Coalition for Responsible Waste Incineration

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Environmental Protection Agency
Mailcode: 2822T
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Attn: Docket ID No. EPA-HQ-OAR-2004-0305

The Coalition for Responsible Waste Incineration (CRWI) appreciates the opportunity to submit comments on *National Emission Standards for Hazardous Air Pollutants: Primary Lead Smelting; Proposed Rule*. 76 FR 9410 (February 17, 2011). CRWI is a trade association comprised of 26 members. All of our Full members are regulated under Subpart EEE.

In these proposed rules, CRWI is primarily concerned about the changes EPA is proposing in how startup, shutdown, and malfunction are regulated. We are submitting specific comments on the three issues listed below.

1. EPA's proposed requirement that facilities meet steady-state standards during startup, shutdown, and malfunctions is neither logical nor lawful.
2. EPA should modify the affirmative defense provisions so that it is a "rebuttable presumption."
3. CRWI suggests that EPA clarify its affirmative defense provisions.

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Thank you for the opportunity to comment on this proposed rule. If you have any questions, please contact me at (202-452-1241 or mel@crwi.org).

Sincerely yours,

Melvin E. Keener, Ph.D.
Executive Director

cc: CRWI members
N. Topham – EPA

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Specific comments

1. EPA's proposed requirement that facilities meet steady-state standards during startup, shutdown, and malfunctions is neither logical nor lawful.

EPA's proposal to require units to comply with the same emission standards during periods of startup, shutdown, malfunction, and steady state conditions is neither logical nor lawful.

A. EPA does not demonstrate that sources can meet standards during startup, shutdown, or malfunction.

MACT floor standards must be based on evidence that top performers have already achieved them. However, EPA's statement that sources can meet the standards during startup, shutdown, and malfunction (SSM) events is not based on any data (at least there is no data in the record to show this). In fact, it is most likely wrong. The current standards were developed using data collected during steady-state operations. It cannot reflect the variations that will be experienced during SSM events because no data was taken during these events. EPA includes variability but the variation in test data taken during steady state conditions only reflects the normal variations that occur during normal operations. It cannot take into account the variability that would be experienced during SSM events. To do this would require having data on emissions during these events. EPA does not have that data. If EPA decides to require facilities to meet the same emission standards under both normal operations and during SSM events, they must use data gathered during both normal operations and SSM events in developing those standards.

B. It is impossible to use operating parameters developed under steady-state conditions to show compliance during startup, shutdown, and malfunctions.

Typically, regulations require that a facility perform an initial test to show that they are in compliance with their current emission standards. EPA requires these tests to be run under steady-state conditions. In addition, this test is used to set operating parameters that the facility will show that it remains in compliance with the emission standards on a day-to-day basis. It is reasonable to use these operating parameters to show continued compliance during normal operations. However, under startup, shutdown, and malfunctions, conditions are not steady but are constantly changing. The relationships developed during the initial test (and subsequent tests) between emissions and operating parameters are no longer valid under these conditions and cannot and should not be used to show

compliance. To expect a facility to comply with the same operating limits during transient events would require extrapolation outside the range of the data used to develop the relationship. If a facility were to ask the Agency to be allowed to extrapolate an operating limit outside what was demonstrated during the test, it is likely that this request would be refused because there is no data to show that the relationship is still valid. The Agency could be correct in rejecting this request, depending upon the request. Yet, EPA is telling facilities to do just that during transient events – extrapolate beyond the range of the data used to develop the relationship. This is not scientifically correct nor is it appropriate.

C. If EPA cannot develop emission-based standards that apply during periods of startup, shutdown, or malfunction, then it should adopt work practice standards.

CRWI does not believe that it is possible for EPA to develop valid floor standards for the periods of startup, shutdown, and malfunction. We note that EPA's own National Stack Testing Guidance precludes and possibly prohibits the development of such data ("Operations during periods of startup, shutdown, and malfunction do not constitute representative conditions for the purposes of a performance test." Section VII. 5 of the September 30, 2005 Final Clean Air Act National Stack Testing Guidance). So, even if a facility had such data, EPA would not have accepted it in a test report according to this guidance, much less have incorporated it into an emissions database based on compliance test reports. For example, if a facility ran a Method 5 test during startup, a single test would take six to eight hours (each run takes at least an hour, three runs are required for a valid test, and the sampler must have time in between runs to change out the sampling trains). During those six to eight hours, the conditions would have changed so significantly that it would be virtually impossible to understand what that data meant or to extrapolate the results (which will be one hour averages) to other transient conditions.

CRWI believes that Congress anticipated this type of circumstance when they included § 112(h) of the Clean Air Act. Here they allow EPA to develop work practice standards where a methodology to develop a standard of performance is not feasible due to technological constraints. It is not practical to gather data during transient event using current EPA methods. Without data during these events, it is impossible to develop numerical standards. In the absence of data and in the absence of a credible methodology to develop data (even if one can be developed which is not certain), CRWI believes EPA should use a work practice under § 112(h) to address this situation.

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2. EPA should modify the affirmative defense provisions so that it is a "rebuttable presumption."

