# VIA CERTIFIED AND ELECTRONIC MAIL

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# Re: National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines; New Source Performance Standards for Stationary Internal Combustion Engines, 78 Fed. Reg. 6674 (Jan. 30, 2013)

Pursuant to Section 307(d)(7)(B) of the Clean Air Act,<sup>1</sup> Clean Air Council, Citizens for Pennsylvania's Future (PennFuture), Conservation Law Foundation (CLF), Environmental Defense Fund (EDF), Natural Resources Defense Council (NRDC), Pace Energy and Climate Center (Pace), Sierra Club, and West Harlem Environmental Action, Inc., (WE ACT) (hereinafter "Environmental Groups") petition the Environmental Protection Agency (EPA) for reconsideration of its January 30, 2013 final rule amending the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Reciprocating Internal Combustion Engines (RICE). As explained below, the purpose of this petition is to address issues of central relevance to the outcome of the final rule ("the Amendments"), and to strengthen provisions that could allow excessive operation of uncontrolled stationary RICE.

<sup>&</sup>lt;sup>1</sup> 42 U.S.C. § 7607(d)(7)(B).

With the exception of the issues raised in Part VI, *infra*, the grounds for the objections raised in this petition arose after the period for public comment and are "of central relevance to the outcome of the rule,"<sup>2</sup> and therefore meet the statutory criteria for mandatory reconsideration. With respect to each objection, the regulatory language and EPA interpretations that render the rule arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law appeared for the first time in the final rule published on January 30, 2013.<sup>3</sup> The grounds for the objections raised in this petition thus arose after the period for public comment. Because this petition was filed by the April 1, 2013 deadline for filing petitions for review,<sup>4</sup> the grounds for the objection is of "central relevance" to the outcome of this rule, because — consistent with EPA's interpretation of that term — each objection presents "substantial support for the argument that the regulation should be revised."<sup>6</sup> The Administrator must therefore convene a proceeding for reconsideration of the Amendments and afford a new opportunity for public comment on the issues raised below.<sup>7</sup>

### I. Introduction

Our organizations have consistently advocated for comprehensive and protective standards for emissions from stationary RICE. Diesel exhaust from compression ignition (CI) engines is highly hazardous to human health and the environment, containing over 600 hazardous air pollutants as well as high levels of particulate matter and ozone-forming pollutants.<sup>8</sup> Pollution from CI engines has also been classified as a human carcinogen and causes a wide variety of non-cancer effects.<sup>9</sup> Similarly, spark ignition (SI) RICE units also emit harmful criteria pollutants and air toxics, which contribute to ambient ozone and carbon monoxide levels and put public health at risk.<sup>10</sup> The public health and environmental implications of increasing the use of uncontrolled CI and SI RICE units in demand response (DR) programs and SI RICE in remote areas could be significant.

For these reasons, several of our organizations filed extensive joint comments on EPA's June 7, 2012 proposal to amend the RICE NESHAP. These comments urged EPA: (1) not to finalize the proposed exceptions from rigorous emission standards for emergency stationary RICE engaged in DR; (2) not to waive pollution control requirements for SI RICE units located in remote areas; and (3) to require registration and reporting from all new and existing RICE

 $<sup>^{2}</sup>$  Id.

<sup>&</sup>lt;sup>3</sup> National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines; New Source Performance Standards for Stationary Internal Combustion Engines; Final Amendments, 78 Fed. Reg. 6674 (Jan. 30, 2013).

 $<sup>^{4}</sup>$  *Id.* at 6674.

<sup>&</sup>lt;sup>5</sup> 42 U.S.C. § 7607(d)(7)(B).

<sup>&</sup>lt;sup>6</sup> *Coalition for Responsible Regulation, Inc. v. EPA*, 684 F.3d 102, 125 (D.C. Cir. 2012) (citing EPA's Denial of the Petitions to Reconsider the Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act, 75 Fed. Reg. 49,556, 49,561 (Aug. 13, 2010)).

<sup>&</sup>lt;sup>7</sup> 42 U.S.C. § 7607(d)(7)(B).

