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Petition to Find Inadequate and Correct Several State Implementation Plans under Section 110 of the Clean Air Act Due to Startup, Shutdown, Malfunction, and/or Maintenance Provisions

Pursuant to the Clean Air Act ("CAA" or "the Act"),[1] the Administrative Procedure Act[2] and the First Amendment of the Constitution of the United States of America, Sierra Club files this petition with the Administrator of the United States Environmental Protection Agency ("EPA") and requests her to take the following actions:

1) Pursuant to CAA § 110(k)(5), 42 U.S.C. § 7410(k)(5), notify the states listed below of the substantial inadequacies in their state implementation plans and finalize a rule requiring the states to revise their plans as described below;
2) Or, alternatively, pursuant to CAA § 110(k)(6), 42 U.S.C. § 7410(k)(6), determine that the Administrator's action approving the implementation plan provisions listed below was in error and revise those approvals so that the SIPs are brought into compliance with the requirements of the CAA, or promulgate a Federal Implementation Plan (FIP) to do the same, as described below.

INTRODUCTION

State Implementation Plans ("SIPs") are required under the Act to ensure attainment and maintenance of the health- and welfare-based National Ambient Air Quality Standards ("NAAQS"). But in some states, emissions in excess of SIP limitations during periods of startup, shutdown, malfunction[3] and/or scheduled maintenance ("SSM")[4] are exempt from

[1] 42 U.S.C. §§ 7401 et seq.
[2] 5 U.S.C. §§ 500 et seq.
[3] As used by EPA, the term "malfunction" refers to "sudden and unavoidable breakdown of process or control equipment." Memorandum from Steven A. Herman, Assistant Administrator for Enforcement and Compliance Assurance, and Robert Perciasepe, Assistant Administrator for Air and Radiation, U.S. EPA on State Implementation Plans (SIPs): Policy Regarding Excess Emissions During Malfunctions, Startup, and Shutdown to Regional Administrators, Regions I – X (Sep. 20, 1999) [hereinafter 1999 Memorandum], Attachment at 1 n.1. Some states use terms such as "upset" and "breakdown" to denote substantially similar occurrences. *See, e.g.*, Alaska Admin. Code tit. 18 § 50.240(f) *and* 401 Ky. Admin. Regs. 50:055 § 1(4)(e).
[4] The acronym "SSM" is most commonly used to denote startup, shutdown and malfunction but not scheduled maintenance. However, several states have included provisions that allow special treatment for excess emissions during scheduled maintenance and those provisions are included in this petition.

compliance. These SSM exemptions undermine the emission limits in SIPs and threaten states' abilities to achieve and maintain compliance with NAAQS, thereby threatening public health and public welfare, which includes agriculture, historic properties and natural areas. Despite the Act's requirements and EPA's view that SSM exemptions have no place in SIPs, many of these provisions remain effective and enforceable as a matter of federal law due to prior EPA SIP approvals. EPA has encouraged the Regional Administrators to work with the states in their regions to remove or fix the SSM provisions in their SIPs.[5] EPA recently required Utah to revise the excess emissions provisions in its SIP in order to comply with the Clean Air Act and longstanding EPA guidance.[6] Nevertheless, many states still have SSM provisions that are inconsistent with the Act. SSM exemptions continue to undermine the NAAQS, Prevention of Significant Deterioration ("PSD") increments, and visibility requirements of the Act. EPA should act now to close these loopholes, some of which have shielded sources from compliance for decades.

[5] 1999 Memorandum at 4.

[6] Finding of Substantial Inadequacy of Implementation Plan; Call for Utah State Implementation Plan Revision, 76 Fed. Reg. 21,639 (Apr. 18, 2011).

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LEGAL BACKGROUND

I. Clean Air Act Requirements for State Implementation Plans

Section 110 of the Clean Air Act requires states to submit SIPs to ensure that each state attains and maintains compliance with each of the NAAQS promulgated by EPA.[7] The plans must include "enforceable emission limitations" sufficient to meet the Act's requirements.[8] The plans must also prohibit the emission of air pollution that contributes to nonattainment or interference with maintenance of the NAAQS in any other state.[9] The states must have adequate authority to carry out their implementation plans.[10] In areas that have not attained the NAAQS, the plan must provide for attainment and include enforceable emissions limitations to that end.[11]

In addition to the states' authority to enforce their SIPs, sections 113 and 304 of the Act create enforcement mechanisms for EPA and citizens.[12] The Administrator is empowered to determine whether a person has violated or is violating any SIP provision and issue an order to comply or assess civil penalties.[13] The district courts, upon complaint by the Administrator or by a citizen, have jurisdiction to assess relief whenever a person has violated or is violating a SIP or permit.[14]

II. Prior EPA Guidance

EPA has long held that exemptions for excess emissions[15] due to SSM are inconsistent with the Act and should not be included in SIPs. In the late 1970s, EPA first publically noted unacceptable SSM exemptions and explained that these exemptions should not be allowed in SIPs.[16] At least two circuit courts of appeals have upheld EPA's interpretation of the Clean Air Act.

> The longstanding policy makes clear that excess emissions resulting from malfunctions are violations of the Clean Air Act, for such emissions can interfere with attainment of the national air standards. … We defer to the EPA's

[7] 42 U.S.C. § 7410(a)(1).
[8] *Id.* § 7410(a)(2)(A).
[9] *Id.* § 7410(a)(2)(D)(i).
[10] *Id.* § 7410(a)(2)(E).
[11] *Id.* § 7502(c)(1), (c)(2).
[12] *Id.* §§ 7413; 7604.
[13] *Id.* § 7413(a)(1), (d)(1).
[14] *Id.* §§ 7413(b), 7604(a).
[15] According to EPA's 1982 policy statement, " 'excess emission' means an air emission rate which exceeds any applicable emission limitation." Memorandum from Kathleen M. Bennett, Assistant Administrator for Air, Noise and Radiation, U.S. EPA on Policy on Excess Emissions During Startup, Shutdown, Maintenance, and Malfunctions to Regional Administrators, Regions I – X, U.S. EPA (Sep. 28, 1982) [1982 Memorandum], Attachment at 1.
[16] Approval and Promulgation of Utah SO_2 Control Strategy, 42 Fed. Reg. 21,472 (Apr. 27, 1977); Approval and Promulgation of Idaho SO_2 Control Strategy, 42 Fed. Reg. 58,171 (Nov. 8 1977). The Administrator believed that "the issuance of an administrative order or the initiation of judicial action following a period of excess emissions caused by circumstances beyond the control of the operator may not be appropriate." But "the automatic granting of a regulatory exemption for these periods of excess emissions is not a suitable remedy." Approval and Promulgation of Utah SO2 Control Strategy, 42 Fed. Reg. at 21,472.

> longstanding policy, for the policy is a reasonable interpretation of the Clean Air Act.

Ariz. Pub. Serv. Co. v. U.S. EPA, 562 F.3d 1116, 1129 (10th Cir. 2009); *see also* Mich. Dep't of Envtl. Quality v. Browner, 230 F.3d 181 (6th Cir. 2000).

A. Bennett Memoranda in 1982 and 1983

EPA further explained its policy on SSM provisions in SIPs in two memoranda, issued by then Assistant Administrator for Air, Noise and Radiation, Kathleen M. Bennett in 1982 and 1983.[17] The foundation of EPA's policy was – and continues to be – that all excess emissions must be considered violations of the applicable standards.[18] All excess emissions should be treated as violations because any excess emission may "cause or contribute to violations of the [NAAQS]."[19]

States usually have the inherent authority to decide whether or not they will proceed to enforce limitations. Thus, a state need not adopt any SSM provision at all in its SIP.[20] EPA distinguishes excess emissions during malfunctions from excess emissions during startup, shutdown and scheduled maintenance. If the state decides to codify its approach to excess emissions during malfunctions, EPA policy allows an "enforcement discretion approach."[21]

> Such an approach can require the source to demonstrate to the appropriate State agency that the excess emissions, though constituting a violation, were due to an unavoidable malfunction. Any malfunction provision must provide for the commencement of a proceeding to notify the source of its violation and to determine whether enforcement action should be undertaken for any period of excess emissions.[22]

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[17] 1982 Memorandum; Memorandum from Kathleen M. Bennett, Assistant Administrator for Air, Noise and Radiation, U.S. EPA on Policy on Excess Emissions During Startup, Shutdown, Maintenance, and Malfunctions to Regional Administrators, Regions I – X, U.S. EPA (Feb. 15, 1983) [1983 Memorandum].

[18] 1982 Memorandum at 1.

[19] *Id.* EPA stated:

> Without clear definition and limitations, these automatic exemption provisions could effectively shield excess emissions arising from poor operation and maintenance or design, thus precluding attainment. Additionally, by establishing an enforcement discretion approach and by requiring the source to demonstrate the existence of an unavoidable malfunction on the source, good maintenance procedures are indirectly encouraged.

Id.

[20] *Id.*, Attachment at 1.

[21] *Id.*

[22] *Id.* The state should consider five criteria in deciding whether or not to pursue enforcement action for excess emissions allegedly due to a malfunction:

1. To the maximum extent practicable the air pollution control equipment, process equipment, or processes were maintained and operated in a manner consistent with good practice for minimizing emissions;
2. Repairs were made in an expeditious fashion when the operator knew or should have known that applicable emission limitations were being exceeded. Off-shift labor and overtime must have been

In no case, however, should excess emissions during predictable events be eligible for non-enforcement under this policy. According to the policy in the 1982 and 1983 Memoranda, "[a]ny activity or event which can be foreseen and avoided or planned, falls outside of the definition of sudden and unavoidable breakdown of equipment."[23] Startup and shutdown of the source and scheduled maintenance are all predictable events that either occur during normal operation or can be planned.[24]

EPA noted that scheduled maintenance can generally be planned to coincide with shutdown of the source. "Consequently, excess emissions during periods of scheduled maintenance should be treated as a violation unless a source can demonstrate that such emissions could [not] have been avoided through better scheduling for maintenance or through better operation and maintenance practices."[25]

B. Hermann & Perciasepe Memorandum in 1999

In 1999, EPA reaffirmed and clarified the approaches to SSM SIP provisions it had endorsed in the 1982 and 1983 memoranda.[26] EPA also outlined another approach – an affirmative defense – that at that time EPA believed states could include in their SIPs to address excess emissions caused by SSM.[27]

EPA reiterated that, in its view, enforcement discretion is the best approach to excess emissions caused by SSM conditions.[28] In the 1999 memorandum, EPA clarified that SIP provisions – whether they codify a state's inherent enforcement discretion or implement an affirmative defense – must not impede the ability of EPA or citizens independently to bring enforcement actions.[29]

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utilized, to the extent practicable, to ensure that such repairs were made as expeditiously as practicable;

3. The amount and duration of the excess emissions (including any bypass) were minimized to the maximum extent practicable during periods of such emissions;
4. All possible steps were taken to minimize the impact of the excess emissions on ambient air quality; and
5. The excess emissions are not part of a recurring pattern indicative of inadequate design, operation, or maintenance.

Id., Attachment at 1-2.

[23] *Id.*, Attachment at 2; 1983 Memorandum, Attachment at 2.

[24] 1983 Memorandum. Attachment at 3.

[25] *Id.* The original text omitted the word "not," however the context clearly indicates that it was intended.

[26] 1999 Memorandum.

[27] *Id.* at 2.

[28] *Id.* ("The best assurance that excess emissions will not interfere with NAAQS attainment, maintenance, or increments is to address excess emissions through enforcement discretion.").

[29] *Id.* at 3 ("[EPA] does not intend to approve SIP revisions that would enable a State director's decision to bar EPA's or citizens' ability to enforce applicable requirements. Such an approach would be inconsistent with the regulatory scheme established in Title I of the Clean Air Act."); *see also id.*, Attachment at 2 ("[A] determination by the state not to take enforcement action would not bar EPA or citizen action."); Approval and Disapproval and Promulgation of Colorado Affirmative Defense Provisions for Startup and Shutdown, 71 Fed. Reg. 8958, 8959-60 (Feb. 22, 2006) (disapproving section II.J.5 because it could be interpreted to preclude EPA and citizen enforcement).

EPA allowed states, in consultation with EPA, to address certain excess emissions during startup and shutdown with "narrowly-tailored SIP revisions that take … technological limitations into account … ."[30] These narrow provisions may not apply "where a single source or small group of sources has the potential to cause an exceedance of the NAAQS or PSD increments."[31] What has the potential to cause an exceedance of a NAAQS or PSD increment has changed over time as revised NAAQS have become more protective, *e.g.* ozone, lead, SO_2, NOx, or new standards have been added, *e.g.* $PM_{2.5}$ NAAQS and $PM_{2.5}$ increments. This is especially true in the context of the revised SO_2 and NOx NAAQS which are now based on a one-hour averaging time, making them very susceptible to violation during SSM events. Thus, SIP provisions that in the past did not risk violating NAAQS and increments may now do so and thus, even according to EPA's past policy, no longer be acceptable.

In any event, EPA's past policy provided that these types of revisions were only appropriate when several criteria were met:

1. The revision must be limited to specific, narrowly defined source categories using specific control strategies (e.g., cogeneration facilities burning natural gas and using selective catalytic reduction);
2. Use of the control strategy for this source category must be technically infeasible during startup or shutdown periods;
3. The frequency and duration of operation in startup or shutdown mode must be minimized to the maximum extent practicable;
4. As part of its justification of the SIP revision, the state should analyze the potential worst-case emissions that could occur during startup and shutdown;
5. All possible steps must be taken to minimize the impact of emissions during startup and shutdown on ambient air quality;
6. At all times, the facility must be operated in a manner consistent with good practice for minimizing emissions, and the source must have used best efforts regarding planning, design, and operating procedures to meet the otherwise applicable emission limitation; and
7. The owner or operator's actions during startup and shutdown periods must be documented by properly signed, contemporaneous operating logs, or other relevant evidence.[32]

In addition to the enforcement discretion approach and "narrowly-tailored" alternative limitations, the 1999 memorandum specified the situations in which, in EPA's view at that time, a state can provide an affirmative defense for excess emissions due to SSM.[33] Many states have SIP provisions, resembling affirmative defenses, that offer relief to sources which have exceeded emissions limitations based upon a certain showing but without specifying the procedure by which the showing is made and judged.[34] A true affirmative defense, though, is "raised in the

[30] 1999 Memorandum, Attachment at 4-5.
[31] *Id.*, Attachment at 5.
[32] *Id.*
[33] *Id.* at 2.
[34] *See*, *e.g.*, Alaska Admin. Code tit. 18 § 50.240; 326 Ind. Admin. Code 1-6-4; Utah Admin. Code r. R307-107.

context of an enforcement proceeding before an independent trier of fact," and is not determined by the state.[35]

EPA guidance set forth several limitations to the potential use of such affirmative defenses. They may never apply to requests for injunctive relief, but must be limited to requests for civil penalties.[36] This is because "EPA has a fundamental responsibility under the Clean Air Act to ensure that SIPs provide for attainment and maintenance of the [NAAQS] and protection of the [PSD] increments."[37] Further, affirmative defenses may not be available "[w]here a single source or small group of sources *has the potential* to cause an exceedance of the NAAQS or PSD increments … ."[38] In these situations, "an affirmative defense approach will not be adequate to protect public health and the environment…," and enforcement discretion is the only appropriate approach to excess emissions.[39] And finally, affirmative defenses should not apply to any limitations "that derive from federally promulgated performance standards or emission limits, such as new source performance standards (NSPS) and national emissions standards for hazardous air pollutants (NESHAPS)."[40]

EPA has enumerated additional elements that should be included if a state chooses to adopt an affirmative defense for excess emissions due to malfunctions or startup and shutdown. EPA's guidance states that an affirmative defense to excess emissions during malfunctions must consist of the following elements, on which the defendant must have the burden of proof:

1. The excess emissions were caused by a sudden, unavoidable breakdown of technology, beyond the control of the owner or operator;
2. The excess emissions (a) did not stem from any activity or event that could have been foreseen and avoided, or planned for, and (b) could not have been avoided by better operation and maintenance practices;
3. To the maximum extent practicable the air pollution control equipment or processes were maintained and operated in a manner consistent with good practice for minimizing emissions;
4. Repairs were made in an expeditious fashion when the operator knew or should have known that applicable emission limitations were being exceeded. Off-shift labor and overtime must have been utilized, to the extent practicable, to ensure that such repairs were made as expeditiously as practicable;
5. The amount and duration of the excess emissions (including any bypass) were minimized to the maximum extent practicable during periods of such emissions;
6. All possible steps were taken to minimize the impact of the excess emissions on ambient air quality;

[35] 1999 Memorandum, Attachment at 2 n.4; Approval and Disapproval and Promulgation of Colorado Affirmative Defense Provisions for Startup and Shutdown, 71 Fed. Reg. 8958, 8960 n.3; Envtl. Prot. Agency, *Excess Emissions during SSM Meeting: EPA Presentation*, 6 (presented Jan. 19, 2005), Document ID EPA-R08-OAR-2010-0909-0031.
[36] 1999 Memorandum at 2; *id.*, Attachment at 3 (malfunction), 6 (startup and shutdown).
[37] *Id.* at 2 (citing 42 U.S.C. § 7410(a), (*l*)).
[38] *Id.* at 3 (emphasis added).
[39] *Id.*
[40] *Id.*, Attachment at 3.

7. All emission monitoring systems were kept in operation if at all possible;
8. The owner or operator's actions in response to the excess emissions were documented by properly signed, contemporaneous operating logs, or other relevant evidence;
9. The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and
10. The owner or operator properly and promptly notified the appropriate regulatory authority.[41]

EPA guidance likewise states that an affirmative defense for excess emissions for startup and shutdown must have similar, but distinct, elements:

1. The periods of excess emissions that occurred during startup and shutdown were short and infrequent and could not have been prevented through careful planning and design;
2. The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;
3. If the excess emissions were caused by a bypass (an intentional diversion of control equipment), then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
4. At all times, the facility was operated in a manner consistent with good practice for minimizing emissions;
5. The frequency and duration of operation in startup or shutdown mode was minimized to the maximum extent practicable;
6. All possible steps were taken to minimize the impact of the excess emissions on ambient air quality;
7. All emission monitoring systems were kept in operation if at all possible;
8. The owner or operator's actions during the period of excess emissions were documented by properly signed, contemporaneous operating logs, or other relevant evidence; and
9. The owner or operator properly and promptly notified the appropriate regulatory authority.[42]

ARGUMENT

I. Affirmative defenses for excess emissions in judicial proceedings are contrary to the Clean Air Act. EPA should revise its policy to disallow them in SIPs, and issue a SIP call requiring states to eliminate them.

The Clean Air Act unambiguously grants jurisdiction to the district courts to determine the penalties that should be assessed in an enforcement action involving the violation of an emission limit. The Act states that, in civil actions brought by EPA in the district courts, "such court shall have jurisdiction to restrain such violation, to require compliance, to assess such civil penalty, …

[41] *Id.*, Attachment at 3-4.
[42] *Id.*, Attachment at 6.

and to award any other appropriate relief."[43] In actions brought by citizens, "[t]he district court shall have jurisdiction, … to enforce such emission standard or limitation, or such an order, … and to apply any appropriate civil penalties … ."[44]

Congress also specified in the Act the list of factors that the district courts are to consider in assessing penalties:

> the Administrator or the court, as appropriate, shall take into consideration (in addition to such other factors as justice may require) the size of the business, the economic impact of the penalty on the business, the violator's full compliance history and good faith efforts to comply, the duration of the violation as established by any credible evidence (including evidence other than the applicable test method), payment by the violator of penalties previously assessed for the same violation, the economic benefit of noncompliance, and the seriousness of the violation.[45]

EPA's policy on affirmative defenses is inconsistent with these provisions of the Clean Air Act because the inclusion of an affirmative defense provision in a SIP limits the courts' discretion – granted by Congress – to assess penalties for Clean Air Act violations. In the CAA Congress imposed strict liability for violations,[46] and specified how the size of the penalty should be determined.[47] However, the inclusion of an affirmative defense in a SIP could enable a defendant to avoid any penalty. The elements of the affirmative defenses that EPA allows ignore some of the penalty criteria that the Act instructs the district courts to weigh when assessing penalties for violations. The affirmative defenses omit assessment of "the size of the business," "the economic impact of the penalty on the business," "the violator's full compliance history …," the economic benefit of noncompliance," and "the seriousness of the violation."[48] The affirmative defense also prevents courts from considering "other factors as justice may require."[49] Preventing the district courts from considering these statutory factors is not a permissible interpretation of the Clean Air Act. Congress has spoken to the precise issue of what factors are relevant for assessing penalties and EPA therefore has no authority to supplant that Congressional intent.

Petitioner requests, first, that EPA rescind its policy allowing states to include in their SIPs affirmative defenses to excess emissions. Second, petitioner requests EPA to find that all SIPs containing an affirmative defense to penalties for excess emissions are substantially inadequate

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[43] 42 U.S.C. § 7413(b).
[44] *Id.* § 7604(a).
[45] *Id.* § 7413(e)(1).
[46] *See, e.g.*, United States v. Dell'Aquilla, 150 F.3d 329, 332 (3d Cir.1998); United States v. B & W Inv. Props., 38 F.3d 362, 367 (7th Cir.1994).
[47] For example, in no case should polluters be able to "obtain an economic benefit vis-à-vis their competitors due to their non-compliance with environmental laws." Pub. Interest Research Group of New Jersey, Inc. v. Powell Duffryn Terminals, Inc., 913 F.2d 64, 79 (3d Cir.1990); *see also* United States v. Mun. Auth. of Union Twp., 150 F.3d 259, 265 (3d Cir.1998).
[48] 42 U.S.C. § 7413(e)(1).
[49] *Id.*

to comply with the requirements of the Clean Air Act, and issue a call for each of the states with such a SIP to revise it in conformity with the requirements of the Act.

Alternatively, in the event that EPA denies this request, petitioner requests that EPA require states with affirmative defenses to revise them so that they are consistent with EPA's policy by finding that noncompliant affirmative defenses are substantially inadequate to comply with the requirements of the Clean Air Act, as EPA has interpreted it, and issue a call for each of the states with such a SIP to revise it in conformity with the requirements of the Act.

II. SSM exemptions undermine the ability of states, EPA, and citizens to protect the NAAQS, PSD increments, and visibility. They must be removed from all SIPs.

Beyond affirmative defenses discussed above, SIPs have two basic types of impermissible SSM exemptions. Automatic exemptions are those that create categories of excess emissions that are not violations of the SIP. Florida's SIP, for example, provides that "[e]xcess emissions resulting from startup, shutdown or malfunction of any source *shall be permitted* providing …" that certain criteria are met.[50] Such automatic exemptions cannot ensure that the SIP meets the requirements of CAA § 110.

Discretionary exemptions, on the other hand, create categories of excess emissions that may be excused by the state enforcement authority. North Carolina's SIP, for instance, provides that "[a]ny excess emissions that do not occur during start-up or shut down shall be considered a violation of the appropriate rule *unless the owner or operator* of the source of the excess emissions *demonstrates to the director*, that the excess emissions are the result of a malfunction."[51] Exemptions that may be granted by the state do not comply with the enforcement scheme of Title I of the Act because they undermine enforcement by EPA under section 113 of the Act or by citizens under section 304.

