RECENT DEVELOPMENT

VACATUR OF THE STARTUP, SHUTDOWN, MALFUNCTION EXEMPTION FOR HAZARDOUS AIR POLLUTANT CONTROL UNDER SECTION 112 OF THE CLEAN AIR ACT: PROPOSED AGENCY ACTIONS AND POTENTIAL IMPACTS

West Rhoden*

I. ISSUE

The Environmental Protection Agency’s (“EPA”) regulations promulgated under § 112 of the Clean Air Act (“CAA”) for sources emitting Hazardous Air Pollutants (“HAPs”) include exemptions for compliance with relevant standards during periods of startup, shutdown, or malfunction (“SSM”).¹ On December 19, 2008, the D.C. Circuit Court of Appeals issued its opinion vacating these exempting provisions,² and the EPA subsequently proposed a number of actions to respond to the decision through subsequent regulation and special enforcement based on source-type analyses.³

The most recent attempts by private environmental proponent groups to enforce the provisions of the CAA include suits against industry members for “emission events” reported to state agencies, which normally occur during malfunction or

* West Rhoden is a second year law student at the University of Houston Law Center.


These emissions events constitute air pollutant releases in excess of New Source Review ("NSR") permit limitations and other provisions of the CAA, and normally occur during periods of malfunction or non-routine operation similar to the events formerly protected from § 112 violations by the HAP SSM exemption.

This article addresses the following issues: 1) What are the EPA’s options in response to the D.C. Circuit’s opinion; 2) what EPA approaches will properly address the D.C. Circuit’s concerns with the current SSM exemptions; and 3) how can the EPA change its approach to SSM regulation to quickly address noncompliance issues for industries subject to § 112 of the CAA and avoid repetitive rule-making and litigation regarding the SSM exemption.

I. THE D.C. CIRCUIT VACATES THE SSM EXEMPTION

In 1970, Congress passed the CAA to address current and anticipated dangers to the public health and welfare from air pollutant emissions from stationary and mobile sources. The CAA delegates rule-making, adjudication, and enforcement authority to the EPA. Under the CAA, each state is required to prepare a state implementation plan (SIP), detailing the state’s tactics to reduce the concentration of certain air contaminants to levels determined to by the EPA. In addition, section 112 of the CAA requires EPA to regulate “major sources” of HAPs by using Maximum Achievable Control Technology ("MACT") to reduce emissions for newly constructed or modified sources.

Before the D.C. Circuit’s October 2009 mandate of vacatur, the EPA’s regulations addressing HAPs on source-specific bases under 40 C.F.R. § 63 included exemptions under Subpart A: General Provisions for facilities during periods of SSM.

---

5. Id.
7. Id.
8. See generally Clean Air Act, 42 U.S.C § 7410 (2008) (specifying the requirements for states to prepare and submit State Implementation Plans (SIPs) that detail the state’s strategy to reduce emissions of pollutants regulated under the CAA).
10. See 40 C.F.R. §§ 63.6(f)(1), 6(b)(1) (2006) (“emission standards set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction, and as otherwise specified in an applicable subpart”).
Under these general rules, sources subject to Part 63 must create a Startup, Shutdown, Malfunction Plan (“SSMP”), as follows:

[D]evelop a written startup, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction; and a program of corrective action for malfunctioning process, air pollution control, and monitoring equipment used to comply with the relevant standard [to address scenarios that would cause the source to exceed any] applicable emission limitation in the relevant standard.\textsuperscript{11}

The EPA’s 1994 proposed regulations for facilities subject to § 112 of the CAA required such facilities to implement an SSMP during periods of SSM.\textsuperscript{12} In 2006, however, the EPA vacated the duty to implement the SSMPs and rather required each facility to comply with the following baseline requirements during an SSM event.\textsuperscript{13}

At all times, including periods of startup, shutdown, and malfunction, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. During a period of startup, shutdown, or malfunction, this general duty to minimize emissions requires that the owner or operator reduce emissions from the affected source to the greatest extent which is consistent with safety and good air pollution control practices.\textsuperscript{14}

