

February 21, 2012

VIA E-MAIL

RCRA Docket/EPA Docket Center Attention: DOCKET ID EPA-HQ-OAR-2003-0119 Environmental Protection Agency 1200 Pennsylvania Ave., NW Washington, DC 20460

RE: Proposed Amendments: Commercial and Industrial Solid Waste Incineration Units 76 Fed. Reg. 80452, December 23, 2011

To Whom It May Concern:

The American Chemistry Council<sup>1</sup> appreciates the opportunity to provide comments on the above-referenced amendments. We hope that the Environmental Protection Agency will seriously consider our comments on this rule and finalize provisions that will enhance flexibility and achievability.

Please do not hesitate to contact me should you require further information on the attached comments. I can be reached by phone at (202) 249-6426 or at by e-mail at patricia haederle@americanehemistry.com,

Very truly yours,

Attachment

¹ The American Chemistry Council (ACC) represents the leading companies engaged in the business of chemistry. ACC members apply the science of chemistry to make innovative products and services that make people's lives better, healthier and safer. ACC is committed to improved environmental, health and safety performance through Responsible Care®, common sense advocacy designed to address major public policy issues, and health and environmental research and product testing. The business of chemistry is a \$720 billion enterprise and a key element of the nation's economy. It is one of the nation's largest exporters, accounting for ten cents out of every dollar in U.S. exports. Chemistry companies are among the largest investors in research and development. Safety and security have always been primary concerns of ACC members, and they have intensified their efforts, working closely with government agencies to improve security and to defend against any threat to the nation's critical infrastructure.

# Comments on EPA's Commercial and Industrial Solid Waste Incineration Units: Reconsideration and Proposed Amendments; 76 FR 80452, December 23, 2011 Docket EPA-HQ-OAR-2003-0119

Submitted by The American Chemistry Council

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#### 1. INTRODUCTION

The American Chemistry Council (ACC) is pleased to submit comments on the Environmental Protection Agency's (EPA or Agency) proposed Commercial and Industrial Solid Waste Incineration Units: Reconsideration and Proposed Amendments (hereinafter "Proposed Rule"). On June 4, 2010 EPA proposed standards for CISWI units and ACC submitted lengthy comments on that proposal. On March 21, 2011, EPA finalized the CISWI rule and then announced in a notice on May 18, 2011 that it intended to reconsider certain provisions in the final rule. On May 20, 2011, ACC filed a petition for reconsideration with the Agency requesting that various provisions in the final rule be reconsidered and revised. We hope that EPA will seriously consider our comments on this Proposed Rule and finalize provisions that will enhance flexibility and achievability.

ACC represents the leading companies engaged in the business of chemistry. ACC members apply the science of chemistry to make innovative products and services that make people's lives better, healthier and safer. ACC is committed to improved environmental, health and safety performance through Responsible Care<sup>®</sup>, common sense advocacy designed to address major public policy issues, and health and environmental research and product testing. The business of chemistry is a \$720 billion enterprise and a key element of the nation's economy. It is one of the nation's largest exporters, accounting for ten cents out of every dollar in U.S. exports. Chemistry companies are among the largest investors in research and development. Safety and security have always been primary concerns of ACC members, and they have intensified their efforts, working closely with government agencies to improve security and to defend against any threat to the nation's critical infrastructure.

#### II. RECONSIDERATION ISSUES

#### A. REVISION OF SUBCATEGORIES

In ACC's comments on the June 4, 2010 proposed rule, we requested that EPA establish separate subcategories for coal and biomass energy recovery units (ERUs) for all the pollutants. In the final rule, EPA did establish separate limits for CO, NOx, and SO2 for coal and biomass ERUs. Included in ACC's petition for reconsideration was a request that EPA establish separate coal and biomass ERU and set separate emission standards for particulate matter (PM), mercury (Hg), lead (Pb), cadmium (Cd), and hydrogen chloride (HCl) from coal-fired units and biomass unit. In this Proposed Rule, EPA has proposed to set separate limits for PM, Cd, and Pb along with carbon monoxide (CO), nitrogen oxide (NOx), and sulfur dioxide (SO2) for coal and biomass ERUs. Additionally, EPA states that it is taking comment on proposed revised subcategories, including whether it should also subcategorize for HCl and Hg. See 76 Fed. Reg. 80458 (Dec 23, 2011).

A number of parties, including ACC and one of its member companies, Eastman Chemical Company ("Eastman") have consistently advocated that EPA must establish distinct subcategories for biomass and coal fired units, consistent with EPA's acknowledgement that distinct operational and design issues exist between the two design types which should lead to separate emissions categorization (76 Fed. Reg. 15733). Thus, while ACC therefore strongly

supports EPA's decision to set separate coal and biomass standards for D/Fs, CO, NOx, SO2, PM, Cd, and Pb, we encourage EPA to subcategorize coal and biomass ERUs and set reasonable and achievable emissions standards for mercury and hydrogen chloride. Eastman is submitting detailed technical justification in support of this subcategorization and ACC incorporates by reference and strongly supports those comments.

## B. ESTABLISHMENT OF LIMITATIONS ON FUEL SWITCHING PROVISIONS

ACC has long advocated the need for combustion units that intermittently burn solid waste to be able to transition between § 129 and § 112 requirements as applicable. We included comments on this issue for both the 2010 proposed CISWI rule and the 2010 proposed Boiler MACT rule. ACC does not support the fuel switching requirements that EPA promulgated in the final CISWI rule and we believe that EPA exceeded its statutory authority in the approach it took. In this Proposed Rule, EPA requests comment "on the fuel switching provisions included in the final CISWI rule, particularly on whether the provisions should include further clarification on the timeline and regulatory requirements of a fuel switch. Additionally, we are soliciting comment on an alternative time period for switching frequency (e.g., 12 months)." 76 Fed. Reg. 80452, at 80458-80460 (Dec. 23, 2011). We appreciate the opportunity to submit comments again on this important issue and we strongly recommend that EPA finalize the approach that we advocate below.

Some ACC members operate units that intermittingly combust a solid waste generated on-site from manufacturing operations. These units switch between burning solely a traditional fuel and burning both traditional fuel and non-hazardous solid waste fuel as needed. ACC appreciates EPA's attempt to address fuel-switching and we acknowledge that it presents some unique regulatory challenges as these units move from being regulated under § 129 as CISWI to being regulated under § 112 as boilers, and vice versa. *Id.* at 80458–60. However, we believe that the approach EPA has chosen to address such fuel switching is contrary to the plain language of § 129 and therefore unlawful.

EPA's proposed approach is that "[u]nits that cease combusting solid waste remain subject to CISWI for at least six months after solid waste is added to the combustion chamber. After six months, sources must either comply with any applicable section 112 standards or, if they intend to combust solid waste in the unit in the future, opt to remain subject to CISWI." *Id.* at 80501 (to be codified at 40 C.F.R. § 60.2265). The proposed definition of CISWI unit in § 60.2265 reads in relevant part "any distinct operating unit of any commercial or industrial facility that combusts, *or has combusted in the preceding 6 months*, any solid waste." (Emphasis added).

The requirement that sources remain subject to CISWI for six months after their last combustion of solid waste is unlawful. Section 129(g)(1) defines solid waste incineration unit, in relevant part, as "a distinct operating unit of any facility which *combusts* any solid waste material." (Emphasis added). Congress did not say "which combusts, or has combusted in the preceding 6 months, any solid waste," or more generally, "which recently combusted any solid waste material." Instead, Congress chose the present tense "combust" to express its clear intent to regulate only units currently combusting solid waste. EPA must "give effect to the unambiguously expressed intent of Congress" under step 1 of the Chevron test. See Chevron

USA v. NRDC, 467 U.S. 837, 842-43 (1984). Since Congress was clear in its intent to only regulate solid waste incineration units *currently* combusting waste, EPA's expansion of the definition of CISWI to regulate units that *have* burned waste in the past but have stopped is impermissible.

Similar reasoning applies to EPA's proposal in § 60.2145(a)(4) that a CISWI unit give EPA 30-days' notice prior to the effective date of a fuel switch from a waste to a non-waste fuel. This prior notice requirement also subjects a unit to continued regulation under § 129 after it has ceased burning waste. For example, a unit that stops combusting waste on January 1<sup>st</sup> and notifies EPA of its waste-to-fuel switch on that same date would continue to be regulated as a CISWI until January 31<sup>st</sup>. As stated above, this is an impermissible expansion of § 129 requirements for a unit not combusting waste material. *See Chevron*, 467 U.S. at 842-43.

EPA's six month requirement could also subject units that no longer burn solid waste to § 112 and 129 standards simultaneously.

Under § 129(h)(2), Congress limited EPA's authority to regulate CISWI units by stating that "no solid waste incineration unit subject to performance standards under [CISWI – sections 111 and 129] shall be subject to standards under [NESIIAP – section 112]." The recent ruling from the D.C. Circuit Court of Appeals highlighted the mutual exclusivity of § 112 and § 129. In *Portland Cement Ass'n v. EPA*, 2011 U.S. App. LEXIS 24577, at \*12 n.2 (D.C. Cir. Dec. 9, 2011) the court notes that some cement kilns would be regulated under NESHAP and other cement kilns combusting solid waste "...would be subject to standards under the CISWI rules rather than under the NESHAP rules, since the two regimes are mutually exclusive. *See also, NRDC v. EPA*, 489 F.3d 1250, 1256 (D.C. Cir. 2007). The reconsidered CISWI proposal would subject some units that should be subject to regulation under § 112 (e.g., boilers), when and because they are combusting traditional fuels, to both §section 129 *and* § section 112 emission limits because of their intermittent combustion of solid waste.

For example, the Boiler MACT rule applies to an industrial, commercial, or institutional boiler or process heater, as defined in 40 C.F.R. § 63.7575, that is a major source of hazardous air pollutants. 40 C.F.R. § 63.7485. The Boiler MACT states in § 63.7575 that a unit "combusting solid waste... is *not* a boiler." In other words, as soon as a major source unit subject to § 129 regulation stops burning solid waste, it would be a combustion unit regulated by the Boiler MACT § 112 standards. But under EPA's fuel-switching approach, the unit would continue to be a "solid waste incinerator," subject to § 129 standards for at least 6 months after the unit stops burning waste. This 6-month overlap between the start of Boiler MACT applicability and the end of CISWI applicability is impermissible because it would subject a unit to both § 129 and § 112 standards in violation of those sections of the CAA and D.C. Circuit case law.

Fortunately, there is precedent for a fuel switching provision that is both lawful and workable, and would assure that a combustion unit is subject to either the CISWI or the Boiler MACT rule requirements at all times, but not to both simultaneously. The fuel switching provisions in the 2005 NESHAP for Hazardous Waste Combustors ("HWC MACT") have been in place for many years and are operating successfully. *See* 40 C.F.R. §§ 63.1200 et seq., 63.1206(b)(ii) & 63.1209(q). The HWC MACT allows units that intermittently combust hazardous waste to comply with either Subpart EEE at all times or with Subpart EEE while hazardous waste is in the

combustion chamber and, some other applicable subpart promulgated under § 112 or § 129, when no hazardous waste is in the combustion chamber 40 C.F.R. § 63.1206(b)(ii). In relevant part, the emission standards and operating requirements set forth in the HWC MACT do not apply "when hazardous waste is not in the combustion chamber" and the unit's compliance with other § 112 or 129 requirements has been documented. *Id*,

The HWC MACT requires that if the unit is going to operate under different modes of operation, the owner/operator must establish operating parameter limits for each mode. Additionally, the owner/operator must document in the operating record when the unit changes a mode of operation and begins complying with the operating limits for an alternative mode of operation. In order to operate under otherwise applicable requirements promulgated under §§ 112 or 129, the owner/operator must specify the otherwise applicable requirements as a mode of operation in its Documentation of Compliance; its Notification of Compliance; and its Title V permit application. These requirements include the otherwise applicable requirements governing emission standards, monitoring and compliance, notification, reporting and recordkeeping. See 63.1209(q)(1).

ACC recognizes that hazardous waste combustion units, unlike solid waste combustion units, are exempted from the definition of "solid waste incineration unit" in § 129(g) so EPA is not required to regulate these units under § 129. Nonetheless, if EPA can offer regulatory flexibility for units that intermittently combust hazardous waste, it should certainly do the same for units that intermittently combust non-hazardous solid waste.

The regulatory approach taken in the HWC MACT could easily be adapted and applied permissibly under § 129. This would ensure that when combusting a solid waste the unit is regulated under § 129, and when combusting a traditional fuel it is regulated under § 112. One of these strict regulatory regimes would be applicable at all times, there would be no regulatory gaps and no confusion as to which set of requirements apply and the burden would be on the owner/operator to ensure that it is in compliance with one of these regulatory regimes at all times.