SIPs must include emission limitations designed to ensure attainment and maintenance of the NAAQS and PSD increments. Because the Act does not directly prohibit a source from causing or contributing to exceedances of the NAAQS or PSD increments, these emission limitations in SIPs are a crucial mechanism by which these ambient standards are met and maintained. SSM regulations that provide exemptions to these limitations interfere with this mechanism and thereby undermine attainment and maintenance of the NAAQS, protection of PSD increments and other CAA requirements.[52] The amount of excess emissions during SSM can be exceptionally large – many times above the limits. In fact, excess emissions can swamp the amount of pollutants emitted at other times.[53] SSM exemptions create large loopholes to the

[50] Fla. Admin. Code Ann. r. 62-210.700(1) (emphasis added).
[51] 15A N.C. Admin. Code 2D.0535(c) (emphasis added).
[52] Finding of Substantial Inadequacy and Call for Utah State Implementation Plan Revision, 75 Fed. Reg. 70,888, 70,891 (proposed Nov. 19, 2010) [Proposed Utah SIP Call].
[53] *See*, *e.g.*, Envtl. Integrity Project, *Gaming the System* 7, 8 (2004) , *available at* http://www.environmentalintegrity.org/news_reports/Report_Gaming_System.php. The Environmental Integrity Project ("EIP") defines upsets as "non-routine events, such as equipment breakdowns, startup, shutdown and maintenance, at industrial facilities that cause them to emit more pollution than allowed by their permits and applicable rules." *Id.* at 1. EIP found that upset emissions at several natural gas plants were between 35 and 163 *times* other reported annual emissions and that upset emissions at some refineries are two and a half to three times other reported annual emissions. *Id.* at 7, 8.

Act's fundamental requirement that a SIP must provide for attainment and maintenance of the NAAQs and PSD increments.

SIP provisions that automatically exempt emissions during SSM conditions prevent the SIP's emission limits from serving as "enforceable emission limitations" that meet section 110 requirements. This undermines the Clean Air Act's requirement that each SIP must include "enforceable emission limitations and other control measures … to meet the applicable requirements of [the Act]."[54] The Act defines "the terms '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* … ."[55] SSM exemptions preclude anyone, including the states, from enforcing limitations that can ensure ambient air standards are met. Further, emission limits subject to such exemptions do not constrain emissions "on a continuous basis," as the Act requires.

Since the 1970s, EPA has held the view that automatic exemptions for SSM interfere with the requirements of the Clean Air Act. According to EPA, "[i]t is our interpretation that the fundamental integrity of the CAA's SIP process and structure are undermined if emission limits relied on to meet CAA requirements related to protection of public health and the environment can be violated without potential recourse."[56]

In addition, any SIP provision that purports to vest the determination of whether or not a violation of the SIP has occurred with the state enforcement authority is inconsistent with the enforcement provisions of the Act. Section 113 allows EPA to ensure compliance by three methods: the Agency may issue an order of compliance, assess civil penalties in an administrative proceeding, or file a civil judicial action.[57] These options are available when "the Administrator finds that any person has violated or is in violation of any requirement or prohibition of an applicable plan or permit … ."[58] The Act therefore reserves the power of the Administrator to use her own judgment in deciding whether a violation has occurred. The Act also vests jurisdiction in the courts to grant relief in civil actions, whether brought by EPA or by citizens.[59] Thus citizens must also retain the ability to independently decide whether enforcement is warranted. Citizen enforcement is not merely a peripheral or interstitial measure, according to the Supreme Court, but an important aspect of enforcement.[60] The Court found that "Congress enacted § 304 specifically to encourage citizen participation in the enforcement of standards and regulations established under this Act, and intended the section to afford citizens very broad opportunities to participate in the effort to prevent and abate air pollution."[61] The power of the courts to adjudicate these cases, under the CAA, requires that they be able to determine whether or not violations have occurred. The Act does not allow decisions by state authorities to cut off any of these statutory enforcement mechanisms.

[54] 42 U.S.C. § 7410(a)(2)(A).
[55] *Id.* § 7602(k) (emphasis added).
[56] Proposed Utah SIP Call, 75 Fed. Reg. at 70,892.
[57] 42 U.S.C. § 7413(a)(1). The Act also authorizes criminal enforcement. 42 U.S.C. § 7413(c).
[58] *Id.*
[59] *Id.* §§ 7413(b), 7604(a).
[60] Pennsylvania v. Del. Valley Citizens' Council for Clean Air, 478 U.S. 546, 560 (1986).
[61] *Id.* (citations omitted).

In 1999, EPA clarified that this was also its interpretation of the Act:

> SIP provisions that give exclusive authority to a state to determine whether an enforcement action can be pursued for an exceedance of an emission limit are inconsistent with the CAA's regulatory scheme. EPA and citizens, and any court in which they seek to file an enforcement claim, must retain the authority to independently evaluate whether a source's exceedance of an emission limit warrants enforcement action.[62]

Exemptions that excuse violations or otherwise interfere with injunctive relief directly prevent EPA and citizens (and sometimes the states) from ensuring compliance with the Act.[63] Indirectly, these exemptions reduce the incentive of sources to operate in accordance with best practices and to invest in controls and equipment that protect health and the environment.[64]

Petitioner requests that EPA find that all SIPs containing an SSM exemption or a provision that could be interpreted to affect EPA or citizen enforcement are substantially inadequate to comply with the requirements of the Clean Air Act and issue a call for each of the states with such a SIP to revise it in conformity with the requirements of the Act or otherwise remedy these defective SIPs.

The analysis below of individual states' SSM provisions that follows includes generally-applicable provisions, those that apply to all pollutants and all source categories. Many states also have SIP-approved SSM provisions that pertain to specific pollutants and/or source categories. The same arguments that apply to the general SSM provisions also apply to those narrower provisions. Some pollutant and source category specific provisions have been identified, but this is not intended to be an exhaustive list as we did not read every line of every SIP provision in the country.

The analysis below of individual states' SSM provisions addresses state regulations that EPA has approved for inclusion in the states' federally-enforceable SIPs. Several states have submitted to EPA revisions to their SSM regulations; this petition generally does not address revised state regulations that are pending before EPA but have not been approved for SIP inclusion.

III. Interpretations of regulations that form the basis of EPA's SIP approval should be included in the text of state regulations rather than, or in addition to, being memorialized in correspondence.

In some cases, EPA has approved SIP provisions that, by their plain terms, do not comply with the requirements of the Clean Air Act, or even meet the various EPA policies on SSM provisions. EPA has sometimes rationalized these approvals by first obtaining letters of interpretation from the state authorities that construe the state's SSM provisions in a manner that complies with EPA guidance. However, such constructions are not necessarily apparent from

[62] Proposed Utah SIP Call, 75 Fed. Reg. at 70,893.
[63] *Id.* at 70,891.
[64] *Id.*; *see, also*, Approval and Promulgation of Utah SO_2 Control Strategy, 42 Fed. Reg. 21,472, 21,472-73 (Apr. 27, 1977); Approval and Promulgation of Idaho SO_2 Control Strategy, 42 Fed. Reg. 58,171 (Nov. 8 1977).

the text of the provisions and their enforceability may be difficult and unnecessary complex and inefficient.

When EPA approved Oklahoma's SSM provisions in 1984, for instance, it compared them, factor-by-factor, with its recently issued SSM guidance.[65] At first, EPA was unable to determine whether the regulations on their face complied with EPA's guidance.[66] EPA therefore requested clarification from Oklahoma about how the State intended to interpret and administer its regulations. After receiving two letters of clarification from Oklahoma, EPA concluded that the SSM provisions, as Oklahoma intended to execute them, did comply with EPA guidance.[67] Thus, EPA and Oklahoma purported to resolve several ambiguities in the existing SSM provisions through correspondence that was never promulgated as part of the Oklahoma SIP. Oklahoma's letters of clarification are quoted, but not reproduced, in the Federal Register notice of EPA's SIP approval.[68]

EPA recently took a similar approach to ambiguous SSM provisions in the Tennessee SIP. In an action redesignating to attainment the Knoxville 1997 8-hour ozone nonattainment area, EPA was faced with SIP provisions whose ambiguities arguably undermine the enforceability of the applicable requirements.[69] To address these ambiguities, "EPA contacted Tennessee and Knox County, requesting their interpretations of their respective rules … ."[70] In response, both Tennessee and Knox County stated that they interpret their regulations in a manner that does not preclude enforcement of emissions limitations and standards.[71] EPA accepted these interpretations for the purpose of the redesignation, but stated:

> Although EPA interprets the SIP in the same manner as indicated by the State and the County, EPA recognizes that the cited language is not as clear as would be ideal. EPA would encourage the State and County to clarify the language in any future revisions to these provisions of the SIP.[72]

In another context, EPA has recognized that statements made during the SIP approval process are not a substitute for clearly worded provisions in the SIP itself. When EPA proposed a call for Utah to revise its SSM provisions, it reviewed the original approval in which EPA had purported to limit its approval of the unacceptable SSM provision.[73] EPA now recognizes that this was not appropriate:

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[65] Revision to Oklahoma Regulation 1.5 – Reports Required; Excess Emissions During Startup, Shutdown and Malfunction of Equipment, 49 Fed. Reg. 3084, 3084 (Jan. 24, 1984).
[66] *Id.*
[67] *Id.* at 3084-85.
[68] *Id.*
[69] Redesignation of the Knoxville 1997 8-Hour Ozone Nonattainment Area to Attainment, 76 Fed. Reg. 12,587, 12,589-90 (Mar. 8, 2011).
[70] *Id.* at 12,590.
[71] *Id.* at 12,590-91.
[72] *Id.* at 12,591 n.2.
[73] Proposed Utah SIP Call, 75 Fed. Reg. 70,888, 70,890 (stating that "any exemptions granted by the Utah Executive Secretary 'are not applicable as a matter of federal law.' ") (citing Approval and Promulgation of Nonattainment Area Plan for Utah, 44 Fed. Reg. 28,688, 28,691 (May 16, 1979)).

> However, thirty years later, it is not clear how EPA reached the conclusion that exemptions granted by Utah would not apply as a matter of federal law or whether a court would honor EPA's interpretation; the Utah rule itself makes no reference to a reservation of federal authority. Instead, the rule merely states that information submitted by a source regarding a breakdown event would be "used by the executive secretary in determining whether a violation has occurred and/or the need of further enforcement action."[74]

Difficult to find interpretations of SIP language should not form the basis of EPA approval. The problem with this approach is that the state's interpretation of its regulations may (or may not) be known by parties attempting to enforce the SIP decades after the provisions were created. State agency opinions not explicitly set forth in the SIP itself (i.e., in the Code of Federal Regulations), even when published in the Federal Register, are insufficient to correct shortcomings in the plain language of the SIP. The regulations themselves should always reflect and ensure their intended operation. In order to ensure swift and accurate resolution of these actions, parties need to be able to rely on the accessible SIP language in the C.F.R. or at least on EPA's web page rather than a letter that may or may not be in a file somewhere.

Petitioner requests that, when it considers SIP revisions, EPA require all terms, conditions, limitations and interpretations of the various SSM provisions be reflected in the unambiguous language of the SIPs themselves.

[74] *Id.*

ANALYSIS OF INDIVIDUAL STATES' SSM PROVISIONS

Alabama

SIP Provisions

The Alabama SIP has two generally applicable SSM provisions. The SIP authorizes the Director to "exempt on a case by case basis any exceedances of emission limits which cannot be reasonably avoided, such as during periods of start-up, shut-down or load charge" in a source's permit. Ala. Admin. Code r. 335-3-14-.03(1)(h)(1), *available at* http://www.epa.gov/region4/air/sips/al/335-3-14.pdf. The SIP also authorizes an exemption for emergencies. *Id.* 335-3-14-.03(1)(h)(2). Emergency is defined as:

> any situation arising form [sic] sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which situation require immediate corrective action to restore normal operation, and that causes the facility to exceed a technology based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

Id. 335-3-14-.03(1)(h)(2)(i). Such emergencies "may be exempted as being violations" if five conditions are met. *Id.* 335-3-14-.03(1)(h)(2)(ii). The Director has the sole authority to determine whether an emergency has occurred. *Id.* 335-3-14-.03(1)(h)(2)(iii). Although the case by case exemption of subsection (1)(h)(1) must be included in the permit itself, the regulations do not make clear whether the emergency provision must be included or whether it is generally applicable.

The Alabama SIP contains several pollutant and source category specific SSM provisions. *Id.* 335-3-4-.01(1)(c) (discretionary exemption from visible emission limits during SSM); *id.* 335-3-5-.04(13) (SSM exemption for kraft pulp mills); *id.* 335-3-12-.03(2) (discretionary exemption from monitoring requirement during malfunction).

Analysis

Both of the generally applicable Alabama SSM provisions are inconsistent with the Clean Air Act and EPA policy. Both of the provisions provide exemptions, which is inconsistent with EPA's policy that all excess emissions are violations. 1982 Memorandum at 1; 1999 Memorandum at 1-2.

The start-up/shut-down/load change exemption is further inconsistent with EPA policy because the exemption is available for emissions that can be reasonably avoided. Each of the three situations is part of normal operation of a source. For these situations, EPA policy requires a higher showing to escape enforcement—the source must "adequately show[] 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 sever property damage." 1983 Memorandum, Attachment at 3.

The emergency provision appears to grant the Director sole authority to determine whether or not a violation has occurred. This type of provision may affect enforcement by EPA and citizens and is therefore not allowed. 1999 Memorandum at 3; Approval and Disapproval and Promulgation of Colorado Affirmative Defense Provisions for Startup and Shutdown, 71 Fed. Reg. 8958, 8959-60 (Feb. 22, 2006) (disapproving section II.J.5 because it could be interpreted to preclude EPA and citizen enforcement).

Remedy

Both the start-up/shut-down/load change and the emergency provisions of Ala. Admin. Code r. 335-3-14-.03(1)(h) are inconsistent with the Act and EPA policy and should be removed from the Alabama SIP. Alternatively, if the provisions are to be retained, they must be revised to clearly comply with the CAA and EPA guidance. The provisions must stipulate that all excess emissions are violations and preserve the authority of EPA and citizens to enforce the SIP standards and limitations.

Alaska

SIP Provisions

The Alaska SIP provides an excuse for "unavoidable" excess emissions. Alaska Admin. Code tit. 18 § 50.240, *available at* http://yosemite.epa.gov/r10/airpage.nsf/283d45bd5bb068e68825650f0064cdc2/17d7254768b935db88256516006de456?OpenDocument. Unavoidable excess emissions may occur during startup or shutdown, *id.* § 50.240(d), scheduled maintenance, *id.* § 50.240(e), or upsets, *id.* § 50.240(f). Section 50.240 states:

> Excess emissions determined to be unavoidable under this section ***will be excused*** and are not subject to penalty. This section does not limit the department's power to enjoin the emission or require corrective action.

Id. § 50.240(b) (emphasis added). Relief under any of the three subsections (d), (e), or (f) requires that the source follow the reporting procedures of subsection (c), *id.* § 50.240(d), (e), (f), and the source must document any incident with "records made at the time the excess emissions occurred." *Id.* § 50.240(g).

The showings required to obtain relief for excess emissions during startup or shutdown and scheduled maintenance reflect the EPA guidance on enforcement discretion almost verbatim. During startup or shutdown, excess emissions:

> will be considered unavoidable if the owner, operator, or permittee … demonstrates that (1) the excess emissions could not have been prevented through careful planning and design; and (2) if a bypass of control equipment occurred,

> the bypass was necessary to prevent loss of life, personal injury, or severe property damage.

Id. § 50.240(d); *c.f.* 1983 Memorandum, Attachment at 3.

During scheduled maintenance, excess emissions "will be considered unavoidable if the owner, operator, or permittee … demonstrates that the excess emissions could not have been avoided *through reasonable design*, better scheduling for maintenance, or better operation and maintenance practices." Alaska Admin. Code tit. 18 § 50.240(e) (emphasis added); *c.f.* 1983 Memorandum, Attachment at 3. The emphasized phrase indicates an additional element of the showing that is in addition to the EPA criteria.

The showing required to obtain relief for excess emissions during upsets, on the other hand, are much less stringent that EPA criteria. The owner, operator, or permittee must demonstrate that:

> (1) the event was not caused by poor or inadequate design, operation, or maintenance or by any other reasonably preventable condition; (2) the event was not of a recurring pattern indicative of inadequate design, operation, or maintenance; and (3) when the operator knew or should have known that an emission standard or permit condition was being exceeded, the operator took immediate and appropriate corrective action in a manner consistent with good air pollution control practice for minimizing emissions during the event, taking into account the total emissions impact of the corrective action, including slowing or shutting down the source as necessary to minimize emissions.

Alaska Admin. Code tit. 18 § 50.240(f).

Analysis

The Alaska SSM provision is contrary to the Act and inconsistent with EPA policy because it provides an excuse for excess emissions rather than considering all emissions violations of the applicable standard. 1982 Memorandum at 1; 1999 Memorandum at 1-2. The Alaska approach to SSM is unclear in its application to enforcement actions brought by EPA or citizens. Section 50.240 is drafted as if the department were the sole enforcement authority. The Alaska provision is worded as if it were an affirmative defense to penalties yet uses the criteria for enforcement discretion and is ambiguous about what decision-making authority is empowered to determine whether an owner, operator, or permittee has met its burden of proof for relief. One plausible interpretation of subsection (b) is that the department itself determines what excess emissions "will be excused and are not subject to penalty." Alaska Admin. Code tit. 18 § 50.240(b). Because the regulation could be interpreted to bar EPA and citizen enforcement, it violates the Clean Air Act and is contrary to EPA policy.

Remedy

Alaska should remove Alaska Admin. Code tit. 18 § 50.240 from its SIP, or revise it to clearly comply with the CAA and EPA guidance. The provision must stipulate that all excess emissions

are violations and preserve the authority of EPA and citizens to enforce the SIP standards and limitations.

Arizona

SIP Provisions

The Arizona SSM provision was approved not long after EPA issued the 1999 Memorandum, Revisions to the Arizona State Implementation Plan, 66 Fed. Reg. 48,087 (Sep. 18, 2001), and contains affirmative defenses for excess emissions caused by malfunctions, Ariz. Admin. Code § 18-2-310(B) and startup or shutdown, *id.* § 18-2-310(C), *available at* http://yosemite.epa.gov/R9/r9sips.nsf/AgencyProvision/87B02615BA87C78888256D160080CBE8?OpenDocument. The two affirmative defenses are almost identical to the EPA guidance from the 1999 memorandum. One additional element in the Arizona defenses that does not appear in the 1999 memorandum is that "[d]uring the period of excess emissions there were no exceedances of the relevant ambient air quality standards established in Article 2 of this Chapter that could be attributed to the emitting source." *Id.* § 18-2-310(B)(7), (C)(1)(f). Neither of the affirmative defenses applies to judicial actions for injunctive relief. *Id.* § 18-2-310(B), (C)(1).

Analysis

Affirmative defenses for excess emissions are inconsistent with the Clean Air Act, as explained above in section I of the Argument, and should be removed from the Arizona SIP.

EPA policy states that "affirmative defenses are not appropriate for areas and pollutants where a single source or small group of sources has the potential to cause an exceedance of the NAAQS or PSD increments." 1999 Memorandum, Attachment at 3. The Arizona SIP makes a related demonstration one of the elements of its defenses: to prevail on either of the affirmative defenses, the source must prove that the ambient standards were, in fact, not exceeded. Ariz. Admin. Code §18-2-310(B)(7), (C)(1)(f). When EPA proposed to approve the affirmative defenses into the Arizona SIP, it stated "[w]e believe these rules are consistent with the Clean Air Act and the relevant policy and guidance regarding excess emissions," referring to the 1999 Memorandum. Revisions to the Arizona State Implementation Plan, 66 Fed. Reg. 24,074, 24,074 (proposed May 11, 2001). EPA noted that the proposed regulation disallowed the defenses "if during the period of excess emissions, there was an exceedance of the relevant ambient air quality standard that could be attributed to the emitting source." *Id.* at 24,075. But including this element in the defense is not the same as disallowing affirmative defenses entirely where a single source or small group of sources has the potential to cause an exceedance of the NAAQS or PSD increments. EPA policy represents a judgment that sources with the power to cause an exceedance should be strictly controlled at all times, not just when they actually cause an exceedance. The incentive of such a source to emit pollutants at levels close to the threshold at which it causes an exceedance is thereby reduced. In these situations, " the only appropriate means of dealing with excess emissions during malfunction, startup, and shutdown episodes is through an enforcement discretion approach." 1999 Memorandum at 3.

Table comparing elements of the EPA policy on affirmative defenses for malfunctions to the Arizona defense.

Elements of Affirmative Defense for Excess Emissions caused by Malfunction as Discussed in 1999 Memorandum	**Elements of Arizona Affirmative Defense for Malfunctions**
1. The excess emissions were caused by a sudden, unavoidable breakdown of technology, beyond the control of the owner or operator;	"The excess emissions resulted from a sudden and unavoidable breakdown of process equipment or air pollution control equipment beyond the reasonable control of the operator;" Ariz. Admin. Code § 18-2-310(B)(1).
2. The excess emissions (a) did not stem from any activity or event that could have been foreseen and avoided, or planned for, and (b) could not have been avoided by better operation and maintenance practices;	"The excess emissions did not stem from any activity or event that could have been foreseen and avoided, or planned, and could not have been avoided by better operations and maintenance practices;" *Id.* § 18-2-310(B)(8).
3. To the maximum extent practicable the air pollution control equipment or processes were maintained and operated in a manner consistent with good practice for minimizing emissions;	"The air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;" *Id.* § 18-2-310(B)(2).
4. Repairs were made in an expeditious fashion when the operator knew or should have known that applicable emission limitations were being exceeded. Off-shift labor and overtime must have been utilized, to the extent practicable, to ensure that such repairs were made as expeditiously as practicable;	"If repairs were required, the repairs were made in an expeditious fashion when the applicable emission limitations were being exceeded. Off-shift labor and overtime were utilized where practicable to ensure that the repairs were made as expeditiously as possible. If off-shift labor and overtime were not utilized, the owner or operator satisfactorily demonstrated that the measures were impracticable;" *Id.* § 18-2-310(B)(3).
5. The amount and duration of the excess emissions (including any bypass) were minimized to the maximum extent practicable during periods of such emissions;	"The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable during periods of such emissions;" *Id.* § 18-2-310(B)(4).
6. All possible steps were taken to minimize the impact of the excess emissions on ambient air quality;	"All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;" *Id.* § 18-2-310(B)(5).
7. All emission monitoring systems were kept in operation if at all possible;	"All emissions monitoring systems were kept in operation if at all practicable;" *Id.* § 18-2-310(B)(9).
8. The owner or operator's actions in response to the excess emissions were documented by properly signed, contemporaneous operating logs, or other relevant evidence;	"The owner or operator's actions in response to the excess emissions were documented by contemporaneous records." *Id.* § 18-2-310(B)(10).
9. The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and	"The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;" *Id.* § 18-2-310(B)(6).
10. The owner or operator properly and promptly notified the appropriate regulatory authority.	"[T]he owner or operator of the source has complied with the reporting requirements of R18-2-310.01 …" *Id.* § 18-2-310(B).

Table comparing elements of the EPA policy on affirmative defenses for startup and shutdown to the Arizona defense.

Elements of Affirmative Defense for Excess Emissions caused by Startup or Shutdown as Discussed in 1999 Memorandum	**Elements of Arizona Affirmative Defense for Startup and Shutdown**
1. The periods of excess emissions that occurred during startup and shutdown were short and infrequent and could not have been prevented through careful planning and design;	"The excess emissions could not have been prevented through careful and prudent planning and design;" Ariz. Admin. Code § 18-2-310(C)(1)(a).
2. The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;	*[no corresponding element]*
3. If the excess emissions were caused by a bypass (an intentional diversion of control equipment), then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;	"If the excess emissions were the result of a bypass of control equipment, the bypass was unavoidable to prevent loss of life, personal injury, or severe damage to air pollution control equipment, production equipment, or other property;" *Id.* § 18-2-310(C)(1)(b).
4. At all times, the facility was operated in a manner consistent with good practice for minimizing emissions;	"The source's air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;" *Id.* § 18-2-310(C)(1)(c).
5. The frequency and duration of operation in startup or shutdown mode was minimized to the maximum extent practicable;	"The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable during periods of such emissions;" *Id.* § 18-2-310(C)(1)(d).
6. All possible steps were taken to minimize the impact of the excess emissions on ambient air quality;	"All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;" *Id.* § 18-2-310(C)(1)(e).
7. All emission monitoring systems were kept in operation if at all possible;	"All emissions monitoring systems were kept in operation if at all practicable;" *Id.* § 18-2-310(C)(1)(g).
8. The owner or operator's actions during the period of excess emissions were documented by properly signed, contemporaneous operating logs, or other relevant evidence; and	"The owner or operator's actions in response to the excess emissions were documented by contemporaneous records." *Id.* § 18-2-310(C)(1)(h).
9. The owner or operator properly and promptly notified the appropriate regulatory authority.	"[T]he owner or operator of the source has complied with the reporting requirements of R18-2-310.01 …" *Id.* § 18-2-310(C)(1).