<sup>&</sup>lt;sup>8</sup> Comments of Citizens for Pennsylvania's Future, Clean Air Council, Environmental Defense Fund, Group Against Smog and Pollution, Natural Resources Defense Council, Pace Energy & Climate Center, Piedmont Environmental Council, and Sierra Club, Document ID No. EPA-HQ-OAR-2008-0708-1090, at 5-7 (filed Aug. 9, 2012). <sup>9</sup> Id.

<sup>&</sup>lt;sup>10</sup> EPA, Regulatory Impact Analysis (RIA) for Existing Stationary Spark Ignition (SI) RICE NESHAP at 4-4 (Aug. 2010).

units.<sup>11</sup> CLF filed separate comments, primarily opposing the 100-hour emergency demand response operating allowance.<sup>12</sup>

Though it reflects important improvements over the proposed rule, the January 30, 2013 final rule amending the RICE NESHAP continues to pose serious concerns for our organizations. We appreciate EPA's decision to require that emergency RICE utilize ultra low-sulfur diesel (ULSD) fuel, and to require compliance reporting for emergency RICE larger than 100 horsepower (HP) that are operated or contractually obligated to be available for DR or to support local grid reliability. We also strongly support EPA's decision not to finalize a provision allowing uncontrolled emergency RICE to participate in commercial "peak shaving" programs. However, other provisions of the final rule fail to provide the rigorous protections for public health and the environment that are called for under section 112 of the Clean Air Act. This petition respectfully urges EPA to strengthen new provisions of the Amendments that were not made available for public comment and that are of central relevance to the outcome of the Rule, and to reform such elements that could lead to excessive operation of uncontrolled stationary RICE. Key objections raised in this petition for reconsideration include:

- The 50-hour operating allowance for emergency engines operating without modern controls lacks important safeguards to protect human health. On reconsideration, EPA should replace the 50-hour allowance with a provision that is more carefully and clearly delineated to ensure uncontrolled emergency RICE may only be dispatched during genuine grid emergencies, while still allowing local grid operators to address legitimate reliability concerns.
- The Amendments should accelerate the ULSD requirements, currently implemented in 2015. Below, we ask EPA to require that emergency RICE begin utilizing ULSD immediately, with a strictly limited allowance for non-ULSD fuel purchased as of the date of the proposed reconsideration.
- The Amendments unjustifiably postpone the deadline for filing compliance reports for three years – and waive reporting entirely for emergency RICE operations that occur between the effective date of the RICE NESHAP and January 1, 2015. We ask EPA to accelerate this deadline, ensure that owners of emergency RICE report their compliance status for all periods in which they are subject to the NESHAP, and ensure that reporting includes a detailed account of utilization of ULSD and non-ULSD fuel.
- EPA should commit to re-assess the public health impacts of the Amendments after the first full year of implementation drawing from the availability of the informative compliance reporting under the final rule.
- The Amendments inappropriately waive pollution control requirements for remote existing SI RICE, without addressing the potential risk of public exposure due to harmful emissions from engines that are likely capable of meeting otherwise applicable emission standards. We ask EPA to eliminate this categorical exclusion or more judiciously limit it to SI RICE that are demonstrated to be so isolated as to pose no risk of human exposure.

<sup>&</sup>lt;sup>11</sup> Id. at 36.

<sup>&</sup>lt;sup>12</sup> Comments of Conservation Law Foundation, Document ID No. EPA-HQ-OAR-2008-0708-1101 (filed Aug. 9, 2012).

We also continue to oppose the provisions of the final rule that allow emergency RICE units to participate in emergency DR programs for as much as 100 hours per year without installing cost-effective emission control technologies. To be sure, our organizations understand the importance of grid reliability. However, it is inappropriate to allow extensive operation of emergency RICE for reliability purposes without installing readily available, indeed commonplace, advanced pollution controls. Demand response programs are economic in nature, and revenues earned by RICE units in these programs are sufficient to offset the cost of pollution controls and other compliance activities. RICE units can meet modern pollution control requirements cost-effectively and without compromising availability, as commenters on the proposed rule indicated. Moreover, comprehensive emission standards are essential to ensure that DR programs encourage clean energy and do not lead instead to increased utilization of uncontrolled stationary RICE emitting high levels of air toxics, particulates, and other pollutants — pollutants whose impacts are only heightened by the frequent "clustering" of these units near schools and residential neighborhoods.<sup>13</sup>

