

**Iowa Department of Natural Resources
Environmental Protection Commission**

ITEM

9

DECISION

TOPIC

Final Rules – Chapter 23:

Air Quality Program Rules – Adoption of air toxics standards for stationary engines (RICE NESHAP)

The Department is requesting permission from the Commission to adopt amendments to Chapter to amend Chapter 23, “Emissions Standards for Contaminants,” of the Iowa Administrative Code.

The purpose of the rule making is to adopt the federal air toxics standards for stationary engines commonly known as the RICE NESHAP. “RICE NESHAP” is the acronym for National Emission Standards for Hazardous Air Pollutants (NESHAP) for Reciprocating Internal Combustions Engines (RICE) (40 Code of Federal Regulations (CFR) Part 63 Subpart ZZZZ). The Department requests that the Commission adopt the RICE NESHAP by reference so that all compliance deadlines will be according to federal timelines.

The U.S. Environmental Protection Agency (EPA) recently updated the RICE NESHAP. The revised RICE NESHAP generally provides regulatory relief and clarity from the previous requirements.

Upon adoption of RICE NESHAP amendments, the Department rather than EPA will implement and enforce these regulations in Iowa. This allows the Department to provide compliance assistance and outreach to affected facilities as soon as possible.

Need for Final Rules

In 2010, the Commission adopted earlier amendments to the RICE NESHAP. Executive Order (EO) 72 subsequently rescinded adoption of the RICE NESHAP amendments. EO 72 stated the RICE NESHAP was too costly for small utilities that maintain and operate rarely used emergency engines, and the RICE NESHAP requirements could increase electricity rates for consumers.

In response to the concerns from Governor Branstad as expressed in EO 72 and concerns from other stakeholders, EPA agreed to reconsider the RICE NESHAP. Consequently, EPA updated the standards to provide more circumstances for emergency engines and for engines that participate in electricity management programs to operate under non-emergency conditions. The Department is now requesting that the Commission adopt the amendments to the RICE NESHAP. If the Commission does not adopt the RICE NESHAP amendments, the inconsistency with federal regulations may cause regulatory uncertainty and confusion for affected facilities.

Summary of rulemaking activities

On April 16, 2013, the Commission approved the Department's request to publish the Notice of Intended Action and to accept formal public comments on the proposal. The Notice of Intended Action was published in the Iowa Administrative Bulletin as [ARC 0740C](#) on May 15, 2013. The Department held a public hearing on June 4, 2013, and accepted written public comments through June 4, 2013. The Department did not receive any comments at the public hearing. The Department received two written comments. Both comments were in favor of the Department and Commission adopting the RICE NESHAP (see attached Public Participation Responsiveness Summary). The Department did not make any changes to the final rules from what was published in the Notice of Intended Action.

Stakeholder Engagement

Over the past three years, the Department has worked closely with stakeholders regarding the RICE NESHAP. Stakeholders include affected facilities (such as investor-owned electric utilities, municipal utilities, rural electric cooperatives, industries, institutional facilities and others), the Iowa Association of Municipal Utilities (IAMU), South Iowa Municipal Electric Cooperative Association (SIMECA), Resale Power Group of Iowa (RPGI), and North Iowa Municipal Electric Cooperative Association (NIMECA). IAMU, SIMECA, NIMECA, and RPGI recently offered their support for the Department adopting the RICE NESHAP amendments.

If the Commission approves the final rules, the Adopted and Filed rules will be published on September 18, 2013, and will become effective on October 23, 2013.

The Adopted and Filed rules, Jobs Impact Statement, Fiscal Impact Statement, and Public Participation Responsiveness Summary are attached.

Christine Paulson
Environmental Specialist Senior
Program Development Section, Air Quality Bureau
Memo date: July 29, 2013

ENVIRONMENTAL PROTECTION COMMISSION[567]

Adopted and Filed

Pursuant to the authority of Iowa Code section 455B.133, the Environmental Protection Commission (Commission) hereby amends Chapter 23, "Emission Standards for Contaminants," Iowa Administrative Code.

The purpose of the rule making is to adopt by reference the federal air toxics standards for stationary engines commonly known as the RICE NESHAP. RICE NESHAP is the acronym for National Emission Standards for Hazardous Air Pollutants (NESHAP) for Reciprocating Internal Combustion Engines (RICE) (40 Code of Federal Regulations (CFR) Part 63, Subpart ZZZZ). The Commission is adopting the RICE NESHAP by reference into state rules so that all compliance deadlines will be in accordance with federal time lines.

Notice of Intended Action was published in the Iowa Administrative Bulletin on May 15, 2013, as **ARC 0740C**, and a public hearing was held on June 4, 2013, in Windsor Heights, Iowa. The Department of Natural Resources (Department) received no comments at the public hearing. The Department received two written comments prior to the June 4, 2013, deadline for public comments. Both comments supported the Commission adopting the RICE NESHAP amendments. The Department's Public Participation Responsiveness Summary is available from the Department upon request. The Commission did not make any changes to the adopted amendments from what was published in the Notice of Intended Action.