Remedy

Petitioner requests EPA to require Arizona to remove the affirmative defenses from its SIP as inconsistent with the Clean Air Act. In the alternative, EPA should require revision of the affirmative defenses so that they are not available to a single source or one of a small group of sources who have the potential to cause an exceedance of the NAAQS. The Arizona affirmative defense for excess emissions during startup and shutdown should also include the second element from the 1999 Memorandum, Attachment at 6: that "[t]he excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance."

Maricopa County

SIP Provisions

The Maricopa County Air Pollution Control Regulations contain an SSM provision that is identical to the Arizona state provision. Maricopa County Air Pollution Control Regulation 3, Rule 140, §§ 401 (affirmative defense for malfunctions), 402 (affirmative defense for startup and shutdown), *approved by EPA at* Revision to the Arizona State Implementation Plan, Maricopa County Environmental Services Department, 67 Fed. Reg. 54,957 (Aug. 27, 2002), and *available at* http://yosemite.epa.gov/R9/r9sips.nsf/AgencyProvision/0514F87920A9CD0185256FD6005AE588/$file/Maricopa+140.pdf?OpenElement.

Analysis

The provisions of the Maricopa County regulations have the same problems as the Arizona state regulations. Affirmative defenses should not be allowed in any SIP, as discussed above in section I of the Argument. Alternatively, if the affirmative defenses are to remain in the SIP, the elements related to exceedances of the ambient standards are inappropriately permissive and do not comply with EPA guidance. *See* Rule 140, §§ 401.7, 402.1(f). The affirmative defense for startup and shutdown omits the second element from the 1999 Memorandum, Attachment at 6, that "[t]he excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance."

Remedy

Petitioner requests EPA to require Arizona and/or Maricopa County to remove the affirmative defenses from the SIP as inconsistent with the Clean Air Act. In the alternative, EPA should require revision of the affirmative defenses so that they are not available to a single source or one of a small group of sources who have the potential to cause an exceedance of the NAAQS. The Maricopa County affirmative defense for excess emissions during startup and shutdown should also include the second element from the 1999 Memorandum, Attachment at 6: that "[t]he excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance."

Pima County

SIP Provisions

The Rules and Regulations of the Pima County Air Pollution Control District contain an enforcement discretion approach to excess emissions during SSM conditions. Rule 706, *approved by EPA at* Arizona State Implementation Plan Revision, 47 Fed. Reg. 16,326 (Apr. 16, 1982), and *available at* http://yosemite.epa.gov/R9/r9sips.nsf/AgencyProvision/D66F2373B11DEF2C882569DF008049FF/$file/az-pi+706.pdf?OpenElement. First, any source must "notify the Control Officer of any occurrence during malfunction, startup, or shutdown in which a control standards is violated." Rule 706(A). Subsection D then provides that: "[t]he Control Officer may defer prosecution of a

Notice of Violation issued for an exceedance of a control standard if …" certain conditions are met. Rule 706(D).

Analysis

Although the rule properly classifies all excess emissions as violations, the power of the Control Officer to "defer prosecution" in Rule 706 is ambiguous. That power could be construed to preclude enforcement by EPA or citizens, contrary to the enforcement structure of the CAA. 1999 Memorandum at 3; Approval and Disapproval and Promulgation of Colorado Affirmative Defense Provisions for Startup and Shutdown, 71 Fed. Reg. 8958, 8959-60 (Feb. 22, 2006).

Remedy

EPA should require Arizona and/or Pima County to revise Rule 706 of the Rules and Regulations of the Pima County Air Pollution Control District so that is it clear that a decision by the Control Officer does not affect EPA or citizen enforcement.

Arkansas

SIP Provisions

The Arkansas SIP contains a pollutant specific SSM exemption for the excess emission of volatile organic compounds ("VOCs") in Pulaski County:

> Emissions in excess of these Regulations which are temporary and result solely from a sudden and unavoidable breakdown, malfunction or upset of process or emission control equipment, or sudden and unavoidable upset of operation ***will not be considered a violation*** of these Regulations …

014-01-1 Ark. Code R. § 19.1004(H) (emphasis added). Arkansas also appears to have copied the affirmative defense of 40 C.F.R. § 70.6(g) into its SIP without clearly limiting its application to operating permits. *Id.* § 19.602. See http://yosemite.epa.gov/r6/Sip0304.nsf/home?Openview&Start=1&Count=30&Expand=2.

Analysis

The pollutant-specific SSM exemption for the excess emission of VOCs in Pulaski County is contrary to the fundamental requirement that all excess emissions be considered violations. 1982 Memorandum at 1; 1999 Memorandum at 1 & Attachment at 1-2. The emergency defense in 014-01-1 Ark. Code R. § 19.602 is a Title V regulation that should not be a part of the Arkansas SIP.

Remedy

Arkansas should remove 014-01-1 Ark. Code R. §§ 19.1004(H) and 19.602 from its SIP.

Colorado

SIP Provisions

The Colorado SIP provides affirmative defenses "to owners and operators for civil penalty actions for excess emissions during periods of malfunction," 5 Colo. Code Regs. § 1001-2(II.E), and "during periods of startup and shutdown," *id.* § 1001-2(II.J). These provisions were recently approved by EPA. Approval and Disapproval and Promulgation of Colorado Affirmative Defense Provisions for Startup and Shutdown, 71 Fed. Reg. 8958 (Feb. 22, 2006); Approval and Promulgation of Colorado Affirmative Defense Provisions for Malfunctions, 73 Fed. Reg. 45,879 (Aug. 7, 2008); *available at* https://yosemite.epa.gov/R8/R8Sips.nsf/e5e850cc767bc8b3872573a9004cad73/a6a06f7b851673e987256b7200510e78?OpenDocument.

As shown below, the Colorado affirmative defenses reflect the EPA policy on affirmative defenses from the 1999 Memorandum almost word for word. Both defenses are limited to actions for civil penalties, 5 Colo. Code Regs. § 1001-2(II.E.1), (II.J.1), and are unavailable in actions seeking injunctive relief, *id.* § 1001-2(II.E.3), (II.J.3). Neither defense is available in actions seeking to enforce NSPS, NESHAP or other "federally promulgated performance standards or emission limits." *Id.* § 1001-2(II.E.4), (II.J.4).

The affirmative defense for startup and shutdown "cannot be used by a single source or small group of sources where the excess emissions have the potential to cause an exceedance of the ambient air quality standards or [PSD] increments," *id.* § 1001-2 (II.J.4), which reflects another of the EPA policy requirements. The affirmative defense for malfunctions, in contrast, takes a different approach to this requirement of the EPA policy. The affirmative defense for malfunctions is not explicitly limited to situations where no single source or small group of sources have the potential to cause an exceedance of the NAAQS or PSD increments. Instead, the defense includes an additional element: that "[d]uring the period of excess emissions, there were no exceedances of the relevant ambient air quality standards established in the Commissions' Regulations that could be attributed to the emitting source." *Id.* § 1001-2(II.E.1.j).

Analysis

Affirmative defenses for excess emissions are inconsistent with the Clean Air Act, as explained above in section I of the Argument, and should be removed from the Colorado SIP. Alternatively, if the affirmative defenses are to remain in the SIP, the affirmative defense for malfunctions should be revised. According to EPA policy, affirmative defenses are not appropriate where a single source or a small group of sources *has the potential* to cause an exceedance of the NAAQS or PSD increments. 1999 Memorandum, at 2-3 & Attachment at 1-2, 3. The Colorado SIP allows an affirmative defense for malfunctions in such situations. Although the source must prove that there were, in fact, "no exceedances of the relevant ambient air quality standards … that could be attributed to the emitting source," 5 Colo. Code Regs. § 1001-2(II.E.1.j), this showing does not have the same deterrent effect. Precluding affirmative defense in areas where the ambient air quality is only precariously below the NAAQS or PSD increments encourages owners and operators to more scrupulously plan their operations and

design their facilities. Sources with *the potential* to cause an exceedance should be more strictly controlled at all times and should not be able to mire enforcement proceedings in the questions of whether or not the NAAQS or PSD increments were exceeded as a matter of fact.

Table comparing elements of the EPA policy on affirmative defenses for malfunctions to the Colorado defense.

Elements of Affirmative Defense for Excess Emissions caused by Malfunctions as Discussed in 1999 Memorandum	**Elements of Colorado's Affirmative Defense for Malfunctions**
1. The excess emissions were caused by a sudden, unavoidable breakdown of technology, beyond the control of the owner or operator;	"The excess emissions were caused by a sudden, unavoidable breakdown of equipment, or a sudden, unavoidable failure of a process to operate in the normal or usual manner, beyond the reasonable control of the owner or operator;" 5 Colo. Code Regs. § 1001-2(II.E.1.a).
2. The excess emissions (a) did not stem from any activity or event that could have been foreseen and avoided, or planned for, and (b) could not have been avoided by better operation and maintenance practices;	"The excess emissions did not stem from any activity or event that could have reasonably been foreseen and avoided, or planned for, and could not have been avoided by better operation and maintenance practices;" *Id.* § 1001-2(II.E.1.b).
3. To the maximum extent practicable the air pollution control equipment or processes were maintained and operated in a manner consistent with good practice for minimizing emissions;	"At all times, the facility was operated in a manner consistent with good practices for minimizing emissions. This Section II.E.1.i is intended solely to be a factor in determining whether an affirmative defense is available to an owner or operator, and shall not constitute an additional applicable requirement;" *Id.* § 1001-2(II.E.1.i).
4. Repairs were made in an expeditious fashion when the operator knew or should have known that applicable emission limitations were being exceeded. Off-shift labor and overtime must have been utilized, to the extent practicable, to ensure that such repairs were made as expeditiously as practicable;	"Repairs were made as expeditiously as possible when the applicable emission limitations were being exceeded;" *Id.* § 1001-2(II.E.1.c).
5. The amount and duration of the excess emissions (including any bypass) were minimized to the maximum extent practicable during periods of such emissions;	"The amount and duration of the excess emissions (including any bypass) were minimized to the maximum extent practicable during periods of such emissions;" *Id.* § 1001-2(II.E.1.d).
6. All possible steps were taken to minimize the impact of the excess emissions on ambient air quality;	"All reasonably possible steps were taken to minimize the impact of the excess emissions on ambient air quality;" *Id.* § 1001-2(II.E.1.e).
7. All emission monitoring systems were kept in operation if at all possible;	"All emissions monitoring systems were kept in operation (if at all possible);" *Id.* § 1001-2(II.E.1.f).
8. The owner or operator's actions in response to the excess emissions were documented by properly signed, contemporaneous operating logs, or other relevant evidence;	"The owner or operator's actions during the period of excess emissions were documented by properly signed, contemporaneous operating logs or other relevant evidence;" *Id.* § 1001-2(II.E.1.g).
9. The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and	"The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;" *Id.* § 1001-2(II.E.1.h).
10. The owner or operator properly and promptly notified the appropriate regulatory authority.	"[T]he owner or operator of the facility must meet the notification requirements of Section II.E.2. in a timely manner …" *Id.* § 1001-2(II.E.1).

Table comparing elements of the EPA policy on affirmative defenses for startup and shutdown to the Colorado defense.

Elements of Affirmative Defense for Excess Emissions caused by Startup or Shutdown as Discussed in 1999 Memorandum	**Elements of Colorado Affirmative Defense for Startup and Shutdown**
1. The periods of excess emissions that occurred during startup and shutdown were short and infrequent and could not have been prevented through careful planning and design;	"The periods of excess emissions that occurred during startup and shutdown were short and infrequent and could not have been prevented through careful planning and design;" 5 Colo. Code Regs. § 1001-2(II.J.1.a).
2. The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;	"The excess emissions were not part of a recurring pattern indicative of inadequate design, operation or maintenance;" *Id.* § 1001-2(II.J.1.b).
3. If the excess emissions were caused by a bypass (an intentional diversion of control equipment), then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;	"If the excess emissions were caused by a bypass (an intentional diversion of control equipment), then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;" *Id.* § 1001-2(II.J.1.c).
4. At all times, the facility was operated in a manner consistent with good practice for minimizing emissions;	"At all times, the facility was operated in a manner consistent with good practices for minimizing emissions. This subparagraph H is intended solely to be a factor in determining whether an affirmative defense is available to an owner or operator, and shall not constitute an additional applicable requirement." *Id.* § 1001-2(II.J.1.h).
5. The frequency and duration of operation in startup or shutdown mode was minimized to the maximum extent practicable;	"The frequency and duration of operation in startup and shutdown periods were minimized to the maximum extent practicable;" *Id.* § 1001-2(II.J.1.d).
6. All possible steps were taken to minimize the impact of the excess emissions on ambient air quality;	"All possible steps were taken to minimize the impact of excess emissions on ambient air quality;" *Id.* § 1001-2(II.J.1.e).
7. All emission monitoring systems were kept in operation if at all possible;	"All emissions monitoring systems were kept in operation (if at all possible);" *Id.* § 1001-2(II.J.1.f).
8. The owner or operator's actions during the period of excess emissions were documented by properly signed, contemporaneous operating logs, or other relevant evidence; and	"The owner or operator's actions during the period of excess emissions were documented by properly signed, contemporaneous operating logs or other relevant evidence;" *Id.* § 1001-2(II.J.1.g).
9. The owner or operator properly and promptly notified the appropriate regulatory authority.	"[T]he owner or operator of the facility must meet the notification requirements of Paragraph 2 in a timely manner …" *Id.* § 1001-2(II.J.1).

Remedy

The affirmative defense provisions of 5 Colo. Code Regs. § 1001-2(II.E) and (II.J) should be removed as inconsistent with the Clean Air Act. Alternatively, the affirmative defense for malfunctions in subsection (II.E) should not be available where a single source or a small group of sources has the potential to cause an exceedance of the NAAQS or PSD increments.

Delaware

SIP Provisions

The Delaware SIP contains no generally applicable SSM regulations. However, there are several exemptions for excess emissions during startup and shutdown when those periods are controlled by an operating permit. Delaware SIP regulations *available at* http://yosemite.epa.gov/r3/r3sips.nsf/SIPIndex!OpenForm&Start=1&Count=1000&Expand=1.2&Seq=2.

For example, in the section governing "Particulate Emissions from Fuel Burning Equipment," the startup/shutdown provision reads:

> The provisions of this Regulation shall not apply to the start-up and shutdown of equipment which operates continuously or in an extended steadystate when emissions from such equipment during start-up and shutdown are governed by an operation permit issued pursuant to the provisions of 2.0 of 7 DE Admin. Code 1102.

7-1100-1104 Del. Code Regs. § 1.5. There are several identical (and nearly identical) provisions to the same effect. 7-1100-1105 Del. Code Regs. § 1.7 (Particulate Emissions from Industrial Process Operations); 7-1100-1108 Del. Code Regs. § 1.2 (Sulfur Dioxide Emissions from Fuel Burning Equipment); 7-1100-1109 Del. Code Regs. § 1.4 (Emissions of Sulfur Compounds From Industrial Operations); 7-1100-1114 Del. Code Regs. § 1.3 (Visible Emissions); 7-1100-1124 Del. Code Regs. § 1.4 (Control of Volatile Organic Compound Emissions); 7-1100-1142 Del. Code Regs. § 2.3.5 (Control of NO_X Emissions from Industrial Boilers and Process Heaters at Petroleum Refineries).

Analysis

The exemptions in each of these provisions are dependent on alternative provisions in an operating permit under 7-1100-1102 Del. Code Regs. § 2.0. However, there seems to be no mechanism that constrains those alternative provisions. *See id.* It appears that the State may allow sources to circumvent otherwise applicable limits during startup and shutdown by creating exemptions in the federally enforceable state operating permit program. *See* Approval and Promulgation of Delaware Minor New Source Review and federally Enforceable State Operating Permit Program, 63 Fed. Reg. 16,751 (Apr. 6, 1998) (explaining the program). This process does not comply with EPA's requirements that all excess emissions be considered violations of the applicable standards. 1982 Memorandum at 1; 1983 Memorandum, Attachment at 2-3.

If the intent of these SIP provisions is to provide source category specific rules for startup and shutdown, this process fails to meet the requirements of the Act and EPA policy. Narrowly-tailored source-specific rules are permissible when set in consultation with EPA, under conditions that are wholly lacking from the Delaware approach. But the underlying problem is that such alternative limits must be approved by EPA to be part of the SIP. 1999 Memorandum, Attachment at 4-5. It appears that the State has discretion as to what alternative limitations for startup and shutdown are included in the operating permits under 7-1100-1102 Del. Code Regs. §

2.0. Thus, each of these provisions authorizes Delaware to create exemptions for excess emissions in the operating permits.

Remedy

The following provisions should be removed from the Delaware SIP: 7-1100-1104 Del. Code Regs. § 1.5; 7-1100-1105 Del. Code Regs. § 1.7; 7-1100-1108 Del. Code Regs. § 1.2; 7-1100-1109 Del. Code Regs. § 1.4; 7-1100-1114 Del. Code Regs. § 1.3; 7-1100-1124 Del. Code Regs. § 1.4; 7-1100-1142 Del. Code Regs. § 2.3.5.

District of Columbia

SIP Provisions

The SIP for the District of Columbia has no generally applicable SSM provision. Generally, air pollution control equipment must be kept in operation whenever the source is operating. D.C. Mun. Regs. tit. 20, § 107.1, *available at* http://yosemite.epa.gov/r3/r3sips.nsf/9eeb842c677f8f5d85256cfd004c3498/047a019ea373e76f85256d25006023ef!OpenDocument. However, the Mayor has the power to authorize continued operation when air pollution controls are shut down:

> The Mayor shall by notice to the owner or operator permit the continued operation of the stationary source for the time period proposed, or for the lesser time as the Mayor finds reasonable, or the Mayor may order the owner or operator to discontinue operation of the stationary source until the maintenance is completed, or the malfunctioning equipment is repaired.

Id. § 107.3.

The SIP also contains several source category and pollutant specific SSM provisions. The SIP contains alternative limits for visible emissions during startup and shutdown, *id.* §§ 606.1, 606.2, and an exemption from NO_X limits for "[e]mergency standby engines operated less than five hundred (500) hours during any consecutive twelve (12) month period," *id.* § 805(c)(2). For visible emissions during malfunctions the SIP mentions an affirmative defense:

> Violation of standards set forth in this section, as a result of unavoidable malfunction, despite the conscientious employment of control practices, shall constitute an affirmative defense on which the discharger shall bear the burden of proof. Periods of malfunction shall cease to be unavoidable malfunctions if reasonable steps are not taken to eliminate the malfunction within a reasonable time.

Id. § 606.4. The elements of this "affirmative defense" are not clearly laid out, and the term affirmative defense is not defined in chapter 600, nor in section 199 of chapter 1, the generally applicable definitions section. *See id.* §§ 600.1-699.2; id. § 199.1.

Analysis

The effect of the Mayor's authorization of scheduled maintenance under section § 107.3 is not clear. One plausible interpretation of the section would excuse any excess emissions during the time that the Mayor had authorized operation without air pollution control equipment. This interpretation is contrary to the enforcement scheme of the Act because it allows a decision by the state to preclude EPA and citizen enforcement. 1999 Memorandum at 3; Approval and Disapproval and Promulgation of Colorado Affirmative Defense Provisions for Startup and Shutdown, 71 Fed. Reg. 8958, 8959-60 (Feb. 22, 2006).

The source category and pollutant specific exemptions violate the fundamental requirement that all excess emissions be considered violations and interfere with EPA and citizen enforcement. 1999 Memorandum at 3; Approval and Disapproval and Promulgation of Colorado Affirmative Defense Provisions for Startup and Shutdown, 71 Fed. Reg. at 8959-60. None of the exemptions appear to meet the criteria for a source category specific rule from EPA's policy. 1999 Memorandum, Attachment 4-5.

The "affirmative defense" of section 606.4 is too ambiguous to be considered an affirmative defense as EPA intends that term to be used. In any case, affirmative defenses for excess emissions are inconsistent with the Clean Air Act and should be removed from the SIP.

Remedy

The District of Columbia should clarify that the authorization to shut down air pollution control equipment in D.C. Mun. Regs. tit. 20, § 107.3 does not exempt the source from compliance with emission limits and standards. The District of Columbia should remove the pollutant specific provisions in D.C. Mun. Regs. tit. 20, §§ 606.1, 606.2, 606.4 and 805(c)(2) from the SIP.

Florida

SIP Provisions

The Florida SIP provides an automatic exemption for excess emissions due to SSM, Fla. Admin. Code Ann. r. 62-210.700(1), *available at* http://www.epa.gov/region4/air/sips/fl/Chapter-62-210.pdf, as well as exemptions specifically for fossil fuel steam generators during startup and shutdown, *id.* 62-210.700 (2), and boiler cleaning and load change, *id.* 62-210.700 (3). Key portions of the SIP provision read as follows:

> (1) Excess emissions resulting from startup, shutdown or malfunction of any source ***shall be permitted*** providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.
> (2) Excess emissions from existing fossil fuel steam generators resulting from startup or shutdown ***shall be permitted*** provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized.

(3) Excess emissions from existing fossil fuel steam generators resulting from boiler cleaning (soot blowing) and load change ***shall be permitted*** provided the duration of such excess emissions shall not exceed 3 hours in any 24-hour period and visible emissions shall not exceed Number 3 of the Ringelmann Chart (60 percent opacity), and providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized.
(4) Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited.

Id. r. 62-210.700 (1)-(4) (emphasis added).

The Florida SIP contains several other pollutant and source category specific SSM provisions. *Id.* r. 62-296.401(7)(b)(1) (alternative limit for visible emissions from air curtain incinerators during startup); *id.* r. 62-296.404(1)(a)(2) (SSM exemption for visible emissions from kraft pulp mills); *id.* r. 62-296.404(3)(a)(3) (exemption to prohibition of venting sulfur for emergency and essential maintenance); *id.* r. 62-296.404(6)(c) (exempting periods of SSM from consideration of excess sulfur emissions for kraft recovery furnaces, lime kilns and calciners and other regulated non-NSPS total reduced sulfur emissions units); *id.* r. 62-296.570(4)(b)(c) (SSM exemption to RACT limits for NO_X).

Analysis

The Florida SIP is inconsistent with the CAA and EPA policy. Subsections (1) to (3) state that excess emissions "shall be permitted," contrary to the fundamental requirement that all excess emissions be considered violations. 1982 Memorandum at 1; 1999 Memorandum at 1 & Attachment at 1-2. This permission appears impermissibly to preclude enforcement of the limitations not only by the state, but also by EPA and citizens. 1999 Memorandum at 3; Approval and Disapproval and Promulgation of Colorado Affirmative Defense Provisions for Startup and Shutdown, 71 Fed. Reg. 8958, 8959-60 (Feb. 22, 2006). Further, the conditions specified in subsection (3) are normal condition of operation, and as such are not eligible for any relief under EPA guidance. 1983 Memorandum, Attachment at 2.

Subsection (4) contains substantive provisions that appear to carve away parts of the exemptions in subsections (1) to (3). But the regulations do not specify the procedure by which the factual premises of any of these subsections are to be proven.

Remedy

Florida should remove Fla. Admin. Code Ann. r. 62-210.700 from the SIP in its entirety. Alternatively, if the provision is to be retained, it must be revised to clearly comply with the CAA and EPA guidance. The provision must stipulate that all excess emissions are violations and preserve the authority of EPA and citizens to enforce the SIP standards and limitations.

