Environmental Protection Agency

40 CFR Part 52
State Implementation Plans: Response to Petition for Rulemaking; Restatement and Update of EPA's SSM Policy Applicable to SIPs; Findings of Substantial Inadequacy; and SIP Calls To Amend Provisions Applying to Excess Emissions During Periods of Startup, Shutdown and Malfunction; Final Rule
XI. Statement of the EPA's SSM SIP Policy as of 2015

The EPA’s longstanding interpretation of the CAA is that SIP provisions cannot include exemptions from emission limitations for emissions during SSM events. In order to be permissible in a SIP, an emission limitation must be applicable to the source continuously, *i.e.*, cannot include periods during which emissions from the source are legally or functionally exempt from regulation. Regardless of its form, a fully approvable SIP emission limitation must also meet all substantive requirements of the CAA applicable to such a SIP provision, *e.g.*, the statutory requirement of section 172(c)(1) for imposition of RACM and RACT on sources located in designated nonattainment areas.

This section of the document provides more specific guidance on the appropriate treatment of emissions during SSM events in SIP provisions, replacing the EPA’s prior guidance issued in memoranda of 1982, 1983, 1999 and 2001. The more extended explanations and interpretations provided in other sections of this document are also applicable, should a situation arise that is not sufficiently covered by this section’s more concise policy statement. This SSM Policy as of 2015 is a policy statement and thus constitutes guidance. As guidance, this SSM Policy as of 2015 does not bind states, the EPA or other parties, but it does reflect the EPA’s interpretation of the statutory requirements of the CAA. The EPA’s evaluation of any SIP provision, whether prospectively in the case of a new provision in a SIP submission or retrospectively in the case of a previously approved SIP submission, must be conducted through a notice-and-comment rulemaking in which the EPA will determine whether a given SIP provision is consistent with the requirements of the CAA and applicable regulations.

A. Definitions

The term *alternative emission limitation* means, in this document, an emission limitation in a SIP that applies to a source during some but not all periods of normal operation (*e.g.*, applies only during a specifically defined mode of operation such as startup or shutdown). An alternative emission limitation is a component of a continuously applicable SIP emission limitation, and it may take the form of a control measure such as a design, equipment, work practice or operational standard (whether or not numerical). This definition of the term is independent of the statutory use of the term “alternative means of emission limitation” in sections 111(h)(3) and 112(h)(3), which pertain to the conditions under which the EPA may pursuant to sections 111 and 112 promulgate emission limitations, or components of emission limitations,
that are not necessarily in numeric format.

The term automatic exemption means a generally applicable provision in a SIP that would provide that if certain conditions existed during a period of excess emissions, then those exceedances would not be considered violations of the applicable emission limitations.

The term director's discretion provision means, in general, a regulatory provision that authorizes a state regulatory official unilaterally to grant exemptions or variances from otherwise applicable emission limitations or control measures, or to excuse noncompliance with otherwise applicable emission limitations or control measures, which would be binding on the EPA and the public.

The term emission limitation means, in the context of a SIP, a legally binding restriction on emissions from a source or source category, such as a numerical emission limitation or a numerical emission limitation with higher or lower levels applicable during specific modes of source operation, a specific technological control measure requirement, a work practice standard, or a combination of these things as components of a comprehensive and continuous emission limitation in a SIP provision. In this respect, the term emission limitation is defined as in section 302(k) of the CAA. By definition, an emission limitation can take various forms or a combination of forms, but in order to be permissible in a SIP it must be applicable to the source continuously, i.e., cannot include periods during which emissions from the source are legally or functionally exempt from regulation. Regardless of its form, a fully approvable SIP emission limitation must also meet all substantive requirements of the CAA applicable to such a SIP provision, e.g., the statutory requirement of section 172(c)(1) for imposition of reasonably available control measures and reasonably available control technology (RACM and RACT) on sources located in designated nonattainment areas.

The term excess emissions means the emissions of air pollutants from a source that exceed any applicable SIP emission limitation. In particular, this term includes those emissions above the otherwise applicable SIP emission limitation that occur during startup, shutdown, malfunction or other modes of source operation, i.e., emissions that would be considered violations of the applicable emission limitation but for an impermissible automatic or discretionary exemption from such emission limitation.