The U.S. Environmental Protection Agency (EPA) recently updated the RICE NESHAP. The revised RICE NESHAP generally provides regulatory clarity to and relief from the previous requirements.

Upon the affected date of these adopted amendments, the Department rather than EPA

will implement and enforce these regulations in Iowa, thereby allowing the Department to provide compliance assistance and outreach to affected facilities as soon as possible.

In 2010, the Commission adopted an earlier version of the RICE NESHAP. In Executive Order (EO) 72, Governor Branstad subsequently rescinded adoption of the RICE NESHAP. EO 72 stated that the RICE NESHAP was too costly for small utilities that maintain and operate rarely used emergency engines and that the RICE NESHAP requirements could increase electricity rates for consumers.

In response to the concerns from Governor Branstad as expressed in EO 72 and concerns from other stakeholders, EPA agreed to reconsider the RICE NESHAP. Consequently, EPA made changes to the RICE NESHAP as published in the Federal Register on January 30, 2013 (available at www.gpo.gov/fdsys/pkg/FR-2013-01-30/pdf/2013-01288.pdf). The updated RICE NESHAP provides more circumstances for emergency engines and for engines that participate in electricity management programs to operate under non-emergency conditions. The Commission is now adopting the amendments to the RICE NESHAP. If the Commission did not adopt the RICE NESHAP amendments, the inconsistency with federal regulations may cause regulatory uncertainty and confusion for affected facilities.

Item 1 amends the introductory paragraph of subrule 23.1(4) to reference paragraph 23.1(4)“cz” for adoption of the RICE NESHAP.

Item 2 amends paragraph 23.1(4)“cz” to remove the earlier adoption date for the RICE NESHAP and to adopt the January 30, 2013, version of the federal regulations.

Jobs Impact Statement

The following is a summary of the jobs impact statement. The complete jobs impact statement is available from the Department upon request.

After analysis and review, the Department has determined that jobs could be impacted. However, the amendments are only implementing federally mandated regulations. This rule making does not impose on Iowa businesses any regulations that are not required by federal law. The Commission is adopting the federal RICE NESHAP by reference so the rules will be identical to federal requirements. Additionally, facilities are impacted by the federal standards regardless of whether the Commission adopts the standards into state administrative rules.

The Commission minimized the impact of the RICE NESHAP by waiting to adopt the standards until after EPA completed its reconsideration. EPA's final rule generally provides regulatory relief from and clarity to the requirements that EPA initially mandated. In particular, the new RICE NESHAP will provide more flexibility and potential cost savings to affected industries.

According to EPA's regulatory impact analysis, the new standards for engines will have capital and annual costs, but these costs are substantially less than the costs EPA estimated for previous standards. Further, more facilities will be subject only to work practice or record-keeping requirements rather than have costs associated with controlling emissions and monitoring emissions.

Facilities that cannot meet EPA's revised requirements for emergency engines must comply with the requirements for non-emergency engines. However, until May 3, 2014, "area source" facilities that operate their engines as part of a load management program may still operate their engines for up to 50 hours in a calendar year to provide electricity to the grid or as part of a financial arrangement with another entity (also known as "peak shaving"). EPA defines an "area source" as one that emits less than 10 tons per year of any one air toxic and less than 25 tons per year of any combination of air toxics. Essentially, these facilities have an extra year after

the RICE NESHAP compliance date to determine how to use these engines.

Some facilities have already replaced their engines or installed emissions control equipment or are preparing to do so to ensure these engines can operate without any restrictions. Additionally, a facility may receive an extension of up to one year to install control equipment. Because the deadline for facilities to request extensions occurred prior to the effective date of Iowa's adoption of the RICE NESHAP amendments, EPA Region 7 (rather than the Department) is responsible for processing extension requests. According to information that EPA provided to the Department to date, fifty-four Iowa facilities have submitted requests for extensions. EPA has granted forty-nine extensions and expects to act on the remaining four requests in the near future (one request was withdrawn).

These amendments are intended to implement Iowa Code section 455B.133 and 42 U.S.C. Section 7412 (Title I of the Clean Air Act, Section 112).

These amendments will become effective on October 23, 2013.

The following amendments are adopted.