Since EPA has stated it cannot use work practice standards during periods of startup and shutdown, compliance with CO emission limits along with other parameters such as sorbent loading in spray dryer absorbers will be very problematic. EPA should resolve this problem by allowing sources that encounter these issues to elect to comply with §112 standards during all times that solid waste is not being combusted or, alternatively, during just the startup and shutdown periods. The proposed procedure to remain subject to §129 for six months after

When hazardous waste is not in the combustion chamber (i.e., the hazardous waste feed to the combustor has been cut off for a period of time not less than the hazardous waste residence time) and you have documented in the operating record that you are complying with all otherwise applicable requirements and standards promulgated under authority of sections 112 (e.g., 40 CFR part 63, subparts LLL, DDDDD, and NNNNN) or 129 of the Clean Air Act in lieu of the emission standards under §§ 63.1203, 63.1204, 63.1205, 63.1215, 63.1216, 63.1217, 63.1218, 63.1219, 63.1220, and 63.1221; the monitoring and compliance standards of this section and §§ 63.1207 through 63.1209, except the modes of operation requirements of § 63.1209(q); and the notification, reporting, and recordkeeping requirements of §§ 63.1210 through 63.1212.

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shutting off waste feed would not allow this flexibility, which we believe will be required for some units, even top performers, to comply with the rule.

## C. DEFINITIONS OF CYCLONIC BURN BARRELS, BURN OFF OVENS, SOIL TREATMENT UNITS, LABORATORY ANALYSIS UNITS, AND SPACE ITEATERS FROM CISWI SUBCATEGORIES

EPA discusses the definition of several types of units: cyclonic burn barrels, burn-off ovens, soil treatment units, laboratory analysis units, space heaters, foundry sand thermal reclamation units, and chemical recovery units. EPA has also included a definition of chemical recovery unit in the Proposed Rule that more properly addresses sulfuric acid recovery units (SARUs) as well as other types of chemical recovery units. 76 Fed. Reg. 80460-80464.

Additionally, EPA discusses that each of these types of units are excluded from being classified as regulated CISWI units by definition. The revised definitions for these types of units are provided at §60.2265 and §60.2875. ACC supports the revised definitions and agrees with EPA that these units should not be regulated under CISWI.

#### D. STANDARDS FOR STARTUP, SHUTDOWN AND MALFUNCTION

1. EPA should promulgate work practice standards for periods of startup and shutdown for CISWI units, as it did in the final rules for both major and area source boilers.

The 2010 proposed CISWI rule required compliance with emission limitations at all times, including during startup, shutdown and malfunction (SSM). This is contrary to a long history of recognition by EPA and the courts that technology-based requirements like those issued under CAA §§ 111 and 112 (and by extension, § 129) need to account for unavoidable excess emissions associated with SSM events. ACC and others urged EPA instead to use its statutory authority to establish emission standards based on work practices for SSM events. See, ACC Comments at 24-25, 43-46. EPA rejected these comments, and finalized its proposal. EPA provided the rationale for its action on startup and shutdown in the preamble to the CISWI final rule as follows:

We concluded that CISWI units would be able to meet the emissions limitations during periods of startup because most units used natural gas or clean distillate oil to start their incinerators and only add waste after the incinerator has reached combustion temperatures. *Id.* We proposed that emissions from burning natural gas or distillate fuel oil would generally be significantly lower than from burning solid waste. *Id.* We further proposed that emissions during shutdown would also be generally significantly lower because the waste would be almost fully combusted before the unit began shutting down. *Id.* We proposed that these factors, in conjunction with the variability built into the MACT standards and the longer averaging periods, meant that sources would be able to comply with the standards during periods of startup and shutdown. *Id.* 76 Fed. Reg. at 15737-38.

EPA assumes that because CISWI units burn natural gas or distillate oil during periods of startup and shutdown ("SS") it is technically feasible for these units to meet the strict emissions standards established for periods of normal operation, which included emissions resulting from the burning of waste, during startup and shutdown. This assumption is flawed for several reasons.

First, because CISWI units are burning fossil fuels, and not waste, during SS periods, they are no different than the combustion units covered by the major source and area source boiler rules. In both of those rules. EPA determined that it was not feasible to require stack testing during SS periods due to physical limitations and the short duration of those periods and therefore used its authority to require work practice standards (compliance with the manufacturer's recommended procedures or procedures for a similar design) during periods of startup and shutdown. See, § 63.7530(h) (major source); and § 63.11201(b) (area source). These same technical limitations apply to CISWI units during SS periods, and EPA has failed to explain in the Final Rule why these units should be treated differently than major and area source combustion units. As stated above, since ACC could not have known that EPA would finalize work practices for major/area sources during periods of startup and shutdown in those final rules, and then arbitrarily treat combustion units under CISWI differently, we believe the issue is ripe for reconsideration. In addition, in this proposed reconsideration of various CISWI provisions EPA has made a number of changes to the final CISWI rule that reintroduce the issue of SS and how those events should be regulated. We therefore believe it is appropriate for EPA to consider our additional comments on SS herein.

Second, while EPA contends that CISWI units can meet the emission standards during SS periods, there is no factual support for this assertion in the administrative record, and indeed, ACC provided evidence to the contrary in its comments, which EPA did not address in the final rule. See ACC Comments at 43-46. Corrected (and even uncorrected) emission concentrations

<sup>&</sup>lt;sup>2</sup> National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers, 76 Fed. Reg 15608 (March 21, 2011) and National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers, 76 Fed. Reg. 15554 (March 21, 2011) (hereinafter major source boiler rule or area source boiler rule).

In the preamble to the final major source boiler rule, EPA states: —Consistent with *Sierra Club v. EPA*, EPA has established standards in this final rule that apply at all times. In establishing the standards in this final rule, EPA has taken into account startup and shutdown periods and, for the reasons explained below, has established different standards for those periods. EPA has revised this final rule to require sources to meet a work practice standard, which requires following the manufacturer's recommended procedures for minimizing periods of startup and shutdown, for all subcategories of new and existing boilers and process heaters (that would otherwise be subject to numeric emission limits) during periods of startup and shutdown. ... we considered whether performance testing, and therefore, enforcement of numeric emission limits, would be practicable during periods of startup and shutdown. EPA determined that it is not technically feasible to complete stack testing—in particular, to repeat the multiple required test runs—during periods of startup and shutdown due to physical limitations and the short duration of startup and shutdown periods. Therefore, we have established the separate work practice standard for periods of startup and shutdown. Periods of startup, normal operations, and shutdown are all predictable and routine aspects of a source's operations. 76 Fed. Reg. at 15613.

can be significantly higher during startup and shutdown due to the unavoidable less-than-optimal emissions control performance during transitional (non-steady state) conditions. For example, at solid fuel ERUs combustion-related emissions such as CO, particulate (smoke), and opacity increase during the startup period when load and temperature are coming up to full load steadystate conditions. EPA itself recognized in the Boiler MACT that "CEM data show that CO levels have a higher degree of variability than other pollutants" (76 Fed. Reg. 15646). It doesn't matter whether these units are being fired with solid fuel or solid waste - the equipment involved is virtually identical and fuel combustion characteristic differences are minimal. Startup burners reduce emissions by preheating the combustion chamber and downstream equipment but are not sized to achieve full load temperatures; even if they were, they could not completely avoid temporary sub-optimal combustion conditions as heat load shifts from auxiliary fuel to waste during startup and from waste to auxiliary fuel during shutdown. Air pollution control equipment goes through similar transient temperature and flow conditions, e.g., changing furnace temperature and velocity profiles make SNCR systems less effective during startup than during full load steady state conditions and ESPs and fabric filters must have adequate time to warm up before they can function optimally. These conditions are distinct from the less variable conditions that occur during typical steady-state operations. EPA's emission database excludes these periods and therefore does not capture this component of variability. Removing the oxygen correction from the CO limit that applies during startup does not address this issue.

Finally, as we set forth in Attachment 1 to our August 2011 Petition for Reconsideration (Docket OAR-2009-0119), when the CISWI emission limits are averaged in the same manner as the major source boiler rule limits, it is apparent that some of the CISWI limits are actually more stringent than the major source boiler rule limits for similar subcategories. EPA's assertion that CISWI sources could meet the emission limits during startup and shutdown periods is unfounded and further disproved when comparing the stringency of the CISWI emission limits with those established for major sources in the final boiler rule. EPA concluded, and rightly so, that major source boilers could not meet emissions standards established for normal operations during periods of startup and shutdown. It stands to reason therefore that CISWI units, which like boilers burn fossil fuels during startup and shutdown, will not be able to meet numerical emission limits established for normal operations that are even more stringent than the limits set for boilers. For all of these reasons we strongly urge EPA to establish work practice standards for CISWI units during periods of startup and shutdown.

## 2. EPA should reconsider the need for affirmative defense for malfunctions

As noted above, in the March 21, 2011 final rule, EPA for the first time stated that CISWI units would be required to comply with emission limitations derived based on normal operations, even during periods of startup, shutdown, and malfunction. See, 40 C.F.R. §§ 60.2105, 2670, 76 Fed.

<sup>&</sup>lt;sup>4</sup> ACC also addresses the issue of startup and shutdown and proposed ways to define these periods in our comments on EPA's proposed definition of "CEMS data during startup and shutdown."

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Reg. at 15711. EPA asserts that, because of the way CISWI units are operated and the averaging times that apply to the CISWI standards, CISWI units that can meet the emission limitations in the final CISWI rule during normal operations can also meet those emission limitations during startups and shutdowns. *Id.* at 15738. With respect to malfunctions, however, EPA recognizes that some exceedances of the emission limitations established based on normal operations will almost certainly occur due to unavoidable malfunctions of incineration or pollution control equipment. *Id.* at 15737-38.

Instead of retaining the exemption for malfunction events that EPA previously applied to CISWI units in the 2000 CISWI rule, EPA reversed itself and stated that the numeric emission standards apply during malfunctions and included in the regulations an "affirmative defense" that may be available to avoid "civil penalties" for exceedances associated with malfunctions. The affirmative defense provisions appear in §§ 63.2120 and 60.2685 of the final rule and require an owner/operator of a CISWI unit to prove by a preponderance of evidence that it has met each and every requirement in order to avail itself of the affirmative defense to a claim for civil penalties. For the reasons discussed below, ACC believes that EPA should abandon the approach it is taking to addressing malfunctions, that is, offering an affirmative defense, and instead should use its statutory authority under §§ 111(h) and 302(k) to establish a work practice or operational standard that would reduce emissions during a malfunction event.

## 3. EPA's Approach to Malfunctions Is Not Required by Sierra Club v. EPA and Is Contrary to the Requirements of Section 129 of the Clean Air Act.

EPA states in the final CISWI rule that, "consistent with" the holding in Sierra Club v. EPA, 551 F. 3d 1019 (D.C. Cir. 2008), cert. denied, 130 S. Ct. 1735 (2010) ("Sierra Club"), it has established emission standards that apply at all times, even during a period of malfunction. 76 Fed. Reg. at 15737-38. There are a number of flaws in this statement and in EPA's approach to malfunctions experienced by CISWI units, rendering it contrary to the requirements of § 111 and § 129 of the Clean Air Act. More specifically:

- EPA misinterprets both the relevance and the holding of Sierra Club.
- EPA failed to consider malfunctions in establishing CISWI numeric emission standards.
- EPA failed to present any rationale or justification for its decision to apply the same numeric emission standard established for normal operations during an abnormal event, i.e., a malfunction.
- The Clean Air Act gives EPA an appropriate tool for setting emission standards that apply during malfunctions: a "design, equipment, work practice or operational standard".
- EPA's inclusion of an affirmative defense is not a substitute for establishing a § 111 and § 129-compliant standard for malfunction events.
- EPA's affirmative defense requirements are potentially unconstitutional, but certainly unreasonable and not consistent with §§ 111 and 129.

#### 4. EPA Misinterprets Both the Relevance and the Holding of Sierra Club.

EPA states that it is requiring that sources meet numeric emission standards established for normal operations at all times, including during a malfunction event, "[c]onsistent with Sierra Club v. EPA." 76 Fed. Reg. at 15738. The D.C. Circuit's Sierra Club decision does not, however, compel or even support EPA's position that the same numeric standards established for normal operations must also apply during a malfunction event.

As an initial matter, the Sierra Club decision interpreted § 112, not § 129 (which incorporates by reference § 111 and is mutually exclusive of § 112). This is not a mere technical distinction. The D.C. Circuit Court considered certain statutory language dispositive in interpreting EPA's standards-setting authority under § 112. Specifically, the statement in the definition of "emission limitation" and "emission standard", i.e., that it "limits the quantity, rate, or concentration of emissions of air pollutants on a continuous basis". This statement has been in the statute since 1977. Throughout that time, EPA has exempted emissions during SSM events from compliance with NSPS under CAA § 111. See, 40 C.F.R. 60.8(c). In fact, Congress enacted the "continuous basis" language in § 302(k) knowing that EPA's emissions standards under § 111 exempted SSM periods. There is nothing in the legislative history of the 1977 amendments to the CAA that suggests Congress intended to overturn that practice. Moreover, court decisions both before and after the Clean Air Act Amendments of 1977, some of which are cited below, have affirmed the appropriateness of including an SSM exemption in standards issued under § 111.