## II. The New 50-Hour Operating Allowance for Local Transmission or Distribution Constraints Lacks Important Safeguards to Protect Human Health

Environmental Groups have concerns regarding a provision of the Amendments that allows existing emergency RICE at area sources to operate for up to 50 hours per year, without modern pollution controls to protect human health and the environment, under circumstances that are not clearly delineated. This provision, which appeared for the first time in the final rule, was adopted in response to comments, particularly those submitted by the National Rural Electric Cooperative Association (NRECA).<sup>14</sup>

We appreciate the absolutely critical importance of reliability. The operation of these engines without modern pollution controls to protect human health warrants careful delineation to ensure that the engines are judiciously utilized in emergency applications or, alternatively, to provide for modern pollution controls in the event they are utilized more expansively. In particular, we request that EPA provide a clearly delineated, objective definition of the emergency conditions that could warrant dispatch of emergency RICE and provide the public with an opportunity to comment on such definitions to ensure that RICE engines without modern pollution controls are utilized in well delineated emergency applications. Absent further clarification from EPA on these issues, neither the public nor regulators have an adequate degree of certainty that engines dispatched under this provision are actually providing emergency service.

Indeed, the open-ended nature of this new operating allowance contrasts with the 100hour allowance for emergency DR operation, which is limited to objective, verifiable situations: in order for a RICE owner to avail itself of the 100-hour allowance, the local balancing authority must either declare a Level 2 Energy Emergency Alert under Federal reliability rules, or observe

<sup>&</sup>lt;sup>13</sup> See Nancy E. Ryan, Kate M. Larsen, & Peter C. Black, Smaller, Dirtier, Closer: Diesel Backup Generators in California vii (EDF, 2002) (finding the "risk zone" around a diesel generator operated for just 100 hours per year can extend for 63 to 118 acres, or 10 to 20 average city blocks).
<sup>14</sup> Id.

a 5% deviation in voltage or frequency.<sup>15</sup> Further, in responses to comments on the proposed 100-hour allowance, EPA rejected calls for vague, ambiguous definitions of emergency circumstances – noting specifically that "a lack of a specific [alert] condition would make the regulation very difficult to enforce and more susceptible to abuse."<sup>16</sup>

Because of these concerns and the lack of opportunity to comment, reconsideration of this provision is necessary. On reconsideration, EPA should replace the 50-hour allowance with a provision that is more carefully and clearly delineated to ensure uncontrolled emergency RICE will only be dispatched during genuine grid emergencies, while still allowing local grid operators to address legitimate reliability concerns.

## III. EPA Should Accelerate Reporting Requirements for Emergency RICE and Ensure Detailed Reporting of Fuel Usage

As noted above, we strongly support expansive compliance reporting by all owners of emergency RICE. However, we also have concerns regarding the protectiveness and rigor of the reporting requirements, which were not made available for public comment. We respectfully request that EPA accelerate the reporting requirement such that it coincides with other requirements in the NESHAP, and also ensure that reports include information on fuel utilization that will be necessary to estimate emissions from emergency RICE.

The Amendments require annual reporting from owners and operators of stationary emergency engines larger than 100 horsepower (HP) that operate, or are required by contract to be available to operate, more than 15 hours per year (up to a maximum of 100 hours per year) for emergency DR or that use the local grid reliability allowance.<sup>17</sup> Such owners and operators must report annually to EPA on the dates and times the engines operated for emergency purposes (including DR and local grid reliability), *beginning with operation during the 2015 calendar year*.<sup>18</sup> In addition, "[t]he report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine."<sup>19</sup> As EPA notes in the final rule, reporting is essential to ensure that uncontrolled emergency RICE do not operate outside the limits prescribed in the NESHAP.<sup>20</sup> Indeed, reporting is the *only* mechanism in the NESHAP that allows the public and EPA to verify that emergency RICE operation is in fact based on emergency application. Furthermore, the reports will for the first time provide comprehensive

<sup>&</sup>lt;sup>15</sup> Petitioners oppose the 100-hour allowance, which poses significant risks to public health and the environment. CLF Comments at 3-7. Uncontrolled diesel RICE is also effectively subsidized in competition for DR financial incentives by this allowance, crowding out emission-controlled and renewable sources. Id. at 14-17. Payments under DR programs could recoup the cost of emissions controls in as little as a year, even for RICE that operate for less than 100 hours per year. Joint Comments of EDF et al., at 26-27. While the 100-hour allowance is superior to the 50-hour allowance in that it has verifiable limits, this comparison should not be construed as an endorsement of the 100-hour allowance.