The term malfunction means a sudden and unavoidable breakdown of process or control equipment.

The term shutdown means, generally, the cessation of operation of a source for any reason. In this document, the EPA uses this term in the generic sense. In individual SIP provisions it may be appropriate to include a specifically tailored definition of this term to address a particular source category for a particular purpose.

The term SSM refers to startup, shutdown or malfunction at a source. It does not include periods of maintenance at such a source. An SSM event is a period of startup, shutdown or malfunction during which there are exceedances of the applicable emission limitations and thus excess emissions.

The term startup means, generally, the setting in operation of a source for any reason. In this document, the EPA uses this term in the generic sense. In an individual SIP provision it may be appropriate to include a specifically tailored definition of this term to address a particular source category for a particular purpose.

B. Emission Limitations in SIPs Must Apply Continuously During All Modes of Operation, Without Automatic Discretionary Exemptions or Overly Broad Enforcement Discretion Provisions That Would Bar Enforcement by the EPA or by Other Parties in Federal Court Through a Citizen Suit

In accordance with CAA section 302(k), SIPs must contain emission limitations that “limit the quantity, rate, or concentration of emissions of air pollutants on a continuous basis.” All of the specific requirements of a SIP emission limitation must be discernible in the SIP, for clarity preferably within a single section or provision; must meet the applicable substantive and stringency requirements of the CAA; and must be legally and practically enforceable.

To the extent that a SIP provision allows any period of time when a source is not subject to any requirement that limits emissions, the requirements limiting the source’s emissions by definition cannot do so “on a continuous basis.” Such a source would not be subject to an “emission limitation,” as required by the definition of that term under section 302(k). However, the CAA allows SIP provisions that include numerical limitations, specific technological control requirements and/or work practice requirements that limit emissions and shutdown as components of a continuously applicable emission limitation, as discussed in section XI.C of this document.

Accordingly, automatic or discretionary exemption provisions applicable during SSM events are impermissible in SIPs. This impermissibility applies even for “brief” exemptions from limits on emissions, because such exemptions nevertheless render the limitation noncontinuous. Furthermore, the fact that a SIP provision includes prerequisites to qualifying for an SSM exemption does not mean those prerequisites are themselves an "alternative emission limitation” applicable during SSM events.

Automatic exemptions. A typical SIP provision that includes an impermissible automatic exemption would provide that a source has to meet a specific emission limitation during all modes of operation except startup, shutdown and malfunction; by definition any excess emissions during such events would not be violations and thus there could be a failure to meet based on those excess emissions. With respect to automatic exemptions from emission limitations in SIPs, the EPA’s longstanding interpretation of the CAA is that such exemptions are impermissible because they are inconsistent with the fundamental requirements of the CAA. Automatic exemptions from otherwise applicable emission limitations render those emission limitations less than continuous as required by CAA sections 302(k), 110(6)(2)(A) and 110(a)(2)(C), thereby inconsistent with a fundamental requirement of the CAA and thus substantially inadequate as contemplated in CAA section 110(k)(5).

Discretionary exemptions. A typical SIP provision that includes an impermissible “director’s discretion” component would purport to authorize air agency personnel to modify existing SIP requirements under certain conditions, e.g., to grant a variance from an otherwise applicable emission limitation if the source could not meet the requirement in certain circumstances.406 Director’s discretion provisions operate to allow air agency personnel to make unilateral decisions on an ad hoc basis, up to and including the granting of complete exemptions for

406 The EPA notes that problematic “director’s discretion” provisions are not limited only to those that purport to authorize alternative emission limitations from those required in a SIP. Other problematic director’s discretion provisions include those that purport to provide for discretionary changes to other substantive requirements of the SIP, such as applicability, operating requirements, recordkeeping requirements, monitoring requirements, test methods or alternative compliance methods.
emissions during SSM events, thereby negating any possibility of enforcement for what would be violations of the otherwise applicable emission limitation. With respect to such director’s discretion provisions in SIPs, the EPA interprets the CAA to prohibit these if they provide unbounded discretion to allow what would amount to a case-specific revision of the SIP without meeting the statutory requirements of the CAA for SIP revisions. In particular, the EPA interprets the CAA to preclude SIP provisions that provide for unbounded director’s discretion authority to create discretionary exemptions for violations when the CAA would not allow such exemptions in the first instance. If an air agency elects to have SIP provisions that contain a director’s discretion feature, then to be consistent with CAA requirements the provisions must be structured so that any resulting variances or other deviations from the emission limitation or other SIP requirements have no federal law validity, unless and until the EPA specifically approves that exercise of the director’s discretion as a SIP revision. Barring such a later ratification by the EPA through a SIP revision, the exercise of director’s discretion is only valid for state (or tribal) law purposes and would have no bearing in the event of an action to enforce the provision of the SIP as it was originally approved by the EPA.

