a good relationship between CO emission concentration or CO emission reductions and HAP emission concentrations or HAP emission reductions from rich burn engines equipped with NSCR. Therefore, in that rule, EPA could not use CO as a surrogate for HAP for rich burn engines. For that reason, EPA cannot exempt stationary rich burn engines from either regulation, and rich burn engines greater than 500 HP located at major sources have to comply with the formaldehyde emission standard in the RICE NESHAP (percent reduction or concentration limit) and the NO_x, CO, and VOC emission standards in the SI NSPS.

However, for SI lean burn engines, under the existing RICE NESHAP, EPA established a good relationship between CO emission reductions and HAP emission reductions from 4SLB engines with oxidation catalyst systems. Therefore, EPA concluded that CO emission reductions could serve as a surrogate for HAP emission reductions for SI lean burn engines with oxidation catalysts. Since the existing RICE NESHAP contains emission standards for CO and formaldehyde that are based on the application of oxidation catalysts, it makes sense to exempt these engines from the CO emission standard under the SI NSPS, which would be less stringent than the NESHAP CO standard. For this group of engines, and for 4SLB engines between 250 and 500 HP located at major sources, EPA believes it is more appropriate and reasonable to exempt the engines from the CO standard in the NSPS, since that is the same pollutant that they are testing for in the NESHAP, rather than the VOC standard. Based on comments received and other information analyzed

post-proposal, EPA believes that CO is a more appropriate surrogate for formaldehyde than VOC for SI lean burn engines and EPA does not believe VOC should be used as a surrogate for HAP. EPA recognizes that it proposed exempting 4SLB engines between 250 and 500 HP at major sources from the NSPS NMHC standard, but based on new information comments submitted by EUROMOT (EPA-HQ-OAR-2005-0030-0039), EPA now believes that CO is more appropriate and consistent with the NESHAP for 4SLB engines. Therefore, SI lean burn engines greater than or equal to 250 HP located at major sources that comply with the RICE NESHAP only have to comply with the NO_x and VOC standard in the SI NSPS. EPA has included this provision in Table 1 to the final NSPS.

VI. Summary of Environmental, Energy and Economic Impacts

A. What are the air quality impacts?

The final rule is estimated to reduce NO_x emissions from stationary SI ICE by an estimated 77,000 tons per year (tpy), CO emissions by about 45,000 tpy, VOC emissions by about 2,000 tpy, and HAP emissions by approximately 800 tpy in the year 2015. Of the 800 tpy of HAP reduced in 2015, it is expected that about 86 tpy will be the result of requirements under the RICE NESHAP. The final rule is estimated to reduce NO_x emissions by 84,000 tpy, CO emissions by 49,000 tpy, VOC emissions by 2,400 tpy, and HAP emissions by 900 tpy in the year 2020. Of the 900 tpy of HAP reduced in 2020, it is expected that about 100 tpy will be the result of requirements under the RICE NESHAP. The final rule is estimated to reduce NO_x emissions by 99,000 tpy, CO emissions by 56,000 tpy, VOC emissions by 3,000 tpy, and HAP emissions by 1,000 tpy in the year 2030. Of the 1,000 tpy of HAP reduced in 2030, it is expected that about 120 tpy will be the result of requirements under the RICE NESHAP.

EPA estimates that a total of about 150,000 stationary SI engines will be affected by the final rule by the year 2015. A total of 433,000 stationary SI engines will be affected by the year 2030. An estimated 623,000 stationary CI engines will be affected by the final rule by the year 2015. However, stationary CI engines affected by the final rule would also be subject to the CI NSPS. Further information regarding the estimated reductions of the final rule can be found in the memorandum entitled "Cost Impacts and Emission Reductions Associated with Proposed NSPS for Stationary SI ICE and



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 7
901 NORTH 5TH STREET
KANSAS CITY, KANSAS 66101

APR 25 2011

Mr. Gregg Ammon
Environmental Manager
1111 S 103rd St.
Omaha, NE 68124

RE: Request for a Determination 40 C.F.R. 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines

Dear Mr. Ammon:

Thank you for your inquiry regarding the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Spark Ignition (SI) Reciprocating Internal Combustion Engines (RICE) as promulgated August 20, 2010. In your letter sent to the Environmental Protection Agency (EPA) Region 7, March 3, 2011, Northern Natural Gas is seeking clarification of 40 C.F.R. §63.6625 (h) which states,

(h) If you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, **after which time** (bold added) the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply.

Accordingly, Tables 1a, 2a, 2c, and 2d lists requirements for new, reconstructed, and existing RICE at major and area sources of HAP. In the tables, each requirement for each engine type is specified to apply outside of periods of startup, "You must meet the following requirement, except during periods of startup..." Each table then specifies that "During periods of startup you must..."

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** (bold added).¹

Engine startup is defined in the definitions section of the RICE NESHAP, 40 C.F.R. §63.6670.

Engine startup means the time from initial start until applied load and engine and associated equipment reaches steady state or normal operation. For stationary engine with catalytic controls, engine startup means the time from initial start until applied load and engine and associated equipment, including the catalyst, reaches steady state or normal operation.

¹Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices. Area sources can work with their permitting authority to establish alternative work practices.



In consultation with EPA Office of Air Quality Planning and Standards (OAQPS), Office of General Counsel (OGC), and Office of Compliance (OC), EPA reads the 30 minute limit for engine startup as referenced in Tables 1a, 2a, 2c, 2d, and 40 C.F.R. §63.6625 (h) to not exclude startup operations beyond the 30 minute limit. Instead, the 30 minutes of startup is a period when the numerical emission limitations under normal operation do not apply. For example, an existing non-emergency, non-black start 2 stroke lean burn (SLB) stationary RICE greater than or equal to 100 horsepower (HP) but less than 500 HP at a major source for HAPs, must limit concentration of carbon monoxide (CO) in the stationary RICE exhaust to 225 parts per million, volumetric dry (ppmvd) or less at 15 percent oxygen. During startup, the 2SLB engine does not have to limit CO exhaust to 225 ppmvd. After 30 minutes of engine startup, the standard applies and compliance is determined over the course of 3-hour block averages of all recorded readings. See 40 C.F.R. §63.6625.

In some cases, temperature readings at the inlet of the catalyst are used to ensure a percent of emissions reduced across the catalyst is being met. The readings are averaged over 4-hours on an hourly rolling basis. See Table 6 in the NESHAP for RICE. The 30 minutes of engine startup are also excluded from any 4-hour rolling averaging period of temperature readings to determine compliance.

EPA believes this 3-hour or 4-hour averaging period is suitable to determine compliance for each engine standard since some conditions may arise where an engine cannot instantaneously meet an emission limit, such as immediately following 30 minutes of startup or during every second of operation thereafter. See *Response to Public Comments on Proposed National Emission Standards for Hazardous Air Pollutants for Existing Stationary Reciprocating Internal Combustion Engines Located at Area Sources of Hazardous Air Pollutant Emissions or Have a Site Rating Less Than or Equal to 500 Brake HP Located at Major Sources of Hazardous Air Pollutant Emissions-Memorandum* dated August 10, 2010, Response to Comment 3.4,


EPA is not finalizing numerical emission standards in the final rule for periods of startup. For the emission standards that are applicable during other operations, EPA has clarified that the standards are based on the average of three 1-hour runs. This provides an adequate averaging period for compliance demonstrations during periods other than startup.


As you point out, there may be instances where an engine cannot achieve certain parameters (i.e. inlet temperature) within 30 minutes of starting up. You suggest that the engine would need to shut down and ask whether there are any restrictions in the rule for initiating another startup subsequently. As discussed above, the regulations do not require that the engine shut off if it does not complete startup within 30 minutes, only that after 30 minutes any further activity would be counted as part of normal operation. Regarding multiple startups, in general, startup times should be considered as separate occurrences and are allowed 30 minutes per event. Startups that occur consecutively with short durations between could be considered one startup event since the startups are part of a single occasion where the engine is working up to steady state or normal operations.

Keep in mind there are general duty provisions in the Clean Air Act, 40 C.F.R. Part 63, and RICE NESHAP to operate "...in a manner consistent with safety and good air pollution control practices for minimizing emissions," 40 C.F.R. §63.6605.

If you have any additional questions, please contact Eric Sturm at 913.551.7377 or sturm.eric@epa.gov.

Sincerely,



 Mark A. Smith
Branch Chief
Air Permitting and Compliance
U. S. Environmental Protection Agency, R7

cc: Michael Horowitz, EPA Office of General Counsel
Melanie King, EPA Office of Air Quality Planning and Standards
John Dupree, EPA Office of Compliance



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

JAN 30 2012

REPLY TO THE ATTENTION OF:

Riverview LLC
Attn.: Mr. Brad Fehr and Mr. Brady Janzen
26406 470th Avenue
Morris, Minnesota 56267

Re: Alternative Testing for Spark Ignition Engines Subject to 40 C.F.R. Part 60, Subpart JJJJ

Dear Mr. Fehr and Mr. Janzen:

I am writing in response to your July 7, 2011 letter requesting an exemption from annual testing requirements contained in the Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (40 C.F.R. Part 60, Subpart JJJJ). Your letter proposes five alternatives to the regulatory requirement to conduct annual testing on uncertified spark ignition engines used to turn turbines for electric generation. You propose these options to reduce the burden and cost of annual testing while promoting digester implementation at these and other dairies.

Your request is submitted on behalf of three dairy operations located in Minnesota which are managed by Riverview LLC (Riverview Dairy, West River Dairy and District 45 Dairy). Each dairy has three engine sets which are each 1,057 horsepower spark ignition engines that turn 710 kilowatt generators. Digester gas is the only fuel burned in each of these engines and is provided on a continuous basis from the anaerobic digesters. You are permitting each dairy as a major source under Title V of the Clean Air Act, due to emissions of sulfur dioxide, and are currently working with the Minnesota Pollution Control Agency as it drafts each of these Title V permits.

Determination

The authority to approve alternative testing methods is delegated to the U.S. Environmental Protection Agency's Office of Air Quality Planning and Standards (OAQPS). Region 5 requested OAQPS make a determination regarding the approval/disapproval of two alternative testing scenarios (discussed below) which could be implemented by Riverview Dairy to demonstrate compliance with Subpart JJJJ. The attached memorandum is OAQPS's approval of the two alternative testing scenarios. The approval is granted so long as testing is conducted as outlined in this letter.

EPA has reviewed the information you submitted, the underlying regulations and other applicable requirements. Based on our review, we make the following determinations regarding your request.

1) We do not approve Option 1, as proposed. The regulation clearly requires on-going testing for uncertified engines burning landfill/digester gas. The regulation requires full testing at least once every 8,760 hours of operation or three-years, whichever is earlier.

We understand the engines for which you propose Option 1 run continuously on digester gas which means you are required to conduct annual stack testing for nitrogen oxides, carbon monoxide and volatile organic compounds. Your information states this testing cost \$20,000 per year for each dairy (\$60,000 per year for testing all three dairies). We also received the results of the initial testing conducted at Riverview Dairy which show actual emissions from all three engine sets at this dairy were less than half the applicable limits for each pollutant tested. Considering this information we do approve two modified options (Modified Option 1A and 1B) described in more detail below. This approval depends on Riverview LLC incorporating the selected modification and the additional requirements identified below into its permit to install and operate and Title V permit for each dairy.

2) We do not approve your proposed Options 2 through 4 because 40 C.F.R. Part 60, Subpart JJJJ does not allow for retroactive certification of engines, nor does it currently provide an option for engine "owners/operators" to certify engines.

3) We do not approve your proposed Option 5 because past experience has shown us that even identical engines (model, fuel, etc.) can have different emission characteristics.

Approved alternative testing options and additional requirements

Modified Option 1A: Annual testing for NO, NO_x, CO, and O₂ using a portable analyzer.

We approve use of a portable analyzer method (specifically Conditional Test Method-034; CTM-034) to determine NO, NO_x, CO and O₂ emissions from the engines. This option still requires annual testing at all three facilities and on all three engine sets. However, the portable analyzer method is less expensive than the reference methods required in 40 C.F.R. Part 60, Subpart JJJJ (Methods 1-4, 7E, 10, 18 and/or 25/25A). This alternative does not include a requirement to annually test for VOC. We will waive the requirement to conduct annual VOC testing so long as total VOC in the fuel does not exceed concentrations found during the initial performance test for VOC which demonstrates compliance and/or future performance tests which demonstrate compliance with applicable limits.

Modified Option 1B: Test each dairy's engine sets at least once every three years (rotate annual testing on a three-year cycle).

We approve a rotating, three-year stack test schedule applied to the three dairies identified above. This option may only be selected if emissions measured during the initial performance tests, required below, are less than half the applicable emission limits in Table 1 to 40 C.F.R. Part 60, Subpart JJJJ.

The three-year stack test schedule requires Riverview LLC to test at least one dairy (all three engine sets) each year and then rotate the testing to the next of the three dairies the following year, followed by the third dairy in year three. The testing requirement will then revert back to the first dairy tested and repeat the cycle. If at any time emissions are found to be more than half the applicable emission limit for any of the pollutants tested, Riverview will need to conduct a stack test on the remaining engine sets within the cycle immediately.

Additional requirements for Modified Option 1A or 1B.