<sup>&</sup>lt;sup>16</sup> U.S. EPA, Response to Public Comments on Proposed Amendments to National Emission Standards for Hazardous Air Pollutants for Existing Stationary Reciprocating Internal Combustion Engines and New Source Performance Standards for Stationary Internal Combustion Engines 93, 97-98 (Jan. 14, 2013) [hereinafter "RTC"].
<sup>17</sup> 78 Fed. Reg. at 6681.

<sup>&</sup>lt;sup>18</sup> *Id.* at 6680-81.

<sup>&</sup>lt;sup>19</sup> *Id.* at 6686.

<sup>&</sup>lt;sup>20</sup> Id.

public information on the location, operation, and health impacts of these engines — a point discussed further in Part V of this petition.

Our principal concern regarding the reporting requirements is the lengthy delay EPA has allowed for submission of the first reports. At present, owners and operators that are subject to the requirement need not submit their initial annual reports until March 31, 2016, for engine operation in the 2015 calendar year. As a result of this delay, regulators and the public will have to wait *three years* to obtain basic information regarding the location, operation, and compliance status of emergency RICE. Of equally great concern, the Rule does not require retrospective reporting of emergency RICE operation prior to 2015 – even though the RICE NESHAP takes effect on May 3, 2013 and October 19, 2013. For the initial 17 months of implementation of the RICE NESHAP, EPA and the public will have no practical means of verifying compliance with the emergency RICE provisions.

EPA provides no reasoned explanation why such an essential provision of the NESHAP cannot be implemented earlier. Under the 2010 RICE NESHAP, owners of emergency RICE were already required to install non-resettable hour meters and to keep records of their hours of operation.<sup>21</sup> Other basic information that must be reported under the 2013 Rule is readily available, or should already be in the possession of RICE owners. The additional reporting requirement in the Final Rule imposes only a minimal burden, and this fundamental information should promptly be made available to the public.

In defense of the delayed requirement, EPA stated that it had decided to provide additional time for compliance "[i]n those situations where the EPA is not finalizing revisions as proposed."<sup>22</sup> EPA also claimed that delaying the start of the reporting period to 2015, instead of synchronizing it with the implementation of the NESHAP in 2013, will "provide sources with appropriate lead time" to institute the requirement.<sup>23</sup> EPA did not, however, adequately explain why "appropriate lead time" would be needed to phase in the reporting requirement, or why it considered a two-year deferral of the requirement to be "appropriate." Reporting is an essential feature of NESHAP compliance. Moreover, even if EPA were to require reporting beginning with the 2013 calendar year, reports would not be due until first quarter of 2014 – which should be more than enough lead time for emergency RICE owners to prepare to report, and for EPA to make any needed adjustments to its reporting systems.

Because a two-year delay is unwarranted, EPA should accelerate the reporting requirement and synchronize it with the implementation of the NESHAP. The reporting period should begin immediately, and initial annual reports should be due in early 2014 (for calendar year 2013 operations).

Second, EPA should clarify the reporting requirement for CI engines to make it clear that the type and amount of diesel fuel used must be reported. The current requirement in 40 C.F.R. § 63.6650(h)(2)(viii) and (ix) calls simply for the reporting of any "deviations from the fuel

<sup>&</sup>lt;sup>21</sup> National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines; Final Rule, 75 Fed. Reg. 51,570, 51,575 (Aug. 20, 2010).

<sup>&</sup>lt;sup>22</sup> RTC at 247.

<sup>&</sup>lt;sup>23</sup> *Id.*; *see also* 78 Fed. Reg. at 6681.

requirements . . . that apply to the engine . . . . .<sup>24</sup> Environmental Groups believe that EPA should collect information about the type of fuel that these engines are using, in addition to any deviations, or lack thereof, that may occur during the reporting period. Collecting this information will facilitate EPA's ability to assess the health impacts of the engine emissions, which is a stated rationale for the reporting requirement.<sup>25</sup> Consequently, EPA should amend the requirement for CI engines to expressly require the type and amount of diesel fuel to be reported, along with any "deviations."