In addition, the EPA relaxed SSMP requirements in 2002, by determining that affected facilities were not required to submit SSMPs to the Administrator for prior approval,\textsuperscript{15} and in 2003, by restricting public access to SSMPs.\textsuperscript{16}

\begin{footnotes}
\item[13] Sierra Club, 551 F.3d at 1023.
\item[15] Sierra Club, 551 F.3d at 1023; See generally Requirements for Control Technology Determinations for Major Sources in Accordance with Clean Air Act, 67 Fed. Reg. 16,582 (Apr. 5, 2002).
\item[16] Sierra Club, 551 F.3d at 1023; See generally Requirements for Control Technology Determinations for Major Sources in Accordance with Clean Air Act, 68 Fed. Reg. 32,586, 32,591 (May 30, 2003).
\end{footnotes}
In response to the EPA’s relaxations of the SSMP program, environmental groups filed suit claiming the SSM exemptions were in violation of the unambiguous terms of § 112 of the CAA, and the EPA’s modifications to the SSMP program were “arbitrary and capricious.”\textsuperscript{17} The D.C. Circuit held that the SSM exemption was not a proper use of discretion by the EPA because the plain face of the CAA and legislative history indicate that some § 112 “emission standards” must be applied on a “continuous basis.”\textsuperscript{18} This determination was supported by the CAA definition of “emission limitation” under the general provisions of the Act.\textsuperscript{19}

The Court vacated 40 C.F.R. § 63.6(f)(1), (h)(1), which exempts facilities from compliance with specific “emission standards and limitations” and § 63.6(e)(1)(i), which provides the supplemental “safety and good air pollution control practices” requirement during SSM events.\textsuperscript{20}

II. EPA TACTICS IN THE AFTERMATH OF THE D.C. CIRCUIT MANDATE OF VACATUR

A. The EPA’s Proposed Response

On July 22, 2009, the EPA’s Office of Enforcement and Compliance Assurance (“Office”) issued a letter containing the EPA’s interpretation of the Court’s opinion and the imminent and long-term effects of the opinion. According to the Office, the Court’s mandate of vacatur will have a direct, imminent effect on some source-types, while others may not be affected by the decision for a variety of reasons.\textsuperscript{21}

First, the Court solely vacated the SSM exemptions in 40 C.F.R. § 63, Subpart A: General Provisions of the HAP regulations.\textsuperscript{22} The regulations were promulgated to address “major sources” of HAPs by setting emission limitations based on the regulated entity’s source-type.\textsuperscript{23} For example, different emission standards exist for aerospace manufacturing and hazardous waste combustors.\textsuperscript{24} The regulations for some sources simply reference the SSM exemptions in the General Provisions while other sources are given SSM protection specifically within

\textsuperscript{17} 551 F.3d at 1024.
\textsuperscript{18} Id. at 1028.
\textsuperscript{19} Id. at 1027.
\textsuperscript{20} Id. at 1028; see 40 C.F.R. §§ 63.6(f)(1), (h)(1), (e)(1)(i).
\textsuperscript{21} See Letter from Adam Kushner, supra note 3, at 2.
\textsuperscript{22} Id. at 1.
\textsuperscript{23} Id.
\textsuperscript{24} Id. at 5–7.
the provisions addressing that source-type. Since the Court has not vacated all SSM provisions under Part 63, industry members subject to specific SSM protection are not affected by the Court’s decision.

Second, some source-types with standards simply cross-referencing the general SSM exemptions can still comply with regulatory standards despite the occurrence of an SSM event. For example, some emission limitations are expressed over a long-term average, such as an annual average, where a short-term SSM event will not likely cause the source to exceed the limitation. In addition, some standards only “impose a work practice requirement with which a source should be able to comply during SSM events.”

The proposed approach in the EPA’s letter includes specialized enforcement criteria and rule-making to allow at-risk sources to meet HAP standards during an SSM event. Enforcement options for violations resulting from the vacated general SSM protection will be analyzed on a “good faith effort to minimize emissions” and the existence and implementation of an appropriate SSMP during each violation. In addition, the EPA proposes to implement rule-making and other procedures to address source-types with probable difficulty of complying with § 112 standards due to the “technological limitations of the processes involved.”