Modified Option 1A and 1B are approved contingent on compliance with the requirements identified above as well as the additional requirements identified below.

- 1) Riverview LLC must conduct initial compliance testing in accordance with the requirements of 40 C.F.R. Part 60, Subpart JJJJ at all three dairies (one of which is already complete) on all three engine sets. This includes testing for NO_x, CO and VOC using EPA Reference Methods 7E, 10, and 18/25A. Initial testing must be completed within one year of the date of this letter.
- 2) Riverview LLC must conduct fuel sampling and analysis of the digester gas using ASTM Method D-5504 and Method 18 (Tedlar bag sampling) during the remaining two initial compliance tests. Analysis of the fuel sampled using ASTM Method D-5504 must include determining concentrations of hydrogen sulfide, total reduced sulfur, and/or total sulfur in the fuel. Analysis of the fuel sampled using Method 18 (Tedlar bag sampling) must include, at least, methane, ethane, and total hydrocarbon compounds in the fuel. Samples must be obtained from the fuel feed pipes between the digester and each of the engine sets. This information will be used to establish pollutant concentration ranges within which we anticipate future sampling will assure compliance with the applicable emission limits out the stacks.
- 3) Riverview LLC must begin conducting monthly fuel sampling and analysis of the digester gas using ASTM Method D-5504 and Method 18 (Tedlar bag sampling) at all three dairies identified above. Fuel sampling and analysis may be changed to quarterly sampling and analysis if the monthly data shows little variability in the fuel. Samples must be obtained from the fuel feed pipes between the digester and each of the engine sets.

Analysis of the fuel sampled must include determining concentrations of hydrogen sulfide, total reduced sulfur, and/or total sulfur as well as methane, ethane, and total

hydrocarbon compounds in the fuel. If fuel sampling and analysis show concentrations of any of the above identified chemicals which are below detection level, Riverview LLC can request a revision to the fuel sampling and analysis requirements identified in this letter.

4) Riverview LLC must perform regular maintenance on all of the nine engine sets in accordance with the manufacturer's recommendations. This includes, but is not limited to, oil changes, plug changes, cleaning, conditioning, and other recommendations. Any maintenance performed on the engine sets must be recorded and logged by maintenance activity and the engine set on which the maintenance was performed.

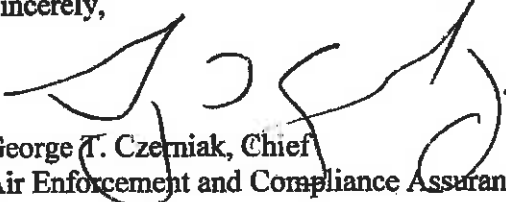
5) EPA may require a full testing program, in accordance with 40 C.F.R. Part 60, Subpart JJJJ, if emissions during any of the stack tests are found to be greater than 50 percent of the applicable limits. EPA may also require a full testing program, in accordance with 40 C.F.R. Part 60, Subpart JJJJ, if fuel sampling shows significant variability in the chemical makeup of the digester gas.

Summary

We look forward to working with Riverview LLC as it selects Modified Option 1A or Modified Option 1B as its alternative testing, and incorporates its selection into its permits to install and operate, and Title V permits. Either Modified Option 1A - annual testing using the less expensive portable analyzer method, or Modified Option 1B - rotating testing over a three-year cycle, is a feasible alternative. Either of these options, accompanied by periodic fuel sampling and analysis, is consistent with alternative testing approved by EPA to demonstrate compliance with other Federal regulations.

We believe Modified Option 1A and Modified Option 1B alleviate the burden and cost concerns raised by Riverview LLC in relation to annual testing requirements while promoting digester implementation, reducing green house gases, providing a renewable energy resource and ensuring on-going compliance with applicable regulations. If you have any questions regarding this letter, feel free to contact Mr. Kevin Vuilleumier at (312) 886-6188.

Sincerely,



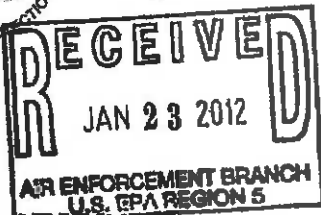
George T. Czerniak, Chief
Air Enforcement and Compliance Assurance Branch

cc: Don Smith, MPCA
Jeff Hedman, MPCA

ATTACHMENT A



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711



JAN 13 2012

OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

MEMORANDUM

SUBJECT: Region 5 Request for Determination on Alternative Testing Options for Riverview, West River, and District 45 Dairies

FROM: Conniesue B. Oldham, Group Leader *Connie Oldham*
Measurement Technology Group (E143-02)

TO: George T. Czerniak, Chief
Air Enforcement and Compliance Assurance Branch, Region 5

I am writing in response to your request of November 3, 2011, for a determination regarding alternative testing options for Riverview LLC managed dairies. You requested approval of alternative methods as part of two alternative approaches to allow Riverview to use in demonstrating compliance with the Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (40 CFR Part 60, Subpart JJJJ) at Riverview Dairy, West River Dairy, and District 45 Dairy. The alternative testing options include:

A) Annual testing at all engine/engine sets using a portable analyzer method Conditional Test Method 034, (CTM-034) for NO, NO_x, CO, O₂, and monthly/quarterly fuel sampling using ASTM Method D5504 -08, or

B) Testing using EPA Reference Methods 7E, 10, and 18/25A (annual testing at one of the three dairies each year, alternating among the three dairies each of the following years) and monthly/quarterly fuel sampling using ASTM Method D5504 -08.

These two alternative testing options resulted from coordination with Melanie King (the primary Office of Air Quality Planning and Standards (OAQPS) rule writer). Use of alternative test methods was coordinated through Raymond Merrill (an OAQPS source measurement specialist) on my staff.

In this memorandum, we address only the request for the use of alternative test methods. We recognize that the Regional Administrator or their designee has the delegated authority to waive testing under §60.8(b)(4) if the owner or operator of the affected source can demonstrate by other means that the affected source is in compliance. We also understand that our review and approval of testing alternatives will be an attachment to your regional determination (Attachment B to your alternative testing request) that responds to the original request from Riverview for exemption from annual testing requirements under Subpart JJJJ. The alternative methods approved herein are to be used in conjunction with the Region's additional requirements for Modified Option 1A and 1B in your letter responding to the alternative testing requested by Riverview.

We are approving the use of CTM-034 (<http://www.epa.gov/ttn/emc/ctm/ctm-034.pdf>) for the measurement of NO, NO_x, CO, and O₂ based on the finding that the emissions from these sources are nominally half the applicable emission standard. We also agree with the use of ASTM Method D5504-08 for sulfur species and gaseous total sulfur analysis in the digester off gas used as fuel for the internal combustion engines at these facilities. This approval is only applicable to the Riverview facilities cited above.

If you need further assistance, please contact Ray Merrill of my staff at (919) 541-5225 or merrill.raymond@epa.gov

cc. M. King, OAQPS, SPPD D243-01
K. Vuilleumier, EPA Region 5



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 7

11201 Renner Boulevard
Lenexa, Kansas 66219

NOV 14 2012

Vicki L. Cason, P.E.
Staff Engineer
Rolla Municipal Utilities
P.O. Box 767
Rolla, Missouri 65402-0767

RE: RICE NESHAP Stack Testing Request

Dear Ms. Cason:

On July 30, 2012, the Rolla Municipal Utilities (RMU) submitted a request to the United States Environmental Protection Agency (EPA) Region 7 to waive certain stack tests in accordance with 40 C.F.R. 63.7(h). EPA has determined that it is appropriate in this case to waive certain stack tests as outlined in the schedule below.

Background

Based on information provided in the July 30, 2012 letter, RMU operates 17 compression ignition reciprocating internal combustion engines (RICE). All 17 engines were manufactured by Caterpillar and are the same model (Model B3516). Each engine has a capacity of 2 megawatts. Each engine is equipped with the same model GT Exhaust Diesel Oxidation Catalyst Silencer (Model #201D1-3-2-5116-2-51363) control system.

RMU's 17 engines are subject to the RICE National Emission Standards for Hazardous Air Pollutants (NESHAP) (40 C.F.R. Part 63, Subpart ZZZZ) including the emission limitations at 40 C.F.R. 63.6603. RMU is required to either limit the concentration of carbon monoxide (CO) in the stationary RICE exhaust to 23 ppmvd at 15 percent O₂ or reduce CO emissions by 70 percent or more. In order to demonstrate compliance with either CO emission limitation, RMU is required to conduct stack testing in accordance with 40 C.F.R. 63.6612, 40 C.F.R. 63.6615, and 40 C.F.R. 63.6620. RMU is required to conduct an initial stack test on each engine and then conduct subsequent stack tests every 8,760 hours of operation or three years, whichever comes first.

On April 27, 2009, EPA released a memorandum related to the Clean Air Act National Stack Testing Guidance. Section 2 of this guidance document addresses stack test waivers. The guidance document states that units, although identical in terms of design and control devices, may have process operations that significantly alter their performance and ability to comply with the underlying regulatory requirements on a continuing basis and that stack tests should not be waived without adequate justification. A waiver may be appropriate on a case-by-case basis when criteria such as the following are met:



- (1) the units are located at the same facility;
- (2) the units are produced by the same manufacturer, have the same model number or other manufacturer's designation in common, and have the same rated capacity and operating specifications;
- (3) the units are operated and maintained in a similar manner; and
- (4) the delegated agency, based on documentation submitted by the facility,
 - a. determines that the margin of compliance for the identical units tested is significant and can be maintained on an on-going basis; or
 - b. determines based on a review of sufficient emissions data that, though the margin of compliance is not substantial, other factors allow for the determination that the variability of emissions for identical tested units is low enough for confidence that the untested unit will be in compliance. These factors may include, but are not limited to, the following:
 - i. historical records at the tested unit showing consistent/invariant load;
 - ii. fuel characteristics yielding low variability (e.g., oil) and therefore assurance that emissions will be constant and below allowable levels;
 - iii. statistical analysis of a robust emissions data set demonstrates sufficiently low variability to convey assurance that the margin of compliance, though small, is reliable.

In this case, all 17 engines are permitted as one source and located at seven substations located in Rolla. All 17 engines were produced by the same manufacturer and have the same model number, the same rated capacity, the same operating specifications, the same control system manufacturer, and the same control system model number. All 17 engines are operated and maintained in a similar manner. In addition, the measured CO concentrations from the four engines (EP-1 through EP-4) that were tested from July 19, 2012 to July 23, 2012 were about 50% below the CO emission limitation with little variability in the measurements. For these reasons, EPA is approving the following stack testing schedule.

Stack Testing Schedule

RMU shall conduct stack tests for at least half of the engines by the date specified at 40 C.F.R. 63.6612. RMU shall conduct stack tests for the remaining engines after one of the initially tested engines operates 8,760 hours or after three years from the date of the initial test, whichever comes first. For example, if none of the engines initially tested operate 8,760 hours before the end of a three-year period, RMU shall conduct a stack test on the remaining untested engines by July 19, 2015 (three years after the initial stack test which was July 19, 2012). RMU shall continue this pattern for subsequent tests. For example, if the remaining untested engines are tested by July 19, 2015, RMU shall conduct subsequent testing on the initially tested engines by July 19, 2018 or after 8,760 hours of operation. In essence EPA is approving the reduction of stack tests to once every six years, assuming no engine operates more than 8,760 hours in the three years following the tests, with approximately half the engines tested every three years.

If you have any questions regarding this letter, please contact David Peter at (913) 551-7397.

Sincerely,



Mark A. Smith, Chief
Air Permitting and Compliance Branch
Air and Waste Management Division



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

DEC 20 2012

REPLY TO THE ATTENTION OF:

Ed C. Stewart, Plant Manager
Saint-Gobain Containers, Inc.
815 South McHenry Street
Burlington, Wisconsin 53105

Re: Testing petition approval for reciprocating internal combustion engines

Dear Mr. Stewart:

Thank you for submitting to the U.S. Environmental Protection Agency on December 3, 2012, your petition to waive initial performance testing for four identical reciprocating internal combustion engines (RICE) at your Burlington, Wisconsin, plant that are subject to testing requirements of the National emissions Standards for Hazardous Air Pollutants at 40 C.F.R. Part 63, Subpart ZZZZ (the "RICE NESHAP").

Saint-Gobain Containers, Inc. (Saint-Gobain) operates six existing non-emergency compression-ignition electric power generating engines, each rated at 2,936 brake horsepower (bhp), at an area source of hazardous air pollutants. The engines are required to be tested pursuant to the provisions at 40 C.F.R. §§ 63.6615 and 63.6620(a), which require Saint-Gobain to conduct both initial performance testing and subsequent testing every 8,760 hours, or three years, whichever comes first, to demonstrate compliance with the carbon monoxide (CO) emission limit in Table 2d of 40 C.F.R. Part 63, Subpart ZZZZ.

Pursuant to 40 C.F.R. § 63.7(d)(2)(iv), EPA may grant a waiver for the requirement to conduct performance tests because the owner or operator of an affected source has demonstrated by other means to the Administrator's satisfaction that the affected source is in compliance with the relevant standard. Based on EPA's review of your petition, we have preliminarily determined that your proposal is acceptable provided that certain conditions described below are met.

