

**Gone Are The Days of the SSM Exemption**  
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The debate over startup, shutdown and malfunction (“SSM”) emissions cuts to the heart of a core dispute between regulators and the regulated: EPA believes that emissions during SSM events are “phases of normal plant operation.” Refiners - and the rest of the regulated community - believe that SSM events are unavoidable outliers, which should not be subject to all applicable emission limits.

EPA’s position is that because excess emissions have the potential to aggravate air quality so as to prevent the attainment or interfere with the maintenance of the ambient air quality standards, all excess emissions are violations of the applicable emissions limitation - no matter the cause of the emissions event. At the same time, EPA has recognized that “the need for stringent emission limitations consistent with CAA requirements for attainment and maintenance of the NAAQS can, in limited circumstances, conflict with the reality that some sources may occasionally have difficulties in meeting those emission limitations during all phases of operations and, in particular, in the case of malfunctions that are genuinely beyond the sources’ control.”<sup>1</sup>

As this Paper will discuss, recent court decisions threaten to do away with EPA’s long-established policy on SSM excess emissions. This Paper will provide a look-back at the Agency’s articulation of its SSM policy, a review of the most recent (and most impactful) judicial decisions on the fate of the SSM exemption, and a discussion of how EPA is proposing to address the SSM exemption in two specific rulemaking actions affecting the refining community.

What Does EPA Say About the SSM Exemption?

Over the years and through a series of published guidance documents, EPA articulated its position on excess emissions caused by SSM events. Each iteration of EPA’s SSM policy demonstrates the fundamental tension between the Clean Air Act’s (“CAA”) requirement to implement the NAAQS and the reality of industrial facility operations.

In 1982, EPA published its “Policy on Excess Emissions During Startup, Shutdown, Maintenance, and Malfunctions,” wherein the Agency confessed that it incorrectly approved some of the early State Implementation Plans (“SIPs”) that provided for automatic exemptions for excess emissions during SSM events. The guidance goes on to explain that because an automatic exemption could shield excess emissions resulting from poor operation and maintenance and design, it necessarily conflicts with the CAA’s requirements. With respect to startup and shutdown emissions, EPA stated:

Startup and shutdown of process equipment are part of the normal operation of a source and should be accounted for in the planning, design and implementation of operating procedures for the process and control equipment. Accordingly, it is

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<sup>1</sup> EPA, Memorandum to Docket EPA-HQ-OAR-2012-0322, Statutory, Regulatory and Policy Context for this Rulemaking, pp. 7-8.

reasonable to expect that careful and prudent planning and design will eliminate violations of emission limitations during such periods.<sup>2</sup>

On the other hand, EPA “agree[d] that the imposition of a penalty for sudden and unavoidable malfunctions caused by circumstances entirely beyond the control of the owner and/or operator is not appropriate.”<sup>3</sup> As a way to resolve this tension, EPA recommended that states consider incorporating an “enforcement discretion approach,” which would allow a state to stand down from an enforcement action, if the source adequately demonstrated that the excess emissions were due to an unavoidable malfunction.

In 1999, EPA’s policy evolved further. The Agency endorsed SIP revisions creating an “affirmative defense” to claims for civil penalties in enforcement actions regarding excess emissions due to malfunctions. Under the affirmative defense provision, if a source demonstrated in a judicial or administrative proceeding that it has met the requirements of the regulation’s affirmative defense, then no civil penalty would be assessed. An acceptable SIP revision would require the defendant to demonstrate, among other things, that the excess emissions were caused by a sudden, unavoidable breakdown of technology, beyond the control of the owner or operator; that air pollution control equipment or processes were maintained and operated in a manner consistent with good practice for minimizing emissions; and that repairs were made in an expeditious fashion when the operator knew or should have known that applicable emission limitations were being exceeded.<sup>4</sup>

As the regulated community is well aware, EPA’s SSM-related pronouncements have not been the model of clarity. In fact, EPA recently admitted that “any misimpression that exemptions for excess emissions are permissible during planned events” may be traced back to its own statements.<sup>5</sup> For example, EPA’s follow-up to its initial guidance document stated the following:

However, for a few sources there may exist infrequent short periods of excess emissions during startup and shutdown which cannot be avoided. Excess emissions during these infrequent short periods *need not be treated as violations* providing the source adequately shows that the excess could not have been prevented through careful planning and design and that bypassing of control equipment was unavoidable to prevent loss of life, personal injury, or severe property damage. (emphasis added).<sup>6</sup>

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<sup>2</sup> EPA, Policy on Excess Emissions During Startup, Shutdown, Maintenance, and Malfunctions, Sept. 28, 1982, Attachment at p. 2.