Neither of these objections could be raised during the comment period, because the reporting requirement appeared in the final rule for the first time. As demonstrated above, the protectiveness and rigor of the reporting requirement lacks record justification and fails to take account of relevant factors. Accordingly, reconsideration to strengthen this provision is required.

## IV. EPA Should Accelerate the Clean Fuel Requirements for Emergency RICE

We strongly support the new requirement in the Amendments that stationary emergency CI engines use ULSD fuel.<sup>26</sup> This requirement will significantly reduce emissions of air toxics such as nickel, zinc, lead, and benzene, and is an especially vital health protection given the extended operating allowances that EPA provided in the Final Rule.<sup>27</sup> As EPA acknowledged, "requiring cleaner [ULSD] fuel for these stationary emergency CI engines will significantly limit or reduce the emissions of regulated air pollutants emitted from these engines, further protecting public health and the environment."<sup>28</sup> However, we respectfully request that EPA open a reconsideration proceeding for the tailored purpose of strengthening the timing of the ULSD requirement.

As with the reporting requirement, EPA has delayed the mandatory use of ULSD until January 1, 2015,<sup>29</sup> even though the rest of the NESHAP will be implemented in 2013. This unwarranted delay will deprive the public of the benefits of the ULSD requirement for almost two years. EPA proffers two rationales for its decision, both lacking support in the record. First, EPA asserts that affected sources need "appropriate lead time" to institute the requirement and "make any physical adjustments to engines and other facilities like tanks or containment structures, as well as any needed adjustments to contracts and other business activities."<sup>30</sup> Yet EPA offers no evidence indicating that emergency RICE need to invest in modifications. Indeed, in prior RICE NESHAP rulemakings EPA has concluded that ULSD can be used in most RICE engines *without* any physical adjustments. For example, EPA's Regulatory Impact Assessment for the 2010 RICE NESHAP assumes no cost to RICE owners from switching to ULSD. EPA concluded that the incremental costs of ULSD fuel (including any additives needed to enhance

<sup>&</sup>lt;sup>24</sup> *Id.* at 6706.

 $<sup>^{26}</sup>$  *Id.* (applicable to engines with a site rating of more than 100 HP and a displacement of less than 30 liters per cylinder that operate or are required by contract to be available to operate for more than 15 hours per year (up to a maximum of 100 hours per year) for emergency demand response, or that operate for local system reliability).  $^{27}$  *Id.* 

 $<sup>^{28}</sup>$  Id.

 $<sup>^{29}</sup>$  *Id*.

<sup>&</sup>lt;sup>30</sup> 78 Fed. Reg. at 6686.

lubricity) would be offset by lower maintenance costs associated with the use of this cleaner fuel.<sup>31</sup> In the same rulemaking, EPA rejected as unsupported industry comments asserting that pre-1996 engines have fuel seals and other features that "cannot tolerate ULSD."<sup>32</sup> EPA's vague reference to "physical adjustments" provides no reasoned justification for departing from its prior conclusions regarding the feasibility of switching to ULSD.

Second, EPA asserts a general policy of providing additional lead-time for requirements, such as ULSD, that were "not contemplated at proposal."<sup>33</sup> That the ULSD requirement was not in the proposal does not justify the lengthy lead-time EPA has provided. Absent a compelling demonstration of infeasibility, EPA should require sources that are subject to the clean fuel requirement to begin using ULSD immediately.

In addition to the timing of the ULSD requirement, our organizations are also concerned about the provision of the Rule that allows "any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, [to] be used until depleted."<sup>34</sup> At present, this rule could be interpreted to allow "hoarding" of non-ULSD fuel, which could be used well past the January 1, 2015 deadline. As EPA noted, the most recent U.S. Energy Information Administration data "show that significant amounts of non-ULSD are still being purchased by end users that typically operate stationary combustion sources, including stationary emergency CI engines."<sup>35</sup> To prevent sources from stockpiling significant amounts of non-ULSD for use after January 15, 2015, EPA should simply allow the depletion of any non-ULSD fuel that was purchased as of the date reconsideration is proposed. Without such a change to the NESHAP, the use of non-ULSD in CI engines could continue long after the January 1, 2015 deadline, delaying the health and environmental benefits that will accrue from requiring ULSD.