Adoption of the EPA’s NSPS or NESHAP that have not yet been revised. The EPA has recently begun revising and will continue to revise NSPS and NESHAP as needed, to make the EPA’s regulations consistent with CAA requirements by removing exemptions and affirmative defense provisions applicable to SSM events, and generally on the same legal basis as for this action. A state should not submit an NSPS or NESHAP for inclusion into its SIP as an emission limitation (whether through incorporation by reference or otherwise) unless either: (i) That NSPS or NESHAP does not include an exemption or affirmative defense for SSM events; or (ii) the state takes action as part of the SIP submission to render such exemption or affirmative defense inapplicable to the SIP emission limitation. Because SIP provisions must apply continuously, including during SSM events, the EPA can no longer approve SIP submissions that include any emission limitations with such exemptions, even if those emission limitations are NSPS or NESHAP regulations that the EPA has not yet revised to make consistent with CAA requirements. Alternatively, states may elect to adopt an existing NSPS or NESHAP as a SIP provision, so long as the SIP provision excludes the exemption or affirmative defense applicable to SSM events.407 States may also wish to replace the SSM exemption in NSPS or NESHAP regulations with appropriately developed alternative emission limitations that apply during startup and shutdown in lieu of the SSM exemption. Otherwise, the EPA’s approval of the deficient SSM exemption provisions into the SIP would contravene CAA requirements for SIP provisions and would potentially result in misinterpretation or misapplication of the standards by regulators, regulated entities, courts and members of the public. The EPA emphasizes that the inclusion of an NSPS or NESHAP as an emission limitation in a state’s SIP is different and distinct from reliance on such standards indirectly, such as reliance on the NSPS or NESHAP as a source of emission reductions that may be taken into account for SIP planning purposes in emissions inventories or attainment demonstrations. For those uses, states may continue to rely on the EPA’s NSPS and NESHAP regulations, even those that have not yet been revised to remove inappropriate exemptions, in accordance with the requirements applicable to those SIP planning functions.

Other modes of normal operation. SIPs also may not create automatic or discretionary exemptions from otherwise applicable emission limitations during periods such as “maintenance,” “load change,” “soot-blowing,” “on-line operating changes” or other similar normal modes of operation. Like startup and shutdown, the EPA considers all of these to be modes of normal operation at a source, for which the source can be designed, operated and maintained in order to meet an applicable emission limitations and during which the source should be expected to control and minimize emissions. Excess emissions that occur during planned and predicted periods should be treated as violations of applicable emission limitations. Accordingly, exemptions for emissions during these periods of normal source operation are not consistent with CAA requirements.

407 Under CAA section 116, states have the explicit general authority to regulate more stringently than the EPA. Indeed, under section 116 states can regulate sources subject to EPA regulations promulgated under section 111 or section 112 so long as they do not regulate them less stringently. According, the EPA believes that states may elect to adopt EPA regulations under section 111 or section 112 as SIP provisions and expressly eliminate the exemptions for emissions during SSM events. It may be appropriate for an air agency to establish an alternative numerical limitation or other form of control measure that applies during these modes of source operation, as for startup and shutdown events, but any such alternative emission limitation should be developed using the same criteria that the EPA recommends for alternative emission limitations applicable during startup and shutdown. Similarly, any SIP provision that includes an emission limitation for sources that includes alternative emission limitations applicable to modes of operation such as “maintenance,” “load change,” “soot-blowing” or “on-line operating changes” must also meet the applicable level of stringency for that type of emission limitation and be practically and legally enforceable.