Georgia

SIP Provisions

The Georgia SIP provides exemptions for excess emissions during startup, shutdown and malfunction. Ga. Comp. R. & Regs. 391-3-1.02(2)(a)(7), *available at* http://www.epa.gov/region4/air/sips/ga/391-3-1.02.pdf. The provision reads:

> (i) Excess emissions resulting from startup, shutdown, malfunction of any source which occur through ordinary diligence is employed ***shall be allowed*** provided that (I) the best operational practices to minimize emissions are adhered to, and (II) all associated air pollution control equipment is operated in a manner consistent with good air pollution control practice for minimizing emissions, and (III) the duration of excess emissions is minimized.
> (ii) Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction are prohibited and are violations of this Chapter (391-3-1).
> (iii)The provisions of this paragraph 7. shall apply only to those sources which are not subject to any requirement under section (8) of this Rule, (i.e. Rule 391-3-1-.02) or any requirement of 40 CFR, Part 60, as amended, concerning New Source Performance Standards.

Id. (emphasis added).

Analysis

The Georgia SSM provision is inconsistent with the Act and EPA policy. The provision states that excess emissions "shall be allowed," contrary to the fundamental requirement that all excess emissions be considered violations. 1982 Memorandum at 1; 1999 Memorandum at 1 & Attachment at 1-2. Although the regulation provides substantive criteria (that fall far short of EPA policy), it is neither an affirmative defense nor enforcement discretion. The regulations are susceptible to interpretation as an enforcement exemption, precluding EPA and citizen enforcement as well as state enforcement. 1999 Memorandum at 3; Approval and Disapproval and Promulgation of Colorado Affirmative Defense Provisions for Startup and Shutdown, 71 Fed. Reg. 8958, 8959-60 (Feb. 22, 2006).

Remedy

Georgia should remove Ga. Comp. R. & Regs. 391-3-1.02(2)(a)(7) from its SIP. Alternatively, if the provision is to be retained, it must be revised to clearly comply with the CAA and EPA guidance. The provision must stipulate that all excess emissions are violations and preserve the authority of EPA and citizens to enforce the SIP standards and limitations.

Idaho

SIP Provisions

Idaho's SIP contains what appears intended to be an enforcement discretion approach to excess emissions during SSM. Idaho Admin. Code r. 58.01.01.131; *see* Approval and Promulgation of Implementation Plan for Idaho and Designation of Areas for Air Quality Planning Purposes, 67 Fed. Reg. 52,666, 52,668 (proposed Aug. 13, 2002); *available at* http://yosemite1.epa.gov/r10/airpage.nsf/283d45bd5bb068e68825650f0064cdc2/def38ce51d3fb9c488256c8a00651d94?OpenDocument. The provision provides that "… the Department shall consider the sufficiency of the information submitted and the following criteria to determine if an enforcement action to impose penalties is warranted … ." Idaho Admin. Code r. 58.01.01.131.02.

The next section clarifies the effect of the decision:

> Any decision by the Department under Subsection 131.02 shall not excuse the owner or operator from compliance with the relevant emission standard and shall not preclude the Department from taking an enforcement action to enjoin the activity causing the excess emissions. Any decision made by the Department under Subsection 131.02 shall not preclude the Department from taking an enforcement action for future or other excess emission events.

Id. r. 58.01.01.131.03.

Analysis

Idaho's SIP very clearly spells out the effect of the Department's decision upon the Department itself, but is says nothing about what effect the decision has on EPA or citizens. This omission could possibly be interpreted contrary to the Act and to EPA policy. The regulation clearly gives the Department the authority to decide whether excess emissions "warrant enforcement action." *Id.* r. 58.01.01.131.02. This phrase could simply mean that the Department decides that the State will not proceed to enforce. But it could also be interpreted to give the Department authority to decide that enforcement is not warranted at all, by anyone, which would preclude action by EPA and by citizens both for civil penalties and for injunctive relief. This interpretation is inconsistent with the Act and EPA policy. 1999 Memorandum at 3.

Remedy

Idaho should clarify, in Idaho Admin. Code r. 58.01.01.131.03, that the Department's decision that enforcement is not warranted has no effect on EPA or citizen enforcement.

Illinois

SIP Provisions

Illinois' generally applicable SSM regulations appear at Ill. Admin. Code tit. 35, §§ 201.261, 201.262 and 201.265, *available at*

http://yosemite.epa.gov/r5/r5ard.nsf/SIPs%20View%20By%20State%20Main%20View!OpenView&Start=1&Count=30&Expand=1#1. Section 201.261(1) invites sources to request advance permission to continue operation during malfunctions or to violate standards or limitations during startup:

> A request for ***permission to continue to operate during a malfunction*** or breakdown, if desired, shall be included as an integral part of the application for an Operating Permit pursuant to Rule 103 … . When the standards or limitations of Part 2 [Subchapter c] of this Chapter will be violated during startup, a request for ***permission to violate such standards or limitations*** shall be an integral part of the application for an Operating Permit pursuant to Rule 103 [Subpart D] … .

Ill. Admin. Code tit. 35, § 201.261(1) (emphasis added).

Section 201.262 specifies the conditions on which the Illinois Environmental Protection Agency will such grant advance permission:

> Permission shall not be granted to allow continued operation during a malfunction or breakdown unless the applicant submits proof to the Agency that: such continued operation is necessary to prevent injury to persons or severe damage to equipment; or that such continued operation is required to provide essential services; provided, however, that continued operation solely for the economic benefit of the owner or operator shall not be a sufficient reason for granting of permission. Permission shall not be granted to allow violation of the standards or limitations of Part 2 [Subchapter c] of this Chapter during startup unless the applicant has affirmatively demonstrated that all reasonable efforts have been made to minimize startup emissions, duration of individual startups and frequency of startups.

Id. § 201.262.

Section 201.265 specifies the effect of permission granted under section 201.262:

> The granting of permission to operate during a malfunction or breakdown, or to violate the standards or limitations of Part 2 [Subchapter c] of this Chapter during startup, and full compliance with any terms and conditions connected therewith, ***shall be a prima facie defense to an enforcement action*** alleging a violation of paragraph (a) of this Rule 105 [Section 201.149], of the emission and air quality standards of this Chapter, and of the prohibition of air pollution during the time of such malfunction, breakdown or startup.

Id. § 201.265.

The Illinois SIP contains several other pollutant and source category specific SSM provisions. *Id.* § 201.404 (exemption to monitoring requirements for malfunction); *id.* § 205.225 (exemption of SSM emissions from emissions reduction market system, whose purpose is to "attain the [NAAQS] for ozone and to meet the requirements of the Clean Air Act"); *id.* § 205.750(c)(1)

(exemption for emissions during emergency from reduction market system, whose purpose is to "attain the [NAAQS] for ozone and to meet the requirements of the Clean Air Act"); *id.* § 218.432(a)(3) (exemption for emergency relief discharge); *id.* § 218.501(e) (exemption for emergency relief discharge); *id.* § 219.581(a)(3) (exemption for emergency relief discharge).

Analysis

The Illinois regulations unambiguously authorize the Agency to grant advance exemptions for violations of emission limits during startup, and potentially during malfunctions as well. *See* Order Granting in Part and Denying in Part Petition for Objection to Permit, In the Matter of United States Steel Corporation - Granite City Works, CAAPP No. 96030056, 39 (Jan. 1, 2011) (interpreting permit conditions based on Illinois SSM SIP provisions) [Granite City Steel CAAPP Order]. The Agency may authorize continued operation during malfunctions, even though the source may be violating its emission limits. Ill. Admin. Code tit. 35, §§ 201.261, 201.262. That permission is a defense in any later enforcement action. *Id.* § 201.265. This regulatory structure – where a defense attaches at the state's discretion – can be interpreted to violate the fundamental requirement that all excess emissions must be considered violations and the enforcement scheme of Title I of the CAA.

Illinois's approach to excess emissions during malfunction and startup appears self-contradictory. On one hand, the source is to request permission at the permitting stage – before a malfunction or excess emissions have occurred. But under EPA policy, the exercise of enforcement discretion (or potential availability of an affirmative defense) depends on the circumstances of each individual instance of malfunction or excess emissions – facts and circumstances that cannot be known in advance. *See* In the Matter of United States Steel Corporation – Granite City Works, EPA Order Granting in Part and Denying in Part Petition for Objection to Permit (Jan. 31, 2011)("EPA Title V Order re U.S. Steel"), *available at* http://www.epa.gov/region7/air/title5/petitiondb/petitions/uss_response2009.pdf, at 39 (Advance permission to operate during these periods is inconsistent with the SIP because "[t]he specific proof required in each instance usually will depend on the nature and the cause of the malfunction or breakdown."),.

Illinois has argued that its SIP provisions do not provide for advance permission to violate emission limits, but rather authorize case-by-case claims of exemption. Ill. Envtl. Prot. Agency, Statement of Basis for a Planned Revision of the CAAPP Permit for U.S. Steel Corp. Granite City Works (Mar. 15, 2011), at 26-27 (interpreting sections 201.261, 201.262 and 201.265). EPA disagreed. EPA Title V Order re U.S. Steel at 39. These divergent interpretations by U.S. EPA and Illinois demonstrate that, at the least, the SIP terms are not clear on this critical issue. Moreover, the state's argument is undercut by the language in the SIP, purporting to grant advance permission to operate during malfunctions and to violate emission standards during startup.

The "prima facie defense" is ambiguous in its operation. A true affirmative defense is "in the context of an enforcement proceeding, a response or defense put forward by a defendant, regarding which the defendant has the burden of proof, and the merits of which are independently and objectively evaluated in a judicial or administrative proceeding." 1999 Memorandum, Attachment at 2 n.4. It is not clear whether the "prima facie defense" is to be

evaluated independently and objectively in a judicial or administrative proceeding or whether the Agency determines its availability. In either case, section 201.265 should be removed from the SIP. If the "prima facie defense" is supposed to be an "affirmative defense," as EPA defines that term, the provision should be removed from the SIP as inconsistent with the enforcement structure of the Clean Air Act. If, on the other hand, the "prima facie defense" is anything short of the "affirmative defense," it clearly has the potential to interfere with EPA and citizen enforcement.

Remedy

Illinois should remove Ill. Admin. Code tit. 35, §§ 201.261, 201.262 and 201.265 from its SIP. Alternatively, if the provisions are to be retained, they must be revised to clearly comply with the CAA and EPA guidance. The provisions must stipulate that all excess emissions are violations and preserve the authority of EPA and citizens to enforce the SIP standards and limitations.

Indiana

SIP Provisions

The Indiana SIP provides an exemption for malfunctions:

> Emissions temporarily exceeding the standards which are due to malfunctions of facilities or emission control equipment ***shall not be considered a violation*** of the rules provided the source demonstrates that:
> (1) All reasonable measures were taken to correct, as expeditiously as practicable, the conditions causing the emissions to exceed the allowable limits, including the use of off-shift and over-time labor, if necessary.
> (2) All possible steps were taken to minimize the impact of the excessive emissions on ambient air quality which may include but not be limited to curtailment of operation and/or shutdown of the facility.
> (3) Malfunctions have not exceeded five percent (5%), as a guideline, of the normal operational time of the facility.
> (4) The malfunction is not due to the negligence of the operator.

326 Ind. Admin. Code 1-6-4(a) (emphasis added), *available at* http://yosemite.epa.gov/r5/r5ard.nsf/977585e33633852b862575750057311a/beee251aa8d85adc8625756e007ae14f!OpenDocument.

The Indiana SIP contains several other pollutant and source category specific SSM provisions. *Id.* 5-1-3 (alternative opacity limits during startup, shutdown, when removing ashes or blowing tubes); *id.* 10-3-1 (exempting specific boilers from compliance during SSM). *Available at* http://yosemite.epa.gov/r5/r5ard.nsf/SIPs%20View%20By%20State%20Main%20View!OpenView&Start=1&Count=30&Expand=2#2.

Analysis

The Indiana SSM provision is inconsistent with the CAA and EPA policy because the provision states that excess emissions are not violations, contrary to the fundamental requirement that all excess emissions be considered violations. 1982 Memorandum at 1; 1999 Memorandum at 1 & Attachment at 1-2. In any case, the regulation is ambiguous because it lacks any procedural specifications. Depending on to whom the demonstration is made, the regulation could be interpreted as either a qualified exemption or an affirmative defense. One interpretation of this section is that the source must make a showing to the State, which would then decide to consider the excess emissions not a violation.

Indiana's SSM provision seems to confuse an enforcement discretion approach with the affirmative defense approach. *See, e.g.*, Approval and Disapproval and Promulgation of Colorado Affirmative Defense Provisions for Startup and Shutdown, 71 Fed. Reg. 8958, 8960 n.3 (Feb. 22, 2006). The provision is framed in terms susceptible to interpretation as an affirmative defense, but uses the criteria similar to those that are supposed to guide a state's enforcement discretion. *Compare* 326 Ind. Admin. Code 1-6-4(a) *with* 1982 Memorandum, Attachment at 2. Regardless of the original intent, the Indiana SSM provision is fatally ambiguous. It could be interpreted to preclude EPA and citizen enforcement and shield sources from injunctive relief.

Remedy

Indiana should remove 326 Ind. Admin. Code 1-6-4 from its SIP. Alternatively, if the provision is to be retained, it must be revised to clearly comply with the CAA and EPA guidance. The provision must stipulate that all excess emissions are violations and preserve the authority of EPA and citizens to enforce the SIP standards and limitations.

Iowa

SIP Provisions

Iowa provides an automatic exemption for excess emissions during startup, shutdown and cleaning:

> Excess emission during a period of startup, shutdown, or cleaning of control equipment ***is not a violation*** of the emission standard if the startup, shutdown or cleaning is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions.

Iowa Admin. Code r. 567-24.1(1) (emphasis added), *available at* http://www.epa.gov/region07/air/rules/iowa/567-2401.pdf. For malfunctions the SIP provides an enforcement discretion approach:

> An incident of excess emission (other than an incident during startup, shutdown or cleaning of control equipment) is a violation. If the owner or operator of a source maintains that the incident of excess emission was due to a malfunction,

> the owner or operator must show that the conditions which caused the incident of excess emission were not preventable by reasonable maintenance and control measures. Determination of any subsequent enforcement action will be made following review of this report.

Id. r. 567-24.1(4).

Analysis

The automatic exemption of subsection (1) is inconsistent with the fundamental requirement that all excess emissions be considered violations. 1982 Memorandum at 1; 1999 Memorandum at 1-2 & Attachment at 1. Subsection (4) correctly considers all excess emissions violations, but empowers the state to make a "determination of *any* subsequent enforcement action." Iowa Admin. Code r. 567-24.1(4) (emphasis added). One possible interpretation of this regulation is that the state can determine no enforcement is warranted at all, by anyone, which would preclude action by EPA and by citizens both for civil penalties and for injunctive relief. This interpretation is inconsistent with the Act and EPA policy. Memorandum at 3; Approval and Disapproval and Promulgation of Colorado Affirmative Defense Provisions for Startup and Shutdown, 71 Fed. Reg. 8958, 8959-60 (Feb. 22, 2006).

Remedy

Iowa should remove Iowa Admin. Code r. 567-24.1(1) from its SIP entirely. Alternatively, if the provision is to be retained, it must be revised to stipulate that all excess emissions are violations. Iowa Admin. Code r. 567-24.1(4) should be revised to ensure that the state's decision not to enforce has no effect on enforcement by EPA or by citizens.

Kansas

SIP Provisions

The Kansas SIP provides exemptions for excess emissions due to malfunction and necessary repairs, Kan. Admin. Regs. § 28-19-11(A), scheduled maintenance, *id.* § 28-19-11(B), and for certain routine modes of operation, *id.* § 28-19-11(C), *available at* http://www.epa.gov/region07/air/rules/kansas/2819-011.pdf. The exemption for malfunctions and necessary repairs reads "[a]bnormal operating conditions resulting from malfunction breakdown, and or necessary repairs to control or processing equipment and appurtenances which cause emissions in excess of the limitations specified in the emission control regulations ***shall not be deemed violations*** provided that …" certain criteria are met. *Id.* § 28-19-11(A) (emphasis added). The exemption for scheduled maintenance provides:

> Emissions in excess of the limitations specified in these emission control regulations resulting from scheduled maintenance of control equipment and appurtenances ***will be permitted*** only on the basis of prior approval by the department and upon demonstration that such maintenance cannot be accomplished by maximum reasonable effort, including off-shift labor where required, during periods of shutdown of any related equipment.

Id. § 28-19-11(B) (emphasis added). The third exemption in section 28-19-11 reads "[e]xcessive contaminant emission from fuel burning equipment used for indirect heating purposes resulting from fuel or load changes, start up, soot blowing, cleaning of fires, and rapping of precipitators ***will not be deemed violations*** … ." *Id.* § 28-19-11(C) (emphasis added).

Analysis

Each of these provisions in the Kansas SIP is inconsistent with the CAA and EPA policy. The provisions state that excess emissions are not violations (or are permitted), contrary to the fundamental requirement that all excess emissions be considered violations. 1982 Memorandum at 1; 1999 Memorandum at 1-2 & Attachment at 1. These provisions appear to preclude enforcement of the limitations by EPA and citizens. 1999 Memorandum at 3; Approval and Disapproval and Promulgation of Colorado Affirmative Defense Provisions for Startup and Shutdown, 71 Fed. Reg. 8958, 8959-60 (Feb. 22, 2006).

Remedy

Kansas should remove Kan. Admin. Regs. § 28-19-11 from the SIP in its entirety. Alternatively, if the provision is to be retained, it must be revised to clearly comply with the CAA and EPA guidance. The provision must stipulate that all excess emissions are violations and preserve the authority of EPA and citizens to enforce the SIP standards and limitations.

Kentucky

SIP Provisions

The Kentucky SIP provides an exemption for excess emissions due to malfunction and shutdown in the discretion of the director:

> Emissions which, due to shutdown or malfunctions, temporarily exceed the standard set forth by the cabinet ***shall be deemed in violation*** of such standards ***unless*** the requirements of this section are satisfied and the determinations specified in subsection (4) of this section are made.

401 Ky. Admin. Regs. 50:055 § 1(1) (emphasis added), *available at* http://www.epa.gov/region4/air/sips/ky/KY-Ch-50.pdf. The factors that guide the director's determination resemble the criteria that are supposed to guide a state's enforcement discretion for malfunctions:

> A source shall be relieved from compliance with the standards set forth by the cabinet if the director determines, upon a showing by the owner or operator of the source, that:
> (a) The malfunction or shutdown and ensuing startup did not result from the failure by the owner or operator of the source to operate and maintain properly the equipment;

(b) All reasonable steps were taken to correct, as expeditiously as practicable, the conditions causing the emissions to exceed the standards, including the use of off shift labor and overtime if necessary;
(c) All reasonable steps were taken to minimize the emissions and their effect on air quality resulting from the occurrence.
(d) The excess emissions are not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and
(e) The malfunction or shutdown and ensuing startup was not caused entirely or in part by poor maintenance, careless operation or any other preventable upset conditions or equipment breakdown.

401 Ky. Admin. Regs. 50:055 § 1(4); *c.f.* 1982 Memorandum, Attachment at 2.

The Kentucky SIP contains several other pollutant and source category specific SSM provisions. *Id.* 50:055, § 2(4) (automatic exemption for opacity during SSM); *id.* 51:170 s 2 (exemption for NO_X from cement kilns during SSM); *id.* 59:105 §1 (exemption for any gas generated during SSM); *id.* 61:005 § 3(4) (monitoring exception for malfunction); *id.* 61:010 § 3(2)(a) (exemptions for particulate matter from existing incinerators during startup and shutdown); *id.* 61:035 § 1 (exemption for any gas generated during SSM); *id.* 61:145 § 3(1) (exemption for sulfur dioxide emissions from existing petroleum refineries during SSM).

Analysis

The Kentucky SIP authorizes the director to decide whether excess emissions are violations and thereby preclude enforcement by EPA and citizens. This regulatory structure is inconsistent with the fundamental requirement that all excess emissions be considered violations, 1982 Memorandum at 1; 1999 Memorandum at 1-2 & Attachment at 1, and the enforcement structure of Title I of the Clean Air Act. *See* 1999 Memorandum at 3, Approval and Disapproval and Promulgation of Colorado Affirmative Defense Provisions for Startup and Shutdown, 71 Fed. Reg. 8958, 8959-60 (Feb. 22, 2006).

Remedy

Kentucky should remove 401 Ky. Admin. Regs. 50:055 § 1 from its SIP. Alternatively, if the provision is to be retained, it must be revised to clearly comply with the CAA and EPA guidance. The provision must stipulate that all excess emissions are violations and preserve the authority of EPA and citizens to enforce the SIP standards and limitations.

Jefferson County

SIP Provisions

Jefferson County Air Quality Regulations contain discretionary exemptions from compliance during startup and shutdown, and during malfunction, and an affirmative defense for emergencies, modeled on 40 C.F.R. § 70.6(g). Jefferson County Air Quality Regulations 1.07, *approved by EPA at* Approval and Promulgation of Air Quality Implementation Plans; Kentucky; Approval of Revisions to State Implementation Plan; Revised Format for Materials

Being Incorporated by Reference for Jefferson County, Kentucky, 66 Fed. Reg. 53,660 (Oct. 23, 2001).

The general regulation provides that:

> Emissions due to startup, shutdown, malfunction, or emergency, that temporarily exceed the standards set forth by the District, shall be deemed in violation of those standards ***unless***, based upon a showing by the owner or operator of the source ***and an affirmative determination by the District***, the applicable requirements of this regulation are satisfied.

Regulation 1.07 § 2.1 (emphasis added).

The requirements for relief under difference circumstances appear in sections 3 (startup and shutdown), 4 (malfunctions) and 5 (emergency). Section 5 of Regulation 1.07 calls the relief available for "emergency" an "affirmative defense." *Id.* § 5.1. However, this "affirmative defense is included in the general regulation, which implies the defense is determined by the District. *See id.* § 2.1. Section 7 allows the Air Pollution Control Officer to "authorize continued operation" during malfunctions and emergencies despite unlawful emissions. *Id.* § 7.1.

Analysis

Regulation 1.07 violates the fundamental requirement that all excess emissions be considered violations. 1999 Memorandum at 3; Approval and Disapproval and Promulgation of Colorado Affirmative Defense Provisions for Startup and Shutdown, 71 Fed. Reg. 8958, 8959-60 (Feb. 22, 2006). Furthermore, a determination by the District to exempt sources from compliance would appear to preclude EPA or citizen enforcement, contrary to the enforcement structure of the CAA. 1999 Memorandum at 3; Approval and Disapproval and Promulgation of Colorado Affirmative Defense Provisions for Startup and Shutdown, 71 Fed. Reg. at 8959-60.

There are two problems with the affirmative defense for emergency, modeled on 40 C.F.R. § 70.6(g). First, the affirmative defense for emergency is part of the Title V regulations, which should not be incorporated into SIPs. Even if the emergency provision were to remain in the SIP, it must be revised so that it is a true affirmative defense. The Code of Federal Regulations defines affirmative defense as "in the context of an enforcement proceeding, a response or defense put forward by a defendant, regarding which the defendant has the burden of proof, and the merits of which are independently and objectively evaluated in a judicial or administrative proceeding." 40 C.F.R. § 60.2265. The emergency provision in the Jefferson County Air Quality Regulations appears to allow the District to decide whether the defense applies.

Remedy

Kentucky and/or Jefferson County should remove the discretionary SSM exemptions that appear in Jefferson County Air Quality Regulation 1.07, §§ 2, 3, 4 and 7 from the SIP. The emergency provision of Jefferson County Air Quality Regulation 1.07, § 5 should also be removed.

Alternatively, if section 5 is to remain in the SIP it must be revised so that it is a true affirmative defense as EPA and the Code of Federal Regulations define that term.

Louisiana

SIP Provisions

The Louisiana SIP contains no general SSM regulation, but has many specific exemptions.

Table summarizing source and pollutant specific SSM provisions in the Louisiana SIP.