On September 30, 2005, EPA issued its EPA's Clean Air Act National Stack Testing Guidance (Guidance). EPA has approved waivers of stack testing requirements in very limited circumstances. As stated in Section VII.2 of the Guidance, criteria for the approval of a test waiver require that:

1. the units be located at the same facility;
2. the units were produced by the same manufacturer, have the same model number or other manufacturer's designation in common, and have the same rated capacity and operating specifications;

3. the units be operated and maintained in a similar manner; and
4. the delegated agency, based on documents submitted by the facility:
 - a. determines that the margin of compliance for the identical units tested is significant and can be maintained on an ongoing basis; or
 - b. determines based on a review of sufficient emission data that, though the margin of compliance is not substantial, other factors allow for the determination that the variability of emissions for identical tested units is low enough for confidence that the untested unit(s) will be in compliance. These factors may include, but are not limited to, the following:
 - i. historical records at the tested unit showing consistent/invariant loads,
 - ii. fuel characteristics yielding low variability and therefore assurance that emissions will be consistent and below allowable levels, and
 - iii. statistical analysis of a robust emissions data set demonstrates sufficiently low variability to convey assurance that the margin of compliance, though small, is reliable.

In this case, Saint-Gobain will install oxidation catalyst on each of the engines that will control CO emissions. In order to comply with the current operating permit issued by Wisconsin Department of Natural Resources (Permit No. 2522005930-P10) on August 25, 2011, Saint-Gobain must conduct nitrogen oxides (NOx) emissions testing for two of the six engines in conjunction with and with the same frequency as required by the RICE NESHAP. The NOx testing is required by the operating permit and is not for determining compliance with the RICE NESHAP. Accordingly, Saint-Gobain is requesting that only two engines be tested for CO emissions to demonstrate RICE NESHAP compliance. Saint-Gobain states that the engines are identical models that burn the same fuel (diesel), were installed at the same time, and have the same operating specifications and oxidation catalyst systems.

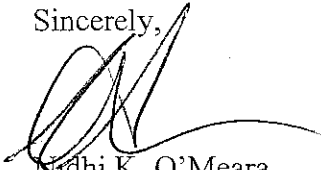
For these reasons, EPA approves Saint-Gobain's request to waive initial performance testing for the remaining four RICE provided that the emission rate for the units tested do not exceed 50 percent of the CO standards or that the EPA agrees the test result satisfies the Guidance criteria described above. The standards are 23 ppm CO, or a 70 percent reduction in the CO emission rate for existing compression ignition RICE rated at more than 500 bhp at an area source. Saint-Gobain shall conduct stack testing for two engines by the date specified at 40 C.F.R. § 63.6612, for CO limitations in Table 2d of the RICE NESHAP that pertain to existing CI engines over 500 bhp at area sources, at representative conditions (100 percent \pm 10 percent), and provide EPA with a copy of the test results. Saint-Gobain shall demonstrate continuous compliance by using a continuous parametric monitoring system that will monitor the oxidation catalyst bed inlet temperature and the pressure drop across the catalyst bed.

In three years, or after 8,760 hours of operation, whichever comes first, Saint-Gobain shall test at least two additional engines. Saint-Gobain shall continue this pattern of testing two engines every three years until all six engines are tested.

EPA's granting of this initial performance test waiver does not alter any of the other requirements of the RICE NESHAP that are applicable to this facility.

If you have any questions, please contact Jeffrey L. Gahris, of my staff, at (312) 886-6794.

Sincerely,



Nidhi K. O'Meara

Acting Chief

Air Enforcement and Compliance Assurance Branch

cc: Andrea Simons, Trinity Consultants

Ted Cauwels, WDNR, Sturtevant Service Center



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711

January 12, 2012

OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

Mr. Brenner Munger, Ph.D., P.E.
Manager, Environmental Department
Hawaiian Electric Company
P.O. Box 2750
Honolulu, Hawaii 96840-0001

Dear Dr. Munger:

This letter is in response to your October 14, 2011, letter to Dr. Conniesue Oldham on behalf of the Hawaiian Electric Company requesting Alternative Test Measures for four new stationary compression ignition (CI) internal combustion engines (ICE) scheduled for installation at Honolulu International Airport (HNL), located on the island of Oahu. Your letter indicated that four (4) 2009 model year Caterpillar Model 3516C-HD stationary CI engines of 2.5 MW each will be installed at HNL in 2012. The engines are certified to the standards for CO, NO_x, PM and non-methane hydrocarbons (NMHC) in 40 CFR part 89 for a 2.5 MW 2009 model year engine. The engines were certified for operation on petroleum diesel but will be operated on biodiesel.

The engines are subject to the New Source Performance Standards for stationary compression ignition engines, which are found at 40 CFR part 60 subpart IIII. Subpart IIII requires owners and operators of new stationary CI ICE that are not certified to conduct performance testing to show compliance with the emission standards in subpart IIII. Although these engines were certified on petroleum diesel, operation on biodiesel does not void the emission certification for the engine if all of the following conditions are met:

- The biodiesel meets the fuel requirements of 40 CFR 60.4207(b)
- The engine manufacturer's warranty for the engine (including the emission control systems) includes the use of the biodiesel (or biodiesel blend) being used in the engine
- The biodiesel meets ASTM D6751

If all of the conditions listed above are met, the engines are installed, configured, operated and maintained per the manufacturer's emission-related written instructions, and you do not change emission-related settings in a way that is not permitted by the manufacturer, then performance testing is not required to demonstrate compliance with the applicable emission standards in subpart IIII.

If any of the conditions listed above are not met, or the engines and control devices are not installed, configured, operated, or maintained per the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, then, as specified in 40 CFR 60.4211(g)(3), you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within one year of startup, or within one year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the

manufacturer's emission-related written instructions, or within one year after you change emission-related settings in a way that is not permitted by the manufacturer. You must conduct subsequent performance testing every 8,760 hours of engine operation or three years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards. Per 40 CFR 60.4212(c), stationary CI ICE that are complying with the emission standards in 40 CFR 89.112 may follow the testing procedures specified in 40 CFR 60.4213, which specifies the methods listed below.

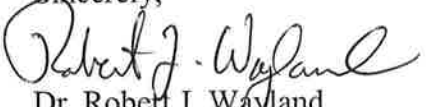
- Selection of sampling sites: Method 1 or 1A of 40 CFR part 60, appendix A
- O₂: Method 3, 3A, or 3B of 40 CFR part 60, appendix A
- Moisture (if necessary): Method 4 of 40 CFR part 60, appendix A; Method 320 of 40 CFR part 63, appendix A; or ASTM D6348-03
- NO_x: Method 7E of 40 CFR part 60, appendix A; Method 320 of 40 CFR part 63, appendix A; or ASTM D6348-03
- PM: Method 5 of 40 CFR part 60, appendix A

Methods for measuring CO and NMHC are not specified in 40 CFR 60.4213. Stationary CI ICE that are complying with the emission standards in 40 CFR 89.112 and following the testing procedures specified in 40 CFR 60.4213 should use the methods listed below for measuring CO and NMHC.

- CO: Method 10 of 40 CFR part 60, appendix A; Method 320 of 40 CFR part 63, appendix A; or ASTM D6348-03
- NMHC: Measure total hydrocarbons using Method 25A of 40 CFR part 60, appendix A. Measure methane (and ethane if needed) using either Method 18 of 40 CFR part 60, appendix A; Method 320 of 40 CFR part 63, appendix A; or ASTM D6348-03.

If ASTM D6348-03 is used, the following conditions must be met: (1) the test plan preparation and implementation in the Annexes to ASTM D6348-03, Sections A1 through A8 are mandatory; and (2) in ASTM D6348-03 Annex A5 (Analyte Spiking Technique), the percent recovery (% R) must be determined for each target analyte (Equation A5.5). In order for the test data to be acceptable for a compound, %R must be between 70 and 130. If the %R value does not meet this criterion for a target compound, the test data are not acceptable for that compound and the test must be repeated for that analyte (i.e., the sampling and/or analytical procedure should be adjusted before a retest). The %R value for each compound must be reported in the test report, and all field measurements must be corrected with the calculated %R value for that compound by using the following equation: Reported Result = Measured Concentration in the stack x 100 % R.

If you have any questions, please contact Melanie King of my staff at (919) 541-2469.

Sincerely,

Dr. Robert J. Wayland
Leader, Energy Strategies Group

cc: Conniesue Oldham, Leader, Measurement Technology Group
Douglas McDaniel, Enforcement Chief, EPA Region 9
Deborah Jordan, Director, Air Division, EPA Region 9



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711

July 29, 2013

OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

Michael W. Kendall, R.S.
Senior Program Manager
Group Leader, Air Services Group, URS Corporation
13825 Sunrise Valley Drive, Suite 250
Herndon, Virginia 20171-3426

Dear Mr. Kendall:

This is in response to your July 10, 2013, request for guidance regarding the installation of bi-fuel kits on new stationary compression ignition internal combustion engines that are subject to 40 CFR part 60 subpart IIII. In your letter, you indicated that the bi-fuel kits allow the engines to operate on a fuel mix of diesel and natural gas. You requested clarification of the impact installation of a bi-fuel kit has on the certification of an engine to the emission standards for stationary compression ignition internal combustion engines (CI ICE), which are in 40 CFR part 60 subpart IIII.

Below are the questions you asked in your letter, and the EPA's response to each question.

1. Does the installation of the bi-fuel kit on a new USEPA-certified unit affect the manufacturer's certification? In other words, is the unit still a certified unit?

Response: As specified in 40 CFR 60.4211(c), owners and operators of 2007 model year and later¹ stationary CI ICE with a displacement less than 30 liters per cylinder must comply by purchasing an engine certified to the applicable emission standards in subpart IIII. The engine must be installed and configured according to the manufacturer's specifications, except as provided in 40 CFR 60.4211(g), which specifies the requirements that apply if the engine is not installed, configured, operated, and maintained per the manufacturer's instructions. Based on our understanding of the bi-fuel conversion, the engine is no longer in its certified configuration after the conversion. Consequently, the owner/operator of the engine must follow the requirements of 40 CFR 60.4211(g) to demonstrate compliance with the emission standards in subpart IIII.

2. Does the installation and operation of the bi-fuel kit on a certified engine constitute tampering under the Clean Air Act, or is this action prohibited by other provisions of the Clean Air Act?

Response: The installation of the bi-fuel kit is not prohibited for certified stationary CI ICE. However, as discussed in the response to the previous question, the engine is no longer in its certified configuration after the conversion, and the owner/operator must demonstrate compliance with the emission standards through the procedures specified in 40 CFR 60.4211(g).

¹ Note: different model years may apply for emergency fire pump engines.

3. If a manufacturer's certification is affected for an engine, what specific testing requirements must be performed to ensure compliance with emission standards under Subpart IIII? URS requests a determination as to the testing procedures required for a facility with a fleet of identical engines which have been installed with bi-fuel units. The engines are identical in size, horsepower, model year, etc. The test would determine compliance with 40 CFR 60 Subpart IIII and would represent compliance for all the identical engines for the client. It is URS' contention that since the engines are identical in every way, it would be unnecessary and cost prohibitive to test all of the engines. Can a representative engine test satisfy the testing requirements for a fleet of identical engines for the same client?

Response: The testing requirements are specified in 40 CFR 60.4211(g). An initial performance test must be conducted for stationary CI ICE less than or equal to 500 horsepower (HP). For stationary CI ICE greater than 500 HP, the owner/operator must conduct an initial test, and also subsequent testing every 8,760 hours of engine operation or 3 years, whichever comes first. Testing must be conducted for each engine, unless the owner/operator has requested and received approval of a waiver of the performance testing requirements, as provided under 40 CFR 60.8(b).

If you have any questions regarding this letter, please contact me at (919) 541-2469 or king.melanie@epa.gov.

Sincerely,



Melanie King
Energy Strategies Group
Sector Policies and Programs Division



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711

JUN 21 2013

Chet M. Thompson
Crowell & Moring LLP
1001 Pennsylvania Avenue, N.W.
Washington, DC 20004-2595

OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

Dear Mr. Thompson:

This is in response to your request dated May 21, 2013 for clarification on several aspects of the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (the "RICE NESHAP"), 40 C.F.R. part 63, subpart ZZZZ. In your letter, you requested clarification of four issues relating to the provisions in the rule for emergency stationary RICE. Those issues and the United States Environmental Protection Agency's response for each issue are provided below.

Issue 1: 40 C.F.R. 63.6585(f)(2) provides that existing commercial emergency stationary RICE located at an area source of hazardous air pollutants (HAP) emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in § 63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in § 63.6640(f)(4)(ii) are not subject to subpart ZZZZ. You requested confirmation that emergency RICE that do not qualify for the exclusion now because they are currently contractually obligated to be available for more than 15 hours for the purposes specified at §§ 63.6640 (f)(2)(ii) and (iii) and (f)(4)(ii), can be excluded once those contracts expire, provided that the other conditions of 40 C.F.R. 63.6585(f)(2) are met.

Response: An existing commercial emergency stationary RICE that does not meet the conditions of 40 C.F.R. 63.6585(f)(2) as of the compliance date, for example because it is contractually obligated to be available for more than 15 hours for the purposes specified at §§ 63.6640 (f)(2)(ii) and (iii), would be subject to subpart ZZZZ. However, if the engine's status changes after the compliance date such that it would now meet the conditions of 40 C.F.R. 63.6585(f)(2), for example if it is no longer contractually obligated to be available for more than 15 hours for the purposes specified at §§ 63.6640 (f)(2)(ii) and (iii), then the engine would no longer be subject to subpart ZZZZ once it meets the conditions of 40 C.F.R. 63.6585(f)(2).