<sup>3</sup> EPA, Policy on Excess Emissions During Startup, Shutdown, Maintenance, and Malfunctions, Sept. 28, 1982, Attachment at p. 1.

<sup>4</sup> EPA, State Implementation Plans: Policy on Excess Emissions During Startup, Shutdown, Maintenance, and Malfunctions, Sept. 20, 1999, Attachment at pp. 3-4.

<sup>5</sup> 78 Fed. Reg. 12477 (Feb. 22, 2013).

<sup>6</sup> EPA, Policy on Excess Emissions During Startup, Shutdown, Maintenance, and Malfunctions, Feb. 15, 1983, Attachment at p. 3.

According to EPA, it did not intend for regulated entities to interpret this statement as a blessing for certain startup and shutdown exemptions. Rather, the Agency now says that this statement was made “in the context of whether air agencies should exercise enforcement discretion.”<sup>7</sup>

EPA attempted another course correction with respect to its above-referenced 1999 guidance. The Agency admits that “additional confusion may have resulted from ambiguity” related to the following pronouncement:

EPA recognizes that, for some source categories, even the best available emissions control systems might not be consistently effective during startup or shutdown periods. [For certain sources in certain areas] these technological limitations may be addressed in the underlying standards themselves *through narrowly-tailored SIP revisions that take into account the potential impacts on ambient air quality caused by the inclusion of these allowances.*<sup>8</sup> (emphasis added).

EPA tells us now that this language was intended not to suggest that an exemption would be permissible, but merely to advise that the air agency could design special emission limitations that apply to sources only during startup and shutdown.<sup>9</sup>

Despite the lack of clarity, EPA’s SSM policy can be distilled into several basic elements: (1) EPA asserts that excess emissions during periods of SSM are violations of the applicable SIP emission limitations; (2) states may elect to exercise traditional enforcement discretion for violations of SIP emission limitations during periods of SSM; and (3) it may be appropriate for states to use affirmative defense provisions to provide relief from monetary penalties in the event of excess emissions from malfunctions that are beyond the control of the source.

### What Do the Courts Say About the SSM Exemption?

Two SSM-related court decisions will have a significant impact on the refining community. In 2008, the United States Court of Appeals for the District of Columbia Circuit vacated two provisions<sup>10</sup> in EPA’s regulations governing hazardous air pollutant emissions during periods of SSM. *Sierra Club v. EPA*, 551 F.3d 1019 (D.C. Cir. 2008). The court interpreted the CAA to require that emissions standards or limitations be continuous in nature and that the Part 63 SSM exemption violates the CAA’s requirements that some section 112 standards apply continuously. Specifically, the court found unconvincing EPA’s argument that the “general duty” to minimize emissions applied during SSM events in order to form a continuous limitation: “because the general duty is the only standard that applies during SSM

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<sup>7</sup> 78 Fed. Reg. 12477 (Feb. 22, 2013).

<sup>8</sup> EPA, State Implementation Plans: Policy on Excess Emissions During Startup, Shutdown, Maintenance, and Malfunctions, Sept. 20, 1999, Attachment at p. 5.

<sup>9</sup> 78 Fed. Reg. 12477 (Feb. 22, 2013).

<sup>10</sup> See 40 CFR § 63.6(f)(1) and 40 CFR § 63.6(h)(1).

events - and accordingly no Section 112 standard governs these events - the SSM exemption violates the CAA's requirements that some section 112 standards apply continuously."<sup>11</sup>

In April 2014, the United States Court of Appeals for the District of Columbia Circuit issued a critical decision in NRDC v. EPA, No. 10-1371 (D.C. Cir. April 18, 2014). In NRDC, the court held that EPA did not have the authority to establish an affirmative defense provision in the Portland cement MACT rulemaking, and under the CAA, the authority to determine a civil penalty lies solely with the courts, and not EPA. The decision further explains that a court hearing an enforcement action is able to consider any defenses raised and determine whether penalties are appropriate.

### What is the Impact on Refiners?

Now, the refining industry is facing two targeted actions by EPA designed to essentially eliminate any meaningful use of the SSM exemption.

#### *Petroleum Refinery Risk Rule*

As the refining community is well aware, the recent judicial decisions have had a significant impact on the proposed petroleum refinery risk rule.<sup>12</sup> In the preamble to the proposed rule, EPA asserts that "periods of startup, normal operations, and shutdown are all predictable and routine aspects of a source's operation."<sup>13</sup> EPA proposes to completely remove the SSM exemption in 40 CFR part 63, Subparts CC and UUU. And, moreover, all references to the general provisions' SSM Plan would be stricken.