Chapter 11. Control of Emissions from Smoke	
La. Admin. Code tit. 33, § III:1107	Discretionary Exemption: "Exemptions from the provisions of LAC 33:III.1105 may be granted by the administrative authority during startup and shutdown periods if the flaring was not the result of failure to maintain or repair equipment."
Chapter 15. Emission Standards for Sulfur Dioxide	
La. Admin. Code tit. 33, § III:1507(A)(1)	Discretionary Exemption: "A four-hour (continuous) start-up exemption from the emission limitations of LAC 33:III.1503.A may be authorized by the administrative authority for plants not subject to LAC 33:III.3232 and 3233 which have been shut down."
La. Admin. Code tit. 33, § III:1507(B)(1)	Discretionary Exemption: "A four-hour (continuous) exemption from emission limitations of LAC 33:III.1503.A may be extended by the administrative authority to plants not subject to LAC 33:III.3232 and 3233 where upsets have caused excessive emissions and on-line operating changes will eliminate a temporary condition."
Chapter 21. Control of Emissions of Organic Compounds; Subchapter M—Limiting Volatile Organic Compound Emissions From Industrial Wastewater	
La. Admin. Code tit. 33, § III:2153(B)(1)(i)	Automatic Exemption: "for wastewater tanks that would normally be required to have a control device or recovery device, these devices shall not be required to meet the 90 percent removal efficiency or 50 ppmv concentration during periods of malfunction or maintenance on the devices for periods not to exceed 336 hours per year."
Chapter 22. Control of Emissions of Nitrogen Oxides (NOx)	
La. Admin. Code tit. 33, § III:2201(C)(8)	Automatic Exemption: "The following categories of equipment or processes located at an affected facility within the Baton Rouge Nonattainment Area or the Region of Influence are exempted from the provisions of this Chapter: … 8. any point source during start-up and shutdown as defined in LAC 33:III.111 or during a malfunction as defined in 40 CFR section 60.2."
Chapter 23. Control of Emissions for Specific Industries; Subchapter D—Emission Standards for the Nitric Acid Industry	
La. Admin. Code tit. 33, § III:2307(C)(1)(a)	Discretionary Exemption: "A four hour start up exemption from emission regulations may be authorized by the administrative authority for plants not subject to LAC 33:III.3191 to 3199 which have been shut down."
La. Admin. Code tit. 33, § III:2307(C)(2)(a)	Discretionary Exemption: "A four hour exemption from emission regulations may be extended by the administrative authority to plants not subject to LAC 33:III.3191 to 3199 where upsets have caused excessive emissions and on-line operating changes will eliminate a temporary condition."

Above regulations *available at* http://yosemite.epa.gov/r6/Sip0304.nsf/home?Openview&Start=1&Count=30&Expand=3.

Analysis

The automatic exemptions of La. Admin. Code tit. 33, §§ III:2153(B)(1)(i) and III:2201(C)(8) contravene the fundamental requirement that all excess emissions be considered violations. 1982 Memorandum at 1; 1999 Memorandum at 1-2 & Attachment at 1. The discretionary exemption provisions of La. Admin. Code tit. 33, §§ III:1107, III:1507(A) & (B) and III:2307(C)(1) & (2) allow a decision by the state to preclude enforcement by EPA and citizens, contrary to the enforcement provisions of the CAA. 1999 Memorandum at 3; Approval and Disapproval and Promulgation of Colorado Affirmative Defense Provisions for Startup and Shutdown, 71 Fed. Reg. 8958, 8959-60 (Feb. 22, 2006).

Remedy

Louisiana should remove the following regulations from its SIP: La. Admin. Code tit. 33, §§ III:1107, III:1507(A) & (B), III:2153(B)(1)(i), III:2201(C)(8) and III:2307(C)(1) & (2).

Maine

SIP Provisions

The Maine SIP has no generally applicable SSM regulations. However, the SIP exempts certain boilers from the visible emission limits of 06-096-101 Me. Code R. § 2 during startup and shutdown:

> This section does not apply to: … E. For boilers whose rated input capacity is greater than 200,000,000 B.T.U. per hour, violations of the applicable provision of subsection 2 during the first 4 hours following the initiation of cold startup or planned shutdown, provided that operating records are available to demonstrate that the facility was being operated to minimize emissions. Any person claiming an exemption under this paragraph shall have the burden of proving that any excess emissions were not caused entirely, or in part, by poor maintenance, careless operation, poor design or any other reasonably preventable condition.

06-096-101 Me. Code R. § 3. The SIP also contains a discretionary exemption for visible emissions during malfunctions:

> The department is authorized to exempt emissions occurring during periods of unavoidable malfunction or unplanned shutdown from civil penalty under section 349, subsection 2, if the malfunction was not caused, entirely or in part, by poor maintenance, careless operation, poor design or any other reasonably preventable condition. In such a case, the burden of proof shall be on the person seeking the exemption.

Id. § 4.

Above provisions *available at* http://www.epa.gov/region1/topics/air/sips/me/2003_ME_ch101.pdf.

Analysis

Neither of these provisions complies with the Clean Air Act because both fail to consider all excess emissions violations of the applicable limitations or standards. 1982 Memorandum at 1; 1999 Memorandum at 1-2. The Maine provisions may also be interpreted to interfere with EPA and citizen enforcement.

Section 3 seems to operate like a defense in that the exemption is only available after a case by case demonstration. But the section does not specify which decision-maker is authorized to determine whether the visible emission limits apply. One plausible interpretation of this regulation is that the department is authorized to decide that the exemption applies and therefore preclude enforcement by EPA and by citizens. Provisions that may be so interpreted should be eliminated from the SIP. 1999 Memorandum at 3; Approval and Disapproval and Promulgation of Colorado Affirmative Defense Provisions for Startup and Shutdown, 71 Fed. Reg. 8958, 8959-60 (Feb. 22, 2006).

Section 4 is less ambiguous in its operation—it clearly provides an exemption at the discretion of the department. Such a provision is contrary to the basic requirement of EPA policy that all excess emissions be considered violations. 1982 Memorandum at 1; 1999 Memorandum at 1-2. This discretionary exemption seems clearly intended to preclude enforcement by any authority, not just enforcement by the State and is therefore inconsistent with the enforcement structure of the Clean Air Act and EPA policy. 1999 Memorandum at 3.

Remedy

Maine should remove both exemptions to the visible emission limits, 06-096-101 Me. Code R. §§ 3(E), (4), from its SIP.

Michigan

SIP Provisions

The Michigan SIP contains both an enforcement discretion approach to "excess emissions resulting from malfunction, start-up, or shutdown," Mich. Admin. Code r. 336.1915, and an affirmative defense for "excess emissions during start-up or shutdown," *id*. r. 336.1916; *available at* http://yosemite.epa.gov/r5/r5ard.nsf/SIPs%20View%20By%20State%20Main%20View!OpenView&Start=1&Count=30&Expand=3.12#3.12. *See* Approval and Promulgation Michigan Provisions for Excess Emissions During Startup, Shutdown or Malfunction, 68 Fed. Reg. 8550 (Feb. 24, 2003).

The elements of the affirmative defense are almost identical to the elements of the 1999 Memorandum, as shown in the table below. The affirmative defense is not available in "a judicial action seeking injunctive relief," Mich. Admin. Code r. 336.1916(1), and "does not apply when a single emission unit, or multiple emission units at a stationary source, *causes an exceedance* of the national ambient air quality standards or any applicable prevention of significant deterioration increment," *id.* r. 336.1916(2) (emphasis added).

In addition to the elements of the defense duplicated from the 1999 Memorandum, Michigan has added another element:

> Excess emissions presenting an imminent threat to human health, safety, or the environment were reported to the department as soon as possible. Unless otherwise specified in the facility's permit, other excess emissions were reported as provided in R 336.1912. If requested by the department, a person shall submit a full written report that includes the known causes, the corrective actions taken, and the preventive measures to be taken to minimize or eliminate the chance of recurrence.

Id. r. 336.1916(1)(i).

Analysis

Affirmative defenses for excess emissions are inconsistent with the Clean Air Act, as explained above in section I of the Argument, and should be removed from the Michigan SIP. Even if the affirmative defense is to remain in the SIP, it suffers from two problems. First, the Michigan defense is available in situations where a single source or a small group of sources has the potential to cause an exceedance of the NAAQS or PSD increments, contrary to EPA policy. 1999 Memorandum at 2-3 & Attachment at 1-2, 3. The Michigan defense is not available when sources actually case an exceedance. Mich. Admin. Code r. 336-1916(2). Sources with *the potential* to cause an exceedance should be more strictly controlled at all times and should not be able to mire enforcement proceedings in the difficult empirical questions of whether or not the NAAQS or PSD increments were exceeded as a matter of fact.

According to EPA policy affirmative defenses should not be available for limits derived from federally promulgated technology based standards, such as NSPSs and NESHAPs. 1999 Memorandum, Attachment at 3. Michigan's defense applies to any "applicable limitation," which appears to include such standards and is therefore contrary to EPA policy. *See* Proposed Utah SIP Call, 75 Fed. Reg. 70,888, 70,892 (Nov. 19, 2010).

Table comparing elements of the EPA policy on affirmative defenses for startup and shutdown to the Michigan defense.

Elements of Affirmative Defense for Excess Emissions caused by Startup or Shutdown as Discussed in 1999 Memorandum	**Elements of Michigan Affirmative Defense for Startup and Shutdown**
1. The periods of excess emissions that occurred during startup and shutdown were short and infrequent and could not have been prevented through careful planning and design;	"The periods of excess emissions that occurred during start-up or shutdown were short and infrequent and could not have been prevented through careful planning and design." Mich. Admin. Code r. 336.1916(1)(a).
2. The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;	"The excess emissions that occurred during start-up or shutdown were not part of a recurring pattern indicative of inadequate design, operation, or maintenance." *Id.* r. 336.1916(1)(b).

Elements of Affirmative Defense for Excess Emissions caused by Startup or Shutdown as Discussed in 1999 Memorandum	Elements of Michigan Affirmative Defense for Startup and Shutdown
3. If the excess emissions were caused by a bypass (an intentional diversion of control equipment), then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;	"The excess emissions caused by a bypass (an intentional diversion of control equipment) were unavoidable to prevent loss of life, personal injury, or severe property damage." *Id.* r. 336.1916(1)(c).
4. At all times, the facility was operated in a manner consistent with good practice for minimizing emissions;	"The facility was operated at all times in a manner consistent with good practice for minimizing emissions." *Id.* r. 336.1916(1)(d).
5. The frequency and duration of operation in startup or shutdown mode was minimized to the maximum extent practicable;	"The frequency and duration of operating in start-up or shutdown mode were minimized to the maximum extent practicable." *Id.* r. 336.1916(1)(e).
6. All possible steps were taken to minimize the impact of the excess emissions on ambient air quality;	"All reasonably possible steps were taken to minimize the impact of the excess emissions on ambient air quality." *Id.* r. 336.1916(1)(f).
7. All emission monitoring systems were kept in operation if at all possible;	"All emission monitoring systems were kept in operation if at all possible." *Id.* r. 336.1916(1)(g).
8. The owner or operator's actions during the period of excess emissions were documented by properly signed, contemporaneous operating logs, or other relevant evidence; and	"The actions during the period of excess emissions were documented by contemporaneous operating logs or other relevant evidence as provided by R 336.1912." *Id.* r. 336.1916(1)(h). "Any information submitted to the department under this subrule shall be properly certified in accordance with the provisions of R 336.1912." *Id.* r. 336.1916(1)(j).
9. The owner or operator properly and promptly notified the appropriate regulatory authority.	"[T]he person has complied with the reporting requirements of R 336.1912 …" *Id.* r. 336.1916(1).

Remedy

The affirmative defense provision of Mich. Admin. Code r. 336.1916 should be removed as inconsistent with the Clean Air Act. Alternatively, the affirmative defense should not be available where a single source or a small group of sources has the potential to cause an exceedance of the NAAQS or PSD increments. The affirmative defense also should not apply to federally-promulgated technology-based standards.

Minnesota

SIP Provisions

The Minnesota SIP has no generally applicable SSM provision. However, the SIP contains an exemption for flared gas at petroleum refineries when those flares are caused by startup, shutdown or malfunction: "The combustion of process upset gas in a flare, or the combustion in a flare of process gas or fuel gas which is released to the flare as a result of relief valve leakage, is exempt from the standards of performance set forth in this regulation." Minn. R. 7011.1415, *available at* http://yosemite.epa.gov/r5/r5ard.nsf/977585e33633852b862575750057311a/e4b5e9ee1a7bedba8625756f004c4269!OpenDocument. Process upset gas is defined as "any gas generated by a petroleum refinery process unit as a result of start-up, shutdown, upset, or malfunction." *Id.* 7011.1400(12).

Analysis

The unconditional source category specific exemption in rule 7011.1415 violates the fundamental requirement that all excess emissions be considered violations and interfere with EPA and citizen enforcement. 1982 Memorandum at 1; 1999 Memorandum at 1-2, 3.

Remedy

Minnesota should remove from its SIP the unconditional SSM exemption for flares at petroleum refineries in Minn. R. 7011.1415.

Mississippi

SIP Provisions

The Mississippi SIP provides affirmative defenses for violations during upsets, 11-1-2 Miss. Code R. § 10.1, and for violations during unavoidable maintenance, *id.* § 10.3, as well as an exemption for violations during startup and shutdown, *id.* § 10.2. *Available at* http://www.epa.gov/region4/air/sips/ms/APC-S-1.pdf. The affirmative defenses are not limited to civil penalties, but appear to extend to actions seeking any type of relief. *See id.* §§ 10.1, 10.3. As shown in the table below, the elements of the affirmative defense for malfunctions fall far short of the EPA policy below.

The exemption for startup and shutdown provides, in pertinent part:

> Startups and shutdowns are part of normal source operation. Emissions limitations applicable to normal operation apply during startups and shutdowns except as follows: … (2) when a startup or shutdown is infrequent, the duration of excess emissions is brief in each event, and the design of the source is such that the period of excess emissions cannot be avoided without causing damage to equipment or persons … .

Id. § 10.2.

The affirmative defense for maintenance in section 10.3 states as follows:

> Unavoidable maintenance that results in brief periods of excess emissions and that is necessary to prevent or minimize emergency conditions or equipment malfunctions constitutes an affirmative defense to an enforecement [sic] action brought for noncompliance with emission standards, or other regulatory requirements if the source can demonstrate [certain criteria].

Id. § 10.3.

Analysis

Affirmative defenses for excess emissions are inconsistent with the Clean Air Act, as explained above in section I of the Argument, and should be removed from the Mississippi SIP.

Alternatively, if the affirmative defense for upsets is to remain in the SIP, it should be revised to comply with EPA policy. According to EPA policy, affirmative defenses are not appropriate where a single source or a small group of sources has the potential to cause an exceedance of the NAAQS or PSD increments. 1999 Memorandum at 2-3 & Attachment at 1-2, 3. The Mississippi provision has no corresponding limitation. Affirmative defenses should only be available in actions seeking civil penalties, and not for actions seeking injunctive relief. *Id.* at 2. Section 10.1 makes no distinction about the relief against which the defense may be asserted. In addition, the elements of the defense omit many of the elements that EPA requires for acceptable defense provisions, as shown in the table below.

Table comparing elements of the EPA policy on affirmative defenses for malfunctions to the Mississippi defense.

Elements of Affirmative Defense for Excess Emissions caused by Malfunction as Discussed in 1999 Memorandum	**Elements of Mississippi Affirmative Defense for Upsets**
1. The excess emissions were caused by a sudden, unavoidable breakdown of technology, beyond the control of the owner or operator;	"[A]n upset occurred and that the source can identify the cause(s) of the upset." 11-1-2 Miss. Code R. § 10.1(a)(1).
2. The excess emissions (a) did not stem from any activity or event that could have been foreseen and avoided, or planned for, and (b) could not have been avoided by better operation and maintenance practices;	Upset is defined as "[a]n unexpected and unplanned condition of operation of the facility in which equipment operates outside of the normal and planned parameters. An upset shall not include a condition of operation caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, operator error, or an intentional startup or shutdown of equipment." *Id.* § 2(34).
3. To the maximum extent practicable the air pollution control equipment or processes were maintained and operated in a manner consistent with good practice for minimizing emissions;	"[T]he source was at the time being properly operated." *Id.* § 10.1(a)(2).
4. Repairs were made in an expeditious fashion when the operator knew or should have known that applicable emission limitations were being exceeded. Off-shift labor and overtime must have been utilized, to the extent practicable, to ensure that such repairs were made as expeditiously as practicable;	*[no corresponding element]*
5. The amount and duration of the excess emissions (including any bypass) were minimized to the maximum extent practicable during periods of such emissions;	"[D]uring the upset the source took all reasonable steps to minimize levels of emissions that exceed the emission standards, or other requirements of Applicable Rules and Regulations or any applicable permit." *Id.* § 10.1(a)(3).
6. All possible steps were taken to minimize the impact of the excess emissions on ambient air quality;	*[no corresponding element]*
7. All emission monitoring systems were kept in operation if at all possible;	*[no corresponding element]*
8. The owner or operator's actions in response to the excess emissions were documented by properly signed, contemporaneous operating logs, or other relevant evidence;	*[no corresponding element]*

Elements of Affirmative Defense for Excess Emissions caused by Malfunction as Discussed in 1999 Memorandum	Elements of Mississippi Affirmative Defense for Upsets
9. The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and	*[no corresponding element]*
10. The owner or operator properly and promptly notified the appropriate regulatory authority.	"[T]he source submitted notice of the upset to the DEQ within 5 working days of the time the upset began; and the notice of the upset shall contain a description of the upset, any steps taken to mitigate emissions, and corrective actions taken." *Id.* § 10.1(a)(4), (5).

The exception of section 10.2 violates the fundamental requirement that all excess emissions be considered violations. 1982 Memorandum at 1; 1999 Memorandum at 1-2 & Attachment at 1. Although section 10.2 resembles an affirmative defense, it operates to nullify the violation. If the exception applies, injunctive relief will be unavailable.

The affirmative defense for unavoidable maintenance has no basis in the CAA or in EPA policy. If maintenance is due to unavoidable malfunction, then any excess emissions should be considered under the malfunction provision. Otherwise, maintenance should be scheduled to coincide with shutdown of the source. 1983 Memorandum, Attachment at 3.

Remedy

The affirmative defense provisions of 11-1-2 Miss. Code R. §§ 10.1 and 10.3 should be removed as inconsistent with the Clean Air Act. Even if affirmative defenses are to remain in the SIP, there is no basis for an affirmative defense for maintenance—Mississippi should remove 11-1-2 Miss. Code R. § 10.3 in any event. If section 10.1 is to remain in the SIP, it should be revised to adhere to EPA's policy on affirmative defenses, by limiting it to actions for civil penalties, making it unavailable where a single source or a small group of sources has the potential to cause an exceedance of the NAAQS or PSD increments, and adding the fourth, sixth, seventh, eighth and ninth elements from the 1999 Memorandum. The exemption of 11-1-2 Miss. Code R. § 10.2 should be removed from the SIP.

Missouri

SIP Provisions

Missouri's SIP contains what appears intended to be an enforcement discretion approach to excess emissions during SSM. Under section 10-6.050, "… the director or the commission shall make a determination whether the excess emissions constitute a malfunction, start-up or shutdown and whether the nature, extent and duration of the excess emissions warrant enforcement action … ." Mo. Code Regs. Ann. tit 10, § 10-6.050(C), *available at* http://www.epa.gov/region07/air/rules/missouri/10-6050.pdf.

The SIP also contains an exemption for visible emissions, *id.* § 10-6.220(3)(c), and an exemption for Hospital/Medical/Infectious Waste Incinerators ("HMIWI") during startup, shutdown and

malfunction, *id.* § 10-6.200(3)(E)(1), (3)(E)(3)(C)(I), (3)(E)(4)(B), (3)(E)(5)(E), (3)(E)(6)(F), (3)(E)(7)(E), (3)(E)(11)(C).

The exemption for visible emissions could be construed to be at the director's discretion:

> Visible emissions over the limitations shown in subsection (3)(B) of this rule are in violation of this rule unless the director determines that the excess emissions do not warrant enforcement action based on data submitted under 10 CSR 10-6.050 Start-Up, Shutdown and Malfunction Conditions.

Id. § 10-6.220(3)(c).

Analysis

Missouri's general SSM approach is ambiguous and could possibly be interpreted contrary to the Act and to EPA policy. The regulation clearly gives the director the authority to decide whether excess emissions occurred during a malfunction, start-up or shutdown, and whether they "warrant enforcement action." *Id.* § 10-6.050(C). This could simply mean that the director decides that the State will not proceed to enforce in these cases. But it could also be interpreted to give the director authority to decide that enforcement is not warranted at all, by anyone, which would preclude action by EPA and by citizens both for civil penalties and for injunctive relief. This interpretation is inconsistent with the Act and EPA policy. 1999 Memorandum at 3.

The visible emission exemption is contrary to the enforcement provisions of the Act because it could be construed to empower the director to preclude enforcement by EPA and citizens. 1999 Memorandum at 3.

Remedy

Missouri should clarify the approach of Mo. Code Regs. Ann. tit 10 § 10-6.050 so that it is unambiguously connected to the State's enforcement discretion. Mo. Code Regs. Ann. tit 10, § 10-6.220(3)(c) should be removed from the SIP completely.

Montana

SIP Provisions

Montana takes an enforcement discretion approach to excess emissions during malfunctions. Mont. Admin. R. 17.8.110(4). The SIP also contains an exception to limits for aluminum plants during startup and shutdown. *Id.* 17.8.334 ("nor shall emissions in excess of the levels required in ARM 17.8.331 and 17.8.332 during periods of startup and shutdown be considered a violation of the limits in ARM 17.8.331 and 17.8.332."), *available at* https://yosemite.epa.gov/R8/R8Sips.nsf?OpenDatabase&Start=1&Count=30&Expand=1.

Analysis

The exemption for aluminum plants during startup and shutdown is contrary to EPA policy for source category specific rules for startup and shutdown. 1999 Memorandum, Attachment at 4-5.

First, source-specific must be limited to cases where no single source or small group of sources has the potential to cause an exceedance of the NAAQS or PSD increments. *Id.*, Attachment at 5. In addition, there is nothing to indicate that the State addressed the feasibility of control strategies, minimization of the frequency and duration of startup and shutdown modes, worst-case emissions, and impacts on ambient air quality. *Id.*

Remedy

Montana should remove Mont. Admin. R. 17.8.334 from its SIP or revise it in accordance with EPA's policy on source category specific rules for startup

Nebraska

SIP Provisions

Nebraska's SIP contains what appears intended to be an enforcement discretion approach to excess emissions during SSM. The SIP states that "… the Director shall make a determination whether the excess emissions constitute a malfunction, start-up, or shutdown, and whether the nature, extent and duration of the excess emissions warrant enforcement action … ." 129 Neb. Admin. Code § 11-35(001), *available at* http://www.epa.gov/region07/air/rules/nebraska/t129ch35.pdf. The SIP also contains exemptions for HMIWI during startup, shutdown and malfunction. *Id.* § 18-004.2.

Analysis

Nebraska's general SSM approach is ambiguous and could possibly be interpreted contrary to the Act and to EPA policy. The regulation clearly gives the Director the authority to decide whether excess emissions "warrant enforcement action." *Id.* § 11-35(001). This phrase could simply mean that the Director decides that the State will not proceed to enforce. But it could also be interpreted to give the Director authority to decide that enforcement is not warranted at all, by anyone, which would preclude action by EPA and by citizens both for civil penalties and for injunctive relief. This interpretation is inconsistent with the Act and EPA policy. 1999 Memorandum at 3.

Remedy

Nebraska should clarify the approach of 129 Neb. Admin. Code § 11-35(001) so that it is unambiguously connected to the State's enforcement discretion. The SSM exemptions for HMIWI of 129 Neb. Admin. Code § 18-004.2 should be removed entirely.