ITEM 1. Amend subrule 23.1(4), introductory paragraph, as follows:

23.1(4) *Emission standards for hazardous air pollutants for source categories.* The federal standards for emissions of hazardous air pollutants for source categories, 40 Code of Federal Regulations Part 63 as amended or corrected through September 19, 2011, are adopted by reference, except those provisions which cannot be delegated to the states. The corresponding 40 CFR Part 63 subpart designation is in parentheses. An earlier date for adoption by reference may be included with the subpart designation in parentheses (except for paragraph 23.1(4) "cz," which specifies a later date for adoption by reference). 40 CFR Part 63, Subpart B, incorporates the requirements of Clean Air Act Sections 112(g) and 112(j) and does not adopt standards for a

specific affected facility. Test methods (Appendix A), sources defined for early reduction provisions (Appendix B), and determination of the fraction biodegraded (F_{bio}) in the biological treatment unit (Appendix C) of Part 63 also apply to the affected activities or facilities. For the purposes of this subrule, “hazardous air pollutant” has the same meaning found in 567—22.100(455B). For the purposes of this subrule, a “major source” means any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit, considering controls, in the aggregate, 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants, unless a lesser quantity is established, or in the case of radionuclides, where different criteria are employed. For the purposes of this subrule, an “area source” means any stationary source of hazardous air pollutants that is not a “major source” as defined in this subrule. Paragraph 23.1(4) “a,” general provisions (Subpart A) of Part 63, shall apply to owners or operators who are subject to subsequent subparts of 40 CFR Part 63 (except when otherwise specified in a particular subpart or in a relevant standard) as adopted by reference below.

ITEM 2. Amend paragraph **23.1(4)“cz”** as follows:

cz. Emission standards for stationary reciprocating internal combustion engines.

These standards apply to new and existing major sources and to new and existing area sources with stationary reciprocating internal combustion engines (RICE). ~~These standards also apply to new and reconstructed RICE located at area sources.~~ For purposes of these standards, stationary RICE means any reciprocating internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. (Part 63, Subpart ZZZZ, as amended through ~~April 20, 2006~~ January 30, 2013)

Date

Chuck Gipp, Director

**Administrative Rules
JOBS IMPACT STATEMENT**

1. BACKGROUND INFORMATION

Agency:	Environmental Protection Commission/ Department of Natural Resources
IAC Citation:	567 IAC Chapter 23
Agency Contact:	Christine Paulson at (515) 242-5154
Statutory Authority:	Iowa Code section 455B.133 and United States Clean Air Act (CAA) Title I (CAA §112; 42 USC §7412), as codified in 40 Code of Federal Regulations Part 63.

Objective:	<p>The Environmental Protection Commission (Commission) is adopting the federal air toxics standards for stationary engines commonly known as the RICE NESHAP. “RICE NESHAP” is the acronym for National Emission Standards for Hazardous Air Pollutants (NESHAP) for Reciprocating Internal Combustions Engines (RICE) (40 Code of Federal Regulations (CFR) Part 63 Subpart ZZZZ). The Commission is adopting the RICE NESHAP by reference into state rules so that all compliance deadlines will be according to federal timelines.</p> <p>The U.S. Environmental Protection Agency (EPA) recently updated the RICE NESHAP. The revised RICE NESHAP generally provides regulatory relief and clarity from the previous requirements.</p> <p>Upon the effective date the adopted rules, the Department of Natural Resources (Department) rather than EPA will implement and enforce these regulations in Iowa. Adopting the RICE NESHAP allows the Department to provide compliance assistance and outreach to affected facilities as soon as possible.</p>
Summary:	<p>In 2010, the Commission adopted an earlier version of the RICE NESHAP. In Executive Order (EO) 72, Governor Branstad subsequently rescinded adoption of the RICE NESHAP. In EO 72, Governor Branstad declared that the RICE NESHAP standards “impose[d] unnecessary and crippling costs on small Iowa municipal utilities” and the RICE NESHAP standards “may make it cost prohibitive for some utilities to maintain and operate emergency engines, jeopardizing the security of the national power grid.” In EO 72, Governor Branstad indicated that EPA was reconsidering the RICE NESHAP rule, in light of widespread concerns received from many stakeholders, including the state of Iowa. Accordingly, Governor Branstad determined that it was in the best interests of Iowa to rescind the RICE NESHAP “because the federal RICE NESHAP standard for requirements for existing stationary diesel engines is likely to change.”</p>

	<p>EPA’s rule did change. EPA updated the RICE NESHAP to provide more circumstances for emergency engines and for engines that participate in electricity management programs to operate under non-emergency conditions. In response, Governor Branstad issued a press release on January 16, 2013, stating, “Recognizing this unnecessary onerous rule would raise costs on Iowa families, I signed Executive Order 72 to rescind the Iowa’s adoption of the rule. I am pleased to learn the Environmental Protection Agency has listened to my concerns over the rule and opted against requiring generators to be retrofitted with expensive components.” The press release also indicated, “Yesterday, the Governor’s Office was informed the EPA finalized changes to the RICE Rule which will help keep utility costs low for hard-working Iowa families. Specifically, the EPA updated the rule with a broader usage definition of emergency use, which will allow utility companies to use these important back-up engines during winter storms or power outages, without necessarily having to retrofit the engines with the expensive new components.” Consequently, the Commission is now adopting the RICE NESHAP.</p> <p>If the Commission did not adopt the RICE NESHAP amendments, the inconsistency with federal regulations may cause regulatory uncertainty and confusion for affected facilities.</p>
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2. JOB IMPACT ANALYSIS

<input type="checkbox"/> <i>Fill in this box if impact meets these criteria:</i>
<input type="checkbox"/> No Job Impact on private sector jobs and employment opportunities in the State.
<input type="checkbox"/> Job Impact cannot be determined.