Issue 2: You requested confirmation that emergency RICE located at area sources can continue to participate in peak shaving programs for up to 50 hours per year until May 3, 2014, without losing their emergency engine status. You also requested confirmation that this "grace period" applies regardless of whether the RICE will be retrofitted to comply with subpart ZZZZ's standards for nonemergency engines.

Response: As specified in 40 C.F.R. 63.6640(f)(4)(i), an existing emergency stationary RICE located at an area source of HAP emissions can be used for peak shaving for up to 50 hours per calendar year prior to May 3, 2014, if the engine is operated as part of a peak shaving (load management program) with the local distribution system operator and the power is provided only to the facility itself or to support the local distribution system. This is the case whether or not the engine will be retrofitted to comply with subpart ZZZZ's standards for non-emergency engines.

Issue 3: You requested confirmation that § 63.6640(f)(4)(i) and (ii) address separate and distinct non-emergency situations, and that the "local reliability" exception set forth in § 63.6640(f)(4)(ii) has no sunset provision. In other words, you would like confirmation that emergency RICE can participate in non-emergency programs meeting the requirements of § 63.6640(f)(4)(ii) beyond May 3, 2014, without compromising their emergency engine status.


Response: That is correct, 40 C.F.R. 63.6640(f)(4)(i) and (ii) are two distinct situations, and there is no sunset provision for the operation specified in § 63.6640(f)(4)(ii). An emergency stationary RICE at an area source of HAP emissions can continue to operate for up to 50 hours per calendar year for the purpose specified in § 63.6640(f)(4)(ii) beyond May 3, 2014.

Issue 4: You requested clarification on how the EPA will interpret § 63.6640(f)(4)(ii)(A), which requires that to qualify for the 50 hour exemption, the emergency RICE must be "dispatched by the local balancing or local transmission and distribution system operator." Under local reliability programs, the local transmission and distribution system operator often does not literally "dispatch" the emergency generator. Rather, the system operator notifies and then cuts power to the participating facility, prompting the facility to engage its emergency RICE. We believe that this scenario is equivalent to being "dispatched by the local balancing or local transmission" operator.

Response: We agree that if the local transmission and distribution system operator notifies the facility that they will be cutting their power, prompting the facility to engage its emergency stationary RICE, the engine would be considered dispatched by the local transmission and distribution system operator.

If you have any questions regarding this letter, please contact Melanie King at (919) 541-2469.

Sincerely,


Peter Tsirigotis
Director

Sector Policies and Programs Division



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711

JUN 24 2009

OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

MEMORANDUM

SUBJECT: Use of an Unheated Sampling Line in ASTM D6522

FROM: Conniesue B. Oldham, Ph.D., Group Leader
Measurement Technology Group

A handwritten signature in cursive script that reads "Conniesue Oldham".

TO: Cynthia J. Reynolds, Director
Technical Enforcement Program, Region 8

We are writing in response to your inquiry regarding the use of an unheated sampling line when testing for carbon monoxide (CO) emissions from a compressor engine subject to 40 CFR Part 60, Subpart ZZZZ, National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. Emissions Science, Inc. has proposed using an unheated sampling line with ASTM D6522 in an upcoming test of internal combustion engines at the Pump Canyon Compression Station in La Plata County, Colorado. Emission Science noted that a heated sampling line is not normally required in Agency methods when measuring CO. The ASTM D6522 method is also designed for nitrogen oxides testing, and a heated line is important in this case. However, when only testing for CO, the heated line is not needed.

We agree that the use of an unheated sampling line with ASTM D6522 is acceptable when only CO is measured. We, therefore, approve the use of an unheated sampling line when only CO is determined by the method. Since this modification to ASTM D6522 is applicable to other sources testing only for CO, we will be posting this letter on our website at <http://www.epa.gov/ttn/emc/approalt.html> for use by other interested parties.

Please contact Foston Curtis of my staff at (919) 541-0893 or curtis.foston@epa.gov if you have any questions regarding this memo or would like additional information.

cc: Gary McAlister, E143-02
Scott Throwe, EPA/OECA/OC



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711

FEB 25 2010

OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

Michael J. Brack
Field Services Manager
Derenzo & Associates, Inc.
39395 Schoolcraft Road
Livonia, MI 48150

Dear Mr. Brack:

This is in response to your correspondence dated February 15, 2010, asking us to approve an alternative to Method 18 that will be used in conjunction with Method 25A to determine nonmethane organic compounds (NMOC) from an internal combustion engine. The source is subject to 40 CFR Part 60, Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines, and must use Method 18 to determine the methane fraction for subtraction from the collective measurement of methane and NMOC by Method 25A.

You propose to use the TECO Model 55C analyzer to measure methane in place of Method 18. You note that this analyzer, which uses gas chromatography and flame ionization detection to separate and measure methane from other organics, is comparable to the "cutter" analyzers already allowed by the regulation.

We are familiar with the operation of the TECO Model 55C analyzer and believe, in principle, it will produce results similar to the "cutter" analyzers. Therefore, we are approving your request to use the TECO Model 55C as an alternative to Method 18 for measuring methane. This alternative method is also acceptable for use at any engine that is covered by the regulations cited above. We will announce on EPA's web site (at <http://www.epa.gov/ttn/emc/tmethods.html#CatB>) that our approval of this modification to Method 18 is broadly applicable to all stationary spark ignition internal combustion engines.

If you need further assistance, please contact Foston Curtis at (919) 541-1063.

Sincerely,

A handwritten signature in cursive script that reads "Connie Oldham".

Conniesue B. Oldham, Ph.D., Group Leader
Air Measurements and Quality Group



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711

JUL 21 2010

OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

Howard Schiff
TRC Companies Inc.
650 Suffolk Street
Wannalancit Mills
Lowell, MA 01854

Dear Mr. Schiff:

In an alternative methods approval letter dated February 25, 2010, we granted Derenzo & Associates permission to use the TECO Model 55C analyzer in place of Method 18 to measure methane from internal combustion engines subject to 40 CFR Part 60, Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines. You brought to our attention that the proposed analyzer more appropriately measures non-methane organics and should be allowed as an alternative to the “cutter” analyzers already allowed by the regulation.

We see your point and appreciate your bringing it to our attention. This letter grants approval to use the TECO Model 55C analyzer to measure non-methane organic compounds from Subpart JJJJ engines. The analyzer may also be used by others at other Subpart JJJJ engines. We will announce this as broadly applicable to all stationary spark ignition combustion engines on EPA’s web site (at <http://www.epa.gov/ttn/emc/tmethods.html#CatB>).

If you need further assistance, please contact Foston Curtis at (919) 541-1063 or Gary McAlister at (919) 541-1062.

Sincerely,

A handwritten signature in blue ink that reads "Connie Oldham".

Conniesue B. Oldham, Ph.D., Group Leader
Measurement Technology Group

cc: Michael Brack, Derenzo & Associates
Foston Curtis, E143-02
Gary McAlister E143-02



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711

NOV 8 2012

Mr. Michael Brack
Derenzo and Associates, Inc.
39395 Schoolcraft Road
Livonia, MI 48150

OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

Dear Mr. Brack:

This letter is in response to your email request of October 12, 2012, for approval of an alternative to the use of Method 25A and Method 18 to measure methane and non-methane organic compound (NMOC) emissions from reciprocating internal combustion engines (RICE), as required in 40 CFR 60, Subpart JJJJ. You also asked to use the Thermo-Electron Model 55I (TECO-55I) as an alternative to Method 25A and Method 18 for measurement of methane and NMOC under 40 CFR Part 63, Subpart ZZZZ.

You requested approval to use the TECO-55I as an alternative in light of our previous alternative test method approvals (ALT-066 and ALT-078) for use of the Thermo-Electron Model 55C (TECO-55C) to measure methane and NMOC from RICE under 40 CFR 60, Subpart JJJJ. You have indicated that the TECO-55C analyzers are no longer manufactured, and have been replaced by a newer design identified as the TECO Model 55I. You also noted that the TECO-55I uses gas chromatography to separate methane from the NMOC in the emissions gas stream, and flame ionization detection to measure methane separately from NMOC in essentially the same manner as the TECO-55C.

We have reviewed your request and the associated rule language. We note that there is no requirement in 40 CFR Part 63, Subpart ZZZZ to measure NMOC, and thus, we will not address that portion of your request. We do agree that an alternative testing approach using the TECO-55I to measure methane and NMOC is appropriate, and we are approving its use under 40 CFR 60, Subpart JJJJ, assuming the applicable requirements in Method 25A are followed. We confirmed with the manufacturer that the TECO-55I is a redesign of TECO-55C and is optimized for low concentration NMOC measurements. Therefore, you must follow the relevant requirements in Method 25A when you use the TECO-55I for measurements under 40 CFR 60, Subpart JJJJ. Specifically, you must heat all sampling components leading to the analyzer to $>110^{\circ}\text{C}$ (220°F) throughout the sampling period, unless safety reasons are cited as required in Section 5.2 of Method 25A. You must also follow the appropriate test procedure, calibration, and standardization requirements in sections 8, 9, and 10 of Method 25A to ensure that linearity, calibration drift error, and drift are within Method 25A limits.

We will announce on EPA's website (at <http://www.epa.gov/ttn/emc/approalt.html>) that our approval of this alternative testing approach to Method 25A and Method 18 for NMOC measurement is broadly applicable to testing of reciprocating internal combustion engine emissions under 40 CFR 60, Subpart JJJJ.

If you need further assistance, please contact Ray Merrill of my staff at (919) 541-5225 or merrill.raymond@epa.gov

Sincerely,

A handwritten signature in blue ink that reads "Connie Oldham".

Conniesue B. Oldham, Ph.D., Group Leader
Measurement Technology Group



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

APR 11 2013

Mr. Mike Trammel
Director, Environmental Affairs
Excelerate Energy, L.P.
1450 Lake Robbins Drive, Suite 200
The Woodlands, Texas 77380

Re: NSPS-NESHAP Applicability to the Proposed Aguirre GasPort Emission Units

Dear Mr. Trammel:

This is in response to your August 27, 2012 letter to the Region 2 Office of the U.S. Environmental Protection Agency (EPA). We apologize for the delay in preparing this response. In this letter you asked for EPA's concurrence on your interpretation of the non-applicability of the New Source Performance Standards (NSPS) and National Emission Standard for Hazardous Air Pollutants (NESHAP) or Maximum Achievable Control Technology (MACT) standards to emission units at the proposed Aguirre GasPort (GasPort), in particular, marine equipment/boilers/engines that will be used on the liquefied natural gas carriers (LNGCs). The GasPort will be located approximately 3 miles offshore of the Puerto Rico Electric Power Authority (PREPA) Aguirre Plant. Excelerate Energy, L.P. (Excelerate) has indicated that it needs EPA to confirm its interpretation before it selects a specific design of the LNGC as its Floating Storage and Regasification Unit (FSRU) since the wrong interpretation can lead to costly fuel changes or equipment retrofits to comply with the NSPS and MACT.

Excelerate plans to utilize one of its existing LNGCs currently in service as the FSRU for the project. The FSRU will be ready to receive and store liquefied natural gas (LNG) from other LNGCs at the rate of approximately one every 8 days. The FSRU will be permanently moored at the GasPort year-round performing regasification services except when there is a need to take the FSRU to safer waters due to an approaching hurricane and for a normal dry-dock time (typically once every 5 years) to ensure the FSRU's sea worthiness. During the scheduled dry-dock periods, Excelerate will provide a similar FSRU, as a temporary substitute at the GasPort. All of the LNGCs being considered for FSRU service are relatively new, state-of-the-art vessels delivered between 2005 and 2010 and currently permitted for use at the Northeast Gateway LNG and Neptune LNG terminals located offshore from Massachusetts. Each Excelerate LNGC under consideration is propelled by a pair of 224 MMBtu/hr dual-fueled main boilers (equipped with NOx-reducing selective catalytic reduction or SCR systems). These boilers make steam for the steam generators to produce electricity needed to power the ship's electric propellers or to power the LNG pumps, run the re-gasification process and other units on the FSRU while the ship is not travelling. Other equipment includes a gas-fired auxiliary boiler (100-157 MMBtu/hr) also equipped with an SCR system, a dual-fueled engine with a 4.0 MW generator, and various smaller combustion sources including an emergency generator (approx. 600 kW) which is used in case of power loss but is otherwise only tested for approximately 30 minutes per week, a shipboard incinerator (approximately 3 MMBtu/hr, used for routine disposal of trash and sludge for approximately 1 hour per day), an inert gas

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generator (approximately 45 MMBtu/hr external combustion unit); and lifeboat and rescue boat engines (which need to be tested weekly for approximately 30 minutes each). In addition, the proposed GasPort will be located within the Puerto Rico territorial sea and, therefore, is not subject to the Deepwater Port Act or the Outer Continental Shelf (OCS) regulations.

EPA is providing general guidance today on the potential applicability of the NSPS and NESHAP on the ancillary equipment on the FSRU for this particular project. Specific questions on the requirements and applicability of a particular NSPS/NESHAP can be discussed separately on a case-by-case basis as the need arises.

