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Attn: Docket ID No. EPA-HQ-OAR-2012-0360

The Coalition for Responsible Waste Incineration (CRWI) appreciates the opportunity to submit comments on *National Emission Standards for Hazardous Air Pollutants: Off-Site Waste and Recovery Operations: Proposed Rule*. 79 FR 37,850 (July 2, 2014). CRWI is a trade association comprised of 26 industry members. A number of CRWI members own and operate facilities that will be impacted by this rulemaking.

CRWI is submitting comments on three specific areas. These are:

1. EPA's reasons for including malfunctions as a part of normal operations;
2. Case law requires the Agency to factor malfunctions into emission limitations; and
3. Routine maintenance provisions.

Detailed comments on each of these areas 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](mailto:mel@crwi.org)).

Sincerely yours,

Melvin E. Keener, Ph.D.  
Executive Director

cc: CRWI members  
P. Hirtz, EPA

## **Specific comments**

### **1. EPA's reasons for including malfunctions as a part of normal operations.**

Since the *SSM decision* (*Sierra Club v. EPA*, 551 F.3d 1019 (D.C. Cir. 2008)), the Agency has developed a policy that startups and shutdowns are distinctive modes of operations. In certain rules (Portland Cement MACT, 78 FR 10,013 and the major source Boiler MACT, 78 FR 7,142), the Agency has chosen to set work practice standards for startup and shutdown, recognizing that it would be infeasible to use EPA test methods to show compliance during these periods (test methods require steady-state conditions). CRWI believes the policy for startups and shutdowns is appropriate in most cases. However, the Agency also decided that malfunctions are not a separate mode of operation and the standards developed using data generated during steady-state conditions should also apply during malfunctions. EPA justifies this policy decision on the belief that:

- a. The statute does not require it to take malfunctions into account (79 FR 37,873);
- b. Even if the statute requires it, accounting for malfunctions would be difficult if not impossible (79 FR 37,873-4); and
- c. The 2008 *SSM decision* requires it (79 FR 37,873).

We believe that the Agency is wrong on all three of their stated reasons. We address the reasons for those beliefs below.

- a. The statute does not require it.

The emission limitations for these facilities were promulgated on July 1, 1996 (61 FR 34,140) and codified in 40 CFR Part 63 Subpart DD. They were amended on July 20, 1999 (64 FR 38,950). These emission limitations were developed from data generated under steady-state conditions and properly excluded periods of startup, shutdown, and malfunction. In fact, if conditions during a test fluctuate to the extent that isokinetic conditions cannot be maintained, the test method requires that the sampling be discontinued and the test restarted. Even if the test is continued, the permitting agency may not accept these results because the process did not meet the test objectives set out in the test plan. EPA is now requiring that emission limitations developed for steady-state conditions should also apply during malfunctions. By definition, malfunctions are when something goes wrong and conditions are not stable. Even incorporating variability into the development of standards cannot overcome this failing. Statistics only estimate the variability in the data used. An event that is not included in the data cannot be predicted using any type of statistics. Said differently, you cannot use statistics to predict an event (so called "black swan" event) that is not included in the original data. Thus by using only data generated under steady-state conditions, the Agency cannot predict what a facility can meet "every day under all operating conditions" if those operating conditions are now expanded to include malfunctions.

Section 112(d) of the Clean Air Act requires that MACT standards be achievable. While it is not included in this proposed rule, EPA states in the boiler MACT final rule that even well-designed and well-maintained equipment “can sometimes fail and that such failures can sometimes cause an exceedance of the relevant emissions standard.” 76 FR at 15,613. Thus, in other rules, EPA has admitted that facilities cannot meet standards developed using data from steady-state conditions when applied to upset conditions.