B. Proposed Alternative Measures

The EPA’s proposed actions to address the Court’s decision on a source-type basis may be appropriate and effective long-term solutions to the major implications of the absence of SSM protection. However, modification of the SSMP program in the general provisions 40 C.F.R. § 63, especially the inclusion of more review and restriction of the SSMP program, will likely provide a more comprehensive and less arduous solution.

In dicta, the D.C. Circuit indicated that the actions by the EPA in 2002, 2003, and 2006 significantly reduced, if not completely eliminated, the safeguards and effectiveness of the SSMP program. During the 1990 CAA Amendments, Congress

26. Id. at 2–3.
27. Id. at 3.
28. Id.
29. Letter from Adam Kushner, supra note 3, at 3.
30. Id. at 4.
31. Id. at 3.
32. Id. at 4.
33. See Sierra Club, 551 F.3d at 1023, 1025.
created the Title V program, which requires major sources of “criteria pollutants” to obtain a Federal Operating Permit (“FOP”) that enumerates the permitted facility’s applicable state and federal regulations promulgated in accordance with the CAA.\(^\text{34}\) When the EPA took the initial position in 1994 to include the SSMP program into § 112 of the CAA, the EPA required facilities subject to Title V permitting to develop, submit, and implement an SSMP, which was subject to Administrator review.\(^\text{35}\) In addition, the SSMPs were to become a part of the Title V permit and failure to comply with the SSMP provisions would constitute a “deviation” or violation.\(^\text{36}\)

The D.C. Circuit concluded that the SSM exemptions were not in accordance with the CAA’s requirement of “continuous compliance” with an Administrator-mandated “emission limitation” under § 112 of the Clean Air Act.\(^\text{37}\) The CAA defines

> ‘emission limitation’ and ‘emission standard’ [to] mean a requirement established by the State or the Administrator which limits the quantity, rate, or concentration of emissions of air pollutants on a continuous basis, including any requirement relating to the operation or maintenance of a source to assure continuous emission reduction, and any design, equipment, work practice or operational standard promulgated under this chapter.\(^\text{38}\)

If the EPA incorporates the SSMPs by reference as a permit addendum into final Title V permits, the conditions of each SSMP would become enforceable provisions of the permit.\(^\text{39}\) Under this scenario, each SSMP would be operating permit terms and conditions, and the SSMP provisions would then be “requirement[s] established by the State or the Administrator” and would be “[related] to the operation or maintenance of a source to assure continuous emission reduction.”\(^\text{40}\)

\(^{34}\) See generally Clean Air Act, 42 U.S.C. § 7661 (2008) (enumerating the current requirements for Title V permit programs, applications, requirements and conditions, and notifications).

\(^{35}\) National Emission Standards for Hazardous Air Pollutants for Source Categories: General Provisions, 59 Fed.Reg. at 12,439 (“Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures (including the startup, shutdown, and malfunction plan required in paragraph (e)(3) of this section), review of operation and maintenance records, and inspection of the source.”)

\(^{36}\) Id. (“The [SSMP] shall be incorporated by reference into the source's title V permit.”).

\(^{37}\) See Sierra Club, 551 F.3d at 1027.


SSMPs provisions would become “emission standards” under the CAA.

Although the SSMP provisions only apply during malfunctions or non-routine operations that tend to exceed baseline regulatory standards, the purpose of the SSMP is to minimize emissions during SSM periods. Therefore, authorized and enforceable SSMPs incorporated into Title V permits would “assure continuous emission reduction” by reducing emissions throughout the SSM occurrence.

Through this process, the Court’s assertion that the CAA requires continuous compliance with an Administrator-mandated standard would be achieved during an SSM event by strict compliance with the provisions of the SSMP. Adopting this approach rather than performing source-specific analyses for enforcement and rule-making, as proposed in the EPA letter, offers industry members a method to achieve compliance with a federally enforceable emission limitation during SSM event rather than relying on EPA’s discretionary enforcement during potentially arduous source-specific rule-making processes. Furthermore, if the EPA initiates source-specific rule-making to continue exempting sources from any “emission limitation” during SSM events, environmental groups, such as the Sierra Club, will likely pursue further litigation to remove the SSM exemption in all of the source-specific provisions of 40 C.F.R. § 63. Although the EPA is typically involved in numerous litigation proceedings, creating enforceable emission limits through the Title V permitting program for all source types may preclude a subsequent vacatur of source-specific SSM exemptions under the MACT provisions, thereby avoiding repetitive EPA rule-making and compliance issues for industry members.