<input checked="" type="checkbox"/> <i>Fill in this box if impact meets either of these criteria:</i>
<input checked="" type="checkbox"/> Positive Job Impact on private sector jobs and employment opportunities in the State.
<input checked="" type="checkbox"/> Negative Job Impact on private sector jobs and employment opportunities in the State.

Description and quantification of the nature of the impact the proposed rule will have on private sector jobs and employment opportunities:

After analysis and review, the Department has determined that jobs could be impacted. However, the rule changes are only implementing federally mandated regulations. The rule changes do not impose any regulations on Iowa businesses not required by federal law. The Commission is adopting the RICE NESHAP by reference so the rule changes will be identical to federal requirements. Additionally, facilities must comply with the federal standards regardless of whether the Commission adopts the standards into state administrative rules.

Potential positive job impacts

The Commission is minimizing the impact of the RICE NESHAP by waiting to adopt the federal standards until after EPA completed its reconsideration. EPA's final rule generally provides regulatory relief and clarity to the requirements that EPA initially mandated. In particular, the new RICE NESHAP potentially provides more flexibility and potential cost savings to affected industries.

Additional information (April 9, 2013)

NIMECA: A representative from NIMECA noted that some short-term jobs are being created in skilled construction, engine manufacturing, and consulting so that municipal utilities can retrofit or replace engines to meet the RICE NESHAP requirements. The Department estimates the increase in these short-term jobs likely occurred over the past 2-3 years and will likely continue until May 3, 2014.

Potential neutral or negative job impacts

According to EPA's regulatory impact analysis, the new standards for engines will have capital and annual costs, but these costs are substantially less than the costs EPA estimated for the previous standards. Further, more facilities will have only work practice or recordkeeping requirements rather than costs associated with controlling and monitoring emissions.

In 2010, the Department estimated the RICE NESHAP might affect 300-500 non-emergency engines in Iowa. Because of EPA's changes to the RICE NESHAP, more back-up engines at municipal utilities, electric cooperatives and other electricity generators potentially qualify as emergency engines, and owners/operators will not have to retrofit these back-up engines with emissions control equipment. These facilities will have new requirements, beginning January 1, 2015, to switch to using Ultra Low Sulfur Diesel (ULSD) fuel and to begin submitting annual reports. The jobs impacts of these new requirements should be minimal and will be significantly less than the impacts of installing and operating control equipment. Further, back-up engines for emergency use at facilities not under contract to provide electricity to the grid or to another entity continue to qualify as emergency engines. These engines have only work practice and recordkeeping requirements.

Facilities that cannot meet EPA's revised requirements for emergency engines must comply with the requirements for non-emergency engines. However, until May 3, 2014, "area source" facilities that operate their engines as part of a load management program may still operate their engines for up to 50 hours in a calendar year to provide electricity to the grid or as part of a financial arrangement with another entity (also known as "peak shaving"). Essentially, these facilities have an extra year after the RICE NESHAP compliance date to determine how to use these engines.

Some facilities have already replaced their engines or installed emissions control, or are preparing to do so, to ensure these engines can operate without any restrictions. Additionally, a facility may receive an extension of up to one year to install control equipment. Because the deadline for facilities to request extensions occurred prior to the effective date of Iowa's adoption of the RICE NESHAP amendments, EPA Region 7 (rather than the Department) is responsible for processing extension requests. According to information that EPA provided to

the Department to date, fifty-four Iowa facilities have submitted requests for extensions. EPA has granted forty-nine extensions and expects to act on the remaining four requests in the near future (one request was withdrawn).

**Additional information on the number of facilities/engines potentially affected
(April 9, 2013)**

IAMU: In IAMU's letter of support to the Commission (dated April 9, 2013), IAMU states: "IAMU is a non-profit trade association...including 136 electric utilities. **Sixty seven [67] of the municipal electric utilities operate a total of 288 RICE/generators** with a total nameplate capacity of 560 megawatts (MW)." (numerical notation and emphasis added)

NIMECA: NIMECA indicated that 11 of NIMECA's 13 member-utilities have engines affected by the RICE NESHAP (37 engines total). NIMECA estimates 31 of the 37 engines will be retrofitted or replaced, and 6 engines may continue to operate as emergency engines. All 11 member-utilities with RICE-affected engines requested extensions from EPA. **Note:** Based on information received from EPA, the Department believes that EPA will grant all of these extensions.

