

October 28, 2014

EPA Docket Center
EPA West (Air Docket)
Attention Docket ID No. EPA-HQ-OAR- 2010-0682
U.S. Environmental Protection Agency
Mailcode: 28221T
1200 Pennsylvania Ave., N.W.
Washington, DC 20460

Re: SSM Coalition Comments on Proposed Rule: Petroleum Refinery Sector Risk and Technology Review and New Source Performance Standards, Docket ID No. EPA-HQ-OAR-2010-0682

Dear Sir or Madam:

This letter provides comments of the SSM Coalition on EPA's above-referenced proposal to promulgate revised National Emission Standards for Hazardous Air Pollutants ("NESHAPs") under Clean Air Act ("CAA") section 112 for Petroleum Refineries (40 C.F.R. part 63, subparts CC and UUU, hereinafter "Existing NESHAPs"), and to promulgate revised Petroleum Refinery New Source Performance Standards ("NSPS") (40 C.F.R. part 60, subparts J and Ja). The proposal was published on June 30, 2014, 79 Fed. Reg. 36,880 (the "Proposed Rule" or the "Proposed Standards").

The SSM Coalition is an *ad hoc* coalition of trade associations and business organizations interested in the methodologies EPA uses to develop stationary source emission standards under the CAA and the way those standards are expressed in EPA regulations. The SSM Coalition's current members are the American Chemistry Council, American Forest & Paper Association, American Fuel and Petrochemical Manufacturers, American Iron and Steel Institute, American Petroleum Institute, American Wood Council, Brick Industry Association, Council of Industrial Boiler Owners, Florida Sugar Industry, National Lime Association, North American Insulation Manufacturers Association, Rubber Manufacturers Association, Treated Wood Council, and the Vegetable Oil SSM Coalition (consisting of the Corn Refiners Association, the National Cotton Council, the National Cottonseed Products Association, the National Oilseed Processors Association, and Sessions Peanut Company).

The SSM Coalition is concerned with the approach EPA is taking to establish emission limitations for hazardous air pollutants ("HAPs") in the Proposed Standards, as well as various rules under the same statutory authority that are in the active rulemaking stage or that are scheduled for review in the near future. Most of the Proposed Rule sets forth EPA's proposed determinations under CAA section 112(d)(6) (eight-year technology review) and under CAA section 112(f) ("residual risk" review) for two NESHAP source categories: Refinery MACT 1, found at 40 C.F.R. part 63, subpart CC, covers

“Sources Not Distinctly Listed,” including all emission sources from petroleum refinery process units (except those listed separately under section 112(c)), e.g. miscellaneous process vents, storage vessels, wastewater, equipment leaks, gasoline loading racks, marine tank vessel loading and heat exchange systems; Refinery MACT 2, found at 40 C.F.R. part 63, subpart UUU, covers process vents on catalytic cracking units, catalytic reformer units, and sulfur recovery units.

In addition, however, EPA also proposes substantial revisions to the existing NESHAPs for these categories that EPA previously promulgated under CAA sections 112(d)(2) and (3), related to applicable emission limitations, operating requirements, emissions testing and monitoring, and reporting associated with source and control equipment startup, shutdown, and malfunction (“SSM”).¹ The SSM Coalition objects to the new manner in which EPA is proposing to address SSM periods in the Proposed Rule (the “Proposed SSM Provisions”). The following comments are limited to the SSM aspects of the Proposed Rule, including the requirements concerning Relief Valve Discharges, which implicate SSM issues.

1. Summary

The SSM Coalition believes that the approach EPA is taking fails to account adequately for emissions that occur during SSM periods. EPA bases its actions on an incorrect reading of the D.C. Circuit’s *Sierra Club v. EPA* decision and on unreasonable or insufficiently supported assumptions about SSM events and emissions during SSM periods. EPA proposes to change regulations that have been in place for many years and whose SSM provisions were never challenged in court, without any justification of its authority to do so and without any apparent factual analysis of the statutory criteria for standard-setting.

EPA has for decades recognized, in technology-based standards under the Clean Air Act and other statutes, that in many cases it is not feasible with an identified technology to achieve the same emission limitations during SSM events as have been established for normal operations. Historically, EPA has, therefore, applied different requirements during SSM events. EPA has not justified departing from that practice in the Proposed Rule. Nor has EPA demonstrated that the amended standards it is proposing reflect the performance

¹ EPA also proposes various amendments to NSPS for Petroleum Refineries, 40 C.F.R. pt. 60 subpts. J and Ja, characterized by EPA as technical corrections and clarifications, see 79 Fed. Reg. at 36,886, which do not directly involve SSM issues and, therefore, are not addressed in these comments.

actually achieved by best-performing existing sources or meet the statutory criteria for establishing beyond-the-floor maximum achievable control technology (“MACT”) standards. Applying the same emission standards established for periods of normal operation during SSM periods is not compelled by the statute or by applicable case law, including the *Sierra Club v. EPA* decision. Nor does the *Sierra Club* decision compel EPA to prohibit emissions from relief valves that EPA believes are malfunctioning when they, in fact, are operating as intended. EPA has several options for setting emission standards for periods of SSM, including establishing a design, equipment, work practice, or operational standard, or a combination thereof, under CAA section 112(h) (hereafter referred to as “work practice standards”).

Before changing the standards to remove special provisions for startup and shutdown periods, EPA is obligated to perform a scientific evaluation of potential emissions from process equipment and control equipment during startup and shutdown, rather than just assuming the issue away. With respect to malfunction events, EPA must make sure any standards that apply during malfunctions reflect the statutory standard-setting criteria. In earlier proposed and final rules containing EPA’s new approach to SSM events, EPA relied on an “affirmative defense” to make up for its failure to include SSM events in setting the MACT standard. Subsequently, however, the Court struck down EPA’s affirmative defense, stating that EPA lacked the statutory authority to dictate civil penalties to the courts for violations of the CAA. See *NRDC v. EPA*, 749 F.3d 1055 (D.C. Cir. 2014); 79 Fed. Reg. 36,880, 36,945. EPA’s approach in the Proposed Rule, which is to drop the affirmative defense it considered necessary for other MACT rulemakings, and yet make no other change to try to ensure that the Proposed Standards reflect the performance of available technology consistent with CAA section 112, ignores the Agency’s duties under section 112.

The position of the SSM Coalition has consistently been that it is not legally acceptable for EPA to promulgate unachievable emission standards and then offer an affirmative defense to penalties for the expected exceedances of those standards. Thus, the Court’s decision striking down the affirmative defense does not impact the basic premise of the SSM Coalition’s comments that EPA must promulgate proper standards that apply during SSM periods.

2. EPA Does Not Have Authority To Amend Existing MACT Standards To Make Them More Stringent.

While EPA does not make the distinction clearly in the Proposed Rule, the Proposed SSM Provisions, unlike the remainder of the Proposed Rule, are

changes to existing MACT standards that EPA promulgated previously pursuant to CAA sections 112(d)(2) and (3) for the NESHAP categories in question. The Clean Air Act does not contemplate, however, EPA returning to previously issued MACT standards to fill “gaps” or re-determine the MACT floors. Rather, Congress established two distinct procedures for establishing standards more stringent than the original MACT standards: the eight-year review for new developments in control technology under CAA section 112(d)(6), and the review of MACT standards to determine whether more stringent limitations are necessary to protect human health under the CAA section 112(f)(2) “residual risk” review.