Although EPA claims that by requiring that the CISWI standards be met at all times, thereby ignoring or assuming away a malfunction, it is acting "consistent with Sierra Club," that claim really does nothing to justify EPA's actions in this proposed reconsideration since the Sierra Club decision relates to a different type of action (exempting emissions from any § 112 standard) under a different statutory provision (§ 112). Even if Sierra Club were relevant to and binding upon EPA's promulgation of performance standards for CISWI units under §§ 111 and 129, however, it would not preclude EPA from establishing distinct requirements applicable during a malfunction.

The Sierra Club ruling vacated the exemption for excess emissions during periods of SSM contained in the General Provisions, 40 C.F.R. part 63 subpart A, for emission standards for hazardous air pollutants regulated under § 112. At issue was EPA's determination that excess emissions during periods of SSM experienced by major sources are not violations as long as the owner/operator has prepared a SSM plan and complies with a "general duty" to minimize emissions. The court concluded that the "general duty" was not a "section 112-compliant standard." However, the court did not imply much less state that the same emission limits that EPA establishes for normal operations must apply during SSM events.

Stather, the "continuous basis" language related to a debate in Congress about whether sources should be allowed to use temporary or intermittent pollution control technologies, as the Sierra Club court recognized. See 551 F.3d at 1027, citing Kamp v. Hernandez, 752 F.2d 1444, 1452 (9th Cir.1985). It had nothing to do with limitations applied during startup, shutdown, or malfunction, nor with EPA's established practice of exempting excess emissions during SSM events from its performance standards.

In fact, the court clearly indicated that § 302(k)'s "inclusion of [the] broad phrase" "any requirement relating to the operation or maintenance of a source to assure continuous emission reduction" in the definition of "emission standard" suggests that EPA can establish MACT standards consistent with § 112 "without necessarily continuously applying a single standard." 551 F.3d 1019, 1021. The court accepted that "continuous" for purposes of § 302(k) "does not mean unchanging...." *Id.* at 1021. The court also highlighted the fact that Congress recognized that it might not be feasible in all cases to prescribe or enforce a numeric emission standard. Congress therefore provided in § 112(h) for the establishment of a "work practice" or "operational standard." *Id.* at 1028.

EPA is now soliciting comments on its determination in the final rule that CISWI units must meet the numeric emission standards established for steady-state operations at all times, including periods of malfunction, and that the only enforcement relief that may be available in the event of a malfunction is an "affirmative defense" to civil penalties. EPA is completely silent on why it is not exercising the discretion and authority provided by Congress in § 111(h) to address CISWI unit malfunctions; in fact, it does not even mention that statutory authority in discussing malfunctions. If EPA wants to act "consistent with" the court's decision in *Sierra Club*, it should promulgate standards for periods of malfunction pursuant to its § 111(h) authority. If EPA chooses to reject the flexibility that Congress clearly intended the Agency to use when it is not feasible to prescribe or enforce a numeric emission standard, it needs to explain its legal authority for these affirmative defense requirements and why each of the requirements is reasonable and justified, taking into consideration alternative solutions.

## 5. EPA Failed to Consider Malfunctions in Establishing CISWI Numeric Emission Standards.

CAA § 129 (a)(2), which incorporates the same MACT standard setting requirements for solid waste incinerators as § 112(d), mandates that the emission standards be "achievable." Moreover, if EPA sets the emission standards based on the "best performing 12% of units in the category" (the "MACT floor"), those limitations must on average be "achieved" by the best performers.

An emission limitation that applies during a malfunction event does not meet the requirement of § 129(a)(2) that "emission standards" under that section be "achievable", if EPA has not demonstrated that the limitation is "achievable" with available technology, "taking into consideration the cost of achieving such emission reduction, and any non-air quality health and environmental impacts and energy requirements. Similarly, an emission limitation that applies during a malfunction event has not been demonstrated to be "achieved" by the best-performing 12% of units in the category" unless EPA can show that those best performers actually meet that emission limitation during a malfunction.

Similarly, § 111(a)(1), which also applies to emission standards under § 129, requires that any emission limitation be "achievable through the application of" emission reduction technology that "the Administrator determines has been adequately demonstrated." EPA therefore must demonstrate that a numerical limitation, if it is to apply during a malfunction, is in fact achievable with available technology during such events.

Based on our review of documents in the docket for this rulemaking it appears that EPA did not to consider any data identifying the level of HAP emissions that may result when a best performing source experiences a malfunction. EPA therefore has failed to show that emission numeric emission limits that apply at all times reflect the reductions that are "achieved" by best performing sources during a malfunction.

Despite the fact that EPA and the courts historically have recognized the inherent limits of technology based standards in promulgating standards under both the Clean Air Act and the Clean Water Act, in this rule EPA chooses to ignore the fact that, despite an owner/operator's best efforts, technology sometimes fails and that even a best performing source could experience a malfunction. Because EPA failed to consider the level of emissions that may result from a malfunction and incorporate that consideration in the numeric emission limitations, which apply at all times (other than during startup and shutdown), EPA's actions are arbitrary and capricious and not in accordance with law.

Furthermore, EPA's failure to establish emissions standards consistent with §§ 111 and 129 of the CAA also raises the issue of denial of due process. By establishing standards that are not attainable "at all times", EPA is subjecting thousands of CISWI units to potential penalties and worse for failing to comply with numeric emission standards that are unattainable during a malfunction.

6. EPA Failed to Present Any Clear Rationale or Justification for its Decision to Apply the Same Numeric Emission Standards Established for Normal Operations for an Abnormal Event, i.e., a Malfunction.

As highlighted above, the court in *Sierra Club* did not state that EPA must apply the same standards it establishes for normal operations during periods of SSM. The court's holding is clear that "some" § 112 standard must "govern" SSM events but it did not specify which § 112 standard. In this rulemaking, EPA concluded that the numeric emission limitations established for normal operations also must be attained during a malfunction event. However, EPA has provided no explanation as to why it believes that CISWI units reasonably could be expected to meet the emissions standards applicable to steady-state operations during a malfunction event.

<sup>&</sup>lt;sup>6</sup> Sec 40 C.F.R. § 60.8(c). For example, the D.C. Circuit recognized, in *Portland Cement Ass'n v. Ruckelshaus*, 486 F.2d 375, 398 (D.C. Cir. 1973), a decision reviewing standards under CAA section 111, 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. Similarly, in *Essex Chem. Corp. v. Ruckelshaus*, 486 F.2d 427, 432 (D.C. Cir. 1973), *cert. denied*, 416 U.S. 969 (1974), another section 111 case, the court held that SSM provisions are "necessary to preserve the reasonableness of the standards as a whole." *Id.* at 433. In *National Lime Ass'n v. EPA*, 627 F.2d 416 (D.C. Cir. 1980), another case reviewing emission standards promulgated under CAA section 111, the court held that the CAA requirement that NSPS be "achievable" means that the standards must be capable of being met "on a regular basis," including "under most adverse circumstances which can reasonably be expected to recur," including during periods of SSM. 627 F.2d at 431 n.46. See also *Marathon Oil Co. v. EPA*, 564 F.2d 1253, 1273-74 (9th Cir. 1977); *NRDC v. EPA*, 859 F.2d 156, 207-208 (D.C. Cir. 1988) (similar conclusion when considering analogous Clean Water Act requirements).

EPA claims in the final CISWI rule that it "presents significant difficulties" to attribute malfunctions to a "best performing" source. 76 Fed. Reg. at 15737. To the contrary, it "presents significant difficulties" when EPA ignores the undisputed existence of malfunctions even at best-performing sources, and claims falsely that the best-performing sources "achieve" emission levels that they undisputedly do not and cannot achieve part of the time. Since EPA describes malfunctions as being sometimes unavoidable or "not reasonably preventable," despite proper design and maintenance of equipment, *id.*, there is no basis for EPA's conclusion that malfunction events are not representative of best-performing sources. True, one goal (although not "the goal") "of best performing sources is to operate in such a way as to avoid malfunctions of their units." *Id.* But that is all the more reason why EPA must acknowledge the fact that those sources nevertheless experience malfunction events, and look at how they minimize emissions during a malfunction, rather than assume those emissions away.

In failing to articulate the basis for its decision not to establish a § 111(h) work practice for malfunctions, the Agency also ignores the comments submitted by ACC and others on the 2010 proposal describing the error of EPA's plan to ignore the effect of malfunctions on an achievable emission limitation and encouraging EPA to establish a work practice standard for malfunction events. EPA's affirmative defense approach to malfunctions is not reasoned decision-making and we hope that the Agency's "reconsideration" of its approach will prompt it to give reasonable consideration to the fact that a CISWI unit that has a malfunction is unlikely to achieve the same level of emission reductions that it achieved and can achieve while operating at steady-state.

## 7. EPA's Inclusion of an Affirmative Defense Is Not a Substitute for Establishing a § 111 and § 129-Compliant Standard for Malfunction Events.

ACC believes that EPA should either revise the numeric emission limitations in the rule so that they are achievable during malfunction events, or use its statutory authority to establish a work practice or management standard under §§ 111(h) and 302(k) for a malfunction event. There is no language in §§ 111 or 129 (or elsewhere in the CAA) that authorizes EPA to offer an owner/operator an "affirmative defense" to "civil penalties" to cure the fact that the Agency has finalized numeric emission standards that do not represent the emission levels actually "achieved" by the best performing sources "at all times". Moreover, EPA's offering of an affirmative defense does not bear a reasonable relationship to the purpose of §§ 111 and 129 or their mandates that EPA establish standards that consider and address the reality of a potential malfunction of technology. If EPA chooses to reject the flexibility that Congress clearly intended the Agency to use when it is not feasible to prescribe or enforce a numeric emission standard, it needs to explain why its affirmative defense approach is a better alternative than using the statutory authority provided in §§ 111(h) and 302(k) to establish a work or management practice for malfunction periods.

<sup>&</sup>lt;sup>7</sup> 76 Fed. Reg. at 15737. ACC believes that EPA's recitation of the comments makes a compelling case for establishing emission limitations that recognize the effect of malfunctions, either directly or through establishment of a work practice standard, and ΔCC endorses those comments.

In the final CISWI rule, EPA asserts that "it is reasonable to interpret section 129 as not requiring EPA to account for malfunctions in setting performance standards." 76 Fed. Reg. at 15737. EPA offers very little support for that assertion, however, other than stating its own, often counterintuitive, conclusions. For example, EPA says it "has determined that malfunctions should not be viewed as a distinct operating mode and, therefore, any emissions that occur at such times do not need to be factored into development of CAA section 129 standards, which, once promulgated, apply at all times." *Id.* EPA provides no explanation for why it "believes" that malfunctions are not a distinct operating mode. Moreover, EPA offers no explanation of its contradictory position that, even though it believes malfunctions are not a distinct operating mode, emissions during malfunctions should not be used to characterize the source's operating mode. On its face, asserting that malfunctions are part of normal operations, but then excluding emissions during malfunctions when determining emission limitations for normal operations, makes no sense.

EPA's statement that "nothing in section 129 or in case law requires that EPA anticipate and account for the innumerable types of potential malfunction events in setting emission standards," *id.*, has it backwards. There is nothing in § 129 that allows EPA to ignore malfunctions and set emissions standards, which are supposed to represent the performance actually achieved by the "best-performing" sources, based on a level of emissions that even these best-performing sources only achieve part of the time.

EPA cannot rationally defend its articulated view that applying the concept of "best performing" is somehow inconsistent with a source experiencing a malfunction. See, 76 Fed. Reg. at 15737. This ignores that work practices, e.g., monitoring operating parameters to identify a malfunction and then stopping or cutting back the process accordingly, represent the best practices for minimizing emissions during a malfunction. While the measures that represent these best practices will depend on facility-specific issues, such as process design, pollution control train, and other factors, they nonetheless represent the "the maximum degree of reduction in emissions of air pollutants …achievable…through application of measures, processes, methods, systems or techniques" and reflect "the average emissions limitations achieved in practice by the best performing 12 percent of units in the category" CAA § 129(a)(2).

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<sup>&</sup>lt;sup>8</sup> The Weyerhaeuser Co. v. Costle decision EPA cites in the March 21, 2011 preamble, 590 F. 2d 1011 (D.C. Cir. 1978), does not support EPA's position. See 76 Fed. Reg. at 15613. In that case, the court was discussing a "technology forcing" standard, rather than one, like MACT, that is to be based on what is already being "achieved" or has been demonstrated to be achievable. Also, the SSM events that EPA acknowledges are expected to occur at sources subject to the MACT standards for CISWI units are a far cry from the "uncontrollable acts of third parties," such as strikes, sabotage, operator intoxication, or insanity" that the Court was considering in the passage quoted by EPA, see id. Industry is not requesting that the MACT standards provide relief from numerical emission limitations during those unusual types of events. Perhaps most importantly, the Weyerhaeuser decision came long before NRDC v. EPA, 859 F.2d 156 (D.C. Cir. 1988) which, as noted above, affirmed the need for an upset provision to address circumstances where compliance with effluent limitations is impossible through no fault of the permittee, and which endorsed Marathon Oil.

