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Air and Radiation Docket
U.S. Environmental Protection Agency
Mailcode: 6102T
1200 Pennsylvania Ave, NW
Washington, DC 20460

Attn: Docket ID No. EPA-HQ-OAR-2004-0490

The Coalition for Responsible Waste Incineration (CRWI) appreciates the opportunity to submit comments on *Standards of Performance for Stationary Gas Turbines; Standards of Performance for Stationary Combustion Turbines; Proposed Rule*. 77 Fed. Reg. 52,554 (August 29, 2012). CRWI is a trade association comprised of 23 members.

CRWI has concerns about two issues associated with the proposed reconsideration rule.

1. *Sierra Club* does not apply to section 111 rules.

2. The proposed affirmative defense language is not consistent with the definition of a malfunction, is internally inconsistent, and is potentially misleading, making the Agency's proposed language arbitrary and capricious.

Specific comments on each of the issues listed above are attached. Thank you for the opportunity to comment on this proposed rule. If you have any questions, please contact me at (703-431-7343 or mel@crwi.org).

Sincerely yours,

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Executive Director

cc: CRWI members
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**Specific comments**

1. *Sierra Club* does not apply to section 111 rules.

   CRWI is concerned that EPA is improperly applying the Sierra Club ruling (*Sierra Club v. EPA*, 551 F.3d 1021 (D.C. Cir. 2008)) to Clean Air Act section 111 rules. In *Sierra Club*, the D.C. Circuit Court of Appeals held that the Clean Air Act required EPA to establish "section 112 compliant" standards for sources emitting hazardous air pollutants that would apply at all times. *Id*. at 1027-28. The court reasoned that because Section 302(k) of the Clean Air Act defines an "emission standard" as a requirement that limits air emissions "on a continuous basis," the Agency could not exempt the source from compliance with § 112-compliant standards for any reason. The court, however, has not made a similar decision relating to facilities regulated under § 111, where EPA has been exempting facilities from complying with technology-based standards during periods of startup, shutdown, or malfunction since 1973 with the court's blessing. In *Portland Cement Ass'n v. Ruckelshaus*, 486 F.2d 375, 398 (D.C. Cir. 1973), the court stated that "'start-up' and 'upset' conditions due to plant or emission device malfunction, is an inescapable aspect of industrial life and that allowance must be made for such factors in the standards that are promulgated." *Id*. at 399.). In *Essex Chem. Corp. v. Ruckelshaus*, 486 F.2d 427, 432-33 (D.C. Cir. 1973), *cert. denied,* 416 U.S. 969 (1974) the court noted that SSM provisions are "necessary to preserve the reasonableness of the standards as a whole." And in 1980, the court stated that technology-based standards must be capable of being met "under most adverse circumstances which can reasonably be expected to recur," such as during periods of SSM. *National Lime Ass'n v. EPA*, 627 F.2d 416, 431, n. 46 (D.C. Cir. 1980).

   CRWI understands the Agency's reasoning for applying the 2008 *Sierra Club* case to NSPS and Section 129 standards. We note, however, that the court did not discuss these prior cases in its 2008 *Sierra Club* decision. CRWI, therefore, believes that EPA is erroneously spreading this approach to standards in other air programs under sections of the CAA where the court has "applauded" SSM exemptions for technology-based standards. We do not believe that *Sierra Club* obligates EPA to follow an altered approach for startup, shutdown, and malfunction events under § 111 or that the Sierra Club ruling reversed earlier court decisions related to § 111, since the Sierra Club ruling dealt with § 112 issues and especially since the Sierra Club ruling did not specifically say it was reversing or over-ruling earlier § 111 decisions. CRWI believes EPA has abundant discretion to leave the longstanding § 111 approach alone, and requests that they do so.

2. The proposed affirmative defense language is not consistent with the definition of a malfunction, is internally inconsistent, and is potentially misleading, making the Agency's proposed language arbitrary and capricious.

Should EPA disagree with our first comment related to § 111 and the *Sierra Club* ruling, CRWI suggests the following modifications to the affirmative defense language to make it more usable, logical, and consistent with its purpose. CRWI understands that most of the provisions EPA has proposed for the affirmative defense comes from earlier guidance memos. While these provisions were in guidance, the Agency did not need to be careful of the wording since they were only guidance and did not have the weight of regulation. However, if the Agency wants to codify this guidance into regulatory language, several changes are needed.

a. The language EPA is proposing appears to create two different definitions of malfunctions. In 40 CFR 60.2, EPA defines malfunctions as follows.

> *Malfunction* means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

The language EPA is proposing in § 60.4334 is similar to the definition in § 60.2 with one major exception. In the proposed language, one of the conditions for an affirmative defense is that the excessive emissions were caused by a "sudden, infrequent, and unavoidable failure…" The General Provisions definition of malfunction uses the phrase "not reasonably preventable" instead of the word "unavoidable." Obviously EPA understands that there should be one definition of malfunction. However, the Agency still makes a change in definition of malfunctions in § 60.4334. CRWI believes that is inappropriate to have two different definitions of malfunction and requests that the Agency revise the language to reflect the General Provisions definition of a malfunction which has been in force for many years.

b. The language in the provision is contradictory. In paragraph (a), the phrase "preponderance of evidence" is used while later in that paragraph (iii), the language refers to "any activity." This same trend occurs in paragraphs (5) – "All possible," (6) "All," and (8) "At all times." These phrases are inconsistent with the burden of proof the Agency is requiring since the term "preponderance" does not mean all of the time. CRWI suggests that the phrase "preponderance of evidence" is adequate and the references to "all" and "any" in the later paragraphs should be modified.