Department: Based on IAMU's and NIMECA's additional information, the Department's confirms its original estimate that the RICE NESHAP may affect 300-500 non-emergency engines in Iowa. The RICE NESHAP potentially affects municipal utilities more than other facilities because municipal utilities are more likely to operate non-emergency engines. IAMU estimates that municipal electric utilities in Iowa operate 288 engines/generators. Based on NIMECA's information, the Department believes that at least some of the 288 engines at municipal utilities will be classified as emergency engines. If municipal utilities account for 225-250 non-emergency engines, other facilities (such as rural electrical cooperatives, investor-owned utilities, industrial facilities, university campuses, and government operations) would reasonably account for 75-150 non-emergency engines.

Estimated Costs to Retrofit or Replace Engines

The costs for retrofit controls on an existing, non-emergency diesel (CI) engine have not changed appreciably since the Department estimated costs in 2010. Because engine types and set-ups vary greatly from facility to facility, the costs of control, emissions testing, and ongoing operation and maintenance also vary greatly. Control costs will also differ from engine to engine depending on the horsepower rating of the engine. The Department's estimates for one-time capital costs to install control range from \$11,000-\$155,000. Again, fewer engines will incur these costs than previously thought because the revised RICE NESHAP provides more flexibility to operate these engines for emergency demand response and for interruptible power agreements.

Additional information (April 11, 2013)

The Department is clarifying that its earlier estimate for the cost of installing emissions controls is on a **per engine basis**. In general, the bigger the engine, the more it will cost to retrofit or replace the engine.

Additional Information Provided by Stakeholders (April 9-10, 2013)

IAMU: IAMU confirmed the accuracy of the Department's estimated range of the cost to install

control on a non-emergency engine. IAMU recently received information from municipal utilities with retrofitting bids ranging from \$17,500-\$150,000 per engine. IAMU also provided an explanation from the Resale Power Group of Iowa (RPGI) about the variation in costs to retrofit engines, as follows, "...there are several variables that make a difference in the cost of the project, [such as] vendor/contractor, engine age/type, physical facility, when the work was done, and how much work the utility was actually able to do itself."

NIMECA: NIMECA confirmed the accuracy of the Department's estimated range of the cost to install controls on a non-emergency engine. In fact, the NIMECA representative believes that bids to install control have actually decreased slightly over the last two years. NIMECA members recently received bids of \$35,000-\$100,000 (per engine) for retrofitting costs. Currently, NIMECA estimates that the income from capacity credits paid to NIMECA members will cover the costs to retrofit or replace non-emergency engines.

Categories of jobs and employment opportunities that are affected by the proposed rule:
Municipal utilities, institutional facilities, industrial plants and other businesses with stationary engines.

Number of jobs or potential job opportunities:
Cannot be determined at this time.

Regions of the state affected:
All regions of the state.

Additional costs to the employer per employee due to the proposed rule: (if not possible to determine, write "Not Possible to Determine.")
Not possible to determine.

3. COST-BENEFIT ANALYSIS

The Agency has taken steps to minimize the adverse impact on jobs and the development of new employment opportunities before proposing a rule. See the following Cost-Benefit Analysis:

No other less intrusive or expensive method exists for achieving the purpose of the rule change. Facilities must comply with RICE NESHAP regardless of whether the Commission adopts the standards. By adopting these standards, Iowa becomes the delegated authority and the Department can provide compliance assistance and outreach to affected facilities as soon as possible.

Administrative Rule Fiscal Impact Statement

Date: April 3, 2013

Agency: Environmental Protection Commission/Department of Natural Resources

IAC Citation: 567 IAC subrule 23.1(4)

Agency Contact: Christine Paulson

Summary of the Rule:

The Environmental Protection Commission (Commission) is adopting the federal air toxics standards for stationary engines commonly known as the RICE NESHAP. "RICE NESHAP" is the acronym for National Emission Standards for Hazardous Air Pollutants (NESHAP) for Reciprocating Internal Combustions Engines (RICE) (40 Code of Federal Regulations (CFR) Part 63 Subpart ZZZZ). The Commission is adopting the RICE NESHAP by reference into state rules so that all compliance deadlines will be according to federal timelines.

The U.S. Environmental Protection Agency (EPA) recently updated the RICE NESHAP. The revised RICE NESHAP generally provides regulatory relief and clarity from the previous requirements.

Upon the effective date of the adopted rules, the Department of Natural Resources (Department) rather than EPA will implement and enforce these regulations in Iowa. Adopting the RICE NESHAP allows the Department to provide compliance assistance and outreach to affected facilities as soon as possible.

Fill in this box if the impact meets these criteria:

- No Fiscal Impact to the State.
 Fiscal Impact of less than \$100,000 annually or \$500,000 over 5 years.
 Fiscal Impact cannot be determined.