EPA’s authority under CAA section 112(d)(6) is to “review and revise as necessary (taking into account developments in practices, processes, and control technologies), emissions standards promulgated under this section no less often than every 8 years.” EPA did not invoke its section 112(d)(6) authority to support the Proposed SSM Provisions (see, e.g., 79 Fed. Reg. at 36,944 & 36,945), but, even if it had, section 112(d)(6) does not provide broad authority to reconsider aspects of previously issued MACT standards unrelated to “developments in practices, processes, and control technologies.” Thus, EPA cannot simply revisit and redo a MACT determination long after the determination has been issued, as EPA attempts to do with the Proposed SSM Provisions. EPA cannot merely change its mind about what standards are required to comply with CAA sections 112(d)(2) and (3), nor can it recalculate a MACT floor based on subsequent performance. *Cf. NRDC v. EPA*, 529 F.3d 1077, 1084 (D.C. Cir. 2008) (rejecting contention that CAA section 112(d)(6) requires EPA to “start from scratch” and develop new MACT standards).

Reassessing existing NESHAPs now that were based on the MACT floor years ago, and imposing more-stringent requirements, would be inconsistent not only with the statute’s careful provision of technology-review and residual-risk authority to follow establishment of MACT standards, but also with Congress’ desire for finality evident in the judicial review provisions of CAA section 307(b). Challenges to MACT standards have to be raised within 60 days of their promulgation. This provision ensures that regulated entities, EPA, and the public know what emission limitations will apply to a source, rather than having those limitations be subject to flux. In the instant case, facilities regulated by the two Existing NESHAPs (subparts CC and UUU) long ago made capital investment decisions and developed and honed their operating procedures to meet the existing MACT standards. The CAA does not allow EPA simply to revisit the analysis and decisions involved in developing emission standards that meet the requirements of CAA sections 112(d)(2) and (3).

Moreover, as discussed in greater detail below, even if EPA did have authority to go back and change the existing MACT standards, it would have to justify why the decisions reflected in the current standards are wrong and why the new standards meet the required criteria that EPA must satisfy in issuing MACT standards under CAA sections 112(d)(2) and (3). EPA has not made either showing in the Proposed Rule.

Also, even if EPA could legally go back and change the existing MACT standards, it could not reasonably make those revised standards effective immediately. It appears that sources subject to the Proposed Rule would be expected to comply with revised SSM requirements as soon as the rule becomes effective. See, e.g., first sentence of proposed paragraph 63.648(j)(3) and proposed paragraph 63.648(j)(4). It would be arbitrary and capricious for EPA to require compliance immediately, when CAA section 112(i) allows a compliance deadline of up to three years. Elimination of the SSM provisions of the existing rules, as well as addition of provisions prohibiting any release from Relief Valves and mandating monitoring, could require plants to make significant changes to their production processes, their HAP collection and control systems, or both, which would take significant time for design, engineering, acquisition, and installation. There is no justification for making such changes in the existing regulations effective immediately, as EPA has proposed.

3. The Proposed SSM Provisions Are Not Required in Order To Be Consistent with *Sierra Club v. EPA*.

EPA has recognized for decades that often it is unreasonable to require sources to meet technology-based emission standards, such as NSPS promulgated under CAA section 111, during SSM periods. See 40 C.F.R. § 60.8(c). That understanding has been a critical piece of most MACT standards as well, through incorporation by reference of the NESHAP General Provisions SSM requirements, inclusion of specific provisions for SSM events in the categorical MACT standards, or both. Despite that fact, in the Proposed Rule EPA proposes that established emission limitations in the affected NESHAPs, which EPA has issued under CAA section 112 (which is modeled in part on section 111), would now be applicable at all times, even during SSM events. See, e.g., proposed sections 63.642(b) and 63.1570.²

² References in these comments are first to the section of proposed revised subpart CC, followed by the comparable section of proposed revised subpart UUU.

EPA suggests that its treatment of excess emissions during SSM events in the Proposed Standards is appropriate, even “required,” in order to make the standards “consistent with” the D.C. Circuit’s decision in *Sierra Club v. EPA*, 551 F.3d 1019 (D.C. Cir. 2008), *cert. denied*, 130 S. Ct. 1735 (2010), which vacated the exemption³ for excess emissions during SSM events contained in the 40 C.F.R. part 63, subpart A General Provisions for emission standards for hazardous air pollutants under CAA section 112. See, e.g., 79 Fed. Reg. at 36,912 & 36,942. The D.C. Circuit’s *Sierra Club* decision does not, however, compel or even support EPA’s adoption of the Proposed SSM Provisions.

First, the *Sierra Club* decision interpreted the NESHAP General Provisions. It did not by its terms address what EPA may or may not include in category-specific MACT standards, and it certainly did not address the specific SSM provisions that EPA wrote into the Existing NESHAPs. In contrast, opinions where the court was looking at source-category-specific MACT standards have emphasized the need for those standards to recognize and accommodate higher emission levels that occur at times other than normal operations. See, e.g., *Sierra Club v. EPA*, 167 F.3d 658, 665 (D.C. Cir. 1999) (Section 112(d) standards based upon the performance of the best-performing facilities are supposed to represent “the emissions control that is achieved in practice” by the best performers; this means that the best-performing facilities will not violate the standards, and that will “only result[] if ‘achieved in practice’ is interpreted to mean ‘achieved under the worst foreseeable circumstances.’”); *Cement Kiln Recycling Coalition v. EPA*, 255 F.3d 855 (D.C. Cir 2001) (the Court choosing to vacate rather than simply remand MACT standards, based in part on the Agency’s failure to exempt hazardous waste combustors from numerical emission limits during SSM periods and the Court’s “similar doubts about EPA’s decision to require sources to comply with standards even during openings of emergency safety valves caused by events beyond the sources’ control.” *Id.* at 872).

Secondly, the *Sierra Club* decision did not say that the same emission limitations that EPA has derived for normal operations must also apply during SSM events. While a blanket, open-ended exemption from any standard under

³ The D.C. Circuit (and EPA in the preamble to the Proposed Rule) referred to the provision vacated in the *Sierra Club* decision as an “exemption” from hazardous air pollutant standards during SSM events. In fact, however, other portions of the NESHAP General Provisions impose various requirements that apply to sources both during SSM events (including the obligation to minimize excess emissions) and in anticipation of and following SSM events (including requirements to prepare a plan to address SSM events and to report SSM events).

section 112 is inconsistent with the *Sierra Club* panel's holding that, for section 112 maximum achievable control technology standards, "there must be continuous section 112-compliant standards" (551 F.3d at 1027), *Sierra Club* does not preclude EPA from applying different standards during SSM events than apply during normal operations. In fact, the opinion acknowledges that section 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 CAA section 112 "without necessarily continuously applying a single standard."⁴

There is ample precedent for EPA applying a different standard during SSM events. The language that the D.C. Circuit considered dispositive in interpreting EPA's standards-setting authority under section 112 — the statement in the CAA section 302 definition of "emission limitation" and "emission standard" that they are a requirement that "limits the quantity, rate, or concentration of emissions of air pollutants on a continuous basis" — has been in the statute since 1977. For over 30 years thereafter, EPA has not required sources to meet NSPS emission limitations under CAA section 111 established for normal operations during SSM events. See 40 C.F.R. § 60.8(c). In fact, Congress enacted the "continuous basis" language in section 302(k) with the knowledge that EPA's emissions standards under section 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.⁵ Moreover, court

⁴ 551 F.3d at 1027. "Indeed, this reading is supported by the legislative history of section 302(k)." *Id.* See also *id.* at 1021 ("accepting that 'continuous' for purposes of the definition of 'emission standards' under CAA section 302(k) does not mean unchanging"); *id.* (referring to "the CAA's requirement that *some* section 112 standard apply continuously") (emphasis added). Moreover, because it was addressing only a generic SSM exemption, the *Sierra Club* decision did not consider whether EPA, in the context of individual categorical standards, could determine that it is infeasible to apply the same limits, or any limits at all on the mass or concentration of pollutants emitted, during SSM events, or that it would lead to absurd results to do so.