c. To many engineers and some regulators, the term "root cause analysis" implies a specific formal process. For many malfunctions, the cause is immediately obvious and a formal process for determining the cause is not needed. When a malfunction occurs, the expectation is that the facility will correct the problem as quickly as possible and return to their operating window. A formal root cause analysis is typically limited to very significant events or repeat events. For

example, if a thermocouple fails, the most likely cause is a bad thermocouple. The first response is to simply replace the thermocouple. However, if the replacement thermocouple fails within a short period of time, then something else may be causing that event to occur and a more detailed analysis may be needed. It may take several failures before the real cause is identified. Here a formal root cause analysis may be needed, but it certainly is not needed to replace the first failed thermocouple.

The Agency's proposed language assumes that all malfunctions are equally significant and need an identical degree of investigation. For example, a missing data point due to a malfunction of the data acquisition system is not as significant as a power failure or a catastrophic event such as fire or explosion. CRWI believes that a formal root cause analysis should only be used when other reasonable methods fail to show what caused the malfunction or when the serious nature of an event might make such an analysis necessary. Moreover, other tools may be more appropriate (e.g., failure mode and effect, fault tree, etc.) or more powerful tools may be introduced in the future. The facility is the only one that can and should decide what tool to use to determine the cause of the malfunction.

Part of this problem may be in communications. To some companies and potentially to some regulators, the term "root cause analysis" implies a specific formal process. There are several techniques that may be called "root cause analysis," depending on the author and industry. If EPA intends for the facility to investigate and fix the source of the malfunction so that it is less likely to recur, CRWI supports that concept but suggests that the Agency use an alternative term that does not carry a specific meaning. However, if the Agency envisions a formal process for determining the root cause for every malfunction, no matter how simple, CRWI believes this is unnecessary and would result in excess efforts with no environmental gains.

d. As facilities and EPA move toward electronic recordkeeping, it does not make sense to require keeping a "properly signed, contemporaneous operating logs" as a requirement for an affirmative defense. There are a number of electronic methods for maintaining records currently available (and more will likely be available in the future). As such, we suggest modifying this provision.

e. The proposed language requires a facility to eliminate the causes of malfunctions. This is an impossible task and is inconsistent with the concept of what constitutes a malfunction (which is an event that is either unavoidable or not reasonably preventable). A facility cannot eliminate the causes for certain malfunctions (e.g., lightning strikes) and if it could, the event would not be a malfunction. We suggest changing the language to require facilities to find ways to mitigate future occurrences.

f. There appears to be a couple of typographical errors in the opening paragraph. As written, these sentences do not make sense and are not consistent with previous versions of affirmative defense language. We suggest the Agency correct what we believe are cut and paste errors.

CRWI suggests that EPA consider making the following modifications to the regulatory language in § 60.4334 to address the concerns mentioned above and to make an affirmative defense a more useful tool (using ~~strikeout~~ to show text deleted and underline to show text added).

§ 60.4334 Affirmative Defense for Violation of Emission Standards During Malfunction.

In response to an action to enforce the standards set forth in paragraphs §§ 60.4320 and 60.4330 you may assert an affirmative defense to a claim for civil penalties for violations of such standards that are caused by malfunction, as defined at 40 CFR 60.2. Appropriate penalties may be assessed~~;~~, however, if you fail to meet your burden of proving all of the requirements in the affirmative defense~~,~~. ~~t~~The affirmative defense shall not be available for claims for injunctive relief.

(a) To establish the affirmative defense in any action to enforce such a standard, you must timely meet the reporting requirements in paragraph (b) of this section, and must prove by a preponderance of evidence that:
(1) The violation:
(i) Was caused by a sudden, infrequent, and ~~unavoidable~~ not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner, and
(ii) Could not have been reasonably prevented through careful planning, proper design or better operation and maintenance practices; and
(iii) Did not stem from any activity or event that could have been reasonably foreseen and avoided, or planned for; and
(iv) Was not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and
(2) Repairs were made as expeditiously as possible when a violation occurred. Off-shift and overtime labor were used, to the extent practicable to make these repairs; and
(3) The frequency, amount and duration of the violation (including any bypass) were minimized to the maximum extent practicable; and
(4) If the violation resulted from a bypass of control equipment or a process, then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and
(5) ~~All possible~~ Reasonable steps were taken to minimize the impact of the violation on ambient air quality, the environment, and human health; and
(6) ~~All e~~Emissions monitoring and control systems were kept in operation if at all possible, consistent with safety and good air pollution control practices; and

(7) All of the actions in response to the violation were documented ~~by properly signed, contemporaneous operating logs~~; and
(8) ~~At all times, t~~The affected source was operated in a manner consistent with good practices for minimizing emissions; and
(9) A written ~~root cause analysis~~ report has been prepared, the purpose of which is to determine~~, correct,~~ and ~~eliminate~~ mitigate the primary causes of the malfunction and the violation resulting from the malfunction event at issue. Facility personnel will determine the appropriate type of analysis required (may include but not limited to root cause analysis, failure mode and effect, fault tree, etc.) to identify the cause of the malfunction. The ~~analysis~~ report must also specify, using best monitoring methods and engineering judgment, the amount of any emissions that were the result of the malfunction.