## 8. EPA's affirmative defense requirements are unreasonable and not consistent with § 111 and § 129.

The affirmative defense regulatory language in § 63.2120 and § 63.2685 opens with the words: "In response to an action to enforce the standards set forth in..." and repeats this thought in paragraph (a) of the section: "To establish the affirmative defense in any action to enforce such a limit..." (emphasis added). This opening language leaves a regulated party to believe that if any action is taken against that party to enforce an emission limit exceeded during a malfunction, the party may avail itself of an affirmative defense if it meets various criteria. However, this is not the way EPA's affirmative defense would play out.

In § 63.2120(b), <sup>9</sup> EPA establishes strict notification requirements that must be followed for the owner/operator to be able even to raise an affirmative defense if and when an enforcement action is brought. First, the owner/operator must notify EPA by phone or FAX as soon as possible, but no later than two business days after the "initial occurrence of the malfunction." Then, within 45 days of the "initial occurrence of the initial occurrence of the exceedance of the standard," the owner/operator must submit a written report accompanied by all necessary supporting documentation to show that it has met each and every requirement set forth in paragraph (a) of § 63.2120. The regulations further state that these reports must be made if the source operator "wishes to avail itself of" the affirmative defense, § 63.2120(b), and "to establish the affirmative defense" the operator "must timely meet the notification requirements in paragraph (b)," § 60.2120(a). Because of the short time frames prescribed for reporting, the reality is that EPA is requiring the facility to present its entire detailed defense in writing to EPA before the Agency has even decided whether to take any enforcement action. To require a party to lay out its entire defense to a *potential* future enforcement action *before* that action may be taken is wholly inappropriate and unacceptable.

EPA has cited no legal authority for its use of affirmative defense requirements that inappropriately and unlawfully shift the burden to the facility to prove by a preponderance of the evidence that any excess emissions were caused by a true malfunction *and* that the facility meets all of the other specified factors in § 63.2120. EPA's affirmative defense places the facility in the position of proving its innocence, rather than EPA or other regulatory authority bearing the burden of proving that the facility violated the CAA.

EPA states that the affirmative defense may be raised to a "claim for civil penalties" but does not define "civil penalties". For example, are these meant to include a "civil administrative penalty" imposed by EPA under § 113(d) of the Clean Air Act? A "noncompliance" penalty sought under § 120 of the Act? A "civil penalty" imposed by a court?

It is also unclear how the affirmative defense would apply to enforcement actions by state and local governments, or to private citizen enforcement actions brought under § 304 of the CAA. While in no way endorsing EPA's affirmative defense provision, ACC believes that if retained

<sup>&</sup>lt;sup>9</sup> The language of the affirmative defense provision in the guidelines for existing sources, 40 C.F.R. 63.2685, is virtually identical to that for new and modified sources in § 63.2120. The remainder of these comments therefore will refer only to the latter section, although the comments apply equally to § 63.2685.

by the Agency after reconsideration, the provision should clearly state that it is applicable to any enforcement action.

Section 63.2120 states: "The affirmative defense shall not be available for claims for injunctive relief." The preamble is silent as to why the affirmative defense would not apply to injunctive relief. If the facility meets the requirements of the affirmative defense provision, why may it not be raised as a defense to a claim for injunctive relief? EPA's assertion to the contrary is unsupported by any explanation.

Turning to the individual requirements in § 63.2120(a)(1) through (9) that a facility must meet to be allowed to raise an affirmative defense, a number of these requirements are not relevant to whether a malfunction, as defined in 40 CFR 63.2 occurred.

Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control and monitoring equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

Most of the conditions for establishing an affirmative defense in § 63.2120 may be relevant to determining whether the facility undertook appropriate and necessary measures to mitigate any excess emissions resulting from the specific malfunction, but do not in any way inform a determination of whether a piece of equipment has met the definition of a malfunction. For example, § 63.2120(a)(2) requires that "off-shift and overtime labor, to the extent practicable" were used to make the repairs needed. ACC does not understand how this requirement relevant to determining whether a piece of equipment has "malfunctioned". See also (a)(3), (a)(5), (a)(6), (a)(7), (a)(8) and (a)(9).

A number of the requirements are extremely subjective and fail to allow for consideration of reasonableness or cost-effectiveness. For example, § 63,2120(a)(1)(ii) requires the owner/operator to show that the malfunction could not have been prevented through "careful planning," "proper design" or "better operation and maintenance practices." This subjective requirement leaves open the possibility that an enforcement official could always find actions that "could" have been taken without any consideration of costs, resources or feasibility. Moreover, it fails to consider that an owner/operator may have chosen to redesign a process or equipment configuration, or make other adjustments to achieve the emission reductions necessary to comply with the standard. In so doing, the owner/operator would have evaluated various options to determine which one was the most cost-effective approach to achieve the emission standard, keeping in mind that cost-effectiveness would include long-term safe and proper operation of the equipment or process. If a malfunction were to occur, it could be difficult if not impossible for the owner/operator to prove that the malfunction "could not have been prevented" if cost and resources were never an issue.

Another subjective and particularly problematic requirement is (a)(8) which requires that: "At all times, the *facility* was operated in a manner consistent with good practices for minimizing emissions." ACC strongly objects to EPA reaching beyond the *equipment* that malfunctioned to require a party to prove by a preponderance of the evidence that "at all times, the *facility* was operated in a manner consistent with good practices for minimizing emissions." (Emphasis

added.) First, EPA does not define "facility" or "affected facility" in the final CISWI rule; common usage of the term "facility" suggests that it means the entire plant. Second, and more importantly, EPA is requiring a party to comply with a requirement that is ambiguous, highly subjective, and impossible to meet. This is not reasoned decision-making. We note that in its proposed reconsideration of various provisions of the Chemical Manufacturing Area Source Rule ("CMAS"), 77 Fed. Reg. 4522 (January 30, 2012) EPA revised this requirement and changed the word "facility" to "affected source." If the affirmative defense provision is included in the final reconsidered CISWI rule, EPA should follow an approach similar to what it has done in CMAS and change "facility" to "incineration unit."

Requirement (a)(4) would disallow the affirmative defense if a malfunction involved bypassing control equipment or a process, and the bypass was not taken "to prevent loss of life, severe personal injury, or severe property damage." This language is both unyielding and subjective. It is unyielding in that it fails to allow any consideration of the fact that bypassing the control equipment or the process may have been an appropriate exercise of good air pollution control practices. For example, a bypass can constitute the best air pollution control practice in response to an upset in order to prevent excess emissions, e.g., to avoid fouling of pollution control equipment media that in turn would result in reduced pollution control equipment efficiency or increased pollution control equipment downtime. Additionally, in some cases the air emissions from a venting event are lower than if the facility had an uncontrolled shutdown to avoid venting. An uncontrolled shutdown could also impact other media, e.g., a wastewater dump from scrubbers, solid waste, etc. And, a shutdown would necessitate additional startup emissions. Arguably, venting for a short period due to malfunction could result in less emissions than a nonorderly shutdown and subsequent restart. Yet, as worded, this requirement would discourage an owner/operator from taking the less-impactful option because it would mean that he could not avail himself of an affirmative defense for the malfunction.

This requirement is subjective in its use of the word "severe." Reasonable minds could disagree on what constitutes "severe" property damage, or "severe" personal injury. Lastly, this requirement is not supported by any explanation as to why "bypassing" control equipment or a process is absolutely unacceptable except when an owner/operator is faced with these dire consequences.

Requirement (a)(5) demands that a party prove that: "All possible steps were taken to minimize the impact of the excess emissions on ambient air quality, the environment and human health." Again, the subjectivity of "all possible steps" is problematic in that it establishes a potentially unattainable standard with no clear direction as to how a party is to meet it.

Requirement (a)(9) is problematic in that it requires a party to prepare a "written root cause analysis to determine, correct and eliminate the primary causes of the malfunction and the excess emissions resulting from the malfunction event at issue." This directive assumes that the cause of

The term "affected facility" is used in NSPS and is defined in the NSPS General Provisions at 40 CFR 60.2, but the CISWI standards apply to "new incineration units." NESHAPs In Part 63 use the term "affected source," and the definition of affected source in 40 CFR 63.2 states: "Affected source may be defined differently for part 63 than affected facility and stationary source in parts 60 and 61, respectively."

any and all malfunctions can be determined, corrected and eliminated. If a malfunction by definition is unavoidable, unforeseeable, and not reasonably preventable, it may be that the first time it happens its primary cause cannot be determined. If the cause cannot be determined, it cannot be corrected. So unless a party can figure out why something malfunctioned, it cannot claim to have had a "malfunction." Not only is this nonsensical, it is a significant departure in EPA policy with no justification provided. For example, in the General Provisions applicable to NSPS, EPA recognizes that the cause of a malfunction cannot always be known. *See* 40 CFR 60.7(b)(2) which requires that written reports of excess emissions include the "nature and cause of any malfunction, *if known....*" (Emphasis added.) Lastly, requiring a party to eliminate the primary causes of the malfunction, without regard to "taking into consideration the cost of achieving such" elimination and the "non-air quality health and environmental impacts and energy requirements" associated with its elimination is unreasonable and entirely inconsistent with the criteria for standards established under § 129(a) of the CAA. <sup>11</sup>

Turning to the 2-day notification requirement in § 63.2120(b), ACC notes that EPA recently proposed almost identical affirmative defense requirements in the CMAS proposed reconsideration but omitted the 2-day notification. It is ACC's understanding that the Agency has been persuaded by comments submitted by ACC and others that the 2-day notification requirement is onerous and unworkable. We also understand that EPA may be revisiting some of the other requirements in the affirmative defense provisions in order to further reduce the burden on facilities. We therefore request that in its reconsideration EPA abandon the 2-day notification requirement in the final provisions for CISWI units.

Unlike the 2-day notification which is triggered by the "initial occurrence of the malfunction," the 45-day period for submitting a written report demonstrating that the party qualifies for the affirmative defense commences on the date of "the initial occurrence of the exceedance of the standards." Complying with this timeframe presents several challenges, specifically because most of the content of the report may not be able to be created until the malfunction has ended, which in some cases could be a number of days.

While there is an opportunity for requesting and obtaining an extension of the reporting deadline of up to 30 additional days, the owner/operator must comply with the original 45-day requirement unless and until he hears back from EPA that the extension request is approved. However, there is no requirement for EPA to act timely in granting or denying an extension request. At a minimum, the rule should provide a timeframe within which EPA must act on a request and if it fails to do so, the request would be considered granted.

For all of the reasons above, and in keeping with the court's holding in *Sierra Club*, we strongly encourage the Agency to abandon its affirmative defense approach as an appropriate and legal

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<sup>&</sup>lt;sup>15</sup>For example, it might be theoretically possible to eliminate the excess emissions associated with the malfunction by installing totally redundant pollution control equipment, or pollution control equipment with far more capacity than needed for normal operations. But this would not reflect the performance of the best performers on which § 129(a) standards are to be based, nor would it appear to take cost and non-air quality health and environmental impacts and energy requirements into consideration as the statute requires. Moreover, the proposed requirement to eliminate "the primary causes of the malfunction" and not just to eliminate "the excess emissions resulting from the malfunction event" lies entirely outside of EPA's authority under the CAA, which is limited to establishing and enforcing emission limitations, not dictating plant operations.

way to address excess emissions during a malfunction. We believe that the Agency instead should use its authority under § 111(h) and 302(k) to establish a management practice, work practice or operational standard to address a malfunction event that may be experienced by a CISWI unit.

#### 9. EPA should provide clarification on the affirmative defense provisions

The text for the affirmative defense at §60.2120(a) of subpart CCCC and §60.2685(a) of subpart DDDD concerns exceedances of emission standards that are caused by malfunctions as defined by §60.2. That definition does not include monitoring system malfunctions within its scope.

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. [Text at §60.2]

At §60.2170(a) of subpart CCCC and §60.2735(a) of subpart DDDD, it seems that EPA has defined a monitoring system malfunction separately from the general provisions definition of malfunction at §60.2.

A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are cause in part by poor maintenance or careless operation are not malfunctions. 76 Fed. Reg. 80452 at 80498 and 80519 (Dec, 23, 2011) [\$60.2170(a) and \$60.2735(a)]

In addition at §60.2170(c) of subpart CCCC and §60.2735(c) of subpart DDDD, ACC sees that failure to collect required data is a deviation from the monitoring requirements, but does not include periods of monitoring system malfunctions or out-of-control periods, repairs associated with monitoring system malfunctions or out-of-control periods, or required monitoring system QA/QC activities.