In this proposed rule, EPA states that it is “the goal of a ‘best controlled or best performing source’ is to operate in such a way as to avoid malfunctions of the source and accounting for malfunctions could lead to standards that are significantly less stringent than levels that are achieved by a well-performing non-malfunctioning source.” 79 FR 37,874. This ignores the fact that Congress did not authorize EPA to set goals but authorized them to set emission limitations based on what was actually achieved. It also implicitly expresses the belief that malfunctions will happen to even the best performers. The Agency also tries to justify this based on a Clean Water Act case, *Weyerhaeuser v. Costle*, 590 F.2d 1011, 1058 (D.C. Cir. 1978) (“*Weyerhaeuser*”), and claimed that it was not required to factor malfunctions into its standards. 79 FR 37,874. EPA’s reliance on this case is inappropriate. That decision addressed a Clean Water Act requirement that, unlike the MACT “floor,” was “technology-forcing” and intended to require development of new control technology. *Weyerhaeuser* at 1025, 1057. In addition, the *Weyerhaeuser* court rejected the idea that standards developed taking upset conditions into account, such that the effluent limitations could be achieved by “properly operated and maintained plants,” must also include an exemption that would accommodate “uncontrollable acts of third parties.” *Id.* at 1058. In any event, ten years later, the Appeals Court applied the same approach to technology-based standards under the Clean Water Act as it has applied in the CAA cases. See *NRDC v. EPA*, 859 F.2d 156, 206-210 (D.C. Cir. 1988) (concluding that a “technology based standard discards its fundamental premise when it ignores the limits inherent in the technology”).

Contrary to what the Agency claims, the statute requires that the Agency consider malfunctions when setting standards. Section 112(d)(2) of the Clean Air Act requires EPA to create emission standards that the Administrator determines is “achievable.” Section 112(d)(3) defines what is “achievable” as what is “achieved in practice by the best controlled similar source” for new sources and “the average emission limitation achieved by the best performing 12 percent” for existing sources. Thus, the statute clearly states that emission limitations under this paragraph must be “achieved in practice.” The meaning of “achieved” in Webster’s Dictionary is “to carry out successfully.” According to the Oxford Dictionary ([http://www.oxforddictionaries.com/us/definition/american\\_english/practice](http://www.oxforddictionaries.com/us/definition/american_english/practice) – accessed on August 16, 2014), the phrase “in practice” is “used to refer to what actually happens as opposed to what is meant or believed to happen.” Combining

these two plain meanings, “achieved in practice” means that the Agency must show that (for new sources) at least one facility can meet the emissions limitation that are being promulgated. Otherwise, that emission limitation is not “achieved in practice.” A similar showing is required for existing sources. If even the best performers are expected to have malfunctions and those malfunctions result in emissions that exceed the standards, the Agency has failed in their duty to develop standards that are “achieved in practice.” As the court noted in *National Lime I*, “by failing to explain how the standard proposed is achievable under the range of relevant conditions which may affect the emissions to be regulated, the Agency has not satisfied this initial burden.” *National Lime Association v. EPA*, 627 F.2d 416 (DC Cir. 1980).

While it is appropriate to use data gathered under steady-state conditions to set emission standards for steady-state conditions, it is not appropriate (from either a logical or legal perspective) to apply those standards to non-steady-state conditions. Thus, EPA must find an alternative method for facilities to show compliance during non-steady-state operations.

In summary, standards based on data collected under steady-state conditions cannot incorporate the variability that occurs during malfunctions. A facility may not be able to comply with emission standards developed under steady state conditions during malfunctions. As such, those standards cannot be “achieved in practice” as required by the statute since even the best performers will have malfunctions. Thus, we believe that EPA should modify the proposed regulatory language to require facilities to meet emission standards (derived from data gathered under steady-state conditions) only during normal operations and not during malfunctions.

b. Accounting for malfunctions would be difficult if not impossible

EPA’s claim that accounting for malfunctions is too difficult is not a sufficient reason for ignoring them. 79 FR 37,873. Difficulty cannot be an excuse for not addressing an issue. *Cement Kiln Recycling Coalition v. EPA*, 255 F.3d 855, 865 (D.C. Cir. 2001) (“*CKRC*”) (“Even accepting the proposition that factors affecting source performance ... are difficult to quantify.... If EPA cannot meet this requirement using the MACT methodology, it must devise a different approach capable of producing floors that satisfy the Clean Air Act.”) (citations omitted). See also *NACWA v. EPA*, 734 F.3d 1115, 1143 (DC Cir. 2013) (remanding because “one sentence in the Federal Register is not enough of a basis to uphold EPA’s new approach”).