⁵ Rather, the "continuous basis" language inserted in 1977 related to a debate in Congress about whether sources should be allowed to use temporary or intermittent pollution control technologies, as the D.C. Circuit recognized in *Sierra Club v. EPA*, 551 F.3d 1019, 1027 (D.C. Cir. 2008), *cert. denied*, 130 S. Ct. 1735 (2010), citing *Kamp v. Hernandez*, 752 F.2d 1444, 1452 (9th Cir.1985). See also Conference Report on H.R. 6161 (the CAA Amendments of 1977), H. Rep. No. 95-564 (August 3, 1977) at 129 (requirement to use "continuous emission controls" "clarifies that intermittent or alternative control measures are not permissible means of compliance"), 172; S. Rep.

decisions both before and after the Clean Air Act Amendments of 1977, some of which are cited below, have affirmed the appropriateness of including special SSM provisions in standards issued under section 111—despite the “continuous basis” language in the definition of “emission limitation.” Similarly, there is nothing in the legislative history of the Clean Air Act Amendments of 1990 that suggests Congress meant something completely different when it used the same defined terms, “emission standard” and “emission limitation,” in directing EPA in the Clean Air Act Amendments of 1990 to establish MACT standards.

Thirdly, the *Sierra Club* decision did not address whether EPA could use a “design, equipment, work practice or operational standard,” as authorized under CAA section 112(h) and included in the definition of “emission limitation” and “emission standard” in CAA section 302(k), in lieu of a numerical emission limitation during SSM events. EPA told the Court that the General Provisions SSM exemption struck down in *Sierra Club* was not an alternative standard based on the work practice standard authority. See 551 F.3d at 1028. Indeed, EPA argued in that case that section 112(h) was irrelevant to its authority to exempt excess emissions during SSM events. *Id.* at 1030 (Randolph, J. dissenting).

Thus, EPA cannot hide behind the *Sierra Club* decision as a justification for ignoring an inability of even the “best performers” to achieve during SSM events the emission limitations EPA has established for normal operations.

No. 94-717 (March 29, 1976) at 78 (definition of “emission limitation” being amended to clarify that “[i]ntermittent controls or dispersion techniques are unacceptable as a substitute for continuous control of pollutants” and contrasting intermittent controls, which vary based on predicted changes in pollutant dispersion due to meteorological predictions, with continuous controls such as flue-gas cleaning equipment); see also *Nat’l Lime Ass’n v. EPA*, 627 F.2d 416, 434 n.54 (D.C. Cir. 1980) (“The ‘intermittent’ controls that concerned Congress were any of those which entailed temporary reductions in emissions when weather conditions were poor.”). The language about “continuous reduction” in the definition of “emission standard” did not address what emission limitations apply during SSM periods, nor EPA’s established practice of exempting excess emissions during SSM events from the performance standards applicable to normal operations. In fact, the legislative history indicates Congress was aware that alternative emission limitations might at times be necessary, even though the emission limitations were established based on the capability of “continuous controls” like scrubbers. See, e.g., S. Rep. No. 94-717 at 78 (“It is recognized that the source controls may not be available to achieve the full reduction required of a particular source under particular circumstances. In such case, supplementary programs can and should be developed. But this flexibility occurs only after imposition of the continuous emission limitation.”).

Moreover, the approach EPA is proposing would not establish “continuous section 112-compliant standards” that the *Sierra Club* decision concluded are required. See 551 F.3d at 1027. Under CAA section 112(d)(2), MACT emission standards must 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. See CAA section 112(d)(3).

An emission limitation that applies during SSM events does not meet the requirement of CAA section 112(d)(2) that “emission standards” under that section be “achievable” if, in fact, 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 SSM events has not been demonstrated to be “achieved” by the best-performing 12% of units in the category under CAA section 112(d)(3), unless EPA can show that those best performers actually meet that emission limitation during SSM events. The Proposed Rule would not establish “continuous section 112-compliant standards” because, as discussed below, EPA has not demonstrated that the emission limitations in the existing MACT standards, as well as the new emission limitations that would be added by the Proposed Rule, would comply with section 112 if they also applied during SSM events.

That plain-language reading of the applicable statutory requirements is echoed by extensive case law. The courts have long recognized that a “technology based standard discards its fundamental premise when it ignores the limits inherent in technology.” *NRDC v. EPA*, 859 F.2d 156, 208 (D.C. Cir. 1988). 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 D.C. Circuit 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 D.C. Circuit 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.

Courts have reached a similar conclusion when considering the analogous Clean Water Act requirements that EPA establish technology-based effluent limitations based on the best available control technology. In one such case, the court held that where EPA knew that there would be periods where a discharger, even with “exemplary use of” the identified best technology, would exceed the effluent limitations because of conditions “beyond the control of the permit holder,” EPA had violated the Clean Water Act by failing to provide an “upset provision” to address those periods. *Marathon Oil Co. v. EPA*, 564 F.2d 1253, 1273-74 (9th Cir. 1977). See also, e.g., *NRDC v. EPA*, 859 F.2d at 207 (distinguishing between technology-based effluent limitations, where some provision for “upsets” is required, and water-quality-based effluent limitations, which are tied to achieving water quality standards rather than based on available technology, and, therefore, need not include an upset provision).⁶

In fact, as explained above, *Sierra Club v. EPA* did not address this precedent, and the 1977 CAA Amendments arguably support the conclusion that emission standards need to deal with the inability of a source to meet the normal emission limitations during particular circumstances. Moreover, the *National Lime Ass’n* decision discussed above, which relies in part on the cases EPA referenced in the preamble, and which directly addresses the need for emission limitations that address reasonably anticipated adverse circumstances, post-dates the Clean Air Act Amendments of 1977 by three years.

As noted above, the *Sierra Club* decision does not prevent EPA from adopting emission standards for SSM periods that are different from those

⁶ The *Weyerhaeuser Co. v. Costle* decision EPA cites in the preamble to the Proposed Rule, 590 F.2d 1011 (D.C. Cir. 1978), does not support EPA’s position. See 79 Fed. Reg. 36,944-45. 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 Proposed Standards are a far cry from the unusual “‘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 NESHAPs 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*.

required during periods of normal operation. Nor does the *Sierra Club* decision mean that EPA is barred from using a “requirement relating to the operation or maintenance of a source to assure continuous emission reduction” as the emission standard that applies during such events. See 551 F.3d at 1027. The *Sierra Club* decision only rejected EPA’s assertion that it had discretion to decide not to impose any emission standard covering SSM periods. See *id.* at 1027-28, 1030 (noting that EPA was not claiming that the General Provisions SSM exemption was either an emission standard under CAA section 112(d) or a design, equipment, work practice, or operational standard under section 112(h)).⁷ Thus, despite EPA’s implications to the contrary, the *Sierra Club* decision expressly recognized that different standards, including non-numerical standards, may (and, in some cases, must) apply during non-standard operating conditions, such as SSM events.

In fact, the only decision that has dealt directly with how EPA should address SSM issues in setting categorical standards pursuant to section 112 is consistent with *Essex Chemical* and the other NSPS cases described above. In *Cement Kiln Recycling Coalition v. EPA*, 255 F.3d 855 (D.C. Cir. 2001) the D.C. Circuit, in deciding whether to simply remand MACT standards (for inadequacies unrelated to SSM issues) or vacate the standards, chose vacatur. It did so in part because of the Court’s concerns about EPA’s failure to exempt hazardous waste combustors from numerical emission limits during SSM periods, “permitting sources to return to compliance by following the steps of a startup, shutdown, and malfunction plan filed with the Agency,” and because the Court had “similar doubts about EPA’s decision to require sources to comply with standards even during openings of emergency safety valves caused by events beyond the sources’ control.” *Id.* at 872. In response to that decision, EPA revised the rule to exempt facilities from the limitations during SSM events. See 40 C.F.R. § 68.1206(b)(1); 67 Fed. Reg. 6792, 6798, 6813 (February 13, 2002).