III. CITIZEN SUITS AND ALTERNATIVES TO PROPOSED EPA ACTION

The CAA provides the authority for “citizen suits” by any person “against any person (including (i) the United States, and (ii) any other governmental instrumentality or agency to the extent permitted by the Eleventh Amendment to the Constitution) who is alleged to have violated (if there is evidence that the alleged violation has been repeated) or to be in violation of (A) an emission standard or limitation under this chapter or

42. 59 Fed. Reg. at 12,439.
43. See Sierra Club, 551 F.3d at 1021; see 59 Fed. Reg. at 12,439.
44. See Letter from Adam Kushner, supra note 3.
an order issued by the Administrator or a State with respect to such a standard or limitation."  

Recent citizen suits have been filed by environmental groups against industry members for violation of state-issued NSR permits, which set federally enforceable emission limits and operating conditions for new or modified sources in accordance with the relevant SIP. For example, the environmental groups Sierra Club and Environmental Texas filed suits against Shell Oil Company and Chevron Phillips Chemical Company, LP in January 2008 and August 2009, respectively, for emission events reported to the state administering agency, the Texas Commission on Environmental Quality ("TCEQ"). These emission events normally occur due to "equipment breakdowns, malfunctions, and other non-routine activities." Both Shell Oil and Chevron are required to report exceedances of their NSR permits, and the citizen suits were filed under the CAA citizen suits provision for violations of "emission standards and limitations" established in the NSR permits.

The D.C. Circuit's mandate to vacate the SSM exemption in the general provisions of 40 C.F.R. § 63 opens another venue for environmental groups to file suits for violations of the emission standards and limitations of the CAA during SSM events. According to the July 2009 EPA letter, the Court's mandate made the general SSM exemption immediately "null and void." The recent suits filed by Sierra Club and Environmental Texas demonstrate a trend towards suits addressing emission limitation exceedances during periods of non-routine facility operation. In response to the Court's mandate and until the EPA properly resolves the regulatory gap, other environmental groups are likely to include violations under § 112 of the CAA for failure to comply with emission standards or limitations during SSM events in upcoming citizen suits.

46. Permit Requirements, 40 C.F.R. 51.165(a)(1)(xiv) (2006) ("Federally enforceable means all limitations and conditions which are enforceable by the Administrator, including those requirements developed pursuant to 40 CFR parts 60 and 61, requirements within any applicable State implementation plan, any permit requirements established pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR part 51, subpart I, including operating permits issued under an EPA-approved program that is incorporated into the State implementation plan and expressly requires adherence to any permit issued under such program.") (emphasis added): see generally Press Release, Environment America, supra note 4.
47. Press Release, Environment America, supra note 4.
48. Id.
49. Id.
50. See Letter from Adam Kushner, supra note 3, at 2.
51. Id.
52. See generally Press Release, Environment America, supra note 4.
The EPA’s memorandum includes proposals for discretionary enforcement of violations during a SSM event, depending on a number of factors, including “good faith efforts to minimize emission” and the presence and implementation of an appropriate SSMP.\textsuperscript{53} Discretionary enforcement will not preclude environmental groups from filing suit against industry members for unauthorized exceedances of MACT standards during SSM periods. Furthermore, the EPA proposes to initiate source-specific rule-making to make compliance with the standards easier during SSM events, or possibly to include SSM exemptions in all source-specific regulations of 40 C.F.R. § 63 to circumvent the D.C. Circuit’s decision, which vacates only the SSM exemption in the general provisions of the MACT regulations.\textsuperscript{54}