C. Emission Limitations in SIPs May Contain Components Applicable to Different Modes of Operation That Take Different Forms, and Numerical Emission Limitations May Have Differing Levels and Forms for Different Modes of Operation

There are approaches other than exemptions that would be consistent with CAA requirements for SIP provisions that states can use to address excess emissions during certain events. While automatic exemptions and director’s discretion exemptions from otherwise applicable emission limitations for SSM events are not consistent with the CAA, SIPs may include criteria and procedures for the use of enforcement discretion by air agency personnel, as described in section XIE of this document. Similarly, SIPs may, rather than exempt excess emissions, include emission limitations that subject those emissions to alternative numerical limitations or other control requirements during startup and shutdown events or other normal modes of operation, so long as those components of the emission limitations meet applicable CAA requirements and are legally and practically enforceable.

The EPA does not interpret section 110(a)(2) or section 302(k) to require that an emission limitation in a SIP provision be composed of a single, uniformly applicable numerical emission limitation. The text of section 110(a)(2) and section 302(k) does not require states to impose emission limitations that include a static, inflexible standard. The critical aspect for purposes of section 302(k) is that the SIP provision impose emissions on a continuous basis, regardless of whether the emission
limitation as a whole is expressed numerically or as a combination of numerical limitations, specific control technology requirements and/or work practice requirements applicable during specific modes of operation, and regardless of whether the emission limitation is static or variable. Thus, emission limitations in SIP provisions do not have to be composed solely of numerical emission limitations applicable at all times. For example, so long as the SIP provision meets other applicable requirements, it may impose different numerical limitations for startup and shutdown. Also, for example, SIPs can contain numerical emission limitations applicable only to some periods and other forms of controls applicable only to some periods, with certain periods perhaps subject to both types of limitation. Thus, SIP emission limitations: (i) Do not need to be numerical in format; (ii) do not have to apply the same limitation (e.g., numerical level) at all times; and (iii) may be composed of a combination of numerical limitations, specific technological control requirements and/or work practice requirements, with each component of the emission limitation applicable during a defined mode of source operation. In practice, it may be that numerical emission limitations are the most appropriate from a regulatory perspective (e.g., to be legally and practically enforceable) and thus the emission limitation would need to be established in this form to meet CAA requirements. It is important to emphasize, however, that regardless of how the state structures or expresses a SIP emission limitation—whether solely as one numerical limitation, as a combination of different numerical limitations or as a combination of numerical limitations, specific technological control requirements and/or work practice requirements that apply during certain modes of operation such as startup and shutdown—the emission limitation as a whole must be continuous, must meet applicable CAA stringency requirements and must be legally and practically enforceable.

Startup and shutdown are part of the normal operation of a source and should be accounted for in the design and operation of the source. It should be possible to determine an appropriate form and degree of emission control during startup and shutdown and to achieve that control on a regular basis. Thus, sources should be required to meet defined SIP emission limitations during startup and shutdown. However, the EPA interprets the CAA to permit SIP emission limitations that include alternative emission limitations specifically applicable during startup and shutdown. Regarding startup and shutdown periods, the EPA considers the following to be the correct approach to creating an emission limitation: (i) The emission limitation contains no exemption for emissions during SSM events; (ii) the component of any alternative emission limitation that applies during startup and shutdown is clearly stated and obviously is an emission limitation that applies to the source; (iii) the component of any alternative emission limitation that applies during startup and shutdown meets the applicable stringency level for this type of emission limitation; and (iv) the emission limitation contains requirements to make it legally and practically enforceable. Section XI.D of this document contains more specific recommendations to states for developing alternative emission limitations.

In contrast to startup and shutdown, a malfunction is unpredictable as to the timing of the start of the malfunction event, its duration and its exact nature. The effect of a malfunction on emissions is therefore unpredictable and variable, making the development of an alternative emission limitation for malfunctions problematic. There may be rare instances in which certain types of malfunctions at certain types of sources are foreseeable and foreseen and thus are an expected mode of source operation. In such circumstances, the EPA believes that sources should be expected to meet the otherwise applicable emission limitation in order to encourage sources to be properly designed, maintained and operated in order to prevent or minimize any such malfunctions. To the extent that a given type of malfunction is so foreseeable and foreseen that a state considers it a normal mode of operation that is appropriate for a specifically designed alternative emission limitation, then such alternative should be developed in accordance with the recommended criteria for alternative emission limitations. The EPA does not believe that generic general-duty provisions, such as a general duty to minimize emissions, is sufficient as an alternative emission limitation for any type of event including malfunctions.