As with the reporting requirement, these objections could not be raised during the period for public comment. Accordingly, reconsideration to strengthen the ULSD provision is required.

#### V. **EPA Should Commit to Promptly Reassess the RICE NESHAP**

Environmental Groups have commented extensively on the human health risks posed by diesel pollution from stationary RICE units. In the rulemaking process for the RICE NESHAP, EPA was not able to estimate the health impacts that will result from the many exemptions for emergency RICE and remote areas RICE. This gap was mostly due to a lack of data. EPA stated in the rulemaking that it does not have proper data on the location, hours of use, HAP emissions, or participation trends in DR programs by existing stationary RICE units.<sup>36</sup> We believe a strong reporting requirement will help alleviate that information gap. However, we also believe it is crucial that EPA make the reported RICE data publicly available, as soon as practicable after it is collected.

<sup>&</sup>lt;sup>31</sup> 2010 CI RIA, at 4-26 to 4-29.

<sup>&</sup>lt;sup>32</sup> RTC on 2010 CI NESHAP, at 263-64.

<sup>&</sup>lt;sup>33</sup> *Id*.

 $<sup>^{34}</sup>$  *Id.* at 6680.  $^{35}$  *Id.* at 6688.

<sup>&</sup>lt;sup>36</sup> See 77 FR 33,831.

Many emergency RICE units are located in densely populated cities and communities near schools, hospitals, playgrounds, and other places where those most vulnerable to diesel pollution impacts congregate. Allowing those communities to be fully aware of the location, numbers, running time, and emissions rates of the stationary diesel engines near them is necessary to help protect public health. The data can also be used by states and municipalities to make informed decisions about pollution abatement programs needed to protect public health from toxic air pollution exposures and meet National Ambient Air Quality Standards.

We also note that in its RIA and response to comments, EPA said it would use information reported by emergency RICE owners to assess the health impacts of these units. We therefore petition the Agency to commit, by regulation, to a timeline for re-evaluating the impacts of the emergency DR engines that operate without modern pollution controls after the first full year of implementation and reporting. This review should include a comprehensive assessment of location of units, hours of use, HAP and criteria emissions, human exposure, and health risks. The agency should also identify the trend in participation of DR programs by emergency RICE. This report and the underlying reporting data should be available for public review and comment.

This objection to the Amendments could not be raised during the period for public comments, because the re-evaluation called for above is only possible as a result of the inclusion of reporting requirements in the final rule. This objection also presents substantial support for a revision to the Amendments, because it will help rectify data deficiencies that affected the development of the Amendments. Accordingly, reconsideration of this aspect of the Amendments is required.

## VI. EPA Should Eliminate or Limit the Categorical Exclusion that Allows Remote RICE to Operate without Modern Pollution Controls

EPA's decision to establish a new subcategory of "remote" RICE, and prescribe management practices in lieu of modern emission standards for that subcategory, will substantially curtail the emission reduction benefits of the 2010 Rule and expose the public to the risks of continued toxic emissions from these engines. The new subcategory consists of "remote," existing 4-stroke rich burn (4SRB) spark ignition (SI) RICE located at area sources. Because many existing SI RICE provide compression for pipelines, EPA defined a "remote" engine for this purpose as one that is situated in a "Class 1" location under regulations issued by the Pipeline and Hazardous Materials Safety Administration (PHMSA).<sup>37</sup> For non-pipeline engines, EPA defined "remote" to include engines with five or fewer buildings intended for human occupancy within a 0.25-mile radius. In explaining this new subcategory, EPA asserted that these remoteness criteria are "adequate in protecting public health."<sup>38</sup> Moreover, EPA argued that the creation of this subcategory is justified because the costs of emission controls, testing, and continuous monitoring "may be unreasonable" for remote engines, which "may be

<sup>&</sup>lt;sup>37</sup> A "Class 1" location is defined as an offshore area or any class location unit that has 10 or fewer buildings intended for human occupancy and no buildings with four or more stories within 220 yards (200 meters) on either side of the centerline of any continuous 1-mile (1.6 kilometers) length of pipeline. 78 Fed. Reg. at 6675. <sup>38</sup> 78 Fed. Reg. at 6682

difficult to access, may not have electricity or communications, and may be unmanned most of the time."<sup>39</sup>