Brief Explanation: The Department will use existing budget and resources to implement the rule.

Assumptions:

Describe how estimates were derived:

Estimated Impact to the State by Fiscal Year

	<u>Year 1 (FY 2011)</u>	<u>Year 2 (FY 2012)</u>
Revenue by Each Source:		
GENERAL FUND	0\$	0\$
FEDERAL FUNDS	0\$	0\$
Other (specify)	0\$	0\$
	<hr/>	<hr/>
	0\$	0\$
TOTAL REVENUE		
Expenditures:		
GENERAL FUND	0\$	0\$
FEDERAL FUNDS	0\$	0\$
Other (specify) Air Contaminant Fee		
	<hr/>	<hr/>
TOTAL EXPENDITURES		

NET IMPACT

This rule is required by State law or Federal mandate.

Please identify the state or federal law:

Iowa Code section 455B.133 and United States Clean Air Act (CAA) Title I (CAA §112; 42 USC §7412), as codified in 40 Code of Federal Regulations Part 63.

Funding has been provided for the rule change.

Please identify the amount provided and the funding source:

Funding has not been provided for the rule.

Please explain how the agency will pay for the rule change:

The Department will utilize existing resources at this time.

Fiscal impact to persons affected by the rule:

These rules will affect municipal utilities, industries, and other facilities with stationary engines.

According to EPA's regulatory impact analysis, the updated RICE NESHAP will have capital and annual costs, but these costs are substantially less than the costs EPA estimated for the previous standards. Further, more facilities will have only work practice or recordkeeping requirements rather than costs associated with controlling and monitoring emissions.

In 2010, the Department estimated that the RICE NESHAP might affect 300-500 non-emergency engines in Iowa. Because of EPA's changes to the RICE NESHAP, more back-up engines at municipal utilities, electric cooperatives and other electricity generators potentially qualify as "emergency engines," and owners/operators will not have to retrofit these back-up engines with emissions control equipment. These facilities will have new requirements, beginning January 1, 2015, to switch to using Ultra Low Sulfur Diesel (ULSD) fuel and to begin submitting annual reports. The costs of complying with these new requirements should be minimal and will be significantly less than the regulatory impacts of installing and operating emissions control equipment. Further, back-up engines for emergency use at facilities not under contract to provide electricity to the grid or to another entity continue to qualify as emergency engines. These engines have only work practice and recordkeeping requirements.

Facilities that cannot meet EPA's revised requirements for emergency engines must comply with the requirements for non-emergency engines. However, until May 3, 2014, "area source" facilities that operate their engines as part of a load management program may still operate their engines for up to 50 hours in a calendar year to provide electricity to the grid or as part of a financial arrangement with another entity (also known as "peak shaving"). Essentially, these facilities have an extra year after the RICE NESHAP compliance date to determine how to use these engines.

Some facilities have already replaced their engines or installed emissions control, or are preparing to do so, to ensure these engines can operate without any restrictions. Additionally, a facility may receive an extension of up to one year to install control equipment. Because the deadline for facilities to request extensions occurred prior to the effective date of Iowa's adoption of the RICE NESHAP amendments, EPA Region 7 (rather than the Department) is responsible for processing extension requests. According to information that EPA provided to the Department to date, fifty-four Iowa facilities have submitted requests for extensions. EPA has granted forty-nine extensions and expects to act on the remaining four requests in the near future (one request was withdrawn).

Additional information on the number of facilities/engines potentially affected (April 9, 2013)

IAMU: In IAMU's letter of support to the Commission (dated April 9, 2013), IAMU states: "IAMU is a non-profit trade association...including 136 electric utilities. **Sixty seven [67] of the municipal electric utilities operate a total of 288 RICE/generators** with a total nameplate capacity of 560 megawatts (MW)." (numerical notation and emphasis added)

NIMECA: NIMECA indicated that 11 of NIMECA's 13 member-utilities have engines affected by the RICE NESHAP (37 engines total). NIMECA estimates 31 of the 37 engines will be retrofitted or replaced, and 6 engines may continue to operate as emergency engines. All 11 member-utilities with RICE-affected engines requested extensions from EPA. **Note:** Based on information received from EPA, the Department believes that EPA will grant all of these extensions.

Fiscal impact to persons affected by the rule (continued from previous page):

Department: Based on IAMU's and NIMECA's additional information, the Department's confirms its original estimate that the RICE NESHAP may affect 300-500 non-emergency engines in Iowa. The RICE NESHAP potentially affects municipal utilities more than other facilities because municipal utilities are more likely to operate non-emergency engines. IAMU estimates that municipal electric utilities in Iowa operate 288 engines/generators. Based on NIMECA's information, the Department believes that at least some of the 288 engines at municipal utilities will be classified as emergency engines. If municipal utilities account for 225-250 non-emergency engines, other facilities (such as rural electrical cooperatives, investor-owned utilities, industrial facilities, university campuses, and government operations) would reasonably account for 75-150 non-emergency engines.