States developing SIP revisions to remove impermissible exemption provisions from emission limitations may choose to consider re-assessing particular emission limitations, for example to determine whether limits originally applicable only during non-SSM periods can be revised such that well-managed emissions during planned operations such as startup and shutdown would not exceed the revised emission limitation, while still protecting air quality and meeting other applicable CAA requirements. Such a revision of an emission limitation will need to be submitted as a SIP revision for EPA approval if the existing limitation to be changed is already included in the SIP or if the existing SIP relies on the particular existing emission limitation to meet a CAA requirement.

Some SIPs contain other generic regulatory requirements frequently referred to as "general duty" type requirements, such as a general duty to minimize emissions at all times, a general duty to use good engineering judgment at all times or a general duty not to cause a violation of the NAAQS at any time. To the extent that such other general-duty requirement is properly established and legally and practically enforceable, the EPA would agree that it may be an appropriate separate requirement to impose upon sources in addition to the (continuous) emission limitation. The EPA itself imposes separate general duties of this type in appropriate circumstances. The existence of these generic provisions does not, however, legitimize exemptions for emissions during SSM events in a SIP provision that imposes an emission limitation.

General-duty requirements that are not clearly part of or explicitly cross-referenced in a SIP emission limitation cannot be viewed as a component of a continuous emission limitation. Even if clearly part of or explicitly cross-referenced in the SIP emission limitation, however, a given general-duty requirement may not be consistent with the applicable CAA requirements for SIP provisions that should apply during startup and

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408 Every source is designed, maintained and operated with the expectation that the source will at least occasionally start up and shut down, and thus these modes of operation are "normal" in the sense that they are to be expected. The EPA uses this term in the ordinary sense of the word to distinguish between such predictable modes of source operation and genuine "malfunctions," which are by definition supposed to be unpredictable and unforeseen events that could not have been precluded by proper source design, maintenance and operation.
shutdown. In general, the EPA believes that a legally and practically enforceable alternative emission limitation applicable during startup and shutdown should be expressed as a numerical limitation, a specific technological control requirement or a specific work practice applicable to affected sources during specifically defined periods or modes of operation. Accordingly, while states are free to include general-duty provisions in their SIPs as separate additional requirements, for example, to ensure that owners and operators act consistent with reasonable standards of care, the EPA does not recommend using these background standards to bridge unlawful interruptions in an emission limitation.\footnote{For example, the EPA has concerns the some general-duty provisions, if at any point relied upon as the sole requirement purportedly limiting emissions, could undermine the ability to ensure compliance with SIP emission limitations relied on to achieve the NAAQS and other relevant CAA requirements at all times. See section 110(a)(2)(A), (C); US Magnesium, LLC v. EPA, 690 F.3d 1157, 1161–62 (10th Cir. 2012).}

D. Recommendations for Development of Alternative Emission Limitations Applicable During Startup and Shutdown

A state can develop special, alternative emission limitations that apply during startup or shutdown if the source cannot meet the otherwise applicable emission limitation in the SIP. SIP provisions may include alternative emission limitations for startup and shutdown as part of a continuously applicable emission limitation when properly developed and otherwise consistent with CAA requirements. However, if a non-numerical requirement does not itself (or in combination with other components of the emission limitation) limit the quantity, rate or concentration of air pollutants on a continuous basis, then the non-numerical standard (or overarching requirement) does not meet the statutory definition of an emission limitation under section 302(k).

In cases in which measurement of emissions during startup and/or shutdown is not reasonably feasible, it may be appropriate for an emission limitation to include as a component a control for startup and/or shutdown periods other than a numerically expressed emission limitation.

The federal NESHAP and NSPS regulations and the technical materials in the public record for those rules may provide assistance for states as they develop and consider emission limitations and alternative emission limitations for sources in their states, and definitions of startup and shutdown events and work practices for them found in these regulations may be appropriate for adoption by the state in certain circumstances. In particular, the NSPS regulations should provide very relevant information for sources of the same type, size and control equipment type, even if the sources were not constructed or modified within a date range that would make them subject to the NSPS. The EPA therefore encourages states to explore these approaches.

