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National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines (RICE Rule) Training Module 40 CFR 63 Subpart ZZZZ

Script- Major Source New Landfill/Digester Gas Engine >500 Horsepower

NARRATOR:

[Slide 2:]

Welcome to the Connecticut Department of Energy & Environmental Protection's Online Training for the National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines, also known as the RICE Rule!

This tool is designed to help owners and operators of reciprocating internal combustion engines, also known as RICE, determine their requirements under 40 CFR Section 63, subpart ZZZZ. By answering the successive questions, your specific requirements have been estimated. Please note that they may not be complete, and refer any questions to your local authority.

[Slide 3:]

We have established that you own or operate a new, landfill or digester gas engine, greater than 500 horsepower, located at a major source. Now, let's discuss your requirements.

If your engine fires landfill or digester gas equivalent to at least 10% of the gross heat input annually, you must monitor and record fuel use each day with separate fuel meters to measure the volumetric flow rate of each fuel. Additionally, you must operate in a manner that keeps hazardous air pollutant emissions to a minimum.

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Now, let's discuss your notification requirements. The rule requires you to submit an Initial Notification within 120 days after the effective date of the rule or 120 days after construction or reconstruction of the unit.

The Initial Notification must include the following information:

- The owner or operator's name and address.
- The address where the affected source is physically located.
- The relevant standard which requires submission of a notification, and your compliance date.
- A short description of the engine, including its size, nature, design, method of operation, and the types of emission points within the affected source that are subject to the applicable standard, along with the hazardous air pollutants emitted.
- An indication as to whether the engine is located at an area or major source of hazardous air pollutants; and
- A statement indicating that the unit has no additional requirements along with an explanation of the exclusion.

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If your engine combusts landfill or digester gas equivalent to at least 10% of the gross heat input annually, you must submit an annual report. The report must contain:

- Each fuel's flow rate and the heating values that were used in your calculations. You must also demonstrate that the percentage of heat input provided by landfill or digester gas is equivalent to 10% or more of the gross heat input on an annual basis.
- You must include the operating limits provided in your permit, along with any deviations from the limits.
- Lastly, you must identify any problems or errors suspected with the meters.

The first annual report must account for the period which begins on the compliance date and ends on December 31st of the same year. This report must be postmarked by the following January 31st.

Each subsequent report must cover the period from January 1st through December 31st, and must be postmarked or delivered by the following January 31st.

If the State permitting authority has set different report due dates, you can submit the annual reports according to the dates specified by the permitting authority.

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You must be in compliance with all applicable requirements by the date shown here.

[Slide 7:]

You are subject to the SI NSPS, listed under 40 CFR 60 subpart JJJJ, if you own or operate a spark ignition engine which was constructed after June 12th, 2006 **and** manufactured on or after July 1st, 2007 (or manufactured on or after January 1st, 2008 if the engine is lean burn and less than 1,350 horsepower). For the purposes of this rule, the date that construction commences is the date the engine is ordered by the owner or operator. You are also subject to the SI NSPS if you own or operate a spark ignition engine that was modified or reconstructed after June 12th, 2006.

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If your engine is subject to the SI NSPS, you must meet the following requirements:

- For applicable emission limits, operating limits, and testing requirements, please refer to the table listed later in this module.
- You must meet all standards for the life of the engine.

Now let's discuss your fuel requirements. If your engine runs on gasoline, the gasoline must comply with the sulfur limit of 80 parts per million per gallon.

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If you have a certified engine:

- You must install, operate, and maintain the unit in accordance with the manufacturer's written instructions
- If you do not adhere to the manufacturer's instructions, you must keep a maintenance plan and maintenance records, and operate the engine in accordance with good air pollution control practices. Failure to adhere to the manufacturer's instructions will also result in the requirement to perform an initial performance test and subsequent testing every 8,760 hours or 3 years, whichever comes first.

If your engine is not certified:

- You must keep a maintenance plan; and
- Conduct an initial performance test and subsequent testing every 8,760 hours or 3 years, whichever comes first.

All engines subject to the SI NSPS are required to keep the following records:

- Documentation of certification (for example, the EPA Certificate of Conformity); and
- Records of engine maintenance.

You must submit an Initial Notification if you own or operate a non-certified engine. A Notification of Intent to Conduct Performance Testing must be submitted 30 days prior to a performance test. Results of performance testing must be submitted within 60 days of the test.

[Slide 10:]

This plate, mounted on an engine, shows proof of engine certification.

[Slide 11:]

In case you are not familiar with an EPA Certificate of Conformity, here's what it looks like.

[Slide 12:]

Please study this table to determine your applicable emission standards, importing and installing requirements, compliance requirements, testing requirements, and general requirements.

[Slide 13:]

All notifications and reports should be sent to EPA Region 1 at the address shown here.

[Slide 14:]

If you would like more information about the RICE rule, please visit the EPA RICE Compliance web page at the address provided. This site provides resources such as Q and A documents, fact sheets, sample notification forms, and recordings of webinars, all of which are designed to help you comply with this rule.

[Slide 15:]

Let's summarize your requirements under this rule.

- You must monitor and record fuel usage daily with separate fuel meters to measure the volumetric flow rate of each fuel.
- You must submit an Initial Notification within 120 days after the effective date of the rule or within 120 days after construction or reconstruction
- You must submit an annual report. The report should include:
 - The fuel flow rate of each fuel, the heating values that were used in calculations, and a demonstration that the percentage of heat input provided by landfill gas or digester gas is equivalent to 10% or more of the gross heat input on an annual basis;
 - o Operating limits provided in your permit, and any deviations;
 - o Problems or errors suspected with the meters.
- The report is due January 31st of each year, unless the permitting authority has specified otherwise.

[Slide 16:]

- You must comply with all Spark Ignition New Source Performance Standards, as applicable.
- Your engine must be in compliance with all requirements of this rule by the date shown on screen.