As explained below, neither justification is adequately supported by the record. Existing SI engines are currently responsible for almost 25,000 tons per year of hazardous pollutants, 516,000 tons per year of CO, and almost 1 million tons of NO<sub>x</sub>, with more than 80 percent of those emissions coming from area sources.<sup>40</sup> As a result of the Final Rule, the HAP and volatile organic compounds (VOC) emission reductions expected from SI engines will be 70 percent less than under the 2010 Rule; NO<sub>x</sub> reductions will decline by 90 percent; and CO reductions will decline by 80 percent.<sup>41</sup> Yet EPA's chosen definition of "remote" does not ensure that human exposure to emissions from SI RICE engines will be minimized. Neither does the definition limit the subcategory to engines for which installation of emission controls is impracticable, which was the principal justification EPA offered for the creation of the subcategory. Accordingly, we urge EPA to reconsider this aspect of the 2012 Amendments by either (1) eliminating the categorical exclusion of modern pollution controls for the remote area source, or (2) significantly narrowing the definition of "remote" to ensure that it only applies to engines that pose no risk to public health and have adequately demonstrated the infeasibility of installing modern emissions controls.

# A. EPA's Definition of "Remote" Leaves the Public Exposed to Harmful Air Toxics.

EPA's conclusion that its definition of "remote" adequately protects public health is not justified by the record. First, as commenters on the proposed Amendments pointed out, PHMSA's safety regulations are used to determine which segments of pipeline are sufficiently close to human populations to warrant heightened precautions against leaks, ruptures, explosions, and other catastrophic incidents.<sup>42</sup> There is no reason to assume that the 220-yard distance that PHMSA considers "safe" for such purposes also minimizes public health risks from air toxics. Indeed, commenters on the 2012 Amendments cited evidence indicating that some HAPs, such as formaldehyde, can be found at elevated concentrations as far as 50 km away from an emission source.<sup>43</sup> Further, commenters cited a 2002 study finding that the "risk zone" for elevated cancer rates around a *single* diesel backup generator extends from 63 to 118 acres (10 to 20 city blocks), even when operated for only 100 hours per year.<sup>44</sup> A circular "risk zone" of this area would have a radius of between 935 and 1,279 feet – substantially greater than the 220-yard distance specified for Class 1 pipeline segments. The risk zone would be even larger in cases where multiple engines are located close together or where engines are operated on a more frequent basis.<sup>45</sup>

In response to these facts, EPA conceded that PHMSA and EPA regulations do not share the same purpose; however, EPA defended its adoption of PHMSA's Class 1 definition by

<sup>&</sup>lt;sup>39</sup> Id.

<sup>&</sup>lt;sup>40</sup> EPA, "Regulatory Impact Analysis (RIA) for Existing Stationary Reciprocating Internal Combustion Engines (RICE) NESHAP," (2010); Table 4-8, Page 4-37.

<sup>&</sup>lt;sup>41</sup> 78 Fed. Reg. at 6676.

<sup>&</sup>lt;sup>42</sup> See generally 49 C.F.R. Part 192.

<sup>&</sup>lt;sup>43</sup> Joint Comments of EDF et al., at 35.

<sup>&</sup>lt;sup>44</sup> *Id.* at 25.

<sup>&</sup>lt;sup>45</sup> Id.

asserting that their intent is "similar", and that the PHMSA classifications are a "wellestablished" system that is currently in use.<sup>46</sup> Neither of these rationales, however, justifies EPA's conclusion that the Class 1 definition (or the 0.25-mile radius) adequately protects public health, or rebuts the evidence presented by commenters. EPA presented no public health studies of its own to show that air toxics from remote RICE would be minimized outside Class 1 locations (or the 0.25-mile radius that EPA adopted for engines not located along a pipeline). Nor did EPA estimate how many people live or work within Class 1 areas or within 0.25 miles of non-pipeline engines, and would be exposed to heightened emissions from RICE under the Final Rule.