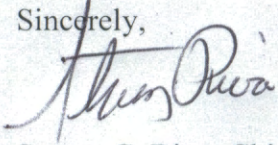
Please note that since the FSRU utilizes boilers as the main propulsion devices instead of reciprocating internal combustion engines (RICE), the FSRU does not meet the exemption provided by Section 302(z) of the Clean Air Act which excludes reciprocating internal combustion engines used as nonroad engines or for transportation purposes from being listed as stationary sources. Accordingly, the FSRU, once permanently moored to the GasPort and unlikely to be moved (except under special circumstances) will be considered a stationary source for Clean Air Act purposes. Since the NSPS and NESHAP apply to stationary sources, these rules will apply to the ancillary equipment on the FSRU. However, there are a few caveats that you should be aware with respect to non-RICE and RICE equipment on the FSRU:

- 1) Once the LNGC marine vessel that will be converted to an FSRU is moored to the GasPort, this marine vessel will become a stationary source and all the air pollution emitting equipment on board will become stationary sources with the exception of reciprocating internal combustion engines. As such, all non-RICE ancillary equipment located on the FSRU must meet the applicable NSPS based on the commenced construction date, i.e., manufactured date on the name plate of the individual equipment. The fact that this equipment was originally designed to be operated on a marine vessel when the equipment was constructed is immaterial for purposes of NSPS applicability. The fact that the equipment will be used at a stationary source combined with the individual manufactured date of the equipment (commenced construction date) is what triggers the NSPS on the existing equipment. For example, 40 CFR Subpart Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, applies to an affected unit that commenced construction, was modified, or was reconstructed after June 19, 1984. Since the LNGCs were delivered between 2005 and 2010, EPA assumes that the boilers were manufactured after the 1984 applicability date and, therefore, NSPS Subpart Db applies to the boilers, and so on.
- 2) All the affected equipment on the FSRU with the exception of reciprocating internal combustion engines will need to comply with any applicable NESHAP. Whether the existing source NESHAP or new source NESHAP will apply to the affected equipment depends on the manufactured date, ordered date, or onsite construction date of the individual equipment and how "commence construction" is defined in the applicable NESHAP.
- 3) All reciprocating internal combustion engines on the FSRU will not be considered stationary sources for the purposes of NSPS and NESHAP even if they have been or are subsequently modified, reconstructed, or replaced since these engines will be used on a piece of equipment that is self-propelled, (i.e., as long as the FSRU is self-propelled) (see paragraph (1)(i) in the nonroad engine definition at 40 CFR §1068.30). Such engines are defined as nonroad engines and the NSPS and NESHAP do not apply to nonroad engines. However, such engines must

comply with the nonroad engine rules in 40 CFR Parts 89, 94, 1039, 1042, 1043, 1045, 1048, 1054, 1065, and 1068, if applicable.

If you have any questions, please contact Mr. Frank Jon, of my staff, at (212) 637-4085.

Sincerely,

A handwritten signature in cursive script, appearing to read "Steven C. Riva".

Steven C. Riva, Chief
Permitting Section
Air Programs Branch
Clean Air and Sustainability Division

cc: Keith H. Kennedy, Tetra Tech EC, Inc.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JAN - 9 2014

OFFICE OF
ENFORCEMENT AND
COMPLIANCE ASSURANCE

Thomas R. Wood
Stoel Rives, LLP, Attorneys at Law
900 S.W. Fifth Avenue, Suite 2600
Portland, Oregon 97204

Re: Regulatory Interpretation of Emergency Engine Provisions under 40 CFR Part 60,
Subpart IIII and Part 63, Subpart ZZZZ

Dear Mr. Wood:

This letter is in response to the April 23, 2013 request from Stoel Rives, LLP, Attorneys at Law on behalf of Portland General Electric Company (PGE), to the United States Environmental Protection Agency (EPA) Region 10. PGE requested guidance on the applicability of provisions of the Clean Air Act (CAA) New Source Performance Standards (NSPS) for Stationary Compression Ignition Internal Combustion Engines, 40 CFR Part 60, Subpart IIII, and the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE), 40 CFR Part 63, Subpart ZZZZ.

This response addresses two stationary engines owned and operated by PGE that will be located at PGE's Carver Readiness Center in Clackamas, Oregon (the Center). The Center is an area source for hazardous air pollutants. The engines are compression ignition diesel-fired RICE that will be considered new units under Subpart IIII. The EPA has determined that utilities may dispatch engines that they own and operate under the 50-hour non-emergency operation option, provided as described further below.

Background

PGE is an electric utility serving customers in the Portland Area. PGE operates a Dispatchable Standby Generation (DSG) program where emergency diesel generators owned by entities other than PGE participate in financial arrangements with PGE to provide power when grid stability is threatened.

The provisions of 40 CFR 60.4211 and 63.6640 authorize limited non-emergency use of diesel engines that are classified and regulated as emergency engines. The NSPS and the NESHAP (for area sources) allow for 50 hours of the 100-hours total to be used to supply power as part of a financial arrangement with another entity if the following conditions in 40 CFR 60.4211(f)(3)(i) (referred to as the "50-hour non-emergency operation option") are met:

1. The engine is dispatched by the local balancing authority or local transmission and distribution system operator;

2. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
3. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
4. The power is provided only to the facility itself or to support the local transmission and distribution system.
5. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

Determination

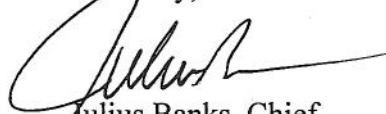
PGE is requesting verification that the engines they own and operate can participate in the DSG program run by PGE. PGE also is requesting verification that provided the five criteria stated above and in the rules are met, that they can use the 50 hours per year for non-emergency operation allowed under 40 CFR §60, Subpart IIII and §63, Subpart ZZZZ, and still be considered emergency engines.

EPA has determined that the language in Subpart ZZZZ regarding emergency engines dispatched under a financial arrangement with another entity was not intended to prohibit utilities from dispatching engines that they own and operate under the 50-hour non-emergency operation option provided.

EPA has issued this regulatory interpretation in consultation with EPA Region 10, and the EPA Office of Air Quality Planning and Standards. This interpretation is not specific to any particular site, but is considered an interpretation of the regulatory requirements at 40 CFR 60.4211 and 63.6640.

If you have any questions regarding this extension, please contact Sara Ayres on my staff at (312) 353-6266 or by email: ayres.sara@epa.gov.

Sincerely,



Julius Banks, Chief
Air Branch
Monitoring, Assistance, and Media Programs Division
Office of Compliance

cc: David Monro, Oregon Department of Environmental Quality
Uri Papish, Oregon Department of Environmental Quality
Heather Valdez, USEPA Region 10



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS TX 75202-2733

SEP 19 2013

Mr. James D. Jones
Kawneer Company, Inc.
P. O. Box 709
Springdale, Arkansas 72765-0709

RE: Applicability Determination (AD) – New Source Performance Standards (NSPS) for Stationary Compression Ignition Internal Combustion Engines (CI) {40 CFR Part 60, Subpart IIII}, and National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE) {40 CFR Part 63, Subpart ZZZZ}; Mobile Power Generator located at the Kawneer Springdale Plant in Springdale Arkansas (Kawneer Plant).

Dear Mr. Jones:

This letter is in response to your letter dated May 16, 2013, requesting our determination of the applicability of NSPS Subpart IIII and NESHAP Subpart ZZZZ to your mobile power generator, SN-33, Serial Number P0812020007. Based upon the information you have provided, including the supplemental information provided on June 27, 2013, the United States Environmental Protection Agency (EPA) has determined that the SN-33 portable power generator is a nonroad engine as defined under 40 CFR § 1068.30, and is therefore not subject to NSPS Subpart IIII nor to NESHAP Subpart ZZZZ, as discussed below.

Specifically, the mobile power generator at the Kawneer Plant is designed to supply electrical power on a temporary basis, at various plant locations and does not remain at any location greater than 12 consecutive months. The purpose and application of that power is for different reasons, delineated for past and current activities as follows:

- Standby power supply when normal supply is interrupted;
- Emergency/supplemental power;
- Power during maintenance events;
- Temporary lighting; and
- Supporting Health and Wellness events.

The engine is an integral part of the portable generator (wheeled unit) transported to the various locations, according to the documentation provided. Therefore, you assert that SN-33 meets the definition of a nonroad engine by the portable design of the generator unit and the fact

that it is transported to different locations to perform the functions listed above on a temporary basis. In considering all of the usage of SN-33, since it was first put into service in February of 2009, it has been operated for only one-hundred-thirty-six (136) hours, as recorded on the non-resettable hour meter, over a period of nearly four years. By virtue of the generator's intended use, no period at any one location should ever exceed a consecutive 12 month period. You also provided a copy of an Applicability Determination Index (ADI) document, Control Number M090038, in reference to substantiating that EPA should find that SN-33 is a nonroad engine.

First, the definition of a nonroad engine, per 40 CFR §1068.30, includes the following provisions and exclusion criteria:

(1) Except as discussed in paragraph (2) of this definition, a nonroad engine is an internal combustion engine that meets the following criteria:

** * **

(iii) By itself or in or on a piece of equipment, it is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include, but not limited to, wheels, skids, carrying handles, dolly, trailer, or platform.

(2) An internal combustion engine is not a nonroad engine if it meets any of the following criteria:

** * **

*(iii) The engine otherwise included in paragraph (1)(iii) of this definition **remains or will remain at a location for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source.** A location is any single site at a building, structure, facility, or installation. Any engine (or engines) that replaces an engine at a location and that is intended to perform the same or similar functions as an engine as the engine replaced will be included in calculating the consecutive period....(emphasis added)*

Upon review of the information provided, we believe that SN-33 meets (1)(iii) of the above definition. In consideration of (2)(iii) of this definition, whereby a nonroad engine becomes a stationary source if it remains at a location for more than 12 months, each location within the plant could be considered a different "single site" within the facility where the unit is used. Although all the "sites" were located on the contiguous property where the unit was housed and for the expressed function of standby or supplementary power, the use of the mobile generator varied by location and duration.

Next, if the engine were used as a replacement engine then the operating time could be considered to be a continuation of usage of the engine it replaced, thereby excluding the engine

from the mobile source category. However, none of the functions for which the engine was used are “replacement functions” for another engine since the mobile generator is only a temporary use engine. Some of the functions, such as the supplying of power for maintenance and the Health and Wellness events are specific to this engine. In general, this engine is not considered a replacement engine.

In order to evaluate seasonal use, we looked at the maintenance and Health and Wellness events. Although these events may occur at approximately the same time each year, the events do not constitute a season of operations on an annual basis. In fact, in considering all of the usage of SN-33 since it was first put into service in February of 2009, six full days of service (136 hours) do not indicate seasonal use of the engine.

Finally, upon review of the ADI document, and after contacting the facility cited in the ADI document, we have determined that the document does not apply to your situation since the nonroad engine referenced in M090038 is placed on a truck and operated while moving to assist an electric-motor driven device to move from one location to another while stationary power supplies are not available. Therefore, no comparison between your operations and the operations of that particular engine are relevant to our evaluation.

Therefore, EPA finds that NSPS Subpart IIII and NESHAP Subpart ZZZZ do not apply to your mobile power generator, SN-33, Serial Number P0812020007, since this engine is considered a nonroad mobile source. This Applicability Determination is site specific and may become void if the use of the engine changes or if new information becomes available in the future. If you have any questions regarding this determination, contact Mr. Charles Handrich of my staff at (214) 665-6553.

Sincerely,



Steve Thompson
Acting Associate Director
Air/Toxics & Inspection
Coordination Branch

cc: Mr. Thomas Rheaume, Arkansas Department of Environmental Quality (ADEQ)
Air Division
Ms. Patricia Campbell, ADEQ, Air Division
✓ Ms. Melanie King, USEPA, Office of Air Quality Planning and Standards



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 7**

Science and Technology Center
300 Minnesota Avenue
Kansas City, Kansas 66101

Donna Oehm, CSM
Farabee Mechanical, Inc.
P.O. Box 1748
Hickman, NE 68372

Dear Ms. Oehm:

A stack testing question was sent to Melanie King with the Environmental Protection Agency on June 27, 2013, by electronic mail (Attachment 1) regarding how to test when the source does not meet the criteria of method 1 of 40 CFR, Part 60, Appendix A. The source to be tested is a Reciprocating Internal Combustion Engine (RICE) that is subject to 40 CFR, Part 63, Section 63.6580, Subpart ZZZZ. Mr. Foston Curtis, with Office of Air Quality Planning and Standards has asked that this office (EPA, Region VII) respond to your question. This response has been discussed and approved by their offices.

Numerous testing scenarios exist for Subpart ZZZZ sources. These scenarios are listed below.

Engines that have testing ports that DO meet the minimum method 1 criteria (test ports that are located greater than 2 duct diameters downstream and ½ diameters upstream of a flow disturbance)

In this first group of sources, test ports are available that meet method 1. Testing would be conducted in the traditional fashion.