Lincoln/Lancaster County

SIP Provisions

The Lincoln-Lancaster County Health Department ("LLCHD") has adopted an SSM regulation that parallels the Nebraska Administrative Code. Lincoln-Lancaster County Air Pollution Control Program, art. 2, § 35, *approved by EPA at* Approval and Promulgation of Implementation Plans and Approval of 112(l) Authority; Lincoln-Lancaster County Health

Department (LLCHD) and City of Omaha (Nebraska), 61 Fed. Reg. 5699 (Feb. 14, 1996). Section 35 is identical to 129 Neb. Admin. Code § 11-35 in all aspects pertinent to this analysis.

Analysis

LLCHD's general SSM approach is ambiguous and could possibly be interpreted contrary to the Act and to EPA policy. The regulation clearly gives the Director the authority to decide whether excess emissions "warrant enforcement action." *Id.* § 35(A). This phrase could be interpreted to give the Director authority to decide that enforcement is not warranted at all, by anyone, which would preclude action by EPA and by citizens both for civil penalties and for injunctive relief. This interpretation is inconsistent with the Act and EPA policy. 1999 Memorandum at 3.

Remedy

Nebraska and/or LLCHD should clarify the approach of Lincoln-Lancaster County Air Pollution Control Program, art. 2, § 35 so that it unambiguously implements enforcement discretion.

New Hampshire

SIP Provisions

The New Hampshire SIP requires the division to allow excess emissions when air pollution control equipment breaks:

> In the event of a malfunction or breakdown of any component part of the air pollution control equipment, increased emissions ***shall be allowed*** by the division for a period not to exceed 48 hours provided that there is no immediate danger to public health.

N.H. Code R. Env-A 902.03 (emphasis added), *available at* http://www.epa.gov/region1/topics/air/sips/nh/2003_Env_A_900_NH.pdf. This mandatory exemption may be extended:

> The director may, upon request of an owner or operator of a stationary source or device, grant an extension of time or a temporary variance for a period longer than 48 hours.

Id. 902.04.

In addition to these generally applicable provisions, the New Hampshire SIP contains an exemption for visible emissions during startup for service industries, *id.* 1203.05, and an exemption for visible emissions during startup at asphalt plants, *id.* 1207.02.

Analysis

Because section 902.03 is a generally applicable regulation that provides that if certain conditions existed during a period of excess emissions, then those exceedances would not be considered violations, it is an automatic exemption. 1999 Memorandum, Attachment at 1 n.2.

Automatic exemptions are not allowed. Both N.H. Code R. Env-A 902.03 and 902.04 should be removed from the SIP. The regulation also appears to authorize the division to allow emissions, which could be interpreted to preclude enforcement by EPA and citizens, contrary to the enforcement structure of Title I of the CAA. 1999 Memorandum at 3; Approval and Disapproval and Promulgation of Colorado Affirmative Defense Provisions for Startup and Shutdown, 71 Fed. Reg. 8958, 8959-60 (Feb. 22, 2006) (disapproving section II.J.5).

The source specific exemptions of N.H. Code R. Env-A 1203.05 and 1207.02 also fail to comply with EPA policy. EPA allows source category specific rules for startup and shutdown, but only under certain conditions, none of which are met in this case. 1999 Memorandum, Attachment at 4-5. First, source-specific must be limited to cases where no single source or small group of sources has the potential to cause an exceedance of the NAAQS or PSD increments. *Id.*, Attachment at 5. New Hampshire's exemptions are not limited in this way. Of the seven criteria EPA considers adequate to justify a source specific emission limit during startup and shutdown, section 1207.02 arguably meets only one of them and section 1203.05 meets none at all. *Compare* 1999 Memorandum, Attachment at 5 *with* N.H. Code R. Env-A 1203.05 and 1207.02. The source category of section 1207.05 is somewhat narrowly defined (asphalt plants existing prior to 1974) but there is nothing to indicate that the State addressed the feasibility of control strategies, minimization of the frequency and duration of startup and shutdown modes, worst-case emissions, impacts on ambient air quality, planning, design and operating processes, and documentation at the source.

Remedy

New Hampshire should remove N.H. Code R. Env-A 902.03 and 902.04 from its SIP. Alternatively, if the provisions are to be retained, they must be revised to clearly comply with the CAA and EPA guidance. The provisions must stipulate that all excess emissions are violations and preserve the authority of EPA and citizens to enforce the SIP standards and limitations. The state should remove the source specific exemptions for startup and shutdown in N.H. Code R. Env-A 1203.05 and 1207.02.

New Jersey

SIP Provisions

New Jersey does not have a general approach to SSM in its SIP. However there are several pollutant specific exemptions that are inconsistent with the Act and EPA policy. The New Jersey SIP exempts "[t]he discharge from any stack or chimney having the sole function of relieving pressure of gas, vapor, or liquid under abnormal emergency conditions" from compliance with any sulfur limitation. N.J. Admin. Code § 7:27-7.2(k)(2), *available at* http://www.epa.gov/region02/air/sip/7_27-Sub7.pdf. This exemption applies to sulfur emissions from industrial sources. *Id.* Emergency conditions are not defined in that subchapter or in the general definitions of subchapter 1. The SIP also exempts electric generating units from compliance with NO_X emissions limits when it is operating at "emergency capacity," at the direction of a load dispatcher during a MEG alert. *Id.* § 7:27-19.24, *available at* http://www.epa.gov/region02/air/sip/pdf/7_27-sub19_09.pdf.

> "MEG alert" means a period in which one or more electric generating units are operated at emergency capacity at the direction of the load dispatcher, in order to prevent or mitigate voltage reductions or interruptions in electric service, or both. A MEG alert begins and ends as follows: 1. An alert begins when one or more electric generating units are operated at emergency capacity after receiving notice from the load dispatcher, directing the electric generating unit to do so; and 2. An alert ends when the electric generating unit ceases operating its electric generating units at emergency capacity.

Id. § 7:27-19.1.

Analysis

The exemption for discharges during abnormal emergency conditions is inconsistent with EPA policy. The fact that these discharges occur through stacks or chimneys that are used only in emergency conditions does not change the nature of the emissions themselves. Under EPA policy, section 7:27-7.2(k)(2) is either an automatic exemption, *see* 1999 Memorandum, Attachment 1 n.2, or a source specific exemption, *see id.*, Attachment at 4-5. In either case, it should be removed.

The MEG alert exemption for electric generating units cannot ensure compliance with the NAAQS and PSD increments for NO_X because ambient air quality is nowhere mentioned as a relevant consideration.

Remedy

New Jersey should remove the two source-specific exemptions in N.J. Admin. Code §§ 7:27-7.2(k)(2) and 7:27-19.24 from its SIP.

New Mexico

SIP Provisions

The New Mexico SIP contains affirmative defenses for excess emissions due to malfunction, N.M. Code R. § 20.2.7.111, due to startup and shutdown, *id.* § 20.2.7.112, and due to emergencies, *id.* § 20.2.7.113, that EPA approved in 2009. Approval and Promulgation of Revision to New Mexico Implementation Plan for Excess Emissions, 74 Fed. Reg. 46,910 (Sep. 14, 2009). The regulations state that the department's determination with respect to any of the defenses "shall not preclude an enforcement action by the federal government or a citizen pursuant to the federal Clean Air Act." *Id.* § 20.2.7.115. As shown in the tables below, the elements of the affirmative defenses for excess emissions during malfunction and startup and shutdown have criteria that closely mirror EPA's policy. The emergency defense reflects the defense in the Title V regulations at 40 C.F.R. § 70.6(g). None of the defenses mention situations where a single source or a small group of sources has the potential to cause an exceedance of the NAAQS. *See* N.M. Code R. §§ 20.2.7.111, 20.2.7.112, 20.2.7.113.

Analysis

Affirmative defenses for excess emissions are inconsistent with the Clean Air Act, as explained above in section I of the Argument, and should be removed from the New Mexico SIP. Alternatively, the affirmative defense provisions should be revised to ensure that they are not available when a single source or small group of sources has the potential to cause exceedances of the NAAQS or PSD increments. 1999 Memorandum at 2-3, 4 & Attachment at 1.

The emergency defense of 40 C.F.R. § 70.6(g) is a Title V regulation and should not appear in the SIP. When EPA approved these provisions, it expressly delayed consideration of the Title V program. Approval and Promulgation of New Mexico Implementation Plan, Excess Emissions, 74 Fed. Reg. at 46,911. At that time, EPA believed the approach of the emergency affirmative defense "is consistent with our guidance documents," despite the fact that none of the cited guidance documents say anything about the Title V emergency defense. *Id.* at 46,911-12.

Table comparing elements of the EPA policy on affirmative defenses for malfunctions to the New Mexico defense.

Elements of Affirmative Defense for Excess Emissions caused by Malfunctions as Discussed in 1999 Memorandum	**Elements of New Mexico's Affirmative Defense for Malfunctions**
1. The excess emissions were caused by a sudden, unavoidable breakdown of technology, beyond the control of the owner or operator;	"The excess emission was caused by a malfunction." N.M. Code R. § 20.2.7.111(A)(1). " 'Malfunction' means any sudden and unavoidable failure of air pollution control equipment or process equipment beyond the control of the owner or operator, including malfunction during startup or shutdown. A failure that is caused entirely or in part by poor maintenance, careless operation, or any other preventable equipment breakdown shall not be considered a malfunction." *Id.* § 20.2.7.7(E)
2. The excess emissions (a) did not stem from any activity or event that could have been foreseen and avoided, or planned for, and (b) could not have been avoided by better operation and maintenance practices;	"The excess emission: (a) did not stem from any activity or event that could have been foreseen and avoided, or planned for; and (b) could not have been avoided by better operation and maintenance practices." *Id.* § 20.2.7.111(A)(2).
3. To the maximum extent practicable the air pollution control equipment or processes were maintained and operated in a manner consistent with good practice for minimizing emissions;	"To the maximum extent practicable the air pollution control equipment or processes were maintained and operated in a manner consistent with good practice for minimizing emissions." *Id.* § 20.2.7.111(A)(3).
4. Repairs were made in an expeditious fashion when the operator knew or should have known that applicable emission limitations were being exceeded. Off-shift labor and overtime must have been utilized, to the extent practicable, to ensure that such repairs were made as expeditiously as practicable;	"Repairs were made in an expeditious fashion when the operator knew or should have known that applicable emission limitations were being exceeded. Off-shift labor and overtime must have been utilized, to the extent practicable, to ensure that such repairs were made as expeditiously as practicable." *Id.* § 20.2.7.111(A)(4).
5. The amount and duration of the excess emissions (including any bypass) were minimized to the maximum extent practicable during periods of such emissions;	"The amount and duration of the excess emission (including any bypass) were minimized to the maximum extent practicable during periods of such emissions." *Id.* § 20.2.7.111(A)(5).

Elements of Affirmative Defense for Excess Emissions caused by Malfunctions as Discussed in 1999 Memorandum	Elements of New Mexico's Affirmative Defense for Malfunctions
6. All possible steps were taken to minimize the impact of the excess emissions on ambient air quality;	"All possible steps were taken to minimize the impact of the excess emission on ambient air quality." *Id.* § 20.2.7.111(A)(6).
7. All emission monitoring systems were kept in operation if at all possible;	"All emission monitoring systems were kept in operation if at all possible." *Id.* § 20.2.7.111(A)(7).
8. The owner or operator's actions in response to the excess emissions were documented by properly signed, contemporaneous operating logs, or other relevant evidence;	"The owner or operator's actions in response to the excess emission were documented by properly signed, contemporaneous operating logs, or other relevant evidence." *Id.* § 20.2.7.111(a)(10).
9. The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and	"The excess emission was not part of a recurring pattern indicative of inadequate design, operation, or maintenance." *Id.* § 20.2.7.111(A)(8).
10. The owner or operator properly and promptly notified the appropriate regulatory authority.	"The owner or operator complied with the notification requirements in Section 110 of 20.2.7 NMAC." *Id.* § 20.2.7.111(a)(9).

Table comparing elements of the EPA policy on affirmative defenses for startup and shutdown to the New Mexico defense.

Elements of Affirmative Defense for Excess Emissions caused by Startup or Shutdown as Discussed in 1999 Memorandum	Elements of New Mexico Affirmative Defense for Startup and Shutdown
1. The periods of excess emissions that occurred during startup and shutdown were short and infrequent and could not have been prevented through careful planning and design;	"The excess emission occurred during a startup or shutdown." N.M. Code R. § 20.2.7.112(A)(1). "The duration of the excess emission that occurred during startup and shutdown was short and could not have been prevented through careful planning and design." *Id.* § 20.2.7.112(A)(2).
2. The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;	"The excess emission was not part of a recurring pattern indicative of inadequate design, operation, or maintenance." *Id.* § 20.2.7.112(A)(3).
3. If the excess emissions were caused by a bypass (an intentional diversion of control equipment), then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;	"If the excess emission was caused by a bypass (an intentional diversion of control equipment), then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage." *Id.* § 20.2.7.112(A)(4).
4. At all times, the facility was operated in a manner consistent with good practice for minimizing emissions;	"At all times, the source was operated in a manner consistent with good practices for minimizing emissions." *Id.* § 20.2.7.112(A)(5).
5. The frequency and duration of operation in startup or shutdown mode was minimized to the maximum extent practicable;	"The frequency and duration of operation in startup or shutdown mode was minimized to the maximum extent practicable." *Id.* § 20.2.7.112(A)(6).
6. All possible steps were taken to minimize the impact of the excess emissions on ambient air quality;	"All possible steps were taken to minimize the impact of the excess emission on ambient air quality." *Id.* § 20.2.7.112(A)(7).
7. All emission monitoring systems were kept in operation if at all possible;	"All emissions monitoring systems were kept in operation if at all possible." *Id.* § 20.2.7.112(A)(8).
8. The owner or operator's actions during the period of excess emissions were documented by properly signed, contemporaneous operating logs, or other relevant	"The owner or operator's actions during the period of the excess emission were documented by properly signed, contemporaneous operating logs, or other relevant

evidence; and	evidence." *Id.* § 20.2.7.112(A)(10).
9. The owner or operator properly and promptly notified the appropriate regulatory authority.	"The owner or operator complied with the notification requirements in Section 110 of 20.2.7 NMAC." *Id.* § 20.2.7.112(A)(9).

Remedy

The affirmative defense provisions of N.M. Code R. §§ 20.2.7.111 and 20.2.7.112 should be removed as inconsistent with the Clean Air Act, as explained above in section I of the Argument. Alternatively, if the affirmative defenses in sections 20.2.7.111 and 20.2.7.112 are to remain in the SIP, they should not be available where a single source or a small group of sources has the potential to cause an exceedance of the NAAQS or PSD increments. The emergency affirmative defense of N.M. Code R. § 20.2.7.113 should be removed from the SIP.

North Carolina

SIP Provisions

The North Carolina SIP contains an exemption for excess emissions during malfunctions in the discretion of the director:

> Any excess emissions that do not occur during start-up or shut down ***shall be considered a violation*** of the appropriate rule ***unless*** the owner or operator of the source of the excess emissions demonstrates to the director, that the excess emissions are the result of a malfunction.

15A N.C. Admin. Code 2D.0535(c) (emphasis added), *available at* http://www.epa.gov/region4/air/sips/nc/2D%20.0501-.0542%20updated%20101105.pdf. The regulation does not allow excuses "for more than 15 percent of the operating time during each calendar year." *Id.* 2D.0535(c)(7). Excess emissions during startup and shutdown are treated in a similar fashion:

> Excess emissions during start-up and shut-down ***shall be considered a violation*** of the appropriate rule ***if the owner or operator cannot demonstrate*** that the excess emissions are unavoidable when requested to do so by the Director.

Id. 2D.0535(g) (emphasis added). In addition, "[t]he Director may specify for a particular source the amount, time, and duration of emissions that are allowed during start-up or shutdown." *Id.*

Analysis

The North Carolina SIP is inconsistent with the Act and EPA policy because a decision of the director can exempt sources from compliance. Both provisions allow the director to decide whether a violation has occurred, contrary to the fundamental requirement that all excess emissions be considered violations. 1982 Memorandum at 1; 1999 Memorandum at 1 & Attachment at 1-2. This decision appears to preclude enforcement of the limitations by EPA and citizens. 1999 Memorandum at 3; Approval and Disapproval and Promulgation of Colorado

Affirmative Defense Provisions for Startup and Shutdown, 71 Fed. Reg. 8958, 8959-60 (Feb. 22, 2006) (disapproving section II.J.5).

The limitation of excuses for malfunctions to 15 percent of the operating time during each calendar year does nothing to ensure that ambient air quality standards are met. The amount of excess emissions released during malfunctions may far exceed the allowable emissions at other times. Envtl. Integrity Project, *Gaming the System* 5-9 (2004), *available at* http://www.environmentalintegrity.org/pdf/publications/EIP_upsets_report_appendixA.pdf.

Remedy

North Carolina should remove 15A N.C. Admin. Code 2D.0535(c) and (g) from its SIP. Alternatively, if the provisions are to be retained, they must be revised to clearly comply with the CAA and EPA guidance. The provisions must stipulate that all excess emissions are violations and preserve the authority of EPA and citizens to enforce the SIP standards and limitations.

Forsyth County

SIP Provisions

The Forsyth County Code has a SIP-approved SSM provision that is substantially similar to North Carolina's state-wide provision. Forsyth County Code ch. 3, 3D.0535, *approved by EPA at* Approval and Promulgation of Air Quality Implementation Plans; North Carolina; Miscellaneous Revisions to the Forsyth County Local Implementation Plan, 65 Fed. Reg. 8081 (Feb. 17, 2000). The code contains discretionary exemptions for excess emissions during SSM that are almost identical to the state provisions. *Compare* Forsyth County Code, ch. 3, 3D.0535(c) *with* 15A N.C. Admin. Code 2D.0535(c) *and* Forsyth County Code, ch. 3, 3D.0535(g) *with* 15A N.C. Admin. Code 2D.0535(g).

Analysis

The local regulations have the same problems as the state-wide regulations. The Director is empowered to excuse violations and preclude enforcement by EPA and citizens, contrary to the fundamental requirements and structure of the Act. 1982 Memorandum at 1; 1999 Memorandum at 1 & Attachment at 1-2; Approval and Disapproval and Promulgation of Colorado Affirmative Defense Provisions for Startup and Shutdown, 71 Fed. Reg. 8958, 8959-60 (Feb. 22, 2006).

Remedy

North Carolina and/or Forsyth County should remove Forsyth County Code ch. 3, 3D.0535 from the SIP. Alternatively, if the provision is to be retained, it must be revised to clearly comply with the CAA and EPA guidance. The provision must stipulate that all excess emissions are violations and preserve the authority of EPA and citizens to enforce the SIP standards and limitations.

North Dakota

SIP Provisions

EPA recently proposed to approve North Dakota's revised SSM provision, N.D. Admin. Code § 33-15-01-13. Approval and Promulgation of Revisions to the North Dakota Air Pollution Control Rules, 76 Fed. Reg. 25,652 (proposed May 5, 2011). There are other rules, though, that create pollutant- and source category specific-exemptions. The SIP creates an exemption from the opacity limit when it is not technically feasible to meet it:

> The provisions of sections 33-15-03-01, 33-15-03-02, 33-15-03-03, and 33-15-03-03.1 shall not apply in the following circumstances: … (4) Where the limits specified in this article cannot be met because of operations or processes such as, but not limited to, oil field service and drilling operations, but only so long as it is not technically feasible to meet said specifications.

N.D. Admin. Code § 33-15-03-04(4), *available at* https://yosemite.epa.gov/R8/R8Sips.nsf/9880b8bc95f12ee787256b5f00549f2e/3a5b0936f386f410872578a4006b90c3?OpenDocument.

The SIP also exempts industrial processes from particulate matter limits during breakdown and maintenance:

> Temporary operational breakdowns or cleaning of air pollution equipment for any process are permitted provided the owner or operator immediately advises the department of the circumstances and outlines an acceptable corrective program and provided such operations do not cause an immediate public health hazard.

Id. § 33-15-05-01(2)(a)(1), *available at* https://yosemite.epa.gov/R8/R8Sips.nsf/9880b8bc95f12ee787256b5f00549f2e/e7f35b4d7da51d9c872578a400717611?OpenDocument.

Analysis

Both pollutant and source category specific exemptions are contrary to the Act and EPA policy because they do not consider each instance of excess emissions a violation of the applicable standard, and because they could be construed to preclude EPA and citizen enforcement. 1982 Memorandum 1 & Attachment at 1; 1999 Memorandum at 1-2.

Remedy

North Dakota should remove the pollutant and source category specific exemptions in N.D. Admin. Code §§ 33-15-03-04(4) and 33-15-05-01(2)(a)(1) from its SIP.

Ohio

SIP Provisions

The Ohio SIP contains general provisions governing malfunctions and scheduled maintenance. Ohio Admin. Code 3745-15-06, *available at* http://yosemite.epa.gov/r5/r5ard.nsf/SIPs%20View%20By%20State%20Main%20View!OpenView&Start=1&Count=30&Expand=5.5.6#5.5.6. Generally, air pollution control equipment must be kept in operation whenever the source is operating. *Id.* 3745-15-06(A)(2). However, "[t]he director shall authorize the shutdown of air pollution control equipment if, in his judgment, the situation justifies continued operation of the sources." *Id.* 3745-15-06(A)(3). The malfunction provision contains an express enforcement discretion approach to excess emissions, stating that "[t]he director shall take appropriate action …" under certain listed circumstances. *Id.* 3745-15-06(C)

The SIP also contains several source category and pollutant specific exemptions. The regulations limiting emissions from portland cement kilns contain an automatic exemption during periods of SSM. *Id.* 3745-14-11(D). There are also exemptions from the visible particulate matter limits during malfunctions. *Id.* 3745-17-07(A)(3)(c); *see also id.* 3745-17-07(B)(11)(f) (similar exemption for fugitive dust). The SIP contains exemptions for HMIWI during startup, shutdown and malfunction. *Id.* 3745-75-02(E), (J), 3745-75-03(I), 3745-75-04(K), (L). Foregoing provisions *available at* http://yosemite.epa.gov/r5/r5ard.nsf/SIPs%20View%20By%20State%20Main%20View!OpenView&Start=1&Count=30&Collapse=5.5#5.5.

Analysis

The effect of the director's authorization of scheduled maintenance under rule 3745-15-06(A)(3) is not clear. One plausible interpretation of the rule would excuse any excess emissions during the time that the director had authorized operation without air pollution control equipment. This interpretation is contrary to the enforcement scheme of the Act because it allows a decision by the state to preclude EPA and citizen enforcement. 1999 Memorandum at 3; Approval and Disapproval and Promulgation of Colorado Affirmative Defense Provisions for Startup and Shutdown, 71 Fed. Reg. 8958, 8959-60 (Feb. 22, 2006).

In addition, the director's decision to authorize shutdown of air pollution control equipment during scheduled maintenance is inconsistent with EPA policy, which considers excess emissions during scheduled maintenance violations unless "a source can demonstrate that such emissions could [not] have been avoided through better scheduling for maintenance or through better operation and maintenance practices." 1983 Memorandum, Attachment at 3. The Ohio regulation does not have similar considerations.

The exemptions of Ohio Admin. Code 3745-14-11(D), 3745-17-07(A)(3)(c), 3745-17-07(B)(11)(f), 3745-75-02(E), (J), 3745-75-03(I) and 3745-75-04(K), (L) violate the fundamental requirement that all excess emissions be considered violations and interfere with EPA and citizen enforcement.

Remedy

Ohio should clarify that the authorization to shut down air pollution control equipment in Ohio Admin. Code 3745-15-06(A)(3) does not exempt the source from compliance with emission limits and standards and further amend the rule to include the conditions on excess emissions during scheduled maintenance in the 1983 Memorandum at 3. The exemptions of Ohio Admin. Code 3745-14-11(D), 3745-17-07(A)(3)(c), 3745-17-07(B)(11)(f), 3745-75-02(E), (J), 3745-75-03(I) and 3745-75-04(K), (L) should be removed entirely.