⁷ The statement in the majority opinion that “Congress gave no indication that it intended the application of MACT standards to vary based on different time periods,” 551 F.3d at 1028: (1) is contradicted by other statements in the opinion, referenced above, that a MACT standard need not continuously apply a single emission limitation, (2) is *dicta*, because that was not the situation presented by the challenged regulations and argued by EPA, (3) ignores the extensive case law about technology-based limitations referenced above, and (4) does not in any event say that the CAA precludes EPA from adopting different emission limitations that apply during SSM events.

4. EPA Must Fully Justify Applying the Same Emission Limitations During Startup and Shutdown as During Normal Operations.

In the preamble to the Proposed Rule, EPA does not say that it is precluded from adopting different emission limitations that would apply during startup and shutdown periods. See 79 Fed. Reg. 36,942-43. Rather, EPA asserts that, “[w]e expect facilities can meet nearly all of the emission standards in Refinery MACT 1 and 2 during startup and shutdown, including the amendments we are proposing in this action,” with the exception of a few select emissions sources.⁸ EPA categorically states that this is so because “APCD [Air Pollution Control Devices] are operating prior to process startup and continue to operate through process shutdown.” *Id.* at 36,942. Specifically, EPA says that for process vents and transfer operations, it is common practice to start an APCD prior to startup. EPA then states without much further explanation that “[w]e do not expect startup and shutdown events to affect emissions from equipment leaks, heat exchange systems, wastewater or storage tanks. *Id.* at 36,944. With regard to emission reductions for relief valves that might occur during startup or shutdown, EPA offers the conclusory statement that all such releases “are unplanned and nonroutine” and, as such, are “malfunctions” that are no longer exempt. *Id.* at 36,912.

SSM Coalition members do not have sufficient information to comment on whether, in fact, the emissions during startup and shutdown of the various emission units subject to the Proposed Rule will be no greater than emissions during normal operations. It is not apparent from the cursory treatment of this issue in the preamble to the Proposed Rule, however, that EPA has adequately justified this conclusion. There are numerous reasons why a source might not be able to comply, during periods of startup or shutdown, with emission limitations established based on performance during steady-state operation, even if the control devices used are started up before the process units and are operational during the shutdown phase of a process. For example, a control device may be less efficient until it reaches its design operating temperature, or it may be less efficient when the pollutant concentrations in the gases to be treated are lower than during steady-state operation (as they often will be when a process is starting up or shutting down). See, e.g., 68 Fed. Reg. 1276 at 1287-88 (Jan. 9, 2003). Energizing a control device before it has reached a minimum operating

⁸ *Id.* at 36,942. EPA identifies three emission sources for which specific startup and shutdown provisions may be needed: specific PM standards for startup of fluid catalytic cracking units (“FCCU”) controlled with an ESP, specific CO standards for startup of FCCU without a post-combustion device, and specific standards for sulfur recovery units (“SRU”) during periods of shutdown. *Id.* at 36,943.

temperature may not only result in lower pollution control efficiency, during that time, it may also result in corrosion or other damage to the control equipment and may void the manufacturer's warranty. This is often the case, for example, in control of particulate matter emissions using an electrostatic precipitator.

On the process side, until a manufacturing process reaches steady-state operation, that process may generate substantially higher emissions, either on a total-mass basis or on a mass-per-unit-of-production basis. See, e.g., 76 Fed. Reg. 63,878, 63,883 col. 2 (Oct. 14, 2011). Also, if flammable gases are involved, routing the gases to a thermal destruction device before the concentration of the flammable compounds in the vent gas stream has exceeded the Upper Explosive Limit can result in an explosion.

EPA must conduct a thorough analysis and determine whether it is representative of the performance of best-performing sources (the "MACT floor") to require facilities in these source categories to achieve the same emission limitation during startup and shutdown as during normal operations. EPA cannot conclude that special provisions for emissions during startup and shutdown are not needed based on "mere speculation." See *NRDC v. EPA*, 859 F.2d 156, 210 (D.C. Cir. 1988). The default assumption must be that such special provisions *are* needed. EPA previously determined, when establishing the existing standards applicable to these source categories, that the best performers on which the MACT standards were based may not achieve those standards during startup and shutdown. EPA cannot simply change its mind about this sort of assessment without providing a factual analysis supporting EPA's new conclusion that MACT standards can be achieved as well during all startup and shutdown periods. See, e.g., *Transactive Corp. v. United States*, 91 F.3d 232, 237 (D.C. Cir. 1996).

EPA states categorically that "[i]n proposing the standards in this rule, the EPA has taken into account startup and shutdown periods" and that "[w]e expect facilities can meet nearly all of the emission standards in Refinery MACT 1 and 2 during startup and shutdown...." 79 Fed. Reg. at 36,942. It is not apparent from the preamble discussion, however, that EPA has actually analyzed sufficient data on emissions during startup and shutdown to justify that conclusion, as opposed to merely assuming it is correct, based on EPA's statements about the timing of startup and shutdown of control equipment, as discussed above. The SSM Coalition questions whether EPA has conducted a sufficient analysis to demonstrate the achievability of the MACT emission limits established for normal operations during startup and shutdown events, because of likely limitations in the available data.

There are several reasons why adequate data often do not exist to allow EPA to conclude that an emission limitation established for normal operations also represents the performance of the best demonstrated control technology during startups and shutdowns. To the extent emissions data come from required performance tests, the applicable regulations generally prohibit testing during SSM conditions, and require that data not be used for compliance purposes if obtained during a startup, shutdown, or malfunction event.⁹ To the extent EPA evaluates emissions data collected through continuous monitoring, the applicable regulations often require or allow the source to exclude from its reporting of continuous monitoring data those data reflecting SSM conditions. Also, atypical pollutant concentrations and other stack conditions that may exist during startup and shutdown can result in the continuous monitoring system producing unusable data, because the pollutant concentration may be outside of the monitoring equipment's span or the stack conditions may not meet monitoring system QA/QC parameters, or the data may be truncated on the high end because of limitations of the monitoring equipment.¹⁰

These factors would cause EPA to understate emissions occurring during startup and shutdown. An additional problem is that it can be unclear whether a condition that leads to excess emissions should be characterized as a startup or shutdown event, or a malfunction event. Without a clear demarcation (both in EPA regulations and in practice), EPA may be analyzing data sets that exclude events that were treated as malfunctions but that the Agency would say should be included in calculating average performance as startup or shutdown conditions.

5. EPA Is Required To Take Malfunctions into Account When Adopting Emissions Standards.

EPA asserts that "EPA's approach to malfunctions" in setting emissions standards "is consistent with CAA section 112 and is a reasonable interpretation of the statute." 79 Fed. Reg. at 36,945. EPA offers very little support for that

⁹ See, for example, the NESHAPs General Provisions, which state that performance tests can only be conducted under representative conditions and which specify that: "Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test...." 40 C.F.R. §63.7(e)(1); see also 40 C.F.R. § 60.8(c) (same for performance testing for NSPS).

¹⁰ Note that data from periods when a monitoring system is outside of control limits are required to be excluded from emission averages under the NESHAPs General Provisions. See 40 C.F.R. § 63.8(c)(7)(ii).

claim, however, other than stating its own, often counterintuitive, conclusions. For example, EPA says it “has determined that CAA section 112 does not require that emissions that occur during periods of malfunction be factored into development of CAA section 112 standards.” 79 Fed. Reg. at 36,944. EPA makes little effort to justify that assertion. The Agency’s statement that “[t]here is nothing in CAA section 112 that directs the agency to consider malfunctions in determining the level ‘achieved’ by the best performing or best controlled sources when setting emission standards,” *id.*, has it backwards. There is nothing in CAA section 112 that allows EPA to ignore malfunctions and set MACT standards based on a level of emissions that even best-performing sources only achieve part of the time.