Engines where method 1 is required but the testing ports DO NOT meet the minimum criteria of method 1 (test ports that are less than 2 duct diameters downstream and ½ duct diameters upstream of a flow disturbance)

In this second group; the engine's stack/duct does not meet the required method 1 criteria in Section 11, Selection of Measurement Site. The actual site-specific emissions profile and characteristics are not known prior to testing. For example: control devices can introduce flow disturbances and/or gaseous stratification by reducing pollutants disproportionately

perpendicular to the effluent flow. The control media can lose its effectiveness. Control devices can have variations in flow rates. The method 1 criteria are designed to set the minimum conditions for which representative samples should be obtainable.

Samples obtained at, or immediately close to, the outlet of the control device would not be representative since mixing has not occurred. Consequently, sampling sites that do not meet the minimum criteria could have stratification and temporal variation. Such tests would be biased and compliance may not have been demonstrated. For these sources, conduct a stratification test following method 7E, Section 8.1.2 and sample using the stipulated number and location of sampling points.

When sampling for NO_x emissions from engines under 40 CFR 60, Subpart IIII and JJJJ, Alternative Test Method 87 (ALT-087) is applicable and can be used to waive the requirement for a stratification test (Attachment 2). ALT-087 also allows single point sampling. Sources subject to Subpart ZZZZ can use ALT-087 to sample at a single point without a stratification test for NO_x and CO emissions. However, the tests results may be suspect since the question of stratification has not been ruled out. If the delegated authority questions a specific test, provide additional information to support that stratification did not exist and the test results are accurate. For example, supporting information can include, but not limited to: 1) providing additional test results, from an identical control device, that shows that the control is capable of reducing the emissions to a level below the standard, 2) alternative data showing that, an identical control device in a significantly similar arrangement, is not stratified, 3) retroactively conducting a stratification test at the test port, 4) install mixing and/or straightening veins and redoing the test, 5) data from the manufacturer showing that the control device does not exhibit stratification, 6) stoichiometric calculations showing that the average concentrations are consistent with the test results. Obtain agreement, from the delegated authority, concerning what constitutes supporting information.

ALT-087 does not exempt sources from meeting the method 1 siting criteria. ALT-087 states that “We are currently revising Subparts IIII and JJJJ to delete the Method 1 or 1A requirement for sampling point selection. In its place, we will specify single point sampling at the centroid of the exhaust.” Until such time as the revision is finalized, Method 1 is still required. ALT-061, allows single point sampling for one Louisiana Subpart JJJJ facility. It is possible that single point sampling may be allowed for Subparts IIII, JJJJ, and ZZZZ engines in the future.

In all cases where method 1 is currently required but the minimum criteria are not met, a stratification test and multiple points should be conducted to demonstrate that the sampling point(s) is/are representative following method 7E. The risk is that the delegated agency (State or EPA Region) may question whether the source has demonstrated compliance. In such cases, retroactive tests and/or additional data (e.g. paragraph 5 above) may be necessary to demonstrate compliance with the standard.

Engines that are NOT required to use the method 1 procedures

For sources where method 1 is not required in 63.6620, Table 4 (Subparts IIII and JJJJ may also be applicable), ALT-087 can be used to avoid stratification testing and/or to sample at a single point. Ideally, ALT-087 would only be used when the minimum sampling site criteria of method 1 are met.

If method 1 is not specifically required, the source should follow it, where possible. If the stack/duct has the extra length upstream and downstream of the control device, install sampling ports, per method 1, to assure that the testing meets the minimum method 1 criteria. In general, the cost to install additional test ports is expected to be less than the cost for an additional test. The risk of not following method 1 is that the test may not be accepted by the delegated authority. Should other solutions, like those mentioned above in paragraph 5, become necessary to support compliance, they should be discussed and approved by the delegated agency before proceeding.

Engines that CAN NOT install test ports that meet the minimum criteria of method 1

If the source does not meet the minimum method 1 criteria and cannot install additional test ports, due to a lack of duct length, then a stratification test should be conducted following method 7E, Section 8.1.2 to demonstrate that fewer test points are acceptable. The source should be operated at a stable load during the test to avoid temporal variations.

If the source cannot pass the stratification test requirements that allow for single point sampling or sampling three points on a 'short line', then it is recommended that multiple points be sampled following the method 7E procedures. It may be necessary to sample for additional time, while operating at stable load, to average out the temporal differences.

General sampling point information for Supart ZZZZ Internal Combustion Engines

If the source does not pass the initial performance test due to inappropriate sample location(s), then the source should consider installing additional stack/duct length to provide a more representative sampling location. Before retesting, the source could consider installing mixing and/or straightening veins or new control media may be necessary and the source should cooperatively work with the delegated authority to achieve a solution.

However, past experience has also shown that many control devices may not be stratified. Gas stratification is usually not expected when test ports are between 2-8 duct diameters downstream and between ½ - 2 duct diameters upstream of a disturbance. Gases quickly equilibrate. In some cases, if the existing testing ports do not meet the minimum method 1 criteria, then test for stratification.

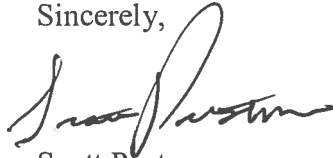
The minimum measurement siting criteria in method 1, Section 11.1.1 for gaseous tests, is that the testing port(s) is/are greater than 2 duct diameters downstream and greater than ½ duct diameters upstream of any flow disturbances for round stacks/ducts. For rectangular stacks/ducts use the calculations for equivalent duct diameters. When the minimum criteria are not met, relocate the sample ports to a representative location, install straightening veins, or sample at additional points.

ALT-061 (attachment 3) allows for single point sampling at Subpart JJJJ sources. At this time, single point sampling for CO at Subpart ZZZZ sources have not been broadly approved. In the interim, when method 1 is not met, conducting a stratification test will show if the site is acceptable to perform the test.

Attachment 4 contains our Source Test Report Format. Include any additional information that may help to demonstrate that the sampling points are representative, should the need arise, in the test report.

If you have any questions or concerns regarding the above, please contact me at (913) 551-7048.

Sincerely,



Scott Postma
QSTO 1, 2, 3
Field Enforcement Compliance Branch
Environmental Services Division

Attachment:

- 1) Correspondences, 6 pages
- 2) ALT-087, 1 page
- 3) ALT-061, 1 page
- 4) Source Test Report Format, 2 pages

Attachments:

cc: Elizabeth Kramer, APCO
Todd Ellis, Nebraska Department of Natural Resources (NDEQ)

EFCB
9/13/13

EFCB

ATTACHMENT 1

From: Donna Oehm [<mailto:farabeecsm@inebraska.com>]
Sent: Thursday, June 27, 2013 3:33 PM
To: King, Melanie
Subject: RICE NESHAP ZZZZ
Importance: High

Melanie,

We recently received a letter from NDEQ (Nebraska) alerting us to an issue where test ports may not be properly located for use in performance testing. As an installer and testing coordinator, I would like some guidance on this subject. I have attached a scan of the letter from NDEQ, and emails from a test company representative, who, like me, needs clarification.

Has "Method 1" been removed from RICE NESHAP ZZZZ, or should we be following Method 1 for test port locations?

In a telephone conversation with the NDEQ, I was told that some manufacturers are putting test ports on the catalyst housings and the test company is using that port for their inlets/outlets respectively, using Method ALT 087.

The manufacturers are supplying ports before and after the catalyst elements (or bricks) in both inline units and silencer/catalyst combination units, this is true. These ports are used to place the monitoring system tubing and thermocouple, but could also be used by the testing company, eliminating the need for a man-lift or bucket truck to reach the outlet port at the top of the stack, in theory.

Is there any conflict with the rule if utilizing these ports for testing purposes?

I have attached a photograph of a silencer/catalyst combination unit showing manufacture test ports. The inlet port is between the two doors where the catalyst elements are located, the outlet port is on the left side of the silencer. (Just as a side note, there is also an inlet port in the exhaust pipe leading up to the silencer and an outlet port near the top of the stack that was used in performance testing this unit; however, the question holds, could we have used the manufacturer's test ports and still be ok?)

Thank you,

Donna Oehm, CSM
Farabee Mechanical, Inc.
PO Box 1748
Hickman, NE 68372
farabeecsm@inebraska.com
402.792.2612 office
402.405.7288 cell

ATTACHMENT 2



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711

Air 87

JUL 27 2011

OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

Mr. Ryan O'Dea
Alliance Source Testing
8020 Counts Massie Road
N. Little Rock, Arkansas 72113

Dear Mr. O'Dea:

In your July 21, 2011 correspondence, you asked for a waiver of the stratification test required in Method 7E (40 CFR 60, Appendix A) when testing reciprocating internal combustion engines. You noted the difficulty in evaluating emission profiles where gas concentrations are constantly varying and exhausts are too small to effectively traverse. These conditions render a stratification test ineffective and inappropriate. Under Federal New Source Performance Standards (40 CFR 60 Subparts IIII and JJJJ), Methods 1 or 1A and Method 7E are required for selecting sampling points and measuring nitrogen oxides (NO_x). Method 7E requires a stratification check before each test.

We agree that a stratification test does not enhance representative sampling and is not appropriate under the noted conditions. We are currently revising Subparts IIII and JJJJ to delete the Method 1 or 1A requirement for sampling point selection. In its place we will specify single-point sampling at the centroid of the exhaust. This new requirement will preclude the need for a stratification test with Method 7E.

We grant your request for a waiver of the stratification test whenever Method 7E is used to determine NO_x emissions from Federally-regulated engines. Single-point sampling at the centroid of the exhaust is adequate. This waiver also applies to carbon monoxide testing. We will be posting this approval on our website at <http://www.epa.gov/tn/emc/approalt.html> for use by other interested parties with similar situations.

If you have questions or would like to discuss the matter further, please call Foston Curtis at (919) 541-1063 or you may email him at curtis.foston@epa.gov.

Sincerely,

Conniesue B. Oldham, Ph.D., Group Leader
Measurements Technology Group

cc: Melanie King, OAQPS/SPPD/ESD (D243-01)

ATTACHMENT 3



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711

SEP 22 2009

OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

Jacob A. Gustin
HLP Engineering, Incorporated
P.O. Box 52805
Lafayette, Louisiana 70505-2805

Dear Mr. Gustin:

In your August 25, 2009 letter, you asked permission to use single-point testing in place of Method 1 or 1A for the required testing of engine emissions at the ConocoPhillips Lake Pelto Compressor Barge located offshore of southern Louisiana. The engines at the facility are subject to 40 CFR Part 60 Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines. They are located over water and are difficult to test due to limited space. For the engines positioned over the side of the platform, access is impossible without using a spud barge or building additional platforms.

You propose to use single-point testing with the aid of an extendable electrician's pole. This would allow the tester to work safely from the platform. The testing diagram you submitted shows how the sampling equipment would allow for testing from the centroid of the exhaust stack.

We approve your use of the single-point testing as described in lieu of Method 1 or 1A for the engines at the noted Louisiana facility. We are currently reviewing the need for multi-point testing at stationary engines and are finding that it may not enhance representative sampling at many engines. Thus, we will be posting this letter on our website at <http://www.epa.gov/ttn/emc/approalt.html> for use by other interested parties in similar situations.

If you have questions or would like to discuss the matter further, please call Foston Curtis at (919) 541-1063 or you may e-mail him at curtis.foston@epa.gov.

Sincerely,

A handwritten signature in cursive script that reads "Connie B. Oldham".

Conniesue B. Oldham, Ph.D., Group Leader
Measurements Technology Group

cc: Timothy Bergeron, LA DEQ
Foston Curtis (E143-02)
Charles Ritchey, Region 6

ATTACHMENT 4

SOURCE TEST REPORT FORMAT

- I. **Cover** Should Indicate the name and location of the plant, the specific source tested, the name and address of the testing firm (or agency), and the month and year of the tests.
- II. **Certification** A page including a certification by the test team leader that he is the person responsible for the test data, and one by the reviewer of the report (normally the supervisor of the team leader) attesting to the authenticity and accuracy of the report.
- III. **Table of Contents**
- IV. **Introduction**. Pertinent background information should be presented in this section. This information shall include, but not be limited to, the following:
 1. Name, address, and owner of plant;
 2. Test purpose;
 3. Name and address of testing organization;
 4. Test dates;
 5. Pollutants tested;
 6. Names of persons present for tests (industry and agency); and
 7. Any other important background information
- V. **Summary of test results** A summary of the test result necessary to evaluate the process with respect to the applicable emission standard(s) should be presented in this section. This information shall include, but not be limited to, the following:
 1. A summary of the emission results;
 2. Allowable emissions;
 3. Isokinetic sampling rates, when applicable;
 4. The operating level of the process during the tests;
 5. A description of the collected samples; and
 6. Discussion of errors, both real and apparent, in the tests.
- VI. **Facility operation during testing** This section shall contain a description of the facility, including, but not limited to, the following:
 1. General description of the facility, including the air pollution control equipment, and the process principle;
 2. A discussion of the maximum and normal operating conditions;
 3. Presentation of the process data for the tests, with calculations where necessary to show the production or burning rates, to demonstrate that the operating conditions are sufficiently representative of those required for testing. Calculation may be included in the Appendix;

4. Process and control equipment flow diagram; and
5. Any changes in operating conditions from those previously agreed upon by the source and agency.