Except for periods of monitoring system malfunctions or out-of-control periods, repairs associated with monitoring system malfunctions or out-of-control periods, and required monitoring system quality assurance or quality control activities including, as applicable, calibration checks and required zero and span adjustments, failure to collect required data is a deviation of the monitoring requirements. Id.[§60.2170(c)]

Both §60.2120(a) of subpart CCCC and §60.2685(a) of subpart DDDD provide a way of asserting an affirmative defense for exceedances of standards caused by malfunctions as defined in §60.2; however, since this definition at §60.2 does not include a reference to monitoring equipment, it seems that a malfunction of monitoring equipment is not considered to be an exceedance of a standard and would not necessarily trigger the potential use of the affirmative defense. As a result, it seems that malfunctions of the continuous monitoring system would not be viewed with the same level of agency concern as malfunctions that caused exceedances of the emission standards. If this understanding is correct, it would alleviate some concern over using the affirmative defense provisions for very minor types of events. ACC would like clarification if this understanding is correct.

In addition as it relates to reporting, ACC believes that the language of §60.2210(m) of subpart CCCC and §60.2770(m) of subpart DDDD contradict the language of §60.2170(c) of subpart CCCC and §60.2735(c) of subpart DDDD. The text of §60.2210(m) and §60.2770(m) require reporting of out-of-control periods for monitoring systems as if they are deviations, while the text of §60.2170(c) and §60.2735(c) says that these periods are not deviations. ACC requests revisions to §60.2210(m) and §60.2770(m) so they do not contradict §60.2170(c) and §60.2735(c).

In summary, ACC thinks EPA's intent is to classify certain specified types of monitoring system events differently from other types of events such that these specified types of monitoring systems events would not be deviations and would not automatically be equated to excess emissions where the assertion of an affirmative defense would be needed, and ACC hopes that our understanding is actually EPA's intent. However, some of the Proposed Rule language that we have cited above does not make that clear.

## E. REVISIONS TO THE CO STANDARDS AND MONITORING REQUIREMENTS

On page 80461 of the Proposed Rule, EPA explains that, in response to Petitioners' comments that correction of CO concentrations to a standard of 7 percent oxygen content during startups and shutdowns causes artificial inflation of CO emission rates, it is not going to require such correction during startups and shutdowns. Petitioners apparently suggested waiving this correction during startups and shutdowns and using uncorrected CO values for these periods in the calculation of 30 day rolling averages. Also, based on data submitted by Eastman for one of its boilers (Boiler 18), EPA states in the preamble that it has identified this period of waiver to be four hours for startups and one hour for shutdowns.<sup>12</sup>

In the case of ERUs, EPA has based the MACT floor of 46 ppm corrected to 7 percent oxygen (30 day rolling average, including startups and shutdowns) on a week of CO CEMS data provided by Eastman for Boiler 18. This data was submitted in response to the 2009 ICR Phase II data request and did not include any periods of startup or shutdown. Additional detail of this data was provided to EPA in November 2010 for use in the March 2011 Final Rule.

Understanding that Boiler 18 would be the top performer for the coal-fired ERU subcategory and to emphasize the impact that startups have on CO emission rates, on July 1, 2011 (in response to EPA's request for further data and information), Eastman provided all of the CEMS data it has from operation of this boiler during 2009. Eastman expected EPA to utilize this data (EPA must consider all data available) when determining the MACT floor emission level, but it did not. This data includes the chart below, which compares 30 day rolling CO (corrected) averages with and without inclusions of periods of startup and shutdown.

<sup>&</sup>lt;sup>12</sup> ACC believes that by EPA soliciting comments on its proposed definition of "CEMS data during startup and shutdown" in this Proposed Rule it has constructively reopened the issue of how this rule should define a "startup" and a "shutdown."

Before we address the setting of an appropriate MACT floor emission limit based on this data, we must turn to the questions EPA has attempted to address concerning length of startups and the effect of oxygen correction during startups and shutdowns.

#### 1. EPA Cannot Define Startup and Shutdown Period Lengths Broadly for All Units

While the four hour startup and one hour shutdown periods are representative of the data Eastman submitted for its boiler, those defined periods should not be applied to any ERU electing to comply using CO CEMS. This is because the period lengths are a function of the specific boiler and its related proper procedures for startup and shutdown. Typically, a boiler startup is not complete until the operation is safe and stable and when steam is no longer vented and is valved into the process steam delivery header system. The percent of design steam load or the length of time which defines the end of startup will vary from boiler to boiler. The periods of startup and shutdown are unique to each unit, and will vary from unit to unit and from site to site.

For these reasons, ACC believes that a single maximum time period is inappropriate to establish relative to startup or shutdown periods. Safe and proper operation of a boiler and its associated equipment dictate the amount of time that is needed for startup and shutdown. Overly prescriptive and non-facility-specific requirements can actually be counterproductive, restricting the flexibility of owners/operators in a way that hampers their ability to troubleshoot or respond to an event, or that compromises safety. We believe facilities must be able to determine the minimum stable operating load on a unit-specific basis and include that and the proper procedures to follow during startup and shutdown in a site-specific plan.

In lieu of a prescribed maximum time period, we believe the following types of concepts could be used by EPA to define the point at which a CISWI unit reaches the end of a startup period. The beginning of a startup would occur with first introduction of fuel with combustion in the furnace:

- Combustion unit firing its primary fuel for a period of time adequate to provide stable
  and non-interrupted fuel flow, stable and controlled air flows, and adequate operating
  temperatures to allow proper fuel drying and air preheat as applicable.
- Emissions controls in service with operating parameters such as flow rates and temperatures being controlled and stable.
- Combustion unit supplying steam or energy output if so equipped to a common header system or energy user(s) at normal operating conditions including pressure, temperature, and above minimum operational output flow rate, as applicable to the unit.

Similarly, we believe the following types of concepts could be used as being indicative of a CISWI unit beginning a shutdown period. The end of a shutdown would occur with the cessation of combustion of any fuel in the furnace:

• Cessation of introduction of the last remaining primary fuel to the furnace, whether or not a supplemental support fuel is being used.

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- Cessation of emissions control system sorbent or other reagent injection.
- Lowering the fuel firing rate to the point that automatic control is no longer effective or possible.
- Lowering of operating rates to the point that emissions control systems no longer can be controlled or be effective due to low flow rates, low temperatures, or other issues.
- Lowering CISWI unit output to the point that steam or energy output if so equipped no longer meets operational required conditions of pressure, temperature, or flow.

CISWI unit owners/operators should establish specific operating conditions and parameters defining startup and shutdown in standard operating procedures for each affected unit so that it is clear when each unit is in either startup or shutdown mode. Procedures should also be used to guide operations purposely through startup or shutdown periods so that protracted periods in startup or shutdown mode beyond that envisioned in the procedures are avoided. Each startup and shutdown should be documented relative to clapsed time and timing of actions prescribed in the procedure so that problems are effectively identified and corrected in a timely manner.

ACC requests that the startup and shutdown definitions in both subparts CCCC and DDDD be modified in such a way so as to accurately reflect combustion unit variability. Using the definitions in 40 CFR 60.2 and adding the highlighted text useful for this rule, ACC recommends the following revised definitions:

Startup means the setting in operation of an affected facility for any purpose beginning with the combustion of the first introduced fuel and ending with the unit attaining stable operating conditions, during which time operators comply with the emission standards by minimizing emissions and reaching normal operations in as timely a manner as is practicable for the source.

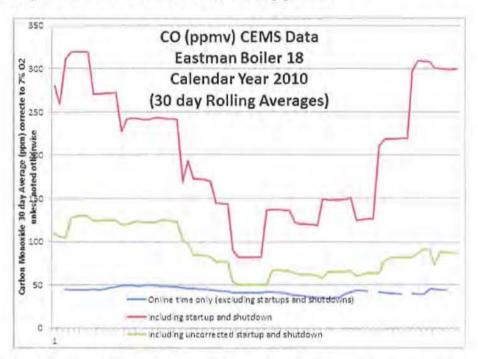
Shutdown means the cessation of operation of the affected facility for any purpose beginning with the cessation of combustion of primary fuel and during which operators comply with the emission standards by minimizing emissions and reaching no operational status in as timely a manner as practicable for the source.

ACC is also recommending the above approach for 40 CFR 63, Subpart DDDDD and Subpart JJJJJ. Therefore, in conjunction with comments in Section II relative to compliance with §112 regulations when not firing solid waste and §129 when burning solid waste, this provides a workable approach to unit startups and shutdowns.

## 2. EPA SHOULD NOT REQUIRE OXYGEN CORRECTION DURING STARTUP/SHUTDOWN

Separate from these comments, Eastman Chemical Company is resubmitting its 2009 Boiler 18 CEMS data, this time including the hourly average oxygen content and an evaluation of the effect of not correcting for oxygen during startups. We refer EPA to the detailed technical analyses in those comments, and point out that the Eastman data demonstrate that this non-correction does not alleviate the concerns about higher CO levels during startups making compliance unachievable. In fact, this boiler, which is the top performing boiler, cannot meet

the CO emission standard (which was based on data which included no startups or shutdowns) when including uncorrected CO emissions from startup periods.



Eastman's chart shows the significant effect of including startups, with and without correcting for oxygen, and clearly supports our contention that EPA must eliminate periods of startup and shutdown from the compliance determination.

Regarding the determination of an appropriate MACT floor based on this one top performer, EPA must use all of the data submitted to properly account for the variability of CO emissions from this unit. It should use all of the hourly averages from normal operation included in the 2010 data set and determine a 99 percentile Upper Prediction Limit (UPL) and a 99 percentile Upper Limit (UL). We disagree with EPA's logic (see page 9 of the memo CISWI Emission Limit Calculation for Existing and New Sources for Reconsideration Proposal,

November 3, 2011, EPA-HQ-OAR-2003-0119-2498) that the UPL is more appropriate than the UL for the ERU subcategory because of the uncertainty in the population of affected sources. In this case, the MACT floor is determined based on one source. The UPL is barely above the maximum 30 day rolling average from the data. It is not certain that this one top performing unit could meet the emission limit at all times. Also, any other coal-fired ERUs that were to enter CISWI applicability may be of a totally different design. The standard should incorporate as much variability as can be technically justified to allow the greatest flexibility. Therefore, we believe the UL is more appropriate in this case. Eastman provides further detailed analyses regarding this approach in its comments on this Proposed Rule, and ACC supports this analysis.

Regardless, ACC and its members continue to believe it will prove problematic to include CO emissions during startups and shutdowns in compliance determinations. This is due to the unpredictability of startup emissions and the unpredictable number of startups during a 30 day operating period, even when following manufacturers' recommendations or other accepted boiler

operating procedures. Of primary importance, boilers that burn solid waste do so along with traditional fuels. Further, most of these are started up on traditional fuels and only introduce solid wastes after startups are complete and the boiler is operating under safe and stable conditions.

We understand that the Agency believes that it cannot set work practice standards under §129 of the Clean Air Act and the numeric standards established for steady-state operations must apply during periods of startup and shutdown. As discussed in the comments above, we do not share that belief and we therefore recommend that EPA—allow ERUs to comply with CISWI standards only between the end of a startup and the beginning of a shutdown and to comply with otherwise applicable standards under §112 of the Clean Air Act at other times. In fact, we believe the Agency may not legally require compliance with § 129 standards if the unit is not burning solid waste. Sources should have the option to comply with §112 during periods when solid wastes are not in the combustion unit, including these startup and shutdown periods.

#### 3. EPA Should Incorporate More Flexibility in CEMS/CMS Parameters

ACC appreciates that EPA understands the computational issue around correcting CO measurements to 7 percent oxygen during startup and shutdown when the oxygen content can approach ambient air oxygen content. In the Preamble discussion at 76 FR 80461, EPA states that this oxygen correction waiver would apply to any CISWI sources that elect to use CO CEMS, instead of stack tests, to demonstrate compliance with the CO limits. As discussed below, ACC ACC recommends that the definition of "CEMS data during startup and shutdown" in § 60.2265 and § 60.2875 be revised.

Per EPA's proposed definition of "startup" and "shutdown", depending on the nature of a shutdown and what kind of maintenance work might be done during that time, a startup time of four hours can be insufficient for dealing with the computational issue for CO measurements. For example if refractory repair is made, startup times can last much longer than four hours depending on the extent of repair and the type of refractory used, and a unit can remain in a high oxygen condition for longer than four hours while this refractory curing occurs.

In addition, the time required for startup and shutdown may be specific to the design of the unit and the type of fuel burned. As discussed in our comments on startup and shutdown above, there is no standard time requirement for startup and shutdown that is valid across different types of units.

ACC believes that it is critical that EPA revise the definition of startup and shutdown without prescriptive hourly timeframes. However, if EPA finalized its proposed definitions it must lengthen the allowable timeframe for startup and shutdown, especially since sources must indicate in CEMS records when those periods occur. In addition during a startup after an extended shutdown period, there can be difficulty in lighting pilots and obtaining a stable main flame on a burner during the initial light-off period in which the time period to troubleshoot burner management issues can be highly variable and lengthy. Likewise, stopping the feeding of waste might occur quite quickly during a unit shutdown, but ramping down of the temperature while on fuel and transitioning through a high oxygen content zone can take longer than one

hour, or it may take longer than one hour to reach that transition zone of high oxygen content during shutdown. As a result during shutdown, the oxygen correction may not be problematic at the beginning of shutdown, but it likely will be towards the end of the shutdown period. ACC therefore recommends that if hourly definitions are finalized, additional time be provided for both startup and shutdown in the definitions in both §60.2265 (Subpart CCCC) and §60.2875 (Subpart DDDD).