Oklahoma

SIP Provisions

The Oklahoma SIP creates an exemption from air quality standards and emissions limits during periods of SSM. Okla. Admin. Code §§ 252:100-9-1 to -8, *available at* http://yosemite.epa.gov/r6/Sip0304.nsf/dc994a1edbcf32c08625651c00552ed8/b9c9ff285b7172a5862575b5006d5a52!OpenDocument. Section 252:100-9-3 provides:

> (a) Reporting. All excess emissions shall be reported as provided in this Chapter. The operation of any air pollution source which results in excess emissions caused by malfunction, shutdown, startup or regularly scheduled maintenance is in violation of the applicable air pollution control rule unless the owner or operator of the facility has complied with the notification requirements prescribed in this Subchapter.
> (b) Demonstration of cause. The owner or operator of the facility must demonstrate to the satisfaction of the Director of the Air Quality Division, in a timely manner prescribed by 252:100-9-4 and 252:100-9-5, that:
> (1) the excess emissions resulted from either malfunction or damage to the air pollution control or process equipment, sudden and unavoidable abnormal operating conditions during startup or shutdown, or scheduled maintenance;
> (2) measures, such as the use of off-shift and overtime labor, have been utilized to effect repairs and minimize emissions; and,
> (3) excess emissions do not occur with such frequency that negligent, marginal or unsafe operation is indicated.

Okla. Admin. Code § 252:100-9-3.

Section 4 requires that maintenance be performed when process equipment is shutdown, "when practicable." *Id.* § 252:100-9-4(a). When maintenance is scheduled for a time when process equipment is running, the regulation requires the owner or operator to give advance notice to the Director. *Id.* § 252:100-9-4(b). The required notice includes a justification of the decision to perform maintenance without shutting down the process equipment. *Id.* § 252:100-9-4(b)(4).

Analysis

Oklahoma's SIP currently contains provisions that implement an exemption from air standards and emission limits during SSM conditions. The approved SSM provisions in SIP are not consistent with the CAA and EPA policy on exemptions from enforcement during SSM.

Oklahoma's existing SSM SIP regulations do not clearly implement either an enforcement discretion approach or an affirmative defense approach. The plain meaning of the SSM provisions, in fact, seems to empower the Director to excuse violations entirely and thereby preclude enforcement by EPA or citizens. Specifically, if an owner or operator satisfies the Director of the regulatory criteria under section 3(b), then the language of section 3(a) creates an exemption for the source and strongly implies that the excess emission is not a violation at all. Okla. Admin. Code § 252-100-9-3(a) should be rephrased to clarify that the Director's decision not to enforce an excess emission does not excuse the violation and does not preclude enforcement by EPA or citizens.

Oklahoma's SIP seems to exempt excess emissions during scheduled maintenance from enforcement entirely. Okla. Admin. Code § 252:100-9-3(b)(1). Under the Oklahoma SIP provision, the first required showing that an owner or operator must make to avoid enforcement of an emission limitation is that the excess emission resulted from one of three causes. Those three causes are "[1] either malfunction or damage to the air pollution control or process equipment, [2] sudden and unavoidable abnormal operating conditions during startup or shutdown, or [3] *scheduled maintenance*." *Id.* (emphasis and numbering added).[75] The second category of causes is basically a malfunction during startup or shutdown, which is properly treated like any other malfunction. EPA has been consistently clear, though, that the third category of causes in Oklahoma's list, scheduled maintenance, is not a general excuse for excess emissions. 1983 Memorandum, Attachment at 3; *see also* Approval and Promulgation of Implementation Plans; Texas; Excess Emissions During Startup, Shutdown, Maintenance, and Malfunction Activities, 75 Fed. Reg. 26,892, 26,896 (June 1, 2010). In EPA's judgment, scheduled maintenance, like any other planned phase of operation, is subject to the normal emission limits. 1983 Memorandum, Attachment at 3.

Although section 4 places some constraints on when maintenance should be performed, the reach of the exemption for scheduled maintenance remains impermissibly broad. EPA recognizes an excuse for excess emissions during scheduled maintenance only when a violation is unavoidable. 1983 Policy Statement, *supra* note 6, Attachment at 3. The Oklahoma regulations, on the other hand, allow scheduled maintenance as an excuse whenever concurrent shutdown of process equipment would not be practicable. Okla. Admin. Code § 252:100-9-4(a).

[75] It is clear that there are three distinct conditions here rather than two. First, the comma after "startup or shutdown," and the lack of any comma after "startup" indicate that scheduled maintenance is its own category of exception. Oklahoma's response to EPA's request for clarification also indicates that the intent of this regulation is not just to excuse scheduled maintenance itself rather than abnormal conditions during scheduled maintenance. Revision to Oklahoma Regulation 1.5, 49 Fed. Reg. at 3,084 (stating that "the intent of this regulation [is] to allow the [Department] not to pursue enforcement of violations due to removing control equipment from operation to perform maintenance . . . .").

Remedy

EPA should require Oklahoma to amend Okla. Admin. Code § 252:100-9-3(a) so that it is clear that the Director's decision not to enforce in the case of excess emissions does not excuse the violation and has no effect on EPA or citizen enforcement actions. "Scheduled maintenance" should be removed from Okla. Admin. Code § 252:100-9-3(b)(1) as a permissible excuse for excess emissions.

Oregon

SIP Provisions

Oregon's SIP contains what appears intended to be an enforcement discretion approach to excess emissions during SSM. Or. Admin. R. 340-028-1400 and 340-028-1450, *available at* http://yosemite.epa.gov/r10/AIRPAGE.NSF/283d45bd5bb068e68825650f0064cdc2/e4e37b053f78d12f88256cde008071c3?OpenDocument. According to the SIP, "[e]missions of air contaminants in excess of applicable standards or permit conditions are considered unauthorized and subject to enforcement action … ." *Id.* 340-028-1400. "In determining if a period of excess emissions is avoidable, and whether enforcement action is warranted, the Department, based upon information submitted by the owner or operator, shall consider whether the following criteria are met … ." *Id.* 340-028-1450

Analysis

Oregon's general SSM approach is ambiguous and could possibly be interpreted contrary to the Act and to EPA policy. The regulation clearly gives the Department the authority to decide whether "enforcement action is warranted." *Id.* 340-028-1450. This phrase could simply mean that the Department decides that the State will not proceed to enforce. But it could also be interpreted to give the Department authority to decide that enforcement is not warranted at all, by anyone, which would preclude action by EPA and by citizens both for civil penalties and for injunctive relief. This interpretation is inconsistent with the Act and EPA policy. 1999 Memorandum at 3.

Remedy

Oregon should clarify the approach of Or. Admin. R. 340-028-1450 so that it is unambiguously connected to the State's enforcement discretion.

Rhode Island

SIP Provisions

The Rhode Island SIP contains a case by case petition procedure whereby a source can continue to operate during a malfunction of its control equipment:

> In the event that the malfunction of an air pollution control system is expected or may reasonably be expected to continue for longer than 24 hours and if the owner or operator wishes to operate the source on which it is installed at any time

> beyond that period, the Director shall be petitioned for a variance under Section 23-25-15 of the General Laws of Rhode Island, as amended.

25-4-13 R.I. Code R. 16.2, *available at* http://www.epa.gov/region1/topics/air/sips/ri/2003_RI_reg_16.pdf.

The statutory provision that authorizes this variance reads:

> (a) Upon application and after a hearing, the director may suspend the enforcement of the whole or any part of this chapter or of any rule or regulation promulgated under this chapter in the case of any person who shall show that the enforcement of this chapter would constitute undue hardship on that person without a corresponding benefit or advantage obtained by it; provided, that no suspension shall be entered deferring compliance with a requirement of this chapter or the rules and regulations promulgated under this chapter, unless that deferral is consistent with the provisions and procedures of the federal Clean Air Act, 42 U.S.C. § 7401 et seq.
>
> …
>
> (d) Notwithstanding the limitations of this section, the director may, upon application, defer compliance with the whole or any part of this chapter or of any rule or regulation promulgated under this chapter where compliance is not possible because of breakdowns or malfunctions of equipment, acts of God, or other unavoidable casualties; provided, that this order shall not defer compliance for more than three (3) months.

R.I. Gen. Laws § 23-25-15 (formerly codified at R.I. Gen. Laws § 23-23-15).

In addition to the petition procedure for continued operation, the Rhode Island SIP contains exemptions for boilers and internal combustion engines that are used on a stand-by or emergency basis. 25-4-13 R.I. Code R. §§ 13.4.1(a) (exempts boilers used on a stand-by or emergency basis from particulate matter limitations), 27.2.3 (exempts emergency stand-by internal combustion engines from NO_X limits). HMIWI seem to be exempt from all limits during startup, shutdown and malfunction. 25-4-39 R.I. Code R. §§ 39.5.4, 39.7.5(a), 39.7.6(b), 39.7.7(e), 39.7.8(f), 39.7.9(e), 39.7.11(c)(2). Foregoing provisions *available at* http://www.epa.gov/region1/topics/air/sips/sips_ri.html.

Analysis

The statutory variance provision of R.I. Gen. Laws § 23-25-15 does not appear to be SIP approved. *See* 40 C.F.R. §§ 52.2070-52.2089. However, it clearly authorizes the director to suspend enforcement and defer compliance. The effect of the permission to continue operation during periods of excess emissions, granted under section 23-25-15, is not clear. Arguably, a variance from the director could excuse compliance and thereby prevent EPA and citizen enforcement. This type of provision is fundamentally at odds with the enforcement structure of Title I of the Clean Air Act and EPA policy. 1999 Memorandum at 3; Approval and Disapproval

and Promulgation of Colorado Affirmative Defense Provisions for Startup and Shutdown, 71 Fed. Reg. 8958, 8959-60 (Feb. 22, 2006).

Remedy

Rhode Island should remove that portion of 25-4-13 R.I. Code R. 16.2 that authorizes variances arguably permitting excess emissions during the malfunction of air pollution control equipment.

South Carolina

SIP Provisions

The South Carolina SIP contains no generally applicable SSM provision. There are, however, several source category and pollutant specific exemptions. Federally approved SIP available at http://www.epa.gov/region4/air/sips/sc/content.htm. There are exemptions to opacity limits for fuel burning operations, S.C. Code Ann. Regs. 61-62.5 St 1(C) ("The opacity standards set forth above do not apply during startup or shutdown."), exemptions to NO_X limits for startup and shutdown burners operated less than 500 hours per year, *id.* 61-62.5 St 5.2(I)(b)(14), and exemptions from sulfur limits for kraft pulp mills during startup, shutdown and malfunction, *id.* 61-62.5 St 4(XI)(D)(4).

The exemption for special purpose burners provides:

> The following sources are exempt from all requirements of this regulation unless otherwise specified: … (14) Special use burners, such as start-up/shut-down burners, that are operated less than 500 hours a year.

S.C. Code Ann. Regs. 61-62.5 St 5.2(I)(b)(14).

The exemptions from sulfur limits for kraft pulp mills provides:

> The Department will consider periods of excess emissions reported under Subpart D(3) of this section to be indicative of a violation if:
> a. the number of 12 hour exceedances from recovery furnaces is greater than 1% of the total number of contiguous 12 hour periods in a quarter (excluding periods of startup, shutdown, or malfunction and periods when the recovery furnace is not operating).
> b. the number of excess emissions from lime kiln exceeds 2% of the total number of possible contiguous periods of excess emissions in a quarter (excluding periods of startup, shutdown, or malfunction and periods when the lime kiln is not operating).
> c. the number of 12 hour exceedances from incinerators is greater than 2% of the total number of contiguous periods in a quarter (excluding periods of startup, shutdown, or malfunction and periods when the incinerator is not operating).
> d. the Department determines that the affected equipment, including air pollution control equipment, is not maintained and operated in a manner

> which is consistent with good air pollution control practice for minimizing emissions during periods of excess emissions.

S.C. Code Ann. Regs. 61-62.5 St 4(XI)(D)(4).

Analysis

The source and pollutant specific exemptions violate the fundamental requirement that all excess emissions be considered violations and interfere with EPA and citizen enforcement. 1999 Memorandum at 3; Approval and Disapproval and Promulgation of Colorado Affirmative Defense Provisions for Startup and Shutdown, 71 Fed. Reg. 8958, 8959-60 (Feb. 22, 2006). None of the exemptions appear to meet the criteria for a source category specific rule from EPA's policy. 1999 Memorandum, Attachment 4-5.

Remedy

South Carolina should remove S.C. Code Ann. Regs. 61-62.5 St 1(C) and 61-62.5 St 5.2(I)(b)(14) from its SIP and revise S.C. Code Ann. Regs. 61-62.5 St 4(XI)(D)(4) to remove the language excluding periods of startup, shutdown and malfunction.

South Dakota

SIP Provisions

Although the South Dakota SIP has no general SSM provision, it does contain an exemption from the opacity limit during periods of startup, shutdown and malfunction. Section 74:36:12:01 contains the generally applicable "[r]estrictions on visible emissions," but the next section states that "[t]he provisions of § 74:36:12:01 do not apply in the following circumstances: … (3) For brief periods during such operations as soot blowing, start-up, shut-down, and malfunctions." S.D. Admin. R. 74:36:12:02(3), *available at* https://yosemite.epa.gov/R8/R8Sips.nsf/c91f89cd1d5ab37387256b5f0054c4ef/56671c7c4c4b562a87256b3c005d58dd?OpenDocument.

Analysis

The exemption from visible emission limits for soot blowing start-up, shut-down, and malfunctions is inconsistent with EPA policy. By carving out situation in which the opacity limitation does not apply, this provision fails to consider all excess emissions violations, the fundamental requirement of any SSM provision. 1982 Memorandum at 1; 1999 Memorandum at 1.

Remedy

South Dakota should remove S.D. Admin. R. 74:36:12:02(3) from the SIP.

Tennessee

SIP Provisions

The Tennessee SIP explicitly grants the Technical Secretary the option to "excuse or proceed upon" violations. Tenn. Comp. R. & Regs. 1200-3-20-.07(1), *available at* http://www.epa.gov/region4/air/sips/tn/CHAPT-20.pdf. The regulations contemplate excuses not only for malfunctions, but also for startup and shutdown. *Id.* 1200-3-20-.07(3) (referring to "an excuse for malfunctions, startups, and shutdowns in causing the excessive emissions"). During startup and shutdown the regulations require "[a]ir contaminant sources" to "take all reasonable measures to keep emissions to a minimum," but this duty is not tied to the excuse provision. *Id.*1200-3-20-.02(1). There is no corresponding duty to minimize emissions during malfunctions. *Id.*

Analysis

Tenn. Comp. R. & Regs. 1200-3-20-.07(1) and (3) should be changed to clarify that all excess emissions are violations regardless of cause and notwithstanding "excuse" by the Technical Secretary, and that "excuse" by the Technical Secretary has no effect on the ability of EPA or citizens to bring enforcement actions for the "excused" excess emissions. The Tennessee SSM provisions can be (and have been) construed as a blanket exemption from enforcement at the unfettered discretion of the Technical Secretary. The Tennessee SIP empowers the Technical Secretary to "excuse" emission violations associated with startup, shutdown, or malfunction, but does not define the nature of that excuse. Specifically, the SIP presents the Technical Secretary with the option either to "excuse or proceed upon the violation." Tenn. Comp. R. & Regs. 1200-3-20-.07(1). If excuse means only the opposite of proceed upon, then the regulatory scheme simply makes explicit the type of enforcement discretion that any enforcement authority inherently possesses.

When approving the Tennessee Title V permitting program, EPA construed the Tennessee SSM provisions in this manner. EPA stated that "the regulation stipulates that all excess emissions be viewed as violations … ." Clean Air Act Final Full Approval of Tennessee and Memphis-Shelby County Operating Permit Programs, 66 Fed. Reg. 56,996, 56,997 (Nov. 14, 2001). "EPA [did] not believe that Tennessee can use [this language] … to excuse violations … ." Approval of Tennessee and Memphis-Shelby County Operating Permit Programs, 66 Fed. Reg. at 56,997. The language in the permit was identical to the language of rule 1200-3-20-.06, the revised, non-SIP-approved SSM provision.

However, at least one court has construed the "excuse" to be essentially an exemption. In National Parks Conservation Ass'n v. Tennessee Valley Authority, 175 F. Supp. 2d 1071 (E.D. Tenn. 2001), the federal district court construed permit provisions containing similar "excuse" language as exemptions:

> [T]he . . . permits . . . allow more exceedances for "de minimis" exceedances for up to 2% of the time each calendar year with no explanation necessary for the exceedance and other excused periods for permitted start-up and shut-down and certain excused malfunctions.

Id. at 1078.

EPA has subsequently noted the danger that such permit provisions or the underlying regulations could be applied as blanket exemptions. In response to two Title V petitions involving Tennessee permits, EPA reiterated its intent to monitor the state's application of the "excuse" provision to make sure that violations are not "excused." EPA stated that it did not believe that Tennessee could use the permit condition or the underlying regulation to excuse violations. In the Matter of TVA John Sevier Fossil Plant Rogersville, Tennessee and TVA Kingston Fossil Plant Harriman, Tennessee Electric Power Generation Petition IV-2002-6 5 (Jul. 2, 2003) [hereinafter TVA John Sevier/Kingston Order], *available at* http://www.epa.gov/region07/air/title5/petitiondb/petitions/tva_decision2002.pdf; In the Matter of TVA Gallatin Power Plant Gallatin, Tennessee and TVA Johnsonville Power Plant New Johnsonville, Tennessee Electric Power Generation Petition IV-2003-4 6 (Jul. 29, 2004) [hereinafter TVA Gallatin/Johnsonville Order], *available at* http://www.epa.gov/region07/air/title5/petitiondb/petitions/tva_decision2003.pdf. However, EPA noted that it would continue to monitor the State's use of rule 1200-3-20-.06 in permits to ensure that violations are not excused. TVA John Sevier/Kingston Order at 5; TVA Gallatin/Johnsonville Order at 6 n.2.

The existing "excuse" language is sufficiently ambiguous that it should be revised. Otherwise, courts may continue to construe the language as providing a blanket exemption, and in any event EPA will be required to monitor the State's case by case implementation of the excuse provision.

Tennessee's SIP also creates an exception for visible emissions levels. The SSM provisions exclude excess visible emissions from the general requirement that the state "automatically" issue a notice of violation for all excess emissions, Tenn. Comp. R. & Regs. 1200-3-20-.07(1), referencing a rule that "due allowance may be made for visible emissions in excess of that permitted in this chapter which are necessary or unavoidable due to routine startup and shutdown conditions," *id.* 1200-3-5-.02(1).

When incorporated into a permit, this rule operates as a blanket exemption for opacity violations. The SIP lacks any standard by which such emissions are to be measured. The chapter on visible emissions refers to "the requirements of Chapter 1200-3-20," on malfunctions, startup and shutdown. *Id.* 1200-3-5-.02(1). But Chapter 1200-3-20 creates an unqualified exception for "Chapter 1200-3-5-.02(1)." *Id.* 1200-3-20-.07(1). This circular reference does not appear to constrain the Technical Secretary's decision to exempt a facility's excess emissions during SSM conditions. EPA's interpretation of the Act prohibits automatic exemptions for both malfunction conditions and startup and shutdown conditions.

Remedy

Tenn. Comp. R. & Regs. 1200-3-20-.07 should be revised to make clear that it does not offer an enforcement exemption for excess emissions associated with SSM. In addition, the language should be amended to clarify that decisions by the Technical Secretary or other State authorities do not limit the ability of citizens or EPA to bring or prevail in enforcement proceedings regarding SSM-related excess emissions. The exemption for excess visible emissions due to

startup and shutdown should be removed. Tenn. Comp. R & Regs. 1200-3-5-.02(1) should be eliminated entirely.

Knox County

SIP Provisions

The Knox County Air Pollution Control Board has promulgated regulations that are also part of the EPA-approved SIP. Approval and Promulgation of Implementation Plans, 37 Fed. Reg. 23,085 (Oct. 28, 1972); Approval and Promulgation of Knox County Portion of the Tennessee SIP, 54 Fed. Reg. 31,953 (Aug. 3, 1989).

The Knox County Air Pollution Control Regulations ("Knox County Regulations") require owners and operators to report SSM conditions. Knox County Regulation 34.1(A), (C). Knox County Regulation 34.1(A) requires an owner or operator to report its intent to shutdown air pollution control equipment for "necessary or scheduled maintenance" at least 24 hours in advance. Knox County Regulation 32.1(C) specifies that "[a] determination that there has been a violation of these regulations or orders issued pursuant thereto shall not be used in any law suit brought by any private citizen."

Analysis

Knox County Regulation 32.1(C) should clarify the effect of an administrative determination on citizen suits. Knox County Regulation 32.1(C) goes beyond, and arguably undermines, the express authorization of citizen enforcement suits under the CAA. Knox County should remove that provision from its regulations. In addition, the Regulations should be amended to state affirmatively that a County decision not to pursue enforcement of excess emissions has no effect on the ability of EPA or citizens to bring enforcement actions regarding such excess emissions.

Remedy

Tennessee and/or Knox County should remove Knox County Regulation 32.1(C) from the SIP or revise it to state that a County decision not to pursue enforcement has not effect on enforcement by EPA or citizens.

Memphis/Shelby County

SIP Provisions

The Shelby County Code incorporates by reference the Tennessee SSM provisions, including "all such additions, deletions, changes and amendments as may subsequently be made … ." Shelby County Code § 16-87, *available at* http://www.epa.gov/region4/air/sips/tn/memph/16.4.pdf.

Analysis

Once the State of Tennessee changes its regulations, those provisions will be effective in the Shelby County Code. However, as technical point, those regulations will not be effective as part of the SIP until they are proposed to EPA for approval.

Remedy

Once the Tennessee state regulations have been amended to address the issues identified above, Tennessee and/or Memphis and Shelby County should propose that the amended regulations be approved into the SIP.

Virginia

SIP Provisions

The Virginia SIP provides exemptions for excess emissions during malfunctions. 9 Va. Admin. Code § 5-20-180(G), *available at* http://yosemite.epa.gov/r3/r3sips.nsf/9eeb842c677f8f5d85256cfd004c3498/2caa1d36e5ca17da85256d20006f4518/$FILE/ATTRBGK8/va_9_vac_5_chapter_20.pdf. The provision reads:

> ***No violation*** of applicable emission standards or monitoring requirements ***shall be judged to have taken place*** if the excess emissions or cessation of monitoring activities is due to a malfunction, provided that:
>
> 1. The procedural requirements of this section are met or the owner has submitted an acceptable application for a variance, which is subsequently granted;
> 2. The owner has taken expedient and reasonable measures to minimize emissions during the breakdown period;
> 3. The owner has taken expedient and reasonable measures to correct the malfunction and return the facility to a normal operation; and
> 4. The source is in compliance at least 90% of the operating time over the most recent 12-month period.

Id. (emphasis added).

Analysis

The Virginia SSM provision is inconsistent with the Act and EPA policy. The provision states that "[n]o violation … shall be judged to have taken place …," contrary to the fundamental requirement that all excess emissions be considered violations. 1982 Memorandum at 1; 1999 Memorandum at 1 & Attachment at 1-2. Although the regulation provides substantive criteria, which fall far short of EPA policy, it fails to establish any procedure through which the criteria are to be evaluated. The regulations are therefore susceptible to interpretation as an exemption to be determined or granted by the State authority, which could preclude EPA and citizen enforcement. 1999 Memorandum at 3; Approval and Disapproval and Promulgation of Colorado

Affirmative Defense Provisions for Startup and Shutdown, 71 Fed. Reg. 8958, 8959-60 (Feb. 22, 2006).

Remedy

Virginia should remove 9 Va. Admin. Code § 5-20-180(G) from its SIP or revise it so that all excess emissions are considered violations and that the authority of EPA and citizens to enforce the SIP standards and limitations is clearly secured.