VII. **Sampling and analytical procedures** A description of the sampling and analytical methods should be presented in this section. The information shall include, but not be limited to, the following:

1. A description of the sampling location(s) and sampling points;
2. Schematic drawings of the facility showing sampling location(s), major and minor flow disturbances, and stack or duct cross section(s) with the dimensions indicated;
3. A description of the sampling equipment;
4. Schematic drawings of the sampling trains (may be included in the Appendix);
5. A description of the sampling procedures, with a discussion of deviations from the standard methods, along with the sampling times;
6. A brief description of the analytical procedures, with a discussion of deviations from the standard methods; and
7. A description of the methods employed for other types of sampling and analyses, such as fuel.

VIII. **Appendix**

1. A summary of all data used in the calculations.
2. Calculations for all data submitted.
3. Copies of **all raw** field data sheets, (initialed by observer, where applicable) including those indicating sampling point locations,
4. Laboratory report, complete with analytical data sheets and chain of custody list.
5. Production and/or operational data, signed by a plant official if provided by the source.
6. Calibration procedures and work sheets for sampling equipment.
7. Copies of calibration records for plant or process instrumentation.
8. Pertinent correspondence concerning the tests.
9. Any other information necessary to assist the agency in making a determination of compliance.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8
1595 Wynkoop Street
DENVER, CO 80202-1129
Phone 800-227-8917
<http://www.epa.gov/regionOB>

Ref: 8ENF-AT

DEC 20 2012

Ryan Robins, Environmental Air Engineer
QEP Field Services Company
Independence Plaza
1050 17th Street, Suite 500
Denver, CO 80265

RE: Application for Alternative Monitoring, MACT ZZZZ
QEP Field Services
Chapita, Coyote Wash, Island and Wonsits Valley Compressor Stations
Uintah & Ouray Reservation, Uintah County, Utah

Dear Mr. Robins:

I am responding to your November 13, 2012 letter to the U.S. Environmental Protection Agency, Region 8 ("EPA") requesting the approval of an alternative monitoring method to the monitoring required under 40 C.F.R. Part 63, **Subpart ZZZZ**, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines ("MACT ZZZZ").¹ Specifically, QEP Field Services Company ("QEP") requested approval to conduct the MACT ZZZZ required pressure differential (i.e., pressure drop) measurements across the catalyst at load conditions within plus or minus 10 percent of the baseline load established during the initial engine performance tests outlined in paragraph #23 of Consent Decree Case No. 2:08-CV-00167-TS-PMW ("QEP CD") for Reciprocating Internal Compression Engines ("RICE") at Chapita, Coyote Wash, Island and Wonsits Valley Compressor Stations ("Affected Facilities").

Owners or operators requesting approval for alternative monitoring requests must satisfy the requirements found in 40 C.F.R. Part 63. Subpart A (General Provisions) that govern such requests. See § 63.8(t)(4). We discuss those requirements below. Pursuant to § 63.8(t)(2), the EPA is approving QEP's Alternative Monitoring Request with two conditions.

Regulatory Background

Under § 63.8(f)(4), "an owner or operator who wishes to use an alternative monitoring procedure must submit an application" for approval that contains a description of the proposed alternative monitoring system which addresses the four elements contained in the definition of "monitoring in § 63.2." The four elements defining monitoring, as cited in § 63.2, are as follows:

¹ MACT ZZZZ, at Table 6, **requires** that the pressure drop across **the** catalyst be measured once per month. Further, MACT ZZZZ **requires** that **these** pressure drop readings occur at 100 percent load plus or minus 10 percent. See Tables 1b and 2b.

- (1) Indicator(s) of performance-the parameter or parameters you measure or observe for demonstrating proper operation of the pollution control measures or compliance with the applicable emissions limitation or standard.. .;
- (2) Measurement techniques-the means by which you gather and record information of or about the indicators of performance...;
- (3) Monitoring frequency- the number of times you obtain and record monitoring data over a specified time interval ... ; and
- (4) Averaging time-the period over which you average and use data to verify proper operation of the pollution control approach or compliance with the emissions limitation or standard...

See § 63.2 for a complete description of these elements. In addition, § 63.8(1)(4) states that "the application must include information justifying the owner or operator's request for an alternative monitoring method, such as the technical or economic infeasibility, or the impracticality, of the affected source using the required method."

Thus, the EPA will evaluate QEP's application for an alternative monitoring procedure pursuant to § 63.8(1).

OEP's Alternative Monitoring Request (AMR) Background

On November 16, 2012, the EPA received an Alternative Monitoring Method Request for engines at affected facilities covered by the QEP CD (Chapita, Coyote Wash, Island and Wonsits Valley Compressor Stations) to allow for monthly pressure differential measurements across the catalyst to be conducted within plus or minus 10 percent of the baseline load established during the initial performance test instead of the plus or minus 10 percent of 100 percent load required in MACT ZZZZ. QEP indicated that due to the variable nature of development of a natural gas field many of the engines do not operate at plus or minus 10 percent of 100 percent load under nonnal operating conditions. QEP stated that they wish to avoid having to needlessly "ramp up" the loads of the affected engines prior to taking monthly measurements.

QEP also noted the proposed alternative monitoring will more accurately reflect the nonnal operation of the engines and will also provide more "meaningful" pressure differential readings that confirm the proper operation of the emission controls. Finally, QEP noted that the alternative monitoring practice benefits air quality since it prevents QEP from having to artificially load engines (which may result in higher emissions.)

EPA's Response

The EPA reviewed the information QEP provided in its November 13, 2012 letter. QEP's alternative monitoring request does not pertain to any of the four elements contained in the definition of "monitoring in § 63.2." Rather QEP's request pertains to the load an engine must be at when conducting the monthly pressure drop readings and why conducting such readings at the loads required by MACT ZZZZ is impractical.

The EPA is approving the alternative monitoring request based on the performance testing negotiated as part of the QEP CD. The EPA notes that the QEP CD allows for affected facilities' engine performance testing to occur at loads other than plus or minus 10 percent of 100 percent load. Thus, the EPA believes that it is technically appropriate to conduct the monthly pressure drop readings at plus or minus 10 percent of the load an affected facility engine was at when the initial performance test was conducted showing compliance with the MACT ZZZZ emission limits.

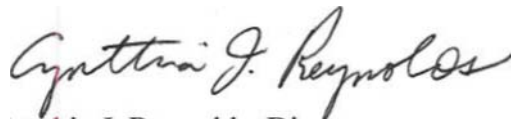
Therefore, pursuant to § 63.8(f)(2), the EPA approves the alternative monitoring request for those affected facilities. However, the EPA's approval is conditioned on the following:

- (1) Should the load of an engine increase by 10% from the load the engine was at during the initial performance test, QEP will re-test and re-establish the baseline pressure drop. QEP will maintain records of the engine load on a daily basis.
- (2) Should the catalyst on an engine be changed, QEP will re-test and re-establish the baseline pressure drop for that engine as required by § 63.6640(b).

Note that pursuant to § 63.8(f)(5)(iii) once the EPA approves the use of an alternative monitoring method for an affected source under § 63.8(f)(5)(i), the owner or operator of such source shall continue to use the alternative monitoring method until he or she receives approval from the Administrator to use another monitoring method as allowed by § 63.8(f).

If you require more specific information regarding this letter, the most knowledgeable person on my staff is Alexis North, who can be reached at (303) 312-7005 or north.alexis@epa.gov.

Sincerely,



Cynthia J. Reynolds, Director
Air & Toxics Technical Enforcement Program
Office of Enforcement, Compliance and Environmental
Justice





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10

1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

MAY 12 2014

OFFICE OF
AIR, WASTE AND TOXICS

Mr. Nicholas Graves
NC Power Systems, CAT
Anchorage Branch
6450 Arctic Boulevard
Anchorage, Alaska 99518

Dear Mr. Graves:

This is the response to the August 8, 2013, request from NC Power Systems, CAT branch office in Anchorage, Alaska, (NC Power Systems) for a determination of the applicability of provisions of the Clean Air Act (CAA) when a mobile source engine is converted to serve as a stationary source engine. NC Power Systems provides equipment and service to the Alaska Village Electric Cooperative (AVEC), and is therefore requesting guidance on their behalf to confirm compliance for the equipment that AVEC is purchasing. AVEC plans to purchase an existing marine propulsion engine and operate it as a stationary source at an existing power plant in Emmonak, Alaska. The National Emission Standard for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE), 40 C.F.R. Part 63, Subpart ZZZZ (Subpart ZZZZ) will apply to this engine when it is operated as a stationary source. The New Source Performance Standards (NSPS) for Stationary Compression Ignition Internal Combustion Engines, 40 C.F.R. Part 60, Subpart IIII (Subpart IIII) can also apply to stationary engines depending on when the engine is manufactured, reconstructed, or modified.

NC Power Systems is requesting that the United States Environmental Protection Agency (EPA) provide guidance on the applicability of Subpart IIII as it relates to the relevant date of manufacture, for an engine that is converted to service as a stationary engine after it had initially been used as a non-stationary engine (in this case, a marine propulsion engine).

Provided that a RICE has not been "reconstructed," as defined at 40 C.F.R. § 60.15, a RICE that is relocated from service as a non-stationary engine type and converted to use at a stationary source retains its original date of manufacture.

Background

AVEC is in the process of designing and constructing a new power plant to replace the existing Emmonak power plant to provide prime power to Emmonak and the neighboring community of Alakanuk, Alaska. The new Emmonak power plant will consist of four diesel engine generators. The specific unit in question is EU ID#4, which is a CAT 3516B, Marine Propulsion engine, manufactured March 22, 1999 (EU ID#4). NC Power Systems states that EU ID#4 has not been reconstructed, as that term is defined at 40 C.F.R. §60.15.

Subpart III applies to owners and operators of stationary compression ignition (CI) RICE that commence construction after July 11, 2005, where the stationary CI RICE is manufactured after April 1, 2006, and is not a fire pump engine. Under the general provisions of Part 60, "commenced" and "construction" are defined as follows:

Commenced means, with respect to the definition of *new source* in section 111(a)(2) of the Act, that an owner or operator has undertaken a continuous program of construction or modification or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or modification.

Construction means fabrication, erection, or installation of an affected facility.

The definition of "model year" applicable to Subpart III, found at 40 C.F.R. § 60.4219, addresses the concept of conversion of a non-stationary engine to a stationary source application. (emphasis added):

Model year means the calendar year in which an engine is manufactured (see "date of manufacture"), except as follows:

(1) Model year means the annual new model production period of the engine manufacturer in which an engine is manufactured (see "date of manufacture"), if the annual new model production period is different than the calendar year and includes January 1 of the calendar year for which the model year is named. It may not begin before January 2 of the previous calendar year and it must end by December 31 of the named calendar year.

(2) For an engine that is converted to a stationary engine after being placed into service as a nonroad or other non-stationary engine, model year means the calendar year or new model production period in which the engine was manufactured (see "date of manufacture").

Date of manufacture means one of the following things:

(1) For freshly manufactured engines and modified engines, date of manufacture means the date the engine is originally produced.

(2) For reconstructed engines, date of manufacture means the date the engine was originally produced, except as specified in paragraph (3) of this definition.

(3) Reconstructed engines are assigned a new date of manufacture if the fixed capital cost of the new and refurbished components exceeds 75 percent of the fixed capital cost of a comparable entirely new facility. An engine that is produced from a previously used engine block does not retain the date of manufacture of the engine in which the engine block was previously used if the engine is produced using all new components except for the engine block. In these cases, the date of manufacture is the date of reconstruction or the date the new engine is produced.

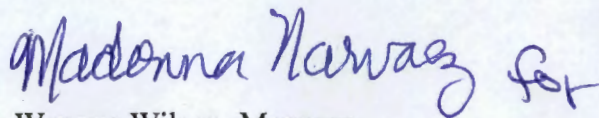
Determination

The conversion of an existing non-stationary engine to use as an engine at a stationary source is not considered to be "commencement of construction" that would trigger new source status under Part 60, Subpart IIII. In the case of engines, which can be stationary or non-stationary, the date the unit commenced construction is the date the original owner entered a contractual obligation to undertake construction, even if it was not an "affected source" under the Part 60 stationary source rules at that time.

Therefore, based on your assertion that EU ID#4 has not been reconstructed, it would retain March 22, 1999, as the engine's manufacture date when converted from a marine propulsion engine to a stationary source. Because the engine was manufactured prior to April 1, 2006, and commenced construction prior to July 11, 2005, it would not be subject to Subpart IIII. EU ID#4 is an existing engine subject to Subpart ZZZZ.

If you have any questions regarding this determination, please contact Heather Valdez at (206) 553-6220.

Sincerely,



Wenona Wilson, Manager
Office of Air, Waste and Toxics

cc: Fathima Siddeek
Alaska Department of Environmental Conservation

Patrick Dunn
Alaska Department of Environmental Conservation



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711

January 27, 2014

OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

Mark L. Kametches
Carolinas DR Program Manager
Duke Energy
410 S. Wilmington St.
Raleigh, North Carolina 27601

Dear Mr. Kametches:

This letter is in response to your November 1, 2013, letter to the U.S. Environmental Protection Agency. In the letter, you requested written confirmation that stationary reciprocating internal combustion engines (RICE) participating in two Duke Energy Carolinas nonresidential demand response programs would be able to meet the definition of "emergency stationary RICE" in the National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines ("RICE NESHAP"). The two programs are the "PowerShare – Generator Curtailment Option" and the "Demand Response Automation – Emergency Generator Option."