This is particularly true where EPA has another statutory option to account for malfunctions: establishing a work practice standard under §112(h). Congress provided for this when they set up the work practice provisions of 112(h). Here Congress stated that EPA may set work practice standards if it is not feasible to prescribe or enforce an emissions standard. CRWI believes that it is infeasible to gather data during malfunctions simply because there are no EPA approved

methods to make measurement during non-steady-state conditions. It is highly likely that when a malfunction occurs, the process will not remain in steady-state, making it infeasible to use current test methods. In the final Hospital/Medical/Infectious Waste Incinerator rule, EPA agrees with this. At 74 FR 51,394, EPA states “It would be very difficult to do any meaningful testing during such an event because the exhaust flow rates, temperatures, and other stack conditions would be highly variable and could foul up the isokinetic emissions test methods (thus invalidating the testing).” EPA followed this logic in the industrial boiler rule (76 FR 15,613) where they determined that it is not technically feasible to complete stack testing during periods of startup and shutdown due to the physical limitations and the short duration of the startup and shutdown periods. As a result, they set work practice standards for startup and shutdown events in this final rule. We believe the same sets of circumstances are applicable to this rule and suggest that EPA set work practice standards in this final rule for malfunctions.

We believe that it makes the most sense legally and technically to handle malfunctions using work practices. An example of a work practice would be the requirement to develop and implement a malfunction plan that would detail a facility’s response to malfunctions and a method to get the facility back within their allowable operating conditions as expeditiously as possible.

c. The 2008 SSM decision requires it.

This rule would require facilities to meet technology-based limits that were developed using data from normal operations (when systems are stable) during periods of malfunction (when systems are not stable). EPA’s decision contradicts a fundamental principle of standard setting, announced and consistently applied over the past 40 years that EPA must account for malfunctions when setting technology-based standards. Contrary to EPA’s suggestion, its departure from precedent was not required or justified by the Court’s split decision in the *SSM decision*. 79 FR 37,873. While that case held that a CAA §112-compliant standard must apply at all times, it did not overrule longstanding precedent requiring EPA to take malfunctions into account when setting technology-based standards. EPA impermissibly disregarded this precedent by failing to either consider malfunctions when setting numeric emissions limits under §112(d) or by establishing a work practice standard under §112(h).

This case concerned a blanket exemption, in the MACT General Provisions, from compliance with MACT standards during malfunctions (unless the standards for a particular source category provided otherwise). The Court struck down that provision because it did not result in continuous §112-compliant emission standards, since, as EPA acknowledged, the General Provisions SSM exemption was not established under either §112(d) or §112(h). 551 F.3d at 1028. At the same time, the Court stated that the requirement, based on its interpretation of the inclusion of “continuous” in the CAA definition of “emission standard,” that some standard

consistent with section 112 apply at all times does not mean that the same standard must apply at all times. *Id.* at 1027. The Court specifically noted the potential for EPA to address malfunctions through its §112(h) work practice authority. *Id.* at 1028.

Therefore, the *SSM Decision* did nothing to negate the principle that EPA must consider malfunctions when it sets §112-compliant emission standards for individual source categories. In fact, the *SSM Decision* reached the same conclusion that the *National Lime I* court reached (although it did not discuss or even cite *National Lime I*): Congress included “continuous” in the definition of “emission standard” to preclude the use of “intermittent” emission controls.<sup>1</sup> We do not seek an exemption from the standards during malfunctions, nor non-“continuous” intermittently-applied MACT standards, but only standards that account for the performance of available technology during malfunction events.<sup>2</sup> Using work practice standards for malfunctions would satisfy both Congress’ intent that 112 standards apply at all times and recent court rulings.

## **2. Case law requires the Agency to factor malfunctions into emission limitations.**

Not only do we believe that the statute requires the Agency to factor malfunctions into development of emission limitations, we also believe that case law requires EPA to consider malfunctions when developing emission limitations.

Four times the U.S. Court of Appeals for the District of Columbia Circuit has told EPA that it must factor malfunctions into its technology-based standard setting process under the Clean Air Act. In *Portland Cement Ass’n v. Ruckelshaus*, 86 F.2d 375, 396, 398 (D.C. Cir. 1973), *cert. denied*, 417 U.S. 921 (1974) (“*Portland Cement I*”), the DC Circuit recognized 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. The Court, which was addressing EPA’s NSPS rules, also noted that including the startup, shutdown, and malfunction provisions “imparts a construction of ‘reasonableness’ to the standards as a

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<sup>1</sup> 551 F.3d at 1027. As the *National Lime I* court explained, when Congress defined “emission standard” in the 1977 CAA Amendments as a requirement that limits emissions “on a continuous basis,” it was responding to information that some sources temporarily reduced their emissions only during adverse weather conditions. 627 F.2d at 434 n.54. Since technology-based standards that account for malfunctions are not the sort of deliberate intermittent control technique addressed by the 1977 CAA Amendments, the *National Lime I* court was free to affirm once again the principle of its prior rulings that EPA must assure the achievability of technology-based standards during malfunctions. See *id.* at 430, 455.