The EPA’s proposed corrective actions will not likely satisfy environmental groups, but rather will encourage citizen suits for emission limitation violations during SSM periods. The recent citizen suits addressing emission events imply that environmental groups are beginning to take a harder stance against CAA emission limitations violations during periods of equipment malfunction or non-routine activity.\textsuperscript{55} These suits indicate a potential shift in public policy and perception, placing the burden on industry members to mitigate emission events rather than placing the burden on the exposed public.\textsuperscript{56} Since SSM exemptions occur during these same scenarios, environmental groups will most likely scrutinize the EPA’s actions addressing the vacated general SSM exemption.\textsuperscript{57}

To fully comply in an expedited manner with the D.C. Circuit’s mandate that facilities comply with a federally enforceable emission limit at all times, the EPA should 1) incorporate SSMPs as permit addendums into each facility’s Title V permit, 2) utilize the Title V permit administrative revision process to expedite incorporation of the SSMPs, and 3) continue to ensure compliance with SSMPs during periods of malfunction through the periodic and immediate self-reporting requirements for malfunction events under 40 C.F.R. § 63.10.

By requiring Title V-permitted facilities to submit “administrative permit amendments” to the EPA or administering state agency to initially incorporate the SSMPs by reference into the Title V permit, the EPA essentially makes the

\textsuperscript{53} See Letter from Adam Kushner, \textit{supra} note 3, at 2–3.

\textsuperscript{54} Id. at 4.

\textsuperscript{55} See generally \textit{Press Release, Environment America, supra} note 4.

\textsuperscript{56} See generally id.

\textsuperscript{57} See generally id.; See generally Letter from Adam Kushner, \textit{supra} note 3.
SSMP provisions federally enforceable emission standards.\textsuperscript{58} Administrative permit amendments constitute a streamlined process by which the EPA Administrator can alter Title V permits with minimal notification requirements if the proposed change to the Title V permit “requires more frequent monitoring or permitting by the permittee.”\textsuperscript{59} Although parties subject to the MACT standards are already required to monitor their processes according to a SSMP during periods of non-routine operation, the EPA has the discretion to allow administrative permit amendments for changes to the Title V permit “[incorporate] any other type of change which the Administrator has determined . . . to be similar to” an increase in monitoring requirements.\textsuperscript{60} To ease the permit amendment process cost and time expenditure of both the EPA and industry members, the EPA should exercise this authority and allow companies to incorporate SSMPs into Title V permits through administrative permit amendments.

In addition, the EPA can authorize any changes made to an SSMP under the Title V permit program through “operational flexibility.” Under 40 C.F.R. § 70.4(d)(3)(viii), Title V permitting programs “must allow changes within a permitted facility without requiring a permit revision, if the changes are not modifications under any provision of title I of the act and the changes do not exceed the emissions allowable under the permit.”\textsuperscript{61} The term “modification” as defined in § 112 of Title I of the CAA includes “any physical change in, or change in the method of operation of, a major source which increases the actual emissions of any hazardous air pollutant emitted by such source by more than a de minimis amount or which results in the emission of any hazardous air pollutant not previously emitted by more than a de minimis amount.”\textsuperscript{62} The alteration of an SSMP alone does not constitute a physical change or change of operation of a major source.\textsuperscript{63} Although SSMP revisions may occur as a result of a physical or operational change, the statute addresses such modifications under other state and federal permitting requirements.\textsuperscript{64} Furthermore, the terms of an SSMP

\textsuperscript{58} See State Operating Permit Programs: Permit Contents, 40 C.F.R. § 70.6(b)(1) (2009) (“All terms and conditions in a part 70 permit, including any provisions designed to limit a source’s potential to emit, are enforceable by the Administrator and citizens under the Act.”).

\textsuperscript{59} Permit Issuance, Renewal, Reopenings, and Revisions, 40 C.F.R. § 70.7(d)(1)(iii) (2009).

\textsuperscript{60} Id.


\textsuperscript{63} See id.

\textsuperscript{64} Compliance with Standards and Maintenance Requirements, 40 C.F.R. § 63.6(o)(3)(viii) (2009).
do not by themselves increase emissions of HAPs but rather serve to mitigate emission standard violations. Therefore, changes to SSMPs should be addressed through the Title V permitting program’s operational flexibility provision, which requires minimal notification requirements, including “a brief description of the change within the permitted facility, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.”

