

US EPA ARCHIVE DOCUMENT



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 2
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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.

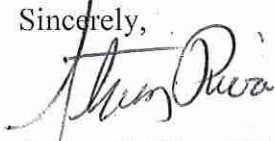
Please note that since the FSRU utilizes boilers as the main propulsion devices instead of reciprocating internal combustion engines (RICE), the FSRU does not meet the exemption provided by Section 302(z) of the Clean Air Act which excludes reciprocating internal combustion engines used as nonroad engines 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,



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

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