EPA likewise offers a backwards, results-driven rationale for ignoring malfunctions, which directly contravenes congressional intent that MACT floor standards be based on what the best sources actually achieve: “accounting for malfunctions could lead to standards that are significantly less stringent than levels that are achieved by a well-performing non-malfunctioning source.” 79 Fed. Reg. at 36,945. EPA cannot ignore the requirement that MACT floor standards reflect performance actually achieved, just because the Agency would like the standards to be more stringent than what actual performance reflects.

EPA acknowledges that even properly designed and operated equipment will sometimes exceed emission limitations that were based on steady-state operation, due to malfunctions. Even the best performing units in the source categories covered by the Proposed Rule (like any technologies) are subject to a wide variety of potential malfunctions (e.g., power failures, equipment breakdowns). See, e.g., 79 Fed. Reg. at 36,944. The operators of these processes and equipment must treat malfunctions as very distinct events from steady-state operations, depending on the severity of the malfunction, requiring anything from shutdown of the unit to emergency fire response actions. The SSM Coalition agrees with EPA’s conclusion that the factual complexity of differing processes and of the severity, frequency, and duration of malfunctions makes [numerical] standard-setting difficult. See *id.* In addition, it is often infeasible to gather emissions data during malfunctions – either for standard-setting or for compliance-demonstration purposes. Malfunctions are by definition unexpected, so it is not possible to plan to have stack test or monitoring equipment in place to measure emissions when one occurs. Even if test or monitoring equipment is in place, emissions during malfunctions often are not routed to a stack where they can be measured, and upsets during stack testing

invalidate the test results under EPA's approved test methods.¹¹

Rather than supporting EPA's decision to ignore the fact that SSM events can lead to higher emissions even at well-operated facilities with the best control equipment, these findings should lead EPA to its authority under CAA section 112(h) to prescribe alternative design, equipment, work practice or operational standards where it is not feasible to set or enforce a numerical emission limit. EPA cannot rationally defend its articulated view that applying the concept of "best performing" is inconsistent with a source experiencing a malfunction. See 79 Fed. Reg. at 36,944. This ignores that there are work practices – such as monitoring of operating parameters to identify a malfunction and stopping or cutting back the process accordingly – that 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 the hazardous air pollutants...achievable...through application of measures, processes, methods, systems or techniques" and reflect "the emission control that is achieved in practice by the best controlled similar source[s]" CAA § 112(d)(2) and (3).

EPA claims that attributing malfunctions to a "best performing" source somehow presents significant difficulties. See 79 Fed. Reg. at 36,944. 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 achieve part of the time. EPA itself describes malfunctions as being sometimes unavoidable or "not reasonably preventable," despite proper design and maintenance of equipment. Consequently, there is no basis for EPA's conclusion that malfunction events are not representative of best-performing sources. See *id.*, see also, e.g., *Cement Kiln Recycling Coalition*, 255 F.3d at 862-865 (recognizing that there is variability in the performance of control technologies, which needs to be taken into account in establishing emission limitations based on the MACT floor); *Sierra Club v. EPA*, 167 F.3d 658, 665 (D.C. Cir. 1999). EPA has recognized that "there is a tension...to ensure

¹¹ EPA acknowledged these potential obstacles to measuring emissions during SSM events in the preamble to final emission standards for medical waste incinerators, 74 Fed. Reg. 51,368, 51,394 (Oct. 6, 2009): ("It would be very difficult to do any meaningful testing during such an event because the exhaust flow rates, temperatures, and other stack conditions would be highly variable and could foul up the isokinetic emissions test methods (thus invalidating the testing)."). See also proposed sections 63.642(d)(3) and 63.1571(b)(1) (which would prohibit performance testing during malfunctions); n.8 *supra*.

adequate compliance while simultaneously recognizing that despite the most diligent of efforts, emission standards may be violated under circumstances entirely beyond the control of the source.” 79 Fed. Reg. at 36,945. That is all the more reason why EPA must acknowledge the fact that those sources nevertheless experience malfunction events, rather than assuming away the emissions associated with those events.

By proposing MACT standards that EPA recognizes even the best-performing existing sources cannot achieve part of the time, EPA is going beyond the MACT floor, yet without making the demonstrations that the statute and case law require the Agency to make in order to impose beyond-the-floor MACT standards. This is especially obvious when one considers the multitude of considerations EPA proposes for sources during malfunctions, by which EPA will determine an appropriate response. Though the affirmative defense in NESHAPs for Portland Cement plants was struck down by in *NRDC v. EPA*, 749 F.3d 1055 (D.C. Cir. 2014), the same considerations still remain in the preamble: EPA’s response will be based on, for example, whether the facility had conducted “root cause analyses to ascertain and rectify excess emissions.” 79 Fed. Reg. at 36,945. EPA makes no attempt to justify those conditions as reasonable “taking into consideration the cost of achieving such emission reduction, and any non-air quality health and environmental impacts and energy requirements....” See CAA section 112(d)(2).

Nor does EPA present any substantiation for its belief that “[a]pplying the concept of ‘best controlled’ or ‘best performing’ to a unit that is malfunctioning presents significant difficulties” in setting CAA section 112 standards. See 79 Fed. Reg. at 36,944. It is indefensible for EPA to acknowledge that malfunctions are inevitable, even for the best-performing sources, and yet refuse to include emissions data representing malfunctions (if such data exist) in calculating the MACT floor (*see id.*), and then require that those MACT floor limitations be met even during malfunctions.

If it is possible to gather sufficient representative data reflecting emissions during malfunctions, then EPA is obligated to consider those data in its MACT floor calculations for steady-state operating conditions. To the extent EPA had access to continuous monitoring data for emission units covered by the NESHAP, EPA could have conducted analyses of emissions levels during malfunction events.¹² Also, many types of sources are required by many state

¹² Even if the continuous monitoring data are for parameters not regulated by the Proposed Standards, analysis of monitoring data for those other parameters during malfunction events might form a reasonable basis for EPA’s assessment of what

agencies to submit deviation reports or malfunction reports when they experience a malfunction that causes an exceedance of an applicable limitation. EPA does not appear to have made any attempt to obtain and analyze such reports, in order to assess what type of requirement might reasonably apply to the subject emission units during malfunctions.

There are several options EPA could use for setting emission standards under CAA section 112 that would apply during malfunction events. For example, EPA might be able to establish a numerical emission limitation that applies at all times, but that has an averaging time of sufficient duration that short, infrequent spikes in emissions due to malfunctions would not cause the source to exceed the emission limitation (while at the same time ensuring that the source does not operate in a way that causes frequent, lengthy excursions above the normal controlled emission rate).¹³ EPA also could use the flexibility accorded by CAA section 302(k) (defining “emission limitation” and “emission standard” to include “any requirement relating to the operation or maintenance of a source to ensure continuous emission reduction, and any design, equipment, work practice or operational standard promulgated under” the CAA) to address emissions during malfunction events through operational requirements, rather than by applying the same limits on pollutant concentrations in exhaust gases that apply during normal operations. Similarly, EPA could conclude, as explained above, that it has grounds to exercise its authority under CAA section 112(h) to promulgate a design, equipment, work practice, or operational standard, or combination thereof, because it is not feasible to prescribe or enforce an emission standard. EPA might also use several of these approaches in combination.

In fact, the Proposed Rule provides an example of how EPA can and should respond to just the kinds of issues that EPA asserts justify ignoring the effect of malfunctions on compliance: In considering additional requirements for Delayed Coking Units (“DCUs”), EPA recognized in the Proposed Rule that the nature of emissions from DCUs made those emissions difficult or impossible to measure and monitor, and the disparate emission points made it infeasible to construct a conveyance to capture all the emissions. 79 Fed. Reg. at 36,902.

standards are achieved or achievable during malfunctions.