Washington

SIP Provisions

The Washington SIP provides an excuse for "unavoidable" excess emissions. Wash. Admin. Code § 173-400-107, *available at* http://yosemite.epa.gov/r10/airpage.nsf/f3f22921988a261b882569e5005ee8bb/c901b85ca16841b588256a3e005c1369?OpenDocument. Unavoidable excess emissions may occur during startup or shutdown, *id.* § 173-400-107(4), scheduled maintenance, *id.* § 173-400-107(5), or upsets, *id.* § 173-400-107(6). "Excess emissions determined to be unavoidable under the procedures and criteria in this section ***shall be excused*** and not subject to penalty." 173-400-107(2) (emphasis added). Relief under any of the three subsections (4), (5), of (6) requires that the source follow the reporting procedures of subsection (3), *id.* § 173-400-107(4), (5), (6).

The showings required to obtain relief for excess emissions during startup or shutdown and scheduled maintenance reflect the EPA guidance on enforcement discretion almost verbatim. During startup or shutdown, excess emissions:

> shall be considered unavoidable provided the source … adequately demonstrates that the excess emissions could not have been prevented through careful planning and design and if a bypass of control equipment occurs, that such a bypass is necessary to prevent loss of life, personal injury, or severe property damage.

Id. § 173-400-107(4); *c.f.* 1983 Memorandum, Attachment at 3.

During scheduled maintenance, excess emissions "shall be considered unavoidable if the source … adequately demonstrates that the excess emissions could not have been avoided *through reasonable design*, better scheduling for maintenance or through better operation and maintenance practices." Wash. Admin. Code § 173-400-107(5) (emphasis added); *c.f.* 1983 Memorandum, Attachment at 3. The emphasized phrase indicates an additional element of the showing that is in addition to the EPA criteria.

The showing required to obtain relief for excess emissions during upsets, on the other hand, are much less stringent that EPA criteria. The source must demonstrate that:

> (a) The event was not caused by poor or inadequate design, operation, maintenance, or any other reasonably preventable condition; (b) The event was not of a recurring pattern indicative of inadequate design, operation, or

> maintenance; and (c) The operator took immediate and appropriate corrective action in a manner consistent with good air pollution control practice for minimizing emissions during the event, taking into account the total emissions impact of the corrective action, including slowing or shutting down the emission unit as necessary to minimize emissions, when the operator knew or should have known that an emission standard or permit condition was being exceeded.

Wash. Admin. Code § 173-400-107(6).

Analysis

The Washington SSM provision is inconsistent with EPA policy because it provides an excuse for excess emissions rather than considering all emissions violations of the applicable standard. The Washington approach to SSM is unclear in its application to enforcement actions brought by EPA or by citizens. Section 173-400-107 is drafted as if the State were the sole enforcement authority. The Washington provision is worded as if it were an affirmative defense to penalties yet uses the criteria for enforcement discretion and is ambiguous about what decision-making authority is empowered to determine whether source has met its burden of proof for relief. One plausible interpretation of subsection (2) is that the Department of Ecology itself determines what excess emissions are "excused and are not subject to penalty." Because the regulation could be interpreted to bar EPA and citizen enforcement, it violates the Clean Air Act and is contrary to EPA policy.

Remedy

Washington should remove Wash. Admin. Code § 173-400-107 from its SIP. Alternatively, if the provision is to be retained, it must be revised to clearly comply with the CAA and EPA guidance. The provision must stipulate that all excess emissions are violations and preserve the authority of EPA and citizens to enforce the SIP standards and limitations.

West Virginia

SIP Provisions

The West Virginia SIP contains no generally applicable SSM regulation. There are, however, many source category and pollutant specific exemptions, as summarized in the following table. West Virginia's SIP is *available at* http://yosemite.epa.gov/r3/r3sips.nsf/SIPIndex!OpenForm&Start=1&Count=1000&Expand=6&Seq=1.

Table summarizing source and pollutant specific SSM provisions in the West Virginia SIP.

To Prevent and Control Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers	
W. Va. Code R. § 45-2-9.1	Automatic Exemption: "The visible emission standards set forth in section 3 shall apply at all times except in periods of start-ups, shut-downs, and malfunctions."
W. Va. Code R. § 45-2-10.1	Discretionary Exemption: "In the event of an unavoidable shortage of fuel … the Director may grant an exception to the otherwise applicable visible emission standards for a period not to exceed fifteen (15) days …"

To Prevent and Control Air Pollution from the Operation of Hot Mix Asphalt Plants	
W. Va. Code R. § 45-3-3.2	Alternative Limit: "The provisions of subsection 3.1 shall not apply to smoke and/or particulate matter emitted during the start-up or shutdown of an operation …"
W. Va. Code R. § 45-3-7.1	Discretionary Exemption: "Due to unavoidable malfunctions of equipment, emissions exceeding those provided for in this rule may be permitted by the Director for periods not to exceed two (2) days upon specific application to the Director."
To Prevent and Control Air Pollution from the Operation of Coal Preparation Plants and Coal Handling Operations	
W. Va. Code R. § 45-5-13.1	Discretionary Exemption: "Due to unavoidable malfunctions of equipment, emissions exceeding those set forth in this rule may be permitted by the Director, upon specific application to the Director, for periods not to exceed ten (10) days."
Control of Air Pollution From Combustion of Refuse	
W. Va. Code R. § 45-6-8.2	Discretionary Exemption: "Due to an unavoidable malfunction of equipment, emissions exceeding any limitation in this rule may be permitted by the Secretary for periods not to exceed five (5) days upon specific application to the Secretary."
To Prevent and Control Particulate Matter Air Pollution from Manufacturing Processes and Associated Operations	
W. Va. Code R. § 45-7-9.1	Discretionary Exemption: "Due to unavoidable malfunction of equipment, emissions exceeding those set forth in this rule may be permitted by the Director for periods not to exceed ten (10) days upon specific application to the Director."
W. Va. Code R. § 45-7-10.3	Automatic Exemption: "Maintenance operations shall be exempt from the provisions of section 4 provided that at all times the owner or operator shall conduct maintenance operations in a manner consistent with good air pollution control practice for minimizing emissions."
W. Va. Code R. § 45-7-10.4	Alternative Limit: "An owner or operator may apply for an alternative visible emission standard for start-up and shutdown periods, on a case-by-case basis, by filing a written petition with the Director"
To Prevent and Control Air Pollution from the Emission of Sulfur Oxides	
W. Va. Code R. § 45-10-9.1	Discretionary Exemption: "Due to unavoidable malfunction of equipment or inadvertent fuel shortages, emissions exceeding those provided for in this rule may be permitted by the Director for periods not to exceed ten (10) days upon specific application to the Director."
Regulation to Prevent and Control Air Pollution from the Emission of Volatile Organic Compounds	
W. Va. Code R. § 45-21-9.3	Discretionary Exemption: "If the provisions of this regulation cannot be satisfied due to repairs made as the result of routine maintenance or in response to the unavoidable malfunction of equipment, the Chief may permit the owner or operator of a source subject to this regulation to continue to operate said source for periods not to exceed 10 days upon specific application to the Chief."
Control of Ozone Season Nitrogen Oxides Emissions	
W. Va. Code R. § 45-40-100.8	Automatic Exemption: "The requirements of subsections 100.3, through 100.7 will not apply to the following periods of operation: 100.8.a. Start-up and shut-down periods and periods of malfunction, not to exceed 36 consecutive hours; and 100.8.b. Regularly scheduled maintenance activities."

Analysis

The SSM provisions in the West Virginia SIP come in four basic patterns. The automatic exemptions of W. Va. Code R. §§ 45-2-9.1, 45-7-10.3 and 45-40-100.8 contravene the fundamental requirement that all excess emissions be considered violations. 1982 Memorandum at 1; 1999 Memorandum at 1 & Attachment at 1-2. The discretionary exemption provisions of W. Va. Code R. § 45-2-10.1, 45-3-7.1, 45-5-13.1, 45-6-8.2, 45-7-9.1, 45-10-9.1 and 45-21-9.3 allow a decision by the state to preclude enforcement by EPA and citizens, contrary to the

enforcement structure of the CAA. 1999 Memorandum at 3; Approval and Disapproval and Promulgation of Colorado Affirmative Defense Provisions for Startup and Shutdown, 71 Fed. Reg. 8958, 8959-60 (Feb. 22, 2006). The automatic alternative limit in W. Va. Code R. § 45-3-3.2 is not sufficiently justified under the criteria for source category specific rules. 1999 Memorandum, Attachment at 4-5. The discretionary alternative limit in W. Va. Code R. § 45-7-10.4 allows a decision of the state to preclude enforcement by EPA and citizens.

Remedy

West Virginia should remove the following regulations from its SIP: W. Va. Code R. §§ 45-2-9.1, 45-2-10.1, 45-3-3.2, 45-3-7.1, 45-5-13.1, 45-6-8.2, 45-7-9.1, 45-7-10.3, 45-7-10.4, 45-10-9.1, 45-21-9.3, and 45-40-100.8.

Wyoming

SIP Provisions

Wyoming recently revised is SSM regulation and adopted an enforcement discretion approach, Env-AQ-1 Wyo. Code R. § 5, which EPA then approved. Approval and Promulgation of Revisions to the Wyoming Air Quality Standards and Regulations, 75 Fed. Reg. 19,886 (Apr. 16, 2010). The Wyoming SIP also contains an exemption for excess particulate matter emissions from diesel engines during startup, malfunction and maintenance. ENV-AQ-1 Wyo. Code R. § 2(d) (providing that "[the] limitation shall not apply during a reasonable period of warmup following a cold start or where undergoing repairs and adjustment following malfunction.").

Analysis

The exemption for diesel engines is contrary to EPA policy for source category specific rules for startup and shutdown. 1999 Memorandum, Attachment at 4-5. First, source-specific must be limited to cases where no single source or small group of sources has the potential to cause an exceedance of the NAAQS or PSD increments. *Id.*, Attachment at 5. In addition, there is nothing to indicate that the State addressed the feasibility of control strategies, minimization of the frequency and duration of startup and shutdown modes, worst-case emissions, impacts on ambient air quality, planning, design and operating processes, and documentation at the source. *Id.*

Remedy

Wyoming should remove ENV-AQ-1 Wyo. Code R. § 2(d) from its SIP or revise it in accordance with EPA's policy on source category specific rules for startup.

CONCLUSION

WHEREFORE, petitioner requests that the Administrator:

I. rescind EPA's policy allowing states to adopt affirmative defenses to excess emissions;

II. find that all SIPs containing an affirmative defense to penalties for excess emissions are substantially inadequate to comply with the requirements of the Clean Air Act and issue a call for each of the states with such a SIP, listed immediately below, to revise it in conformity with the requirements of the Act, pursuant to CAA § 110(k)(5):

Arizona	Ariz. Admin. Code § 18-2-310 and Maricopa County Air Pollution Control Regulation 3,Rule 140, §§ 401, 402
Colorado	5 Colo. Code Regs. § 1001-2(II.E) and (II.J)
District of Columbia	D.C. Mun. Regs. tit. 20, § 606.4
Illinois	Ill. Admin. Code tit. 35, §§ 201.261, 201.262, 201.265
Kentucky	Jefferson County Air Quality Regulation 1.07 § 5
Michigan	Mich. Admin. Code r. 336.1916
Mississippi	11-1-2 Miss. Code R. §§ 10.1 and 10.3
New Mexico	N.M. Code R. §§ 20.2.7.111, 20.2.7.112 and 20.2.7.113; and

III. find the following SIP provisions substantially inadequate to attain or maintain the NAAQS and to otherwise comply with the requirements of the CAA, pursuant to CAA § 110(k)(5), and require the states to revise and propose to EPA for SIP approval provisions that comply with the Act. Specifically, petitioner requests:

1. that EPA require ***Alabama*** to remove both Ala. Admin. Code r. 335-3-14-.03(1)(h)(1) and (1)(h)(2) from its SIP or else revise them so that all excess emissions are violations and no state decision may affect EPA or citizen enforcement;

2. that EPA require ***Alaska*** to remove Alaska Admin. Code tit. 18 § 50.240 from its SIP, or revised it to stipulate that all excess emissions are violations and preserve the authority of EPA and citizens to enforce the SIP standards and limitations;

3. that EPA require ***Arizona*** to revise Ariz. Admin. Code § 18-2-310: first, to stipulate that the affirmative defenses are not available where a single source or one of a small group of sources have the potential to cause an exceedance of the NAAQS or PSD increments; and, second, to include the second element from the EPA policy on affirmative defenses for startup and shutdown at 1999 Memorandum, Attachment at 6;

    i. that EPA require Arizona and/or ***Maricopa County*** to revise Maricopa County Air Pollution Control Regulation 3, Rule 140, §§ 401 and 402: first, so that the affirmative defenses are not available where a single source or one of a small group of sources have the potential to cause an exceedance of the NAAQS or PSD increments; and, second, to add the

second element from the EPA policy on affirmative defenses for startup and shutdown at 1999 Memorandum, Attachment at 6;

ii. that EPA require Arizona and/or ***Pima County*** to revise Rule 706 of the Rules and Regulations of the Pima County Air Pollution Control District so that is it clear that a decision by the Control Officer does not affect EPA or citizen enforcement;

4. that EPA require ***Arkansas*** to remove 014-01-1 Ark. Code R. §§ 19.1004(H) and 19.602 from its SIP;

5. that EPA require ***Colorado*** to revise 5 Colo. Code Regs. § 1001-2(II.E) so that the affirmative defense for malfunctions is not available where a single source or one of a small group of sources who have the potential to cause an exceedance of the NAAQS or PSD increments;

6. that EPA require ***Delaware*** to remove the following provisions from its SIP: 7-1100-1104 Del. Code Regs. § 1.5, 7-1100-1105 Del. Code Regs. § 1.7, 7-1100-1108 Del. Code Regs. § 1.2, 7-1100-1109 Del. Code Regs. § 1.4, 7-1100-1114 Del. Code Regs. § 1.3, 7-1100-1124 Del. Code Regs. § 1.4 and 7-1100-1142 Del. Code Regs. § 2.3.5;

7. that EPA require the ***District of Columbia***: first, to revise D.C. Mun. Regs. tit. 20, § 107.3 to clarify that the authorization to shut down air pollution control equipment does not exempt the source from compliance with emission limits and standards; and, second, remove the pollutant specific provisions in D.C. Mun. Regs. tit. 20, §§ 606.1, 606.2, 606.4 and 805(c)(2) from its SIP;

8. that EPA require ***Florida*** to remove Fla. Admin. Code Ann. r. 62-210.700 from the SIP in its entirety, or revise it so that all excess emissions are considered violations and no decision by the State can affect EPA and citizen enforcement;

9. that EPA require ***Georgia*** to remove Ga. Comp. R. & Regs. 391-3-1.02(2)(a)(7) from its SIP, or revise it so that all excess emissions are considered violations and so that no decision by the State can affect EPA and citizen enforcement;

10. that EPA require ***Idaho*** to clarify, in Idaho Admin. Code r. 58.01.01.131.03, that the Department's decision that enforcement is not warranted has no effect on EPA or citizen enforcement;

11. that EPA require ***Illinois*** to remove Ill. Admin. Code tit. 35, §§ 201.261, 201.262 and 201.265 from its SIP, or revise them so that all excess emissions are considered violations and no decision by the State can affect EPA and citizen enforcement;

12. that EPA require ***Indiana*** to remove 326 Ind. Admin. Code 1-6-4 from its SIP, or revise it so that all excess emissions are considered violations and no decision by the State can affect EPA and citizen enforcement;

13. that EPA require ***Iowa***: first, to remove Iowa Admin. Code r. 567-24.1(1) from its SIP entirely, or revise it so that all excess emissions are considered violations; and, second, to revise Iowa Admin. Code r. 567-24.1(4) to clarify that the state's decision not to enforce has no effect on enforcement by EPA or by citizens;

14. that EPA require ***Kansas*** to remove Kan. Admin. Regs. § 28-19-11 from its SIP, or revise it so that all excess emissions are considered violations and no decision by the State can affect EPA and citizen enforcement;

15. that EPA require ***Kentucky*** to remove 401 Ky. Admin. Regs. 50:055 § 1 from its SIP, or revise it so that all excess emissions are considered violations and no decision by the State can affect EPA and citizen enforcement;

    i. that EPA require Kentucky and/or ***Jefferson County***: first, to remove the Jefferson County Air Quality Regulation 1.07, §§ 2, 3, 4 and 7 from the SIP; and, second, if the emergency provision in Jefferson County Air Quality Regulation 1.07, § 5 is to remain in the SIP, revise it so that it is a true affirmative defense as EPA and the Code of Federal Regulations define that term;

16. that EPA require ***Louisiana*** to remove La. Admin. Code tit. 33, §§ III:1107, III:1507(A) & (B), III:2153(B)(1)(i), III:2201(C)(8) and III:2307(C)(1) & (2) from its SIP;

17. that EPA require ***Maine*** to remove both of the exemptions from its visible emission limits in 06-096-101 Me. Code R. §§ 3(E) and (4) from its SIP;

18. that EPA require ***Michigan*** to revise Mich. Admin. Code r. 336.1916: first, so that the affirmative defense is not available where a single source or one of a small group of sources have the potential to cause an exceedance of the NAAQS or PSD increments; and, second, so that the affirmative defense is not available for federally-promulgated technology-based standards;

19. that EPA require ***Minnesota*** to remove from its SIP the unconditional SSM exemption for flares at petroleum refineries in Minn. R. 7011.1415;

20. that EPA require ***Mississippi***: first, to revise the affirmative defense provisions of 11-1-2 Miss. Code R. § 10.1 to adhere to EPA's policy on affirmative defenses by limiting it to actions for civil penalties, making it unavailable where a single source or a small group of sources has the potential to cause an exceedance of the NAAQS or PSD increments, and adding the fourth, sixth, seventh, eighth and ninth elements from the 1999 Memorandum; second, to remove from its SIP the

exemption of 11-1-2 Miss. Code R. § 10.2; and, third, to remove from its SIP the affirmative defense for maintenance in 11-1-2 Miss. Code R. § 10.3;

21. that EPA require ***Missouri***: first, to remove Mo. Code Regs. Ann. tit 10 § 10-6.050 from its SIP, or clarify the provision so that it cannot be construed to limit EPA or citizen enforcement; and, second, to remove the visible emission exemption in Mo. Code Regs. Ann. tit 10, § 10-6.220(3)(c) from its SIP;

22. that EPA require ***Montana*** to remove Mont. Admin. R. 17.8.334 from its SIP or revise it in accordance with EPA's policy on source category specific rules for startup;

23. that EPA require ***Nebraska***: first, to remove 129 Neb. Admin. Code § 11-35(001) from its SIP, or clarify the provision so that it cannot be construed to limit EPA or citizen enforcement; and, second, to remove 128 Neb. Admin. Code § 18-004.2 from the SIP entirely;

    i. that EPA require Nebraska and/or ***Lincoln*** and ***Lancaster County*** to clarify the approach of Lincoln-Lancaster County Air Pollution Control Program, art. 2, § 35 so that it unambiguously implements enforcement discretion and cannot be construed to limit EPA or citizen enforcement;

24. that EPA require ***New Hampshire***: first, to remove N.H. Code R. Env-A 902.03 and 902.04 from its SIP, or revise them to stipulate that all excess emissions are violations and to preserve the authority of EPA and citizens to enforce the SIP standards and limitations; and, second, to remove the source specific exemptions for startup and shutdown in N.H. Code R. Env-A 1203.05 and 1207.02 from its SIP;

25. that EPA require ***New Jersey*** to remove from its SIP the two pollutant specific exemptions in N.J. Admin. Code §§ 7:27-7.2(k)(2) and 7:27-19.24;

26. that EPA require ***New Mexico***: first, to revise the affirmative defenses in N.M. Admin. R. §§ 20.2.7.111 and 20.2.7.112 so that they are not available where a single source or a small group of sources has the potential to cause an exceedance of the NAAQS or PSD increments; and, second, to remove the emergency defense of N.M. Admin. R. § 20.2.7.113;

27. that EPA require ***North Carolina*** to remove 15A N.C. Admin. Code 2D.0535(c) and (g) from its SIP, or revise them so that all excess emissions are considered violations and no decision by the State can affect EPA and citizen enforcement;

    i. that EPA require North Carolina and/or ***Forsyth County*** to remove Forsyth County Code ch. 3, 3D.0535(c) and (g) from the SIP, or revise them so that all excess emissions are considered violations and no decision by the State can affect EPA and citizen enforcement;

28. that EPA require ***North Dakota*** to remove the pollutant and source category specific exemptions in N.D. Admin. Code §§ 33-15-03-04(4) and 33-15-05-01(2)(a)(1) from its SIP;

29. that EPA require ***Ohio***: first, to revise Ohio Admin. Code 3745-15-06(A)(3) so that it is clear that the authorization to shut down air pollution control equipment does not exempt the source from compliance with emission limits and standards; second, to revise Ohio Admin. Code 3745-15-06(A)(3) to include the conditions on excess emissions during scheduled maintenance in the 1983 Memorandum at 3; and, third, to remove the exemptions of Ohio Admin. Code 3745-14-11(D), 3745-17-07(A)(3)(c), 3745-17-07(B)(11)(f), 3745-75-02(E), (J), 3745-75-03(I) and 3745-75-04(K), (L) from its SIP;

30. that EPA require ***Oklahoma***: first, to revise Okla. Admin. Code § 252:100-9-3(a) so that it is clear that the Director's decision not to enforce in cases of excess emissions does not excuse the violation and has no effect on EPA or citizen enforcement actions; and, second, to revise Okla. Admin. Code § 252:100-9-3(b)(1) so that scheduled maintenance is no longer an excuse for excess emissions;

31. that EPA require ***Oregon*** to clarify Or. Admin. R. 340-028-1450 so that it cannot be construed to limit EPA or citizen enforcement;

32. that EPA require ***Rhode Island*** to remove that portion of 25-4-13 R.I. Code R. 16.2 that authorizes variances from its SIP;

33. that EPA require ***South Carolina***: first, to remove S.C. Code Ann. Regs. 61-62.5 St 1(C) and 61-62.5 St 5.2(I)(b)(14) from its SIP; and, second, revise S.C. Code Ann. Regs. 61-62.5 St 4(XI)(D)(4) to remove the language that excludes periods of startup, shutdown and malfunction;

34. that EPA require ***South Dakota*** to remove S.D. Admin. R. 74:36:12:02(3) from its SIP;

35. that EPA require ***Tennessee***: first, to revise Tenn. Comp. R. & Regs. 1200-3-20-.07 to make clear that it does not offer an enforcement exemption for excess emissions associated with SSM and does not limit the ability of citizens or EPA to bring or prevail in enforcement proceedings regarding SSM-related excess emissions; second, to remove the exemption for excess visible emissions due to startup and shutdown from Tenn. Comp. R & Regs. 1200-3-20-.07; and, third, to remove Tenn. Comp. R & Regs. 1200-3-5-.02(1) from the SIP entirely;

    i. to require Tennessee and/or ***Knox County*** to remove Knox County Air Pollution Control Regulation 32.1(C) from the SIP or revise it to state that a County decision not to pursue enforcement has no effect on enforcement by EPA or citizens;

ii. that EPA require Tennessee and/or ***Memphis*** and ***Shelby County*** to propose the state regulations, as amended above, for incorporation by reference into its portion of the SIP;

36. that EPA require ***Virginia*** to remove 9 Va. Admin. Code § 5-20-180(G) from its SIP, or revise it so that all excess emissions are considered violations and no decision by the State can affect EPA and citizen enforcement;

37. that EPA require ***Washington*** to remove Wash. Admin. Code § 173-400-107 from its SIP or revise the provision to stipulate that all excess emissions are violations and to preserve the authority of EPA and citizens to enforce the SIP standards and limitations;

38. that EPA require ***West Virginia*** to remove W. Va. Code R. §§ 45-2-9.1, 45-2-10.1, 45-3-3.2, 45-3-7.1, 45-5-13.1, 45-6-8.2, 45-7-9.1, 45-7-10.3, 45-7-10.4, 45-10-9.1, 45-21-9.3, and 45-40-100.8 from its SIP; and

39. that EPA require ***Wyoming*** to remove ENV-AQ-1 Wyo. Code R. § 2(d) from its SIP or revise it in accordance with EPA's policy on source category specific rules for startup.

Respectfully submitted,

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