In your letter, you indicated that the terms of the demand response programs are as follows:

PowerShare – Generator Curtailment Option (Duke Energy Carolinas - DEC)

- Contractually limited to 100 hours annually for curtailment events and readiness tests
- Curtailment events restricted to NERC Level 2 (Energy Emergency Alert (EEA) Level 2)
- 1-hour monthly readiness test under load during DEC peak hours

Demand Response Automation (DRA) – Emergency Generator Option (Duke Energy Progress - DEP)

- Contractually limited to 80 hours annually for curtailment events and readiness tests
- Curtailment events restricted to NERC Level 2 (EEA2)
- Single 6-hour summer readiness test under load during DEP peak hours

On December 10, 2013, you provided copies of the contracts for the two demand response programs. The contracts indicated that, with the exception of readiness tests, no curtailment events would be initiated for the PowerShare Generator Curtailment Option and DRA Emergency Generator Option unless Duke Energy Progress has declared a NERC Level 2 (EEA2) reliability status.

In order to be considered an emergency engine, a stationary RICE must meet the definition of "emergency stationary RICE" in 40 CFR 63.6675 and the operational restrictions in 40 CFR 63.6640(f). The operation restrictions specified at 40 CFR 63.6640(f) for emergency engines are as follows:

- There is no time limit on the use of the engine in emergency situations
- The engine may be used for up to 100 hours per calendar year for any combination of the following purposes:
 - Maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine

- Emergency demand response when an EEA Level 2 has been declared by the Reliability Coordinator
- Periods where the voltage or frequency deviates by 5 percent or more below standard
- The engine may be used for up to 50 hours per calendar year for any combination of the following purposes, but the operation counts as part of the 100 hours per calendar year for maintenance, testing, and emergency demand response:
 - Non-emergency situations, provided there is no financial arrangement with another entity
 - Peak shaving in local system operator program until May 3, 2014, if existing engine
 - Local reliability as part of a financial arrangement with another entity if all of the following conditions are met:
 - engine is an existing engine
 - engine is dispatched by local transmission/distribution system operator
 - dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads
 - dispatch follows reliability, emergency operation, or similar protocols that follow specific NERC, regional, state, public utility commission, or local standards or guidelines
 - power is provided only to the facility or to support the local distribution system
 - engine owner/operator identifies and records dispatch and standard that is being followed

You indicated in your letter that the terms of the PowerShare Generator Curtailment Option and DRA Emergency Generator Option programs are consistent with the limitations for emergency engines in 40 CFR 63.6640(f); that is, operation for emergency demand response is limited to no more than 100 hours per year and to situations when an EEA Level 2 has been declared by the Reliability Coordinator. The EPA agrees that the information you provided indicates that the terms of the programs are consistent with respect to the RICE NESHAP's limitations on the number of hours and situations under which an emergency engine can operate for emergency demand response. Note, however, that in addition to the limitations on emergency demand response, an engine must fully comply with the definition of "emergency stationary RICE" and all of the operational restrictions in 40 CFR 63.6640(f) in order to be considered an emergency engine under the RICE NESHAP. Therefore, the terms of the Duke Energy Carolinas demand response programs do not fully capture all of the operational limitations on emergency engines in the RICE NESHAP.

If you have any questions regarding this letter, please contact me at (919) 541-2469.

Sincerely,



Melanie King
Energy Strategies Group
Sector Policies and Programs Division



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

ASSISTANT ADMINISTRATOR
FOR ENFORCEMENT AND
COMPLIANCE ASSURANCE

Michael W. Kendall, R.S.
Senior Air Program Manager, Group Leader
Air Services Group
URS Corporation
13825 Sunrise Valley Drive, Suite 250
Herndon, Virginia 20171-3426

Re: Regulatory Interpretation in Response to URS Applicability Determination Request of New Source Performance Standards for Stationary Compression Ignition Internal Combustion Engines at 40 CFR Part 60, Subpart IIII

Dear Mr. Kendall:

This letter is in response to your request for a determination of the requirements of the New Source Performance Standards (NSPS) for Stationary Compression Ignition (CI) Internal Combustion Engines, which are codified at 40 CFR Part 60, Subpart IIII. Your request was received by the United States Environmental Protection Agency (EPA) on August 21, 2012. Specifically, you requested a determination as to whether a 3,000 kW engine, manufactured after January 1, 2011 and certified to the Tier 2 emission standards, can be used for non-emergency purposes if it is equipped with selective catalytic reduction and a diesel particulate filter to reduce emissions to levels equivalent to the Tier 4 interim emission standards. The EPA is confirming that the Subpart IIII regulations require that 3,000 KW engines manufactured after January 1, 2011 and certified to the Tier 2 standards may only be used for emergency purposes.

The Subpart IIII regulations set forth the following:


- §60.4204(b) states that 2011 model year 3,000 kW stationary non-emergency CI engines with a displacement less than 10 liters per cylinder must meet the Tier 4 standards in 40 CFR Part 1039, Subpart B.
- §60.4205(b) states that the emission standards that apply to owners and operators of 2011 model year 3,000 kW stationary emergency CI engines with a displacement less than 10 liters per cylinder are the Tier 2 standards in Table 1 of 40 CFR §89.112.
- §60.4211(c) states that owners and operators of 2007 model year and later stationary CI engines subject to the emission standards in §60.4204(b) and §60.4205(b) must comply by purchasing an engine certified to the applicable emission standard.

For a 2011 model year 3000 kW non-emergency CI engine with a displacement less than 10 liters per cylinder, the applicable emission standards are the Tier 4 standards in 40 CFR Part 1039, Subpart B, not the Tier 2 standards in Table 1 of 40 CFR §89.112. Therefore, the 3,000 KW engines manufactured after January 1, 2011 and certified to the Tier 2 standards may only be used for emergency purposes.

In your letter you assert that a number of states, including North Carolina and Virginia, continue to issue permits for non-emergency engines that are not Tier 4 interim certified, but are meeting the Tier 4 interim (and some Tier 4 Final) emission requirements. Please provide specific details concerning these inconsistencies that would assist us in addressing your concerns. You also stated that there is inconsistency in rule implementation, as evident by North Carolina's adoption of Subpart III into their state regulations without a similar state regulation in Virginia. It is important to note that states may issue their own air quality regulations, provided that they are at least as stringent as Federal rules. States cannot weaken Federal regulations, and they cannot waive the EPA certification requirement for stationary engines subject to Subpart III.

EPA regards this response as a regulatory interpretation. As such, this response is not a site-specific applicability determination and is not considered a final Agency action. Feel free to contact John DuPree at (202) 564-5950, if you would like to provide site-specific information in support of a request for a formal EPA applicability determination.

Sincerely,



Edward J. Messina, Director
Monitoring, Assistance, and Media Programs Division
Office of Compliance

bcc: Greg Fried, AED
Julius Banks, MAMPD
Michael Horowitz, OGC
Melanie King, OAQPS
Zelma Maldonado, Region 3
Beverly Banister, Region 4



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

APR 19 2012

Mr. James Richmond
GenAcc
60 State Street, Suite 101
Peoria, Illinois 61602

ASSISTANT ADMINISTRATOR
FOR ENFORCEMENT AND
COMPLIANCE ASSURANCE

Dear Mr. Richmond:

We are writing to follow up on a call that you had with several members of our staff on February 27, 2012, regarding the New Source Performance Standards for Stationary Compression Ignition (CI) Internal Combustion Engines. Those standards were published on July 11, 2006, 71 Fed. Reg. 39,154, and revised on June 28, 2011, 76 Fed. Reg. 37,954. They can be found at 40 C.F.R. part 60, subpart IIII. During the call and in previous communications with our staff, you raised a number of concerns and claims related to the provisions in subpart IIII that require engine manufacturers to obtain certification that their new stationary CI engines meet applicable emission standards and that require owners and operators of new stationary CI engines to purchase engines certified to the applicable emission standards. Below is our response to the specific issues you raised during the call.

Requirement to purchase certified engines: As specified in subpart IIII at 40 C.F.R. § 60.4205(b), for 1 MW stationary CI emergency engines with a displacement less than 10 liters per cylinder, the emission standards that apply for owners and operators (emphasis added) of 2011 model year and later engines are the Tier 2 standards in Table 1 of 40 C.F.R. § 89.112. As specified in subpart IIII at 40 C.F.R. § 60.4204(b), owners and operators of 2011 model year and later 1 MW stationary CI non-emergency engines with a displacement less than 10 liters per cylinder must meet the Tier 4 standards in 40 C.F.R. part 1039, subpart B.

You indicated that you are purchasing new 2011 and later model year stationary CI engines that are certified to the Tier 2 standards that apply to emergency engines. You are then installing emission controls on the engine that you believe will reduce the emissions of the engines below the Tier 4 emission standards. You stated that these engines are then being used in non-emergency applications, despite the fact that they are not certified by the U.S. Environmental Protection Agency (EPA) as meeting the emission standards applicable to non-emergency engines. You indicated that you are the owner/operator of these engines through your affiliation with ELM Energy LLC.

As our staff has indicated to you previously on several occasions, subpart IIII specifies at 40 C.F.R. § 60.4211(c) that owners and operators of 2007 model year and later stationary CI engines subject to the emission standards in § 60.4204(b) and § 60.4205(b) must comply by purchasing an engine certified to the applicable emission standard. For 2011 model year and later non-emergency engines larger than 1 MW with a displacement less than 10 liters per cylinder, the applicable emission standards are the Tier 4 standards in 40 C.F.R. part 1039, subpart B, not the Tier 2 standards in Table 1 of 40 C.F.R. § 89.112. It



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is a violation of subpart IIII to purchase an engine for non-emergency use if it is not certified to the applicable standards for non-emergency engines.

You indicated that you believe 40 C.F.R. § 60.4211(g) allows you to demonstrate compliance through on-site compliance testing in lieu of purchasing a certified engine. This is not correct. Paragraph 60.4211(c) says that the owner/operator must comply by purchasing a certified engine; it then goes on to say that it must be installed and configured according to the manufacturer's specifications, "except as permitted in paragraph (g) of this section." In other words, there is no exception to purchasing a certified engine; the paragraph (g) exception applies only to the requirement that the engine be installed and configured as per the manufacturer's specifications. Paragraph 60.4211(g) further makes clear that the requirements for the additional compliance demonstration apply "if you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer" In other words, 60.4211(g) does not provide a mechanism for doing something other than purchasing a certified engine; it only provides an alternative mechanism for showing compliance if you deviate from the manufacturer's specs for installation and configuration of the certified engine that you are required to purchase.

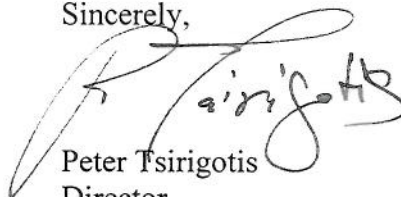
As you may be aware, we issued a letter to engine manufacturers in December 2011 to remind manufacturers that they are required to certify engines to the applicable emission standards in subpart IIII, and that non-emergency engines must be certified to the emission standards for non-emergency engines. Any manufacturer that sells an engine subject to subpart IIII that is not certified to the applicable emission standards for the engine's model year, maximum engine power, and application is violating subpart IIII. The manufacturer letter is attached for your information.

Cost of certification: You indicated that the cost of certification is an unreasonable burden for small businesses. As we have indicated previously, the certification program ensures that the engine manufacturer goes through a robust process to show that the engine meets these emissions standards *over the useful life of the engine*. Owners and operators of certified engines benefit significantly from this program, because they do not have to perform costly stack testing to show initial or continuing compliance with the emission limits set out in subpart IIII. By contrast, once a manufacturer certifies an engine family under subpart IIII, no further engines in that subcategory need be tested under subpart IIII. Numerous small volume manufacturers have certified their engines to the provisions for mobile sources over the years, and the EPA regulations contain several provisions to reduce the burden of certification on small volume manufacturers.

Field testing and state/ local requirements: You stated that owners/operators of stationary CI engines are experiencing difficulty in reconciling the EPA requirements for stationary CI engines with more stringent state or local requirements. It is important to note that states have the right to issue their own air quality regulations, provided they are at least as stringent as federal rules. States cannot weaken federal regulations, however, and they cannot waive the EPA certification requirement for stationary CI engines. You also indicated that field testing of certified engines has demonstrated large differences between emissions measured using the laboratory certification test procedures versus field test procedures, and that certified engines do not reduce emissions below the required emission standards for the first 90 minutes after startup. As we have stated previously, we have not been notified of such difficulties or differences by our state and local air agency partners, but would welcome additional specific information about these issues.

We would welcome any additional information and data you wish to provide us regarding your concerns.

Sincerely,

A handwritten signature in black ink, appearing to read "P. Tsirigotis". The signature is fluid and cursive, with a large initial "P" and a long, sweeping underline.

Peter Tsirigotis
Director
Sector Policies and Programs Division
Office of Air Quality Planning and Standards

A handwritten signature in black ink, appearing to read "Phillip A. Brooks". The signature is cursive and somewhat stylized, with a large initial "P" and a long, sweeping underline.

Phillip A Brooks
Director
Air Enforcement Division
Office of Enforcement and Compliance Assurance