¹³ In fact, EPA included such a consideration of averaging time in determining appropriate standards to apply during shutdown of SRUs. See 79 Fed. Reg. at 36,943 (“the 12-hour averaging time provided for the SRU emissions limitation under Refinery MACT 2 may not be adequate time in which to shut down the unit without exceeding the emissions limitation”).

EPA then concluded that those factors made it “appropriate to develop work practice standards in place of emission limits for the DCU.” *Id.*

There is no indication in the Proposed Rule that EPA gave much, if any, consideration to any of these types of options for addressing emissions during malfunctions. In short, there are ample reasons to reject EPA’s conclusory assertions that it cannot take malfunctions into account when setting MACT standards for the subject source categories. EPA’s failure to evaluate these options thoroughly renders the Proposed Rule arbitrary and requires EPA to develop a new proposal.

6. The Proposed Requirements for Relief Valve Discharges Are Unjustified.

In addition to requiring that sources covered by the Proposed Rule comply with emission limitations in the Existing NESHAPs at all times, including during startup, shutdown, and malfunction, EPA proposes “that emissions of HAP may not be discharged to the atmosphere from relief valves in organic HAP service.” 79 Fed. Reg. at 36,912 and Proposed § 63.648(j)(3). The absolute prohibition on releases of HAPs from equipment that is designed specifically for that purpose is technically infeasible and legally unsupported.¹⁴ EPA also proposes to require monitoring capable of immediately alerting an operator of a pressure release and recording the time and duration of the release. *Id.*

For the same reasons noted above with respect to the SSM provisions in the existing regulations, EPA cannot simply change the established MACT standards, especially to make the standards more stringent, without complying with CAA sections 112(d)(6) and 112(f). (Note that the Proposed Rule includes EPA’s finding that there are no new technologies for controlling process vents. 79 Fed. Reg. at 36,913.) And, even if EPA could go back and revise the existing standards, EPA would at a minimum be bound by the requirement either to base those standards on the emissions achieved by the best-performing facilities, or to demonstrate that the new requirements were justified as beyond-the-floor standards, including evaluating of the costs and emission reduction benefits of the more-stringent standards. EPA has not made any attempt to do so. See 79 Fed. Reg. at 36,912.

¹⁴ Additionally, if read literally, this new prohibition could be interpreted to include any release from a relief valve, including, but not limited to, pressure releases. This could theoretically include emissions that are already regulated by other provisions addressing equipment leaks and fugitive emissions. EPA needs to clearly distinguish among these types of emissions and the respective regulatory requirements.

Obviously EPA believes the proposed regulatory changes will have the effect of reducing emissions from relief valves from what is required by the existing rules. EPA states that the original Refinery MACT 1 regulated relief valves through equipment leak provisions that applied “only after the pressure relief occurred.” *Id.* According to EPA, “Refinery MACT 1 did not restrict relief valve releases to the atmosphere but instead treated them the same as all malfunctions through the SSM exemption provision.” *Id.* The Proposed Rule now *prohibits all discharges* of HAPs to the atmosphere and requires that sources monitor relief valves. Certainly prohibiting all releases of HAP from relief valves and imposing new requirements for monitoring and reporting of such releases is a significant change to existing MACT regulations. EPA has not demonstrated its legal authority to make the proposed changes, nor has it offered justification for the need for any changes.

EPA categorically states “relief valve discharges [are] the result of malfunctions.” 79 Fed. Reg. at 36,912. This statement belies the fact that relief valves are designed precisely to allow for the immediate venting of gas from process equipment in order to avoid safety hazards or equipment damage. Despite this obvious fact, EPA asserts “[r]elief valves are *designed to remain closed* during normal operation and only release as the result of unplanned and/or unpredictable events.” *Id.* (emphasis added). This statement ignores the fact that relief valves would not be there if they were not necessary pieces of safety equipment *designed to open* when operating circumstances warrant, not to remain closed. While it is true that these events are unpredictable in time and duration, they are certainly identifiable and foreseeable—hence the need for this safety equipment. Indeed, without relief valves acting as a safety device and releasing some emissions as intended, catastrophic releases could result in much higher emissions and damage to both the environment and the facility. Relief valves, in actuality, minimize releases to the environment and act as the last resort in a series of actions at a facility to keep an overpressure incident from turning into a major release of pressure (and accompanying emissions).

In addition, by defining intended releases from relief valves as malfunctions that result in the violation of the standards, EPA is forcing facility operators to make a difficult choice between allowing a CAA violation to occur and, with that action, incur penalties, or taking the risk of letting a situation progress to an emergency situation where human health, the environment and the facility are put in jeopardy. It is, therefore, inappropriate and irresponsible from a policy standpoint for EPA to seek to prohibit releases from relief valves.

EPA seems to acknowledge the inherent problem with its proposed

approach to releases from relief valves when it says that “[a] relief valve discharge results from an operator error, a malfunction such as a power failure or equipment failure, or other unexpected cause that requires immediate venting of gas from process equipment in order to avoid safety hazards or equipment damage. *Even so*, to the extent that there are atmospheric HAP emissions from relief valves, we are required to follow the Sierra Club ruling...” *Id.* at 36,912 (emphasis added). Again, EPA is wrongly interpreting the holding of the *Sierra Club* decision.

Nothing in *Sierra Club* said or implied that EPA can ignore the operation of relief valves when it sets MACT standards. In fact, as discussed above, nothing in that decision suggested in any way that EPA need not take episodic releases associated with the capability of the best technology (whether associated with a “malfunction” or not) into account when setting CAA section 112-compliant standards. The only thing compelling EPA to propose to make any release from a relief valve a violation was EPA’s unjustified conclusions that (a) because releases from relief valves are unpredictable, that makes them unanticipated, and, therefore, “malfunctions,” and (b) all deviations from otherwise applicable emission rates that are associated with malfunctions are, by definition, violations. Neither the facts, nor CAA section 112, nor the *Sierra Club* decision, nor other CAA case law justify those conclusions.

As discussed above, relief valves are essential safety devices, and releases from a relief valve occur when the relief valve functions as designed and intended. In contrast, a malfunction of equipment is the failure of equipment to operate as intended due to unforeseen circumstances. Thus, when a relief valve is operating as designed and as expected, that is not a malfunction, *at least of the relief valve*. Consequently, even EPA’s new-found refusal to recognize malfunctions would not justify suddenly prohibiting all venting from relief valves.

Moreover, releases from relief valves essentially and by design cannot be avoided, at least in some situations. Making it a violation to have *any* emission from a relief valve therefore runs directly afoul of the courts’ admonition to EPA that it must establish emission standards that are achievable, including under the worst foreseeable circumstances.

In addition, the Proposed Rule is internally inconsistent: Prohibiting a “release” from a safety device that is intended to release unacceptable pressure is directly contrary to the “general duty” in proposed sections 63.642(n) and 63.1570(c) to operate and maintain the affected sources “at all times” “in a manner *consistent with safety* and good air pollution control practices for minimizing emissions” (emphasis added).

EPA states that pressure release events have “the *potential* to emit large quantities of HAPs.” *Id.* at 36,912 (emphasis added). There is no indication, at least in the preamble to the Proposed Rule, that this is anything more than vague speculation. It also is not a legal basis for making all emissions during malfunctions violations, because the legal question EPA must answer when setting MACT standards is what emissions are representative of the MACT technology and the best-performing facilities. Beyond that, even if some releases from relief valves could be better controlled or relate to problems that could be corrected, at best that would justify imposing limitations on some *pressure releases*, not prohibiting all “releases.” This kind of vaguely supported, imprecise regulation does not meet the requirements for rulemaking under the CAA, especially where EPA’s proposed actions would restrict the use of devices which EPA acknowledges are essential to avoid safety hazards or equipment damage.¹⁵ Also, because facilities already provide reports for unpermitted releases pursuant to other regulatory requirements (e.g., the Existing NESHAPS, other NESHAPS, Title V reporting, and EPCRA and CERCLA reporting), EPA is both on notice of such releases in many instances, and had plenty of data at hand to analyze such releases in the manner required of it by law.