EPA also overlooked other CEMS that will have the same issue with the oxygen correction factor during startup and shutdown, since all of the emission standards (other than opacity) are required to be corrected to 7% oxygen. As a result, EPA should not restrict use of this waiver to only CO CEMS, but should make it available to any CEMS that is required or that is chosen as an alternative compliance option. Even though data may not have been supplied to demonstrate this issue with other CEMS, it should be obvious mathematically that dividing by zero or near-zero will result in infinity or very large values for the respective pollutant that is measured by a CEMS.

EPA needs to recognize that the oxygen correction for a CO CEMS or other CEMS are not the only parameters that would be problematic during startup and shutdown. -For example,  $\{60.2675(f) \text{ [and the analogous } \{60.2110(f)\} \text{ and } \{60.2730(e) \text{ [and the analogous } \{60.2165(e)\} \}$ require a secondary chamber temperature operating limit set at the lowest 1-hour average value during the most recent performance test. As a result of this requirement, a CISWI unit with a selective noncatalytic reduction system for controlling NOx could never startup or shutdown without having to transition above or below this operating limit. This issue would not be restricted to energy recovery units but would apply to any unit using this type of system. ACC did not supply data to EPA that highlights this issue; however, data should not be necessary to understand the issue when startup/shutdown and certain parameter limits will have competing objectives. ACC has not done an exhaustive search of all of the various CMS parameters to know if other examples exist (parameter limits that compete with the ability to startup and shutdown) or could exist (if a facility has to petition the agency when it does not use the specified air pollution control). ACC urges EPA to modify this definition even further as follows and reference its use in the various applicable sections. (Double underlined text is ACC's suggested language, while strikethrough text is ACC's requested deletion):

CEMS and CMS data during startup and shutdown means earbon monoxide CEMS and CMS data collected during the first 4 hours of operation of energy recovery CISWI unit startup from a cold start, and the hour of period of operation following the cessation of waste material being fed to the energy recovery CISWI unit during a unit shutdown.

At a minimum, references to this definition would also need to be added to the various sections in each subpart where CEMS and/or CMS data is specified, such as §60.2110, §60.2115, §60.2145, and §60.2165 of subpart CCCC and §60.2675, §60.2680, §60.2710, and §60.2730 of subpart DDDD, so units would not experience deviations or violations during these necessary and unavoidable periods.

Should EPA believe that a time limit is required, ACC offers alternative time limits that should accommodate the issues we have discussed; however, we still believe no time limit should be required to account for variability in how startup and shutdown can occur.

CEMS and CMS data during startup and shutdown means earbon monoxide CEMS and CMS data collected during the first two days 4 hours of operation of energy recovery CISWI unit startup from a cold start and the first day hour of operation following the cessation of waste material being fed to the energy recovery CISWI unit during a unit shutdown.

## F. ESTABLISHING A FULL-LOAD STACK TEST REQUIREMENT FOR CO COUPLED WITH CONTINUOUS OXYGEN MONITORING

#### 1. ACC Supports the Change from Oxygen CEMS to Oxygen Trim But Clarifications Are Required

EPA is proposing revisions to the continuous oxygen monitoring provisions that would give existing sources the ability to use current oxygen analyzer and oxygen trim systems to demonstrate continuous compliance (76 Fed. Reg. 80461)This was an issue that ACC raised in its petition for reconsideration. We appreciate and support EPA's proposal to add flexibility and reduce the cost and burden of the continuous oxygen monitoring requirements, as these changes allow facilities to utilize existing oxygen trim systems rather than installing CEMS.

In the March 21, 2011 final rule, EPA included continuous oxygen monitoring as the compliance method for ERUs >100 MMBtu/hr, instead of mandating the use of CO CEMS. EPA now proposes to amend the oxygen monitoring requirements (76 FR 80515, Dec. 23, 2011) to allow for the use of continuous oxygen trim analyzer systems instead of oxygen CEMS. EPA is also removing the requirement that the oxygen monitor be located at the outlet of the boiler, so that it can be located either within the combustion zone or at the outlet as a flue gas oxygen monitor.

Many existing boilers already utilize flue gas oxygen analyzers for indication, alarm, and  $O_2$  trim control, where the fuel/air ratio is automatically controlled for optimum combustion conditions. The sensing location for existing  $O_2$  monitors is typically in the optimum location to sense flue gas composition as reliably as possible, because sensing of oxygen in these cases maintains proper excess air levels and helps prevent unsafe operating conditions. For many types of boilers, that location is near the boiler furnace outlet in a position upstream of any potential air inleakage points to avoid erroneous excess air indications which would drive controls in an erroneous direction. This location is also upstream of air preheaters where utilized, thus avoiding the erroneous (high  $O_2$ ) indications due to inherent leakage across regenerative air preheater seals or potential tube leakage in recuperative air preheaters. For those units equipped with existing  $O_2$  sensors and  $O_2$  trim control systems, flue gas composition at those locations would already be used for combustion tuning and control characterization. Therefore, if  $O_2$  monitoring is desired for continuous compliance under the CISWI rule, sensing  $O_2$  at that current location would be technologically sound.

However, ACC recommends the following changes to the regulatory language so that clarity is provided and operability is not negatively impacted. These changes are discussed in the following subsections.

## 2. Revise the Oxygen Sensing Location Definition to Allow for More Flexibility in Placement

The oxygen analyzer system is defined in §60.2265 and 60.2875 in part as follows:

Oxygen analyzer system means all equipment required to determine the oxygen content of a gas stream and used to monitor oxygen in the boiler flue gas or firebox.

The optimum location of the sensor or sampling point is dependent on the specific boiler design. In different applications, that location might be at the furnace exit, in the convection pass, at the boiler outlet, or at another downstream location. We recommend that this language be modified as follows to allow latitude in the exact location of the sensing point:

Oxygen analyzer system means all equipment required to determine the oxygen content of a gas stream and used to monitor oxygen in the boiler or process heater flue gas, boiler/process heater or firebox, or other appropriate intermediate location.

#### 3. Modify Oxygen Trim System Set Point Requirements to Include Safety Controls

Paragraph 60.2165(q)(2) and 60.2730(q)(2) state:

You must operate the oxygen trim system with the oxygen level set at the minimum percent oxygen by volume that is established as the operating limit for oxygen according to paragraph (q)(3) of this section.

The wording of (q)(3) does provide needed operational flexibility relative to oxygen levels:

You must maintain the oxygen level such that it is not below the lowest hourly average oxygen concentration measured during the most recent CO performance test.

However, solid or liquid fuel fired ERUs may also be equipped to fire other liquid or gas fuels that may allow the unit to operate at lower oxygen levels for improved boiler efficiency. Alternatively, they may also fire biomass or other traditional fuels that require higher excess air for improved combustion. Operators may also need to modify the oxygen setpoint or trim system to accommodate boiler or fuel quality issues. EPA needs to recognize that oxygen trim systems not only provide a means for energy efficiency, but they also are integral to furnace combustion control and furnace safety. While use of a 30-day rolling average does provide some

operating flexibility, this rule should not needlessly restrict operator flexibility relative to safety or operating efficiency. The real value for operations is to have an indication of excess oxygen available to operators, along with appropriate alarms so that corrective actions can be taken in a timely manner. Therefore, considering all of the above, it is recommended that the paragraph 60.2165(q)(2) and 60.2730(q)(2) wording be revised to read as follows:

(2) You must operate the oxygen trim system with the oxygen level set at the minimum percent oxygen by volume that is established as the operating limit for oxygen according to paragraph (q)(3) of this section when firing the fuel or fuel mixture utilized during the most recent CO performance test. Operation of oxygen trim control systems to meet these requirements shall not be done in a manner which compromises furnace safety.

## G. INCORPORATING FUEL VARIABILITY INTO EMISSION LIMIT CALCULATIONS

EPA is seeking comment and supporting data on incorporating fuel variability in the emission limit calculations, which are currently based primarily on emissions test data (76 Fed. Reg. 80462). In separate comments on this proposal, Eastman is resubmitting historical coal supply contaminant data that EPA can utilize to develop Fuel Variability Factors (FVFs) for top performing ERUs. ACC supports Eastman's comments on this issue and we encourage EPA to consider and incorporate these data in the emission limit calculations.

#### H. REVIEW OF DIOXIN/FURAN DATA AND NON-DETECT METHODOLOGY

HPA has requested comment and data on whether 0.3 ng/dscm or the recommended three times the Reference Detection Limit values for each test method are sufficient to reflect quantifiable concentration levels, or whether other values should be selected as a lower quantification boundary for emission limits for CISWI sources (76 Fed. Reg. 80462).

The Coalition for Responsible Waste Incineration (CRWI) has submitted separate, extensive comments and data regarding the lowest value that can be reliably measured for dioxin/furans. CRWI have concluded that any estimate below 0.3 ng TEQ/dscm would violate data quality objectives and would pose an unnecessary level of uncertainty on any test results, allowing for too many false positives. ACC supports the comments and conclusions of CRWI and incorporates them by reference.

## I. PROVIDING AN OPTION FOR SOURCES TO USE EMISSIONS AVERAGING

In its petition for reconsideration, ACC requested that EPA allow emissions averaging in the CISWI rule similar to what it allowed in the major source boiler rule. EPA indicates in the Proposed Rule that:

The applicability of CISWI is such that each unit is an affected facility, if it otherwise meets the applicability of the rule. We cannot allow emissions averaging across affected facilities because we establish MACT on an affected facility basis and it would be

impossible to justify MACT when averaged across affected facilities (76 Fed. Reg. 80463).

ACC believes that EPA's rationale for denying requests to include emissions averaging, that a "unit" is an "affected facility", makes little sense as there may be multiple "units" at an "affected facility." A unit is not the same thing as a facility. Moreover EPA has already incorporated emissions averaging into at least one § 129 rule and should do so in this rule. First, there is precedent for the Agency to include emissions averaging in a §129 rule. This is found at 40 CFR 60 Subpart Cb – Emissions Guidelines and Compliance Times for Large Municipal Waste Combustors that are Constructed on or Before September 20, 1994:

- (d) For approval, a State plan shall include emission limits for nitrogen oxides at least as protective as the emission limits listed in table 1 of this subpart for designated facilities. Table 1 provides emission limits for the nitrogen oxides concentration level for each type of designated facility.
- (1) A State plan may allow nitrogen oxides emissions averaging as specified in paragraphs (d)(1)(i) through (d)(1)(v) of this section.
- (i) The owner or operator of a municipal waste combustor plant may elect to implement a nitrogen oxides emissions averaging plan for the designated facilities that are located at that plant and that are subject to subpart Cb, except as specified in paragraphs  $(d)(1)(i)(\Lambda)$  and (d)(1)(i)(B) of this section.
- (A) Municipal waste combustor units subject to subpart Ea or Eb cannot be included in the emissions averaging plan.
- (B) Mass burn refractory municipal waste combustor units and other municipal waste combustor technologies not listed in paragraph (d)(1)(iii) of this section may not be included in the emissions averaging plan.
- (ii) The designated facilities included in the nitrogen oxides **emissions averaging** plan must be identified in the initial compliance report specified in §60.59b(f) or in the annual report specified in §60.59b(g), as applicable, prior to implementing the averaging plan. The designated facilities being included in the averaging plan may be redesignated each calendar year. Partial year redesignation is allowable with State approval.
- (iii) To implement the **emissions averaging** plan, the average daily (24-hour) nitrogen oxides emission concentration level for gases discharged from the designated facilities being included in the emissions averaging plan must be no greater than the levels specified in table 2 of this subpart. Table 2 provides emission limits for the nitrogen oxides concentration level for each type of designated facility. (Emphasis added.)

The preamble to the HON (Hazardous Organic NESHAP for the Synthetic Organic Chemicals Manufacturing Industry (SOCM)) Final Rule (provides EPA's rationale for the emissions averaging provisions. See 59 Fed. Reg. 19425 (April 22, 1994). It states that the Agency has

broad discretion to define "source" and, in the case of the HON, it is defined as all emission points relating to SOCMI production at a facility. It allows all emission points that have numerical emission standards to be included in an average. Only equipment leaks, which have no defined allowable emission level, are excluded. Process vents, storage vessels, transfer rack, and wastewater streams are all allowed and they all have differing emission standards.

EPA has all the latitude it needs to allow emissions averaging across all units at a given facility that are subject to a given Subpart, so long as units are regulated with an applicable numeric emission limit. We suggest EPA follow the HON's provisions (see §63.150(e)) by setting up debit and credit equations to track twelve month moving average emissions.