Estimated Costs to Retrofit or Replace Engines

The costs for retrofit controls on an existing, non-emergency diesel (CI) engine have not changed appreciably since the Department estimated costs in 2010. Because engine types and set-ups vary greatly from facility to facility, the costs of control, emissions testing, and ongoing operation and maintenance also vary greatly. Control costs will also differ from engine to engine depending on the horsepower rating of the engine. The Department's estimates for one-time capital costs to install control range from \$11,000-\$155,000. Again, fewer engines will incur these costs than previously thought because the revised RICE NESHAP provides more flexibility to operate these engines for emergency demand response and for interruptible power agreements.

Additional information (April 9, 2013)

The Department is clarifying that its earlier estimate for the cost of installing emissions controls is on a **per engine basis**. In general, the bigger the engine, the more it will cost to retrofit or replace the engine.

Additional Information Provided by Stakeholders (April 9-10, 2013)

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NIMECA: NIMECA confirmed the accuracy of the Department's estimated range of the cost to install controls on a non-emergency engine. In fact, the NIMECA representative believes that bids to install control have actually decreased slightly over the last two years. NIMECA members recently received bids of \$35,000-\$100,000 (per engine) for retrofitting costs. Currently, NIMECA estimates that the income from capacity credits paid to NIMECA members will cover the costs to retrofit or replace non-emergency engines.

Fiscal impact to Counties or other Local Governments (required by Iowa Code 25B.6):

The fiscal impact to municipally owned utilities, counties or other local government entities with stationary engines would be the same as described above.

**PUBLIC PARTICIPATION RESPONSIVENESS SUMMARY
FOR
567 IOWA ADMINISTRATIVE CODE
CHAPTER 23, “EMISSIONS STANDARDS FOR CONTAMINANTS”**

Introduction

The purpose of the rule making is to adopt the federal air toxics standards for stationary engines commonly known as the RICE NESHAP. RICE NESHAP is the acronym for National Emission Standards for Hazardous Air Pollutants (NESHAP) for Reciprocating Internal Combustion Engines (RICE) (40 Code of Federal Regulations (CFR) Part 63, Subpart ZZZZ). The Iowa Department of Natural Resources (Department) is requesting to adopt the RICE NESHAP by reference into state rules so that all compliance deadlines will be in accordance with federal time lines.

Notice of Intended Action was published in the Iowa Administrative Bulletin on May 15, 2013, as **ARC 0740C**. A public hearing was held on June 4, 2013, in Windsor Heights, Iowa. The Department did not receive any public comments at the hearing. The Department received two written comments prior to the June 4, 2013, public comment deadline.

Public Comment Summary*

Submitted by e-mail from Pam Mackey Taylor, Energy Chair, Iowa Chapter of the Sierra Club, 3839 Merle Hay Road, Suite 280, Des Moines, Iowa, 50310:

The Iowa Chapter of the Sierra Club has approximately 5000 members who live in Iowa. Our mission is to preserve, protect, and enjoy the natural environment. On behalf of our members, the Iowa Chapter supports the adoption of the RICE NESHAP rules in the Iowa Administrative Code.

Exhaust from a diesel-powered stationary reciprocating internal combustion engine (RICE) contains harmful chemicals, such as volatile organic compounds, carbon monoxide, air toxics, and fine particulate matter (PM 2.5). Those pollutants exacerbate asthma, chronic bronchitis, and other respiratory illnesses.

It is obvious that some utilities have been using the RICE engines, without pollution controls, for providing primary power to their customers, in addition to providing emergency power. The Iowa Chapter supports regulations that require RICE engines that are used for non-emergency purposes to have catalytic converters to remove pollutants from their exhaust.

Even though the RICE engines are used for purposes beyond emergencies, the comments from the owners of the RICE engines were narrowly focused on upgrading the pollution controls or replacing the RICE engines with other RICE engines. The EPA comments, materials provided to the Governor’s office that the Chapter obtained through an open records request, and the material provided to the Iowa Utilities Board all point to a need for the municipal utilities to think in a more comprehensive manner about the generation of electricity and providing high-quality power to the grid. However that is outside of the scope of this rule.

The Chapter does not support any further delays in timetables for installing the upgrades to the RICE engines or installing replacement units for those that cannot be upgraded. The owners of the RICE engines have had a long time period to determine if their engines can be upgraded or if they need to be replaced, how much replacement units would cost versus the cost of upgrades, and how to pay for the catalytic converters or replacement engines. Additionally those utilities that do not have room in their current facilities have had many years to determine where to place a RICE engine with the catalytic converter. If a RICE engine is too old to be upgraded, it is too old to continue to operate.