Because a release from a relief valve is unique in that the “release” is an inherent function of the device, and not a malfunction of the device, a work practice standard for such releases pursuant to EPA’s authority under CAA § 112(h) would be the best approach under the CAA for addressing these releases. As noted above, *Sierra Club v. EPA* does not prevent EPA from establishing work practice standards that would provide a mechanism for such devices to be used during times when they need to be used. In fact, relief valve releases fall squarely within the intent of section 112(h) to address situations where (a) it is not feasible to capture the emissions and route them to a control device or (b) it is not practicable to measure the emissions when the relief valve functions for its intended purpose. Any limitations established under the CAA for relief valves, consistent with the best performing facilities’ emissions from relief valves, would necessarily need to address releases from relief valves, not violations of emission limitations, because the relief valve was not malfunctioning, but rather functioning correctly.

¹⁵ See *Motor Vehicle Mfrs. Ass’n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) (holding that an agency must examine the relevant data and articulate a satisfactory explanation for its action, including a rational connection between the facts found and the choice made). See also, *Panhandle Eastern Pipe Line Co. v. FERC*, 890 F.2d 435, 439 (D.C. Cir. 1989) (agency must show that it has taken a “hard look at the salient problems before it”) (quotation marks and citations omitted).

7. EPA’s “Affirmative Defense” Was Never a Substitute for Addressing Malfunction Events in the Emission Standards Themselves.

EPA acknowledges that the sources subject to the Proposed Rule sometimes will be unable to comply with the Proposed Standards because of malfunctions, even if their equipment is properly designed and maintained, through no fault of the source. See 79 Fed. Reg. at 36,912 & 36,945. Indeed, EPA states that it included the affirmative defense in previous rulemakings concerning SSM provisions specifically because it “recogniz[ed] that there is a tension ...to ensure adequate compliance while simultaneously recognizing that despite the most diligent of efforts, emission standards may be violated under circumstances entirely beyond the control of the source.” *Id.* at 36,945.

In the Proposed Rule, EPA says that it is not including the affirmative defense language in the Proposed Rule because of the April 18, 2014, D.C. Circuit decision reviewing NESHAPs for Portland cement plants, *Natural Resources Defense Council v. EPA*, 749 F.3d 1055 (“*NRDC v. EPA*”). See 79 Fed. Reg. at 36,945. That case only directly affects NESHAPs for Portland cement plants. More importantly, it did not address at all the point the SSM Coalition is raising here, that an NSPS that cannot be met with the identified technology, despite proper operation and maintenance, fails to meet the language and intent of CAA section 111, regardless of any provision for mitigation of civil penalties for malfunctions. The Court ruled that EPA lacked authority to impose limitations (by way of the affirmative defense language in the Portland cement NESHAPs) on the district courts’ ability under the CAA to determine appropriate penalties for a violation. 749 F.3d at 1063-64. It said nothing about the validity, under the statute, of EPA declaring unavoidable emissions associated with SSM events to be violations in the first place.

The Proposed Standards, with or without the affirmative defense, still do not represent emission limitations “achieved” by best-performing existing sources under CAA section 112(d)(3), nor do they meet the criteria for establishing beyond-the-floor emission standards under CAA section 112(d)(2). The affirmative defense was, as SSM Coalition comments on other recently proposed NESHAPs and NSPS have demonstrated, an entirely inadequate substitute for setting MACT standards that include provisions for SSM events. Nevertheless, having identified the need to temper the impact on sources of its approach of applying the same limitations to a source at all times, with an affirmative defense, EPA’s statement in the preamble to the Proposed Rule—that it will not include an affirmative defense, but it will not make any other changes to its approach to standard-setting to adjust for the absence of that affirmative defense—is

unreasonable.

EPA's statements that, "if a source is *unable* to comply with emissions standards as a result of a malfunction, the EPA *may* use its case-by-case enforcement discretion to provide flexibility, as appropriate," 79 Fed. Reg. at 36,945 (emphasis added), are woefully inadequate. When, and why, if the source is unable to comply with emission standards because of a malfunction, which EPA defines as an event the source could not have avoided through better design or operation and maintenance—would it ever be appropriate for EPA not to use its enforcement discretion? Moreover, EPA has provided no analysis that would supersede its long-standing determination that it is inappropriate to rely on enforcement, rather than regulatory language, to address the inability to comply with technology-based standards during SSM events. See 37 Fed. Reg. 17,214 (Aug. 25, 1972) (establishing SSM provision in NSPS). The courts have adopted the same view. See, e.g., *Portland Cement*, 486 F.2d at 398 n.1; *National Lime*, 627 F.2d at 431 n.46 ("the flexibility appropriate to enforcement will not render 'achievable' a standard which cannot be achieved on a regular basis, either for the reasons expressly taken into account in compliance determination regulations (here startup, shutdown and malfunction), or otherwise.").¹⁶

Among other things, EPA's exercise of its discretion not to bring an enforcement action for excusable malfunctions does nothing to prevent a source from having to defend itself from a citizen suit or state enforcement action for the same malfunctions. Moreover, EPA does not even take the most basic step here of declaring that it will exercise its enforcement discretion for events that meet the criteria it has applied in the past to the affirmative defense. Instead, EPA merely states that it "may" use its enforcement discretion "as appropriate." This does nothing to make NSPS that ignore the effect on compliance of SSM events acceptable under CAA section 111 and relevant case law. Rather than simply state that it will not employ the affirmative defense language that was rejected by

¹⁶ See also *Marathon Oil Co. v. EPA*, 564 F.2d at 1273 (explaining why EPA's statement that it would not take enforcement action against sources that exceeded effluent limitations because of upset events was "not an adequate response" to the argument that standards that cannot be met during unavoidable upsets fail to reflect available technology). Also for these reasons, EPA's statements in the Proposed Rule preamble that EPA will "determine an appropriate response" to reported exceedances of the Proposed Standards, based on, "among other things, the good faith efforts of the source to minimize emissions during malfunction periods, including preventative and corrective actions, as well as root cause analyses to ascertain and rectify excess emissions" (79 Fed. Reg. at 36,945), are not in any way a substitute for EPA setting the standards at an achievable level in the first place.

the D.C. Circuit for the Portland Cement MACT standards, EPA should address the issues raised by the inherent conflict it sees between continually applicable emission standards and the capability of the identified technology, through promulgating some sort of alternative standard for SSM events.

In addition, to the extent EPA is implying, in its statement that this “same logic applies to EPA administrative enforcement actions”¹⁷, that the *NRDC v. EPA* decision somehow precludes EPA from including an explicit provision in the Proposed Rule providing an affirmative defense to *administrative* penalties, that implication would be inaccurate. In fact, the *NRDC v. EPA* Court specifically recognized that EPA has authority to limit the situations in which it will impose administrative penalties in that manner. See 749 F.3d at 1063 (“By contrast, EPA’s ability to determine whether penalties should be assessed for Clean Air Act violations extends only to administrative penalties, not to civil penalties imposed by a court.” (citation omitted)). At the very least, EPA should affirmatively state in the final rule that EPA will not seek administrative penalties for excess emissions caused by malfunctions.