EPA did cite to a 3-page memorandum prepared by a consultant for the Interstate Natural Gas Association of America (INGAA), which presented the results of dispersion modeling carried out in 2002 and 2003 for two hypothetical natural gas-fired 4-stroke RICE units.<sup>47</sup> This industry modeling has numerous flaws: it was carried out over a decade ago using ISC3, a model that has been superseded by AERMOD; did not provide numerical concentration levels at various distances, or indicate whether those levels are hazardous; failed to characterize the dispersion of particular air toxics of concern, such as formaldehyde; and did not characterize pollutant dispersion for non-natural gas-fired engines. Because of these limitations, EPA erred in relying on the memorandum to conclude that its remoteness definition adequately protects public health.

# B. EPA's Definition of "Remote" Includes Engines That Could Feasibly Install Modern Emission Controls.

EPA's definition of "remote" is also arbitrary because it includes engines that are likely capable of installing advanced pollution controls. As noted above, EPA said this subcategory was necessary to exempt from pollution controls those RICE that "may be difficult to access, may not have electricity or communications, and may be unmanned most of the time."<sup>48</sup> For such engines, EPA asserted that the costs of emission controls, testing, and monitoring "may be unreasonable."<sup>49</sup> Yet as commenters on the Proposed Amendment pointed out, NSCR emission control devices have been installed on tens of thousands of existing SI RICE located in remote areas, and have operated successfully for years.<sup>50</sup> EPA never responded directly to this evidence, nor did it present evidence of its own regarding the costs or infeasibility of requiring pollution controls on RICE units meeting EPA's definition of "remote." What is more, EPA's definition of "remote" bears no clear relationship to accessibility, infrastructure, or staffing considerations. Rather, the definition merely excludes pipeline engines that are located within a relatively small distance of a minimum number of occupied buildings, or non-pipeline engines that are located within 0.25 miles of a minimum number of occupied buildings. This definition could easily deem as "remote" engines that are capable of complying with standards for non-remote engines.

<sup>&</sup>lt;sup>46</sup> RTC at 183.

<sup>&</sup>lt;sup>47</sup> Memorandum from Jim McCarthy and Jeff Panek, IES to Lisa Beal, INGAA, Document ID No. EPA-HQ-OAR-2008-0708-0849 (July 27, 2011).

<sup>&</sup>lt;sup>48</sup> Amendments, 78 Fed. Reg. at 6,682.

<sup>&</sup>lt;sup>49</sup> *Id*.

<sup>&</sup>lt;sup>50</sup> See RTC at 177 (citing comments of Delaware Department of Natural Resources and Environmental Control and the Manufacturers of Emissions Controls Association).

EPA's flawed definition of "remote" also represents an unexplained departure from EPA's past policy and practice regarding subcategorization of emission sources under section 112. In previous section 112 rulemakings, EPA has stated that "normally, any basis for subcategorization . . . must be related to an effect on HAP emissions that is due to the difference in class, type, or size of the units."<sup>51</sup> EPA has also stated that it is inappropriate for the Agency to subcategorize under section 112 where "sources can achieve the same level of emission reductions notwithstanding a difference in class, type, or size."<sup>52</sup> Here, as commenters on the Proposed Amendments made clear, many engines located in remote areas have demonstrated an ability to achieve the same level of emission reductions as other engines. Moreover, EPA's proposed definition of "remote" rests on factors that are loosely related to the technical feasibility of installing emission controls. Accordingly, this provision of the rule should be eliminated or strictly limited to units that have demonstrated they pose no risk of human exposure.

# VII. Alternative Request for Rulemaking

If EPA determines that reconsideration of any of the issues above is not compelled under section 307(d)(7)(B), Environmental Groups request that EPA regard the relevant portions of this filing as a request for rulemaking under the Administrative Procedure Act, 5 U.S.C. § 553(e). We may bring suit under section 304(a) of the Clean Air Act to compel EPA action on any such requests for rulemaking if the Agency does not respond to them in a timely manner.

## VIII. Conclusion

We appreciate EPA's consideration of this request.

Respectfully submitted,

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 <sup>&</sup>lt;sup>51</sup> National Emission Standards for Hazardous Air Pollutants From Coal- and Oil-Fired Electric Utility Steam Generating Units and Standards of Performance for Fossil Fuel-Fired Electric Utility, Industrial-Commercial-Institutional, Small Industrial-Commercial-Institutional Steam Generating Units, 77 Fed Reg. 9,304, 9,378 (Feb. 16, 2012).
 <sup>52</sup> Id.

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