The EPA first implemented pollution control rules for larger RICE engines (greater than 500 horsepower) in 2004. Since January 2008, any engine less than 500 horsepower installed after June 12, 2006, has been required to have the pollution controls. In 2008, EPA signed a consent decree that required rules requiring pollution control on all smaller RICE engines. The original rule went into effect in 2010, after several years of work in writing the rules and meeting with stakeholders, with a requirement that the pollution controls be installed by May 3, 2013. Even though the Governor's action rescinded the Iowa regulations related to the RICE NESHAP rules, the federal laws were still in effect. This revised rule was under discussion and reconsideration by EPA since late 2010. A prudent owner of a RICE engine should have been considering the various options for at least 3 years. Given this long time horizon, there should be no excuses for further delays.

The Chapter realizes that some utilities and a few industries will be required to upgrade their RICE engines. That cost must be compared to the benefits of cleaner air in Iowa and improved public health issues related to reducing the pollution generated by RICE engines. It is always cheaper to avoid installing pollution controls.

The Chapter expects swift enforcement if the owners of the RICE engines do not comply with these regulations as mandated or within the one-year extension that EPA can grant.

**Ms. Mackey Taylor's letter providing comments is available from the Department upon request.*

Department Response

The Department appreciates the comments and support for adopting the RICE NESHAP amendments. The comments are consistent with what EPA is required to accomplish when issuing NESHAP standards, and are consistent with the Department's obligations once the RICE NESHAP amendments are adopted and effective. Responses to the Iowa Sierra Clubs specific points are, as follows:

Air Toxics

The RICE NESHAP requires emissions standards, emissions reductions, and work practices to reduce air toxics emissions. When fully implemented, EPA expects emission of both air toxics and other air pollutants to decrease.

Electricity Generation Strategies

As noted in the letter, these comments are beyond the scope of this rule making. The sole purpose of the rule making is to adopt by reference the RICE NESHAP amendments.

Timeline for RICE NESHAP Compliance

As noted in the comments, EPA did not stay the RICE NESHAP during the reconsideration, and the compliance date for “area sources” with stationary diesel engines remains May 3, 2013. However, EPA provided mechanisms for facilities that need more time to install control or determine how to classify engines. First, the RICE NESHAP allows “area sources” that participate in interruptible service agreements to run engine for “peak shaving” up to 50 hours per calendar year until May 3, 2014. Second, the General Conditions for all NESHAP regulations under 40 CFR Part 63 allow facilities to receive a one year extension to install control equipment. A number of facilities have requested extensions. EPA Region 7 has granted nearly all requests, and EPA intends to process the few outstanding requests.

Enforcement of RICE NESHAP Requirements

Upon the effective date of adopting the RICE NESHAP amendments, the Department becomes the delegated authority to implement and enforce the regulations in Iowa. The Department will implement and enforce the RICE NESHAP according to federal timelines. The Department has already provided extensive compliance assistance to affected facilities and associations, and will be able to provide further assistance when adoption becomes effective. The Department will work closely with EPA Region 7 during the transition period to ensure consistency in applicability determinations and enforcement activities. Further, EPA retains concurrent authority to enforce any NESHAP and NSPS for which a state has delegated authority.

Recommended Action

Proceed with final rules as proposed in the Notice of Intended Action (no changes from what the Department proposed).

Public Comment Summary*

Submitted by e-mail from Greg Fritz, Chief Executive Officer, Northern Iowa Municipal Electric Cooperative Association (NIMECA), 1011 12th Avenue North – P. O. Box 445, Humboldt, Iowa 50548-0445:

NIMECA is a municipal joint action agency located in Humboldt. NIMECA coordinates the power supply, transmission, and related activities for 13 municipal utilities located in Iowa. 11 of our 13 members operate a total of 37 diesel fueled Reciprocating Internal Combustion Engine (RICE) generators. These generators are used to meet grid capacity requirements, provide emergency power in the event of a loss of a member utility’s transmission line, and provide a hedge against high market prices for energy.

NIMECA and its members are supportive of the DNR’s efforts to adopt the revised RICE NESHAP rule. We believe that it is in the best interest of the state to maintain primacy on the enforcement of this rule, particularly as our members move forward with retrofits to comply with the new requirements.

**Mr. Fritz's letter providing comments is available from the Department upon request.*

Department Response

The Department appreciates the comments and support for adopting the RICE NESHAP amendments. The Department is planning to request the Commission's approval to proceed with final rules to adopt the RICE NESHAP amendments. Upon the effective date of adopted rules, the Department rather than EPA will be the primary agency implementing and enforcing the RICE NESHAP requirements in Iowa. The Department plans to continue its outreach and compliance assistance activities with associations such as NIMECA, as well as with individual facilities subject to the RICE NESHAP.

Recommended Action

Proceed with final rules as proposed in the Notice of Intended Action (no changes from what the Department proposed).