The initial incorporation of SSMPs by reference through the administrative permit amendment process serves to create federally enforceable emission standards through the Title V permit, while the subsequent SSMP changes in the permit through operational flexibility provides the EPA with specific examples of SSM actions taken by the facility during non-routine operation. After reviewing these notifications, the EPA may or may not choose to perform a full review of the submitting parties’ SSMPs, creating an additional check on the SSMP program. Furthermore, industry members subject to MACT standards are required to submit periodic and immediate reports after SSM events which detail the corrective actions taken, any exceedance of an applicable emission standard, and any deviations from the facility’s SSMP. The two-tier review of SSMPs through operational flexibility notification and SSMP reporting requirements provide safeguards against improper procedures during SSM events. The process can potentially prompt a review of the SSMPs by the EPA or an administering state agency.

Significant cost and time dedication will be required both by industry and the EPA to initially incorporate SSMPs into Title V permits and address subsequent changes in SSMPs. However, this streamlined process protects industry members and the EPA from potentially large litigation costs resulting from citizen suits much more than the EPA’s proposed discretionary enforcement during source-type rule-making. Furthermore, upon submittal of administrative permit amendments and operational flexibility notification, the permittee is authorized to operate under the

67. See State Operating Permit Programs: Permit Contents, 40 C.F.R. § 70.6(b)(1); see 40 C.F.R. § 70.4(b)(12)(i)(A) (2009).
70. See Letter from Adam Kushner, supra note 3, at 2–3; see generally Press Release, Environment America, supra note 4.
Therefore, requiring immediate submittal of administrative permit amendments to the Title V permit program’s administering authority provides a prompt EPA response to the D.C. Circuit’s vacatur of the SSM exemption, and protects industry members from potential repercussions from noncompliance of MACT standards during SSM events.

IV. CONCLUSION

On October 8, 2009 the D.C. Circuit of Appeals vacated the SSM exemption in the general provisions of the regulations promulgated to address HAP “major sources” under § 112 of the CAA. The mandate immediately made “null and void” provisions which many industry sources have relied upon to avoid violations of HAP regulations during periods of non-routine operations.

The EPA has proposed several response actions, including discretionary enforcement and source-specific rule modifications to lessen the potential significant impacts of the Court’s decision on facilities normally relying on the general SSM exemption. However, these proposed actions are likely insufficient to efficiently and adequately address the concerns of the Court, environmental groups, and industry members. This is especially true considering the recent citizen suits against industry members for CAA violations during malfunction and non-routine periods.

In lieu of discretionary enforcement during source-specific analyses, the EPA should require facilities to immediately submit administrative permit amendments, incorporating SSMPs by reference into each Title V permit. In addition, incorporating SSMPs by reference into a facility’s Title V permit make the SSMP provisions federally enforceable. This approach addresses the Court’s concern that the SSM exemption prevents compliance with some § 112 emission limitations or standards at all times. In addition, the approach addresses the exertions by the plaintiffs in Sierra Club that the SSMPs should be enforceable and reviewed by the Administrator. By incorporating SSMPs into Title V permits through a streamlined

72. Sierra Club, 551 F.3d at 1021.
73. Letter from Adam Kushner, supra note 3, at 2.
74. Id. at 3.
75. See generally Press Release, Environment America, supra note 4.
76. See State Operating Permit: Permit Contents, 40 C.F.R. § 70.6(b)(1) (2009).
77. Sierra Club, 551 F.3d at 1022.
78. Id.
permitting process, the EPA can protect industry members from continued noncompliance during the time-consuming process of addressing the SSM exemption for each source-type, and allow additional time for the EPA to consider other prudent measures to respond to the SSM exemption vacatur. Furthermore, review of industry SSM reports and SSMP operational flexibility notifications by the EPA or other administering agencies provides safeguards against abuse of the SSMP program and addresses some of the important policy issues indicated by the Court and the plaintiffs in the D.C. Circuit opinion.