<sup>2</sup> See *Kamp v. Hernandez*, 752 F.2d 1444, 1453 (9th Cir. 1985) (concluding that “Congress’s primary purpose behind requiring regulation on a continuous basis was to exclude intermittent control techniques from the definition of emission limitations,” and therefore accepting EPA’s interpretation that an emission standard operates continuously “so long as some limitation on emissions, although not necessarily the same limitation, is always imposed”).

whole and adopts a more flexible system of regulation than can be had by a system devoid of ‘give.’” *Id.* at 399.

In *Essex Chem. Corp. v. Ruckelshaus*, 486 F.2d 427, 432 (D.C. Cir. 1973) (“*Essex Chemicals*”), petitioners argued that lesser or no standards should apply during startup, shutdown or malfunction conditions. The Court agreed, holding that such provisions “appear necessary to preserve the reasonableness of the standards as a whole.” *Id.* at 433. And in *NRDC v. EPA*, 859 F.2d 156 (D.C. Cir. 1988), the court held that, although water-quality permit limits need not incorporate an “upset defense,” “[a] technology-based standard discards its fundamental premise when it ignores the limits inherent in the technology.” *Id.* at 208 (citing *Marathon Oil. Co. v. EPA*, 564 F.2d 1253, 1273 (9<sup>th</sup> Cir. 1977)). Consequently, because all pollution control technologies will occasionally malfunction and take time to get to their steady-state conditions (such as during startup, shutdown or malfunction), “achievable” technology-based standards must contain provisions for compliance during such unavoidable events.

In *National Lime I*, the Court reiterated EPA’s duty to consider malfunctions when setting standards: “In *Essex Chemical* as well as *Portland Cement I* we expressed concern that the standards set might not have been achievable in periods of abnormal operation, *e. g.*, during the ‘startup, shutdown and (equipment) malfunction’ periods that occur in plant operation; and we remanded for further consideration of this issue.” 627 F.2d at 430. The *National Lime I* Court remanded EPA’s rule for several reasons concluding that “the record does not support the ‘achievability’ of the promulgated standards for the industry as a whole....” *Id.*

These three cases ruled on standards developed under CAA section 111(b). The standards under consideration here are promulgated under sections 112(d). However, these cases apply since the Agency has stated they consider 111 and 112 essentially equivalent. 58 FR 42,760, 42,762 (Aug. 11, 1993).

Finally, in, *CKRC* (a §112 case), this Court decided to vacate the MACT standards for several reasons, including:

industry petitioners may be correct that EPA should have exempted HWCs from regulatory limits during periods of startup, shutdown, and malfunction, permitting sources to return to compliance by following the steps of a startup, shutdown, and malfunction plan filed with the Agency. We have similar doubts about EPA’s decision to require sources to comply with standards even during openings of emergency safety valves caused by events beyond the sources’ control.

*CKRC* at 872. Hence, this Court has consistently determined that EPA must account for malfunctions when setting technology-based standards. That is true both before and after the 1977 and 1990 CAA Amendments, and under both §111 and §112. In this rulemaking, EPA failed to do so.

### **3. Routine maintenance provisions**

The current OSWRO NESHAP allows for control devices to be bypassed to perform planned routine maintenance of the control device in situations when the routine maintenance cannot be performed during periods that the emission point vented to the control device is shut down (40 CFR 63.693(b)(3)(i)). The facility is allowed to bypass the control device for up to 240 hours per year. With this rulemaking US EPA is proposing to limit the provision only to tanks routing emissions to a control device. 79 FR 37,877.

At least one of our members uses a carbon bed as a control device for both their tank farms and for their container repackaging operations. If finalized as proposed, this member would be required to suspend container repackaging operations during routine maintenance of the carbon bed. Hence, if the routine maintenance added up to 240 hours per year, this would essentially require the equivalent of suspending repackaging operations for one shift (eight hours/day) for 30 days, thus negatively disrupting such activities during routine maintenance of the carbon bed. Based on reporting already required, this member estimates that the emissions during these 240 hours from the repackaging operations would be less than 200 pounds of VOC per year. As such, the operational (and possible revenue) losses would appear to be greater than any perceived environmental benefit that the elimination of this provision is attempting to create. In summary, CRWI believes that similar to tank emissions, the container repackaging emissions during routine maintenance activities are not significant, and therefore suggests that the Agency retain the 240 hour allowance for such impacted OSWRO operations during routine maintenance of a control device.