#### J. ALLOWANCES FOR USING FEED STREAM ANALYSES

1. EPA Should Provide Relief by Adding an Exception to the Deadline for Conducting the Initial Performance Test When the Petition is Still Under Review

In the same section for which EPA is requesting comment on adding other types of parametric monitoring, EPA mentions the provision for petitioning for alternative compliance approaches that EPA has not specified (76 Fed. Reg. 80464). If some other mechanism or approach is needed to comply with emission limitations other than a wet scrubber, fabric filter, activated carbon injection, selective noncatalytic reduction, or an electrostatic precipitator, EPA must be petitioned for specific operating limits to be established during the initial performance test. In the past and for other air testing protocols, EPA has clearly and repeatedly demonstrated an inability to approve petitions, requests, alternate monitoring applications, test plans (as applicable) in a timely manner, such that a facility is often faced with a potential temporary shutdown and disruption of operations. ACC members have frequently experienced this dilemma and are acutely aware of its potential impact.

For example, one ACC member company experienced difficulty during the recent implementation of HWC MACT (63 Subpart EEE) and receiving test plan approvals from EPA Region VI. The member had 11 plans needing approval in this region. The plans had to be submitted one year in advance of the proposed testing date, and all of the plans were submitted in mid-2007, well in advance of one year before the October 14, 2008 compliance date. The regulation also allowed for testing to be completed after the compliance date but no later than 6 months after October 14, 2008, and none of the member's 11 plans were approved by that time (March of 2009). The regulation also provided for as long as one additional year for testing extensions. For 10 of the 11 plans, the member had to use that entire extension period that expired in March 2010.

In addition, a compliance date extension of several months had been given for several units due to Hurricane Gustav and Hurricane Ike in 2008, and the company had to use the entire hurricane extension period for those units, which expired in June 2010. The testing contractor was very concerned about this timing because they could only staff two stack sampling crews simultaneously, and were fearful that all of the testing would be compressed into such a short period that they could not get it completed on time. All of the approvals ultimately came; however, not without a significant consumption of resources by both the member company and

their testing contractor. Particularly frustrating was that the company had sent copies of these plans to their state agencies. One of these states, Louisiana, had reviewed these plans in great detail and had no issues with them, but the company's efforts to persuade Region VI were largely ignored. Virtually all approvals came within a few days or weeks of the unit's respective deadline, with one approval only arriving on the day before the test had to begin. This company was only one of many companies in Region VI with the same issue.

Finally, in cases where a company must use some other method to comply with the emission limitations, the requirement at §60.2680(a) of subpart DDDD [§60.2115 of subpart CCCC] that it must not conduct the initial performance until after approval of a petition by the appropriate administrator, is in direct conflict with §60.2705 of subpart DDDD [§60.2140 of subpart CCCC], should the administrator fail to provide timely approval.

ACC is therefore not confident that EPA will be able to efficiently conduct this petition process under CISWI. In this case, the facility would have to either fail to comply with the prohibition to test without an approved petition, or fail to comply with the deadline to test no later than 180 days after the final compliance date. The fact that these deadlines are still a few years away is somewhat irrelevant since facilities are not yet sure of what might be required under CISWI at their facilities, much less if or when they might need to submit a petition. When these approval authorities have been delegated to state agencies, the urgency of reviewing and approving these types of petitions or plans or requests in a timely manner has usually been much more evident and successful. We urge EPA to delegate the authority to approve these petitions to states. At a minimum, should EPA not delegate this authority, EPA must provide relief by adding an exception to the deadline for conducting the initial performance test when the petition is still under review. ACC recommends the following at the end of sections §60.2680(a) [and §60.2115(a)]:

...You must not conduct the initial performance test until after the petition has been approved by the Administrator (or delegated state authority). Should the deadline to conduct the test no later than 180 days after the final compliance date be reached during this petition review process, the testing deadline is waived until the petition review process is completed and the reviewing authority has established an alternative deadline. Your petition must include the five items ....

#### 2. A Compliance Option Using a Feed Stream Analysis Plan Should Be Added to the Final Rule

The rule provides only two compliance methods for the feed dependent pollutants (cadmium, lead, mercury, sulfur dioxide, and hydrogen chloride): stack testing/parameter monitoring or CEMS. Now that the CISWI rule is being expanded to include energy recovery units (boilers) that co-fire solid waste with fossil fuels, ACC requests that EPA provide other compliance options, such as the development of a feed stream analysis plan.

Any feed stream analysis plan option should allow for a 12-month moving average to account for the long-term fluctuations in the fuel supplies. Under this option, a source would develop a feed stream sampling plan customized for its specific wastes and fuel types. For a unit that does rely Docket No. EPA-HQ OAR 2003 0119 Comments of the American Chemistry Council

on system control efficiency, the source should be allowed to establish an allowable feed rate based on a successful performance test by extrapolating from the actual feed rate and actual emission rate measured during the test.

This approach would follow closely with the compliance program used to comply with the HWC MACT. In the HWC MACT, each source develops and implements a Feed Stream Analysis Plan to adequately characterize the materials to be incinerated and then track the feed rates of parameters such as chlorine, metals, and ash to ensure they stay below the allowable feed rates established from a Comprehensive Performance Test. We note particularly that Subpart EEE specifies up to an annual rolling average for mercury for liquid fuel boilers (see 40 CFR 63.1209(1)(1)(ii)).

It is important to note that it is possible that some energy recovery units may be able to comply with a CISWI emission standard without installing an air pollution control device or technology to reduce the pollutant concentration in the boiler effluent. Such a unit may be able to comply by employing feed controls (e.g., minimizing the amount of metals, sulfur, and/or chloride in the fuel/feed).

However, if a source were to rely on periodic performance tests, it would always run the risk of testing during a period of relatively high pollutant concentration in the fuel/feed, particularly as EPA has not properly accounted for fuel variability when setting the standard. Also, while EPA provides the CEMS option, a source may prefer a feed stream analysis option rather than incurring the expense of a CEMS or uncertainty related to performance of CEMS technology in a particular application. It is for these reasons ACC believes that EPA should add the option of a feed stream analysis plan.

#### K. PROVIDING PARAMETRIC MONITORING PROVISIONS FOR ADDITIONAL CONTROL DEVICE TYPES

EPA, in response to ACC's petition for reconsideration and requests from others, is soliciting comment on the need to specify monitoring provisions for dry sorbent injection and any other control devices not already addressed (76 Fed. Reg., 80464). In response, ACC believes parametric monitoring provisions are needed for acid gas controls including dry sorbent injection, as well as options to use SO<sub>2</sub> emission rate and a SO<sub>2</sub> continuous monitoring system correlated to HCl emissions.

Dry sorbent injection or spray dryer absorbers (using hydrated lime) are two technologies that could be used to reduce HCl and/or SO<sub>2</sub> emissions. ACC recommends that EPA employ a similar approach as the one provided in the Boiler MACT. 76 Fed. Reg. 80598 at 80668 (Table 7) (Dec 23, 2011)

ACC also requests an alternative Continuous Parameter Monitoring System (CPMS) utilizing SO<sub>2</sub> continuous monitoring. In the Boiler MACT, EPA solicits comment on petitioners' request to allow use of SO<sub>2</sub> CEMS for demonstration of continuous compliance with the HCl emission limits for sources that are equipped with acid gas controls:

While the EPA does not have enough information to propose specific requirements, we believe that a reasonable approach would be to allow for the use of SO<sub>2</sub> CEMS provided that the source demonstrates a correlation between SO<sub>2</sub> control and control of other acid gases emitted from each specific unit that chooses to use SO<sub>2</sub> CEMS. Such a relationship is expected because the available add-on controls for acid gases would provide better control efficiencies for the acid gas HAP than for SO<sub>2</sub>, and, therefore, demonstration of SO<sub>2</sub> control using CEMS would provide assurance that the acid gas HAP are being controlled. Therefore, the EPA is soliciting comment on the use of SO<sub>2</sub> CEMS for demonstrating continuous compliance with the HCl emission limits with the condition noted above. 76 Fed. Reg. 80598 at 80610 (Dec 23, 2011)

We agree with EPA's conclusions that acid gas HAP control efficiencies would be better than SO<sub>2</sub> control efficiency (for a given acid gas control device) and that it should be possible to demonstrate a correlation between the two control efficiencies and then to rely on an SO<sub>2</sub> CEMS to demonstrate continuous compliance. EPA drew this same conclusion in the recently finalized Utility MACT and set alternative SO<sub>2</sub> emission limits.

In this case, we agree that there is not enough information to set an alternative SO<sub>2</sub> limit that correlates with the HCl emission standard, such as was done in Utility MACT. One key difference is that the Utility MACT HCl emission limit (0.002 lb/mmBtu) is about ten times lower than the proposed Boiler MACT HCl limit (0.022 lb/MMBtu) for solid-fuel boilers.

ACC recommends that in both the Boiler MACT and the CISWI rule, SO<sub>2</sub> continuous monitoring be allowed as a continuous parametric monitoring system (CPMS), and that the maximum 30 day rolling average SO<sub>2</sub> operating parameter limit to be set during a 3-run performance test where HCl emissions are demonstrated to comply with the final HCl emission limit. This method of continuous compliance should be allowed on any unit that utilizes an acid-gas control technology including wet scrubber, dry scrubbers, and duet sorbent injection.

If this option is incorporated into the final rule, ACC recommends that the SO<sub>2</sub> CEMS be allowed to select either Part 60 or Part 75 for compliance procedures as many of the existing SO<sub>2</sub> CEMS already use Part 75 quality assurance procedures.

#### L. REVISIONS TO THE CONTINUOUS MONITORING PROVISIONS

#### 1. PM CPMS requirement for large ERUs should be removed from the rule

EPA discusses its decision to employ (PM continuous monitors as parametric rather than emissions compliance monitoring and seeks comment:

In today's rule, we are proposing some revisions to the monitoring requirements for ERUs with a design heat input capacity greater than 250 MMBtu/hr. In the final rules, these units were required to monitor continuously for PM using a PM CEMS; however, recent EPA experience with the utility boiler source category has led the EPA to allow PM CEMS as an alternative, rather than a requirement. The PM CEMS technology may not be sufficient to certify accurate monitor performance in the PM concentration range of the CISWI ERU limits. Therefore, we are requiring continuous parameter monitoring

systems for these units similar to those being required for major industrial boilers and utility boilers. (76 Fed. Reg. 80452 at 80464 (Dec 23, 2011)

In the Boiler MACT reconsideration proposal, EPA discusses its decision to employ PM continuous monitors as parametric rather than emissions compliance monitoring and seeks comment:

Relative to application for other boiler units, several parties expressed concern over the state of readiness of current PM CEMS technology, certification methodology and the technical effort and cost required for the recertification necessary to handle changing fuel and control operating conditions. In our reevaluation of this technology we find that PM monitoring technology would best be employed as parametric monitors (PM CPMS) and used to determine compliance with operating limits rather than emissions limits. This approach reduces the burden of certification of the monitor, which can be a substantial annual cost, and maintains our goals of seeking continuous data monitoring of the source particulate mass emission rate as a 30-day rolling average. We seek comment on the use of these monitors as described in the rule. (76 Fed. Reg. 80598 at 80610 (Dec 23, 2011)

EPA's proposal places sources in an untenable position if they are required to install, certify, and operate these monitoring systems. While EPA states these monitors do not have to comply with Performance Specification 11 (PS-11) (presumably to reduce compliance burden), EPA's Proposed Rule language requires the same host of requirements in a site-specific monitoring plan as any other continuous monitoring system (see §60.2165(r) and §60.2145(l)).

In the absence of an EPA-approved performance specification, we do not see how a source can possibly "certify" a monitoring system. EPA apparently recognizes that the burden of complying with PS-11 is unreasonable for coal-fired industrial and institutional boilers as it states in the preamble. While EPA has required PM CEMS in the Utility MACT, those boilers are many times larger than commercial and industrial ERUs with commensurately larger PM emissions and associated impact. They also operate at relatively steady loads compared to industrial and institutional boilers that have to respond to frequent load swings.

Beyond this overall objection to the practicality and cost of PM CPMS on these types of boilers, it is the unreasonable to limit the 30-day rolling average PM CPMS output data to less than the operating limit established during the performance test. This requirement would reduce operating flexibility of these boilers to an untenable level. First, it imposes a much tighter operating envelope than even the Final Rule, which only required the 30 day rolling average to remain less than the emission standard. Second, it does not account for variation in the measurement device output that is likely to occur during long-term operation. The fact that the measurement system is not held to some defined reference method will add to the uncertainty of the data. Even if it were held to PS-11, those specifications include a correlation coefficient of 0.85 between measured and predicted stack gas PM concentrations and the systems will have a high error band compared to the actual PM emission levels and indicate non-compliance when that is often not the case.

For these reasons, ACC requests that EPA remove the requirement to install PM CPMS monitoring for ERUs larger than 250 mmBtu/hr from the final rule.

## 2. ACC Supports Basing All Parametric Monitoring Requirements on 30 Day Rolling Averages

In the preamble to this Proposed Rule, EPA states that it is proposing to incorporate 30-day averaging periods for operating parameters for ERUs.