EPA claims that its proposal takes into account startup and shutdown periods and "expect[s] facilities can meet nearly all of the emission standards in Refinery MACT 1 and 2 during startup and shutdown" because for "most of the emission sources, air pollution control devices are operating prior to process startup and continue to operate through process shutdown."<sup>14</sup> However, as a way to address emissions from units that do not necessarily operate their control devices during startup or shutdown, EPA proposes startup and shutdown-specific limits:

- Specific PM standards for startup of FCCUs controlled with an ESP
- Specific CO standards for startup of FCCUs without a post-combustion device
- Specific standards for SRUs during periods of shutdown<sup>15</sup>

As a result of the court's decision in NRDC, EPA's refinery risk rule proposal does not include a regulatory affirmative defense provision to address malfunction events. EPA instead will "determine an appropriate response" if a source fails to comply with the applicable MACT

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<sup>11</sup> Id. at 1028.

<sup>12</sup> 79 Fed. Reg. 36880 (June 30, 2014).

<sup>13</sup> Id. at 36944.

<sup>14</sup> Id. at 36942.

<sup>15</sup> Id. at 36943.

standard as a result of a malfunction event. Factors to be considered by EPA include 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 address and correct excess emissions.<sup>16</sup> Relying on the court's language in NRDC, in the event of an EPA or citizen enforcement action, the court has the discretion to consider any defenses raised and determine whether penalties are appropriate.

### *Proposed SIP Call*

On February 22, 2013, the Federal Register published EPA's comprehensive proposed SIP call, designed to clarify "its interpretation of the requirements of the CAA to forbid exemptions from otherwise applicable emission limitations for excess emissions during planned events such as startup and shutdown in SIP provisions."<sup>17</sup> The proposed SIP call would find 36 states with SSM provisions that are "inconsistent" with the CAA and require those states to submit new SIP language for EPA approval. The proposed SIP call singled out states with automatic SSM exemptions and "inadequate" affirmative defense provisions. Consistent with its 1999 SSM Policy, EPA suggested that SIP provisions allowing for limited defenses during malfunction events that are demonstrated as "sudden, unavoidable, and unpredictable" will be consistent with the CAA.

In the wake of the NRDC decision, however, EPA completely changed course. On September 5, 2014, EPA proposed a supplemental rule expanding its SIP call to incorporate the holding in NRDC. Even though the NRDC holding pertained to a rulemaking under Section 112 of the CAA, the Agency stated "[t]he recent decision . . . has called into question the legal basis for affirmative defense provisions applicable to violations of CAA requirements. The reasoning used by that court, as logically extended to SIP provisions, indicates that neither states nor the EPA have authority to alter either the rights of other parties to seek relief or the jurisdiction of the federal courts to impose relief for violations of CAA requirements in SIPs . . ."<sup>18</sup>

EPA now believes its SSM policy is fundamentally "flawed" and unsustainable in light of the NRDC decision. The supplemental proposed rulemaking would grant the petitioners' request that EPA rescind its policy that interprets the CAA to allow affirmative defense provisions in SIPs for excess emissions during SSM events.

### What's Left for the SSM Exemption?

The courts likely have not seen the last of the SSM issue. The NRDC decision appears to conflict with Luminant Generation Co. LLC v. EPA, 714 F.3d 841 (5th Cir. 2013), decided by the Fifth Circuit Court of Appeals. In Luminant, the court upheld EPA's partial approval of an affirmative defense provision in the Texas SIP. The NRDC court specifically acknowledged the Luminant decision and clarified that its holding was limited to the MACT rulemaking at issue.

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<sup>16</sup> Id. at 36945.

<sup>17</sup> 78 Fed. Reg. 12477.

<sup>18</sup> EPA, State Implementation Plans: Response to Petition for Rulemaking, Findings of Substantial Inadequacy, and SIP Calls to Amend Provisions Applying to Excess Emissions During Periods of SSM; Supplemental Proposal to Address Affirmative Defense Provisions in States Included in the Petition for Rulemaking and in Additional States, p. 41 (pre-publication).

But, as evidenced by EPA's application of the NRDC holding to the SIP call rulemaking, EPA believes that the court's holding in that case has broad application across multiple regulatory programs. The courts may have the final say.

The refinery risk rule, once finalized, will be challenged on numerous fronts. We would expect industry to challenge EPA's position on SSM. It is reasonable to assume, however, that EPA will continue to remove the SSM exemption in future rulemakings and beyond those promulgated under the MACT program.

Finally, on the enforcement front, questions remain as to how EPA and the courts will apply the NRDC decision, and how the environmental community will step up its citizen suit strategy to take advantage of refiners' inability to rely on the SSM affirmative defense provision.