8. EPA Has Not Justified Changing the Conditions that Apply to Performance Testing.

The Proposed Rule would eliminate previously applicable portions of the NESHAPs General Provisions that (a) require that performance tests be conducted under “representative performance” conditions “(i.e., performance based on normal operating conditions) of the affected source” and (b) specify that “[o]perations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test.” See 40 C.F.R. § 63.7(e)(1) and 79 Fed. Reg. at 36,946. Other than stating that “the performance testing requirements we are proposing to add differ from the General Provisions performance testing provisions in several respects,” EPA offers no explanation for adding proposed sections 63.642(d)(3) and 63.1571(b)(1) and eliminating reference to the NESHAPs General Provision on representative performance testing, 40 C.F.R. § 63.7(e)(1). See 79 Fed. Reg. at 36,946. On the other hand, the Proposed Rule contains new provisions that would prohibit conducting performance testing during a malfunction, proposed sections 63.642(d)(3) and 63.1571(b)(1).

The D.C. Circuit did not vacate the provision EPA proposes to replace, 40

¹⁷ 79 Fed. Reg. at 36,945. See also *id.* (“the presiding officer in an administrative proceeding can consider any defense raised and determine whether administrative penalties are appropriate”)

C.F.R. § 63.7(e)(1), in *Sierra Club v. EPA*. And, contrary to EPA's implication in the preamble to the Proposed Rule, 40 C.F.R. § 63.7(e)(1) does not refer to or rely on provisions that were vacated in *Sierra Club v. EPA*. Compare Table 6, 79 Fed. Reg. at 36,990, and Table 44, *Id.* at 37,043 of the Proposed Rule with 79 Fed. Reg. at 36,945 (*Sierra Club* vacated 40 C.F.R. §§ 63.6(f)(1) and 63.6(h)(1)). That decision in no way authorizes EPA to (1) change existing MACT standards so that (2) EPA could direct a source to conduct performance testing during abnormal operations, including startups and shutdowns. Cf. proposed section 63.1571(b)(1). (“[P]erformance tests shall be conducted under such conditions as the Administrator specifies to the owner or operator based on representative performance...[r]epresentative conditions exclude periods of startup and shutdown *unless specified by the Administrator...*”) (emphasis added).

As EPA and the courts have recognized, the manner prescribed for performance testing affects the stringency of the emission standard, i.e., the difficulty of complying with the standard. For reasons demonstrated above, requiring sources now to demonstrate compliance with numerical emission limitations in the existing MACT standards, using performance tests or continuous monitoring, even while the source is in startup or shutdown mode, can have the effect of making those existing MACT standards more stringent. EPA cannot simply “amend” existing MACT standards in a way that will make those standards more stringent without first, providing an adequate justification for departing from EPA's previous judgment about the appropriate level of the standards and the appropriate conditions for performance testing; and, secondly, demonstrating that the revised standards would still meet the criteria of CAA section 112(d). EPA's total failure to do so renders the Proposed Rule inadequate notice for public comment. If EPA wishes to change the performance tests applicable to the existing MACT standards, it must withdraw and re-propose the new testing requirements, with adequate explanation and justification.¹⁸

¹⁸ As discussed earlier in these comments, EPA may have the data, or be able readily to collect the data, to determine the emission rate for the identified technology during startup and shutdown periods, and either establish a single numerical emission limitation that reflects the source's performance even during startup and shutdown or establish alternative emission limitations that apply during startup and shutdown. It might then be appropriate to specify performance testing or compliance monitoring during startup or shutdown periods. That is not what EPA has done in the proposed rule, however.

9. EPA Has Not Justified Adding New “General Duty” Language to the Existing Subparts CC and UUU Standards.

EPA proposes to replace the NESHAPs General Provisions section that establishes a “general duty” to operate a source consistent with safety and good air pollution control practices for minimizing emissions, 40 C.F.R. § 63.6(e)(1), with somewhat different “general duty” language in proposed sections 63.642(n) and 63.1570(c). This change is not being proposed under CAA sections 112(d)(6) or 112(f), and EPA, therefore, lacks authority to make this change to the Existing NESHAPs. EPA’s only explanation for these changes is that “[s]ome of the language ...is no longer necessary or appropriate in light of the elimination of the SSM exemption.” See 79 Fed. Reg. at 36,945.

The D.C. Circuit did not vacate the provision EPA proposes to replace, 40 C.F.R. § 63.6(e)(1), in *Sierra Club v. EPA* (which vacated the “exemption” for SSM events in sections 63.6(f)(1) and (h)(1), not the requirement for good air pollution control practices), and, contrary to EPA’s assertion in the preamble to the Proposed Rule, 40 C.F.R. § 63.6(e)(1) does not reference provisions that were vacated in *Sierra Club v. EPA*. Compare Table 6, 79 Fed. Reg. at 36,990, and Table 44, *Id.* at 37,043 of the Proposed Rule with 79 Fed. Reg. at 36,945. Even if EPA had authority to change the existing MACT standards in ways not required to address residual risk or new technology, the Agency would have to provide a cogent explanation of why the old rule was unacceptable and the new rule is necessary. EPA has not done so here. The proposed new general duty provisions should be deleted.

EPA should simply delete proposed sections 63.642(n) and 63.1570(c) from the final rule. If EPA fails to do so, however, it would need to re-propose the provision with some explanation of the basis and purpose for the provision, to allow the public an opportunity to provide meaningful comments, as required by CAA section 307(d)(3). The SSM Coalition notes as well that either the currently applicable general duty language contained in the NESHAPs General Provisions or the proposed new general duty language in proposed sections 63.642(n) and 63.1570(c) would be inconsistent with EPA’s insistence that “releases” from Relief Valves are a violation of the Proposed Standards. It would be arbitrary and capricious for EPA to promulgate regulations that require operation of Relief Valves (because they are necessary for the operation of the source consistent with safety and good air pollution control for minimizing emissions) and simultaneously state that it is a violation of the standards when those Relief Valves perform their intended function.

10. Conclusion

In summary, the SSM Coalition urges EPA to withdraw portions of the Proposed Rule that have the effect of eliminating SSM-related provisions contained in established MACT standards. Likewise, EPA should eliminate portions of the Proposed Rule that arbitrarily impose new, unachievable requirements for Relief Valves. For startup and shutdown events, EPA should, at a minimum, conduct a more-thorough analysis of whether it is indeed appropriate to apply the same emission limitations during startup and shutdown, as EPA has proposed.

EPA must consider the variety of options, as discussed in these comments, that it has for addressing excess emissions during SSM events, rather than merely assuming the excess emissions will not occur (in the case of startup or shutdown events) or failing to set standards and other requirements that satisfy the criteria for standard-setting in CAA section 112 (as it has for malfunction events). Finally, EPA should refrain from changing the provisions on representative stack testing and the “general duty” language that currently apply to the MACT standards.

If EPA, despite these comments, were to promulgate the Proposed Standards in their current form, the Agency would need to (1) provide a three-year compliance schedule for *all* of the new requirements, including the new treatment of SSM events, and (2) state affirmatively that EPA will exercise its enforcement discretion not to seek civil penalties, and will not impose administrative penalties, for emissions associated with the malfunctions that EPA acknowledges are an unavoidable aspect of the use of the MACT technology.

If you have any questions about these comments or wish to discuss these issues further with members of the SSM Coalition, please contact our counsel, Russell Frye, at 202-572-8267 or rfrye@fryelaw.com.

Sincerely,

American Chemistry Council
American Forest & Paper
Association
American Fuel and Petrochemical
Manufacturers
American Iron and Steel Institute
American Petroleum Institute

American Wood Council
Brick Industry Association
Council of Industrial Boiler Owners
Florida Sugar Industry
National Lime Association
North American Insulation
Manufacturers Association
Rubber Manufacturers Association
Treated Wood Council
Vegetable Oil SSM Coalition
(consisting of the Corn Refiners
Association, the National Cotton
Council, the National Cottonseed
Products Association, the National
Oilseed Processors Association,
and Sessions Peanut Company)

cc: Desk Officer for EPA, OMB-OIRA