Likewise, to be consistent with these other rules, we have revised all operating parameter averaging for ERU units to be on a 30-day rolling average. Due to the relatively long operational campaigns of ERUs, the longer averaging time will allow operators sufficient flexibility for operational and control device adjustments should they be needed for short term fuel or waste characteristics variability. The EPA has determined the 30-day rolling average reporting basis is appropriate for this rule. The operating limits established through performance testing in this rule represent short term process and control operating conditions representative of compliance. Concerns of variability outside the operators control such as fuel content, seasonal factors, load cycling, and infrequent hours of needed operation prompted us to look at longer averaging periods on which to base operating compliance determination. 76 Fed. Reg. 80465

We concur that 30-day averaging periods are appropriate for ERUs for the reasons EPA provides above. However, these changes were not made to the regulatory text (60.2165, Table 4 to Subpart CCCC, 60.2730, and Table 5 to Subpart DDDD), which still specifies 3-hour block averages for operating parameters. EPA should make sure the regulatory language is clear on how to establish all operating parameter ranges and the required averaging periods. The use of 3-hour averages for operating parameters where CISWI units routinely modulate is simply unworkable. The 3-hour block averaging periods will cause operators to consider shutdown of units that exhibit fluctuations or short term problems with a parameter in an attempt to avoid a potential permit deviation. These shutdowns and restarts will result in more impact on the environment and plant operation than allowing continued operation and a longer averaging period would. Use of 30-day rolling averages for all operating parameters will allow operators to intervene and correct a problem without shutting down. We agree with EPA in their Boiler MACT discussion that major issues such as ESP transformer failure will show up in a 30-day rolling average and prevent continued operation with malfunctioning control equipment. (See 76 Fed. Reg. 80610.)

# 3. EPA Needs to Include Additional Flexibility in Sorbent Injection Rates Based on Load Fraction, Fuel Fraction, Fuel Mix and Operational Requirements

The Proposed Rule requires development of operating parameter limits (OPLs) based on the values achieved during the performance test. In many cases, these levels will be appropriate only for certain modes of operation. For example, the absolute sorbent injection rate observed during the performance test conducted under full load and using the worst case fuel mix will not correlate to the sorbent injection rate necessary during startup or periods of lower load. Frequently, sorbent injection rates are set using a feedback loop from a CEMS or CPMS to avoid wasting sorbent. EPA has acknowledged that the sorbent injection rate will vary with load in Table 7 of the Boiler MACT rule (76 Fed. Reg. 80653), which allows sources to adjust the

sorbent injection rate by a load fraction; however, that approach is not included in the CISWI rule, and ACC requests that EPA include such an approach.

In addition, as EPA requires sources to test at the worst case fuel mix for chloride and mercury, and this fuel mix may differ from the typical day to day fuel mix, EPA should also allow adjustments to sorbent injection rates based on fuel mix. For example, if a boiler is capable of burning both coal and biomass as well as solid waste, and tested with coal firing for the mercury performance test, the carbon injection rate for periods of normal operation should not only be adjusted based on load but also by the percentage of coal being fired. If a boiler is burning natural gas or other clean fuel during a certain operational period, sorbent injection may not be necessary. Therefore, additional flexibility needs to be allowed where justified, based on fuel and operational requirements.

## 4. EPA Should Provide Additional Flexibility for Other Operating Parameters to Vary Non-linearly With Load Fraction

An allowance for operating parameter limit variation due to CISWI unit load fraction is also applicable to all CISWI units and operation parameters. Variations with load and other operating conditions also occur for other operating parameters, such as wet scrubber pressure drop, pH, liquid flow rate, electrostatic precipitator voltage and secondary amperage. Flue gas flow rate and characteristics vary over load and with other operating variables such as fuel quality, to the extent that the single hourly average value determined during the high load steady state performance test will not apply to other conditions if overall performance is optimized. EPA should provide an allowance for any operating parameters to vary with unit load fraction as applicable to the operating parameter and specific affected source, and recognize that those operating parameters do not necessary vary in a linear relationship with load, for example, pressure drop, which typically varies with flow.

#### M. EXTENDING COMPLIANCE DATES

EPA proposes to reset the compliance date for existing sources to 5 years from the effective date of the final reconsidered CISWI rule, or 3 years after a state plan is approved, whichever is carlier (76 Fed. Reg., 80465). For new sources, EPA proposes to revise the compliance date to 6 months after promulgation of the final reconsidered rule. 76 Fed. Reg. at 80465. ACC strongly supports EPA including these proposed compliance deadlines in the final rule so that facilities will have the needed time to make compliance related decisions, install equipment, undertake testing and complete other required actions.

EPA clearly has authority to reconsider and revise standards pursuant to § 307 of the Clean Air Act. After such reconsideration and revision to the standards, "there will be circumstances where EPA changes a rule so extensively that the amended rule should be regarded as a new standard." Pesticide Active Ingredient (PAI) NESHAP, 67 Fed. Reg. 38200, 38201 (June 3, 2002). Sources need time to come into compliance with such "new standards." *Id.* 

As noted above, EPA used its authority in the revised PAI rule to establish a new compliance deadline for existing sources that was an additional 16 months from the deadline in the original

final rule. *Id.* EPA took similar action in establishing a new compliance deadline after reconsideration and promulgation of revised standards in the Miscellaneous Organic Chemicals Manufacturing (MON) NESHAP, 71 Fed. Reg. 10439, 10440 (Mar. 1, 2006). While this authority was under § 112(i)(3), the regulatory structure of §§ 111, 112 and 129 are similar enough that the authority should be the same when revising a § 129 standard.

Section 129(f) requires EPA to establish compliance deadlines for new and existing sources when promulgating "performance standards and other requirements" pursuant to § 129 and § 111. The provision is ambiguous as to whether a compliance deadline initially established in a CTSWI rule must continue to apply when that rule has been substantially revised and changed through the reconsideration process. Arguably it does not.

Section 129(a)(5) requires EPA to review and if appropriate, revise a § 129/111 standard at 5 year intervals after the initial promulgation of the rule. If the underlying standard is revised, it is axiomatic that a new compliance deadline would have to be established pursuant to § 129(f) to allow sources to come into compliance with the revised "performance standards and other requirements." ACC believes the same holds true when a rule is substantially revised pursuant to a § 307 consideration such that the final reconsidered rule is a "new" rule triggering a new effective date.

The need for EPA to reset the compliance deadline in this reconsidered CISWI rulemaking is all the more compelling because of some unique circumstances:

First, EPA administratively stayed the CISWI rule on May 18, 2011, two days before the rule was to become effective. See, 76 Fed. Reg. 28662 (May 18, 2011). EPA stayed the rule because it had already determined that significant requirements of the rule needed to be reconsidered and needed additional public comment. Additionally, the Agency received a number of petitions for reconsideration from interested parties, including ACC, asking the Agency to reconsider additional provisions. That stay remained in place until January 9, 2012, when it was vacated by a federal district court. Sierra Club v. EPA, No. 11-1278-PLF, 2012 U.S. Dist. LEXIS 2457, (D.D.C. Jan. 9, 2012).

Second, due to the vacatur of the stay, the regulated community has lost almost a year from the original compliance time frame. The regulated community relied in good faith on EPA's administrative stay and we will be significantly prejudiced if EPA does not reset or extend the compliance date in the final reconsidered CISWI rule. Given the complexity of this rule and all of the necessary actions that an undetermined number of affected sources will have to take, meeting the initial compliance deadline is going to be impossible for most sources and will severely impact limited industry and state resources.

Third, as noted above, it is still unclear how many sources will be regulated under CISWI, as opposed to the § 112 boiler rules, and this uncertainty will remain until EPA finalizes its reconsideration of the Non-Hazardous Secondary Materials (NHSM) Rule. The continued lack of clarity on whether a secondary material being combusted is a fuel or a "waste" has precluded sources from being able to make applicability determinations and move forward.

Fourth, exacerbating the compliance challenges that will be presented in the final reconsidered rule is the fact that EPA is promulgating the first NESHAP rule applicable to electric generating utilities (EGU) along the same time frame as this rule. As EPA correctly notes, the sheer volume of sources that will need to devise new compliance strategies and install new equipment pursuant to this rulemaking, the boiler major source rulemaking, and the EGU rulemaking will outstrip the availability of the vendors who can do this work. 76 Fed. Reg. at 80465.

In its discussion in the preamble to this proposed reconsidered rule, EPA has accurately highlighted most of the reasons why the compliance date needs to be revised in the final reconsidered rule. *Id.* For the reasons stated in the preamble and in these comments, ACC strongly supports the Agency finalizing its proposed revisions to the compliance deadlines for new and existing CISWI sources.

#### N. TECHNICAL CORRECTIONS

## 1. EPA Needs to Clarify That Operating Parameter Limits Do Not Apply During Performance Pretesting and Testing

In the Proposed Rule, EPA required that sources continuously monitor operating parameter limits (OPLs), and determined that any operation above or below parameter requirements would be a deviation. See Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources: Commercial and Industrial Solid Waste Incineration Units; Proposed Rule, 75 Fed. Reg. 31938, 31976 & 31992 (proposed June 4, 2010). In its response to comments submitted by ACC and others on these provisions, EPA stated that the final rule waives the applicability of operating limits during performance testing:

EPA has revised the rule to waive the operating limits during source testing so that sources may adjust their operating limits to provide increased operating flexibility provided the emissions limits are met. The intention behind reassessing operating limits with new performance testing is to ensure that the limits remain appropriate for the source. By allowing the source to conduct performance test with less stringent operating levels that may have been initially determined, the source will be able to set the limits at levels appropriate for their operations while ensuring emissions limits are met. Response to Comments, at 1111 (Feb. 20, 2011).

In the Final Rule and this Proposed Rule, EPA appropriately revised the regulatory language to reflect the above response to comments for Subpart CCCC as follows:

Operation above the established maximum, below the established minimum, or outside the allowable range of the operating limits specified in paragraph (a) of this section constitutes a deviation from your operating limits subpart, except during performance tests conducted to determine compliance with the emission and operating limits or to establish new operating limits. Operating limits are confirmed or reestablished during performance tests. See, Final Rule, 76 Fed. Reg. 15704 at 15753–54 (Mar 21, 2011) and 76 Fed. Reg. 80452 at 80492 (Dec 23, 2011) (§60.2145(c) (emphasis added)

EPA did not, however, revise similar language for Subpart DDDD in the Final Rule or in this Proposed Rule. See, Final Rule, 76 Fed. Reg. 15704 at 15774 (Mar 21, 2011) and 76 Fed. Reg.

80452 at 80513 (Dec 23, 2011) (\$60.2710(c)) ACC recommends that EPA reconsider and correct what ACC believes to be an oversight with respect to Subpart DDDD.

In addition, ACC is concerned that, as written, the ongoing testing requirements, particularly for existing units (subpart DDDD), could result in a continual reduction of operating limits if facilities have to reset the operating limits every time a stack test is done. Facilities typically operate with a safety margin with respect to operating limits. Therefore, if the operating limits are reset with each performance test, they will continue to change, requiring a continual increase in energy and operating costs. Other combustion-related MACT rules, for example, HWC MACT, explicitly waives current OPLs during subsequent comprehensive performance testing. See, 40 C.F.R. § 63.1207(h)(1). The same waiver should be made explicit in the CISWI rule.

ACC is also concerned about the status of pre-testing associated with performance testing since pre-testing is usually an integral component of testing. The proposed CISWI rule was silent on the issue. It is common to conduct pretesting prior to conducting a performance test, particularly when there are numerous stack sampling trains to be used. For a unit to be able to operate at a new condition during a performance test, it must be allowed to operate at that condition for a period of time before the actual test so that the operator can determine if the condition is feasible. If the condition is outside the existing operating limits, there is no way for the operator to do this. Therefore, existing operating limits need to be waived for pre-testing associated with subsequent performance tests. Section 63.1207(h)(2) of the HWC MACT states:

...current operating parameter limits are also waived during pretesting prior to comprehensive performance testing for an aggregate time not to exceed 720 hours of operation...

ACC urges EPA to reconsider and revise the language in the final CISWI rule to clarify that operator parameter limits are also waived during pretesting prior to performance testing.

## 2. EPA Must Resolve the Discrepancy Regarding New or Modified Unit Compliance Dates

In the December 2011 Re-Proposed Rule, the following text appears:

#### § 60.2015 What is a new incineration unit?

(a)(2) A CISWI unit that commenced reconstruction or modification after [DATE 6 MONTHS AFTER PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER]. 76 Fed. Reg. 80452 at 80489, (Dec 23, 2011)

However, in the rule definitions, the following text appears:

#### § 60.2265 What definitions must I know?

Modification or modified CISWI unit means a CISWI unit that has been changed later than June 1, 2001, and that meets one of two criteria: *Id.* 80502.

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These two regulatory statements contradict each other regarding the date that is considered as the deadline by which a unit is considered modified. ACC assumes the deadline date to be considered a modified unit should be 6 months after the publication of the final rule in the Federal Register. EPA should clarify this in the Final Rule.