As EPA knows, malfunctions will occur. Even the best run facilities will have circumstances where events out of their control (*e.g.*, power failures) will occur. So, while CRWI believes that EPA must take into account the conditions that occur during SSM events and establish limits that consider these circumstances, CRWI also agrees that some form of enforcement discretion is needed for malfunctions. As such, we support EPA maintaining a regulatory provision for malfunctions such as an affirmative defense. However, we are concerned that an affirmative defense implies that the facility is guilty until proven innocent. We believe that the proposed language improperly puts the burden of proof on the facility rather than on the Agency. Therefore, CRWI suggests that EPA establish a rebuttable presumption (rather than affirmative defense) where it is presumed that the facility did everything in their power to minimize emissions during these events, unless the Agency proves certain facts that are enumerated in the rules. If the Agency wants to challenge these activities, the burden of proof would be on them to show that the facility did not undertake reasonable actions to minimize emissions.

3. CRWI suggests that EPA clarify its affirmative defense provisions.

While we prefer EPA use a rebuttable presumption, should EPA keep the affirmative defense idea, CRWI suggests the following modifications to the language to make it more usable. CRWI understands that most of the provisions EPA has proposed for the affirmative defense came from earlier guidance memos. While these provisions were in guidance, the Agency did not need to be careful how certain things were worded 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. For instance, the requirements in §§ 63.1551 are impossible to meet due to the use of ambiguous terms such as "careful," "proper," or "better." Until these are defined, it is impossible to determine whether these criteria have been met. EPA should also drop the reference to "any" activity in this paragraph. There are also several references to "All" that would make it difficult to ever satisfy the requirements of an affirmative defense.

In addition, the requirement to do a root cause analysis jumps to the final step without considering that there may be many steps in determining causality. For many malfunctions, the cause is immediately obvious. There is no need to go into a detailed root cause analysis to determine the cause. When a malfunction occurs, the expectation is that the facility will correct the problem as quickly as

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possible and return to their operating window. A 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 a second thermocouple fails within a short period of time, then something else may be causing that event to happen and a more detailed analysis may be needed. It may take several failures before the real cause is identified. Here a root cause analysis may be needed, but it certainly is not needed to replace the first failed thermocouple. The 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 root cause analysis should only be used as a last resort 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.

If it is necessary to do a root cause analysis (or some other detailed analysis), it may not be possible for that to be completed in 30 days. It is reasonable to develop a report of the cause and whatever corrective action was taken within 30 days if the cause was simple. However, if the event was significant and a more detailed analysis was required, a facility would need more time (e.g., 90 days) to complete that report. It should also be noted that it is impossible to eliminate the causes for certain malfunctions (e.g., lightning strikes). Finally, faxing is an obsolete technology. EPA should allow notification by e-mail or other electronic means.

§ 63.1551 Affirmative defense for exceedance of emission limit during malfunction.

In response to an action to enforce the standards set forth in this subpart you may assert an affirmative defense to a claim for civil penalties for exceedances of such standards that are caused by malfunction, as defined in 40 CFR 63.2. Appropriate penalties may be assessed, however, if you fail to meet your burden of proving all the requirements in the affirmative defense. 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 limit, you must timely meet the notification requirements in paragraph (b) of this section, and must prove by a preponderance of evidence that:

(1) The excess emissions:

(i) Were caused by a sudden, short, infrequent, and unavoidable failure of air pollution control and monitoring 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) Were not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and

(2) Repairs were made as expeditiously as possible when the applicable emission limitations were being exceeded. Off-shift and overtime labor were used, to the extent practicable to make these repairs; and

(3) The frequency, amount and duration of the excess emissions (including any bypass) were minimized to the maximum extent practicable during periods of such emissions; and

(4) If the excess emissions resulted from a bypass of control equipment or a process, then the bypass was unavoidable to prevent loss of life, severe personal injury, or severe property damage; and

(5) All possible reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality, the environment and human health; and

(6) All eEmissions monitoring and control systems were kept in operation if at all possible; and

(7) All of the aActions in response to the excess emissions were documented by properly signed, contemporaneous operating logs; and

(8) At all times, tThe facility was operated in a manner consistent with good practices for minimizing emissions; and

(9) A written root cause analysis report has been prepared to determine, correct and eliminate mitigate the primary causes of the malfunction and the excess emissions resulting from the malfunction event at issue. Facility personnel will determine the appropriate type of analysis required (may include but is not limited to root cause analysis, failure mode and effect, fault tree, etc.) to identify the cause of the malfunction. The analysis report shall also specify, using best monitoring methods and engineering judgment, the amount of excess emissions that were the result of the malfunction.

(b) Notification. The owner or operator of the facility experiencing an exceedance of its emission limit(s) during a malfunction shall notify the Administrator by telephone, or facsimile (FAX) transmission, or electronic

means as soon as possible, but no later than two business days after the initial occurrence of the malfunction, if it wishes to avail itself of an affirmative defense to civil penalties for that malfunction. The owner or operator seeking to assert an affirmative defense shall also submit a written report to the Administrator within 30 days of the initial occurrence of the exceedance of the standard in this subpart to demonstrate, with all necessary supporting documentation, that it has met the requirements set forth in paragraph (a) of this section. If the report requires a more detailed analysis, the report must be submitted within 90 days of the initial occurrence of the event.