The EPA recommends that, in order to be approvable (i.e., meet CAA requirements), alternative requirements applicable to the source during startup and shutdown should be narrowly tailored and take into account considerations such as the technological limitations of the specific source category and the control technology that is feasible during startup and shutdown. The EPA recommends the following seven specific criteria as appropriate considerations for developing emission limitations in SIP provisions that apply during startup and shutdown:

1. The revision is 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 is technically infeasible during startup or shutdown periods;
3. The alternative emission limitation requires that the frequency and duration of operation in startup or shutdown mode are minimized to the greatest extent practicable;
4. As part of its justification of the SIP revision, the state analyzes the potential worst-case emissions that could occur during startup and shutdown based on the applicable alternative emission limitation;
5. The alternative emission limitation requires that all possible steps are taken to minimize the impact of emissions during startup and shutdown on ambient air quality;
6. The alternative emission limitation requires that, at all times, the facility is operated in a manner consistent with good practice for minimizing emissions and the source uses best efforts regarding planning, design, and operating procedures; and
7. The alternative emission limitation requires that the owner or operator’s actions during startup and shutdown periods are documented by properly signed, contemporaneous operating logs or other relevant evidence. If a state elects to create an emission limitation with different levels of control applicable during specifically defined periods of startup and shutdown than during other normal modes of operation, then the resulting emission limitation must meet the substantive requirements applicable to the type of SIP provision at issue, meet the applicable level of stringency for that type of emission limitation and be legally and practically enforceable. Alternative emission limitations applicable during startup and shutdown cannot allow an inappropriately high level of emissions or an effectively unlimited or uncontrolled level of emissions, as those would constitute impermissible de facto exemptions for emissions during certain modes of operation.

E. Enforcement Discretion Provisions

One approach other than exemptions that would be consistent with CAA requirements for SIP provisions that states can use to address excess emissions during SSM events is to include in the SIP criteria and procedures for the use of enforcement discretion by air agency personnel. SIPs may contain such provisions concerning the exercise of discretion by the air agency’s own personnel, but such provisions cannot bar enforcement by the EPA or by other parties through a citizen suit.

Pursuant to the CAA, all parties with authority to bring an enforcement action to enforce SIP provisions (i.e., the state, the EPA or any parties who qualify under the citizen suit provision of section 304) have enforcement discretion that they may exercise as they deem appropriate in any given circumstances. For example, if the event that causes excess emissions is an actual malfunction that occurred despite reasonable care by the source operator to avoid malfunctions, then each of these parties may decide that no enforcement action is warranted. In the event that any party decides that an enforcement action is warranted, then it has enforcement discretion with respect to what remedies to seek from the court for the violation (e.g., injunctive relief, compliance order, monetary penalties or all of the above), as well as the type of injunctive relief and/or amount of monetary penalties sought.\footnote{The EPA notes that only the state and the Agency have authority to seek criminal penalties for knowing and intentional violation of CAA requirements. The EPA has this explicit authority under CAA section 113(c).}

As part of state programs governing enforcement, states can include regulatory provisions or may adopt policies setting forth criteria for how they plan to exercise their own...
enforcement authority. Under section 110(a)(2), states must have adequate authority to enforce provisions adopted into the SIP, but states can establish criteria for how they plan to exercise that authority. Such enforcement discretion provisions cannot, however, impinge upon the enforcement authority of the EPA or of others pursuant to the citizen suit provision of the CAA. Such enforcement discretion provisions in a SIP would be inconsistent with the enforcement structure provided in the CAA. Specifically, the statute provides explicit independent enforcement authority to the EPA under CAA section 113 and to citizens under CAA section 304. Thus, the CAA contemplates that the EPA and citizens have authority to pursue enforcement for a violation even if the state elects not to do so. The EPA and citizens, and any federal court in which they seek to pursue an enforcement claim for violation of SIP requirements, must retain the authority to evaluate independently whether a source’s violation of an emission limitation warrants enforcement action. Potential for enforcement by the EPA or through a citizen suit provides an important safeguard in the event that the state lacks resources or ability to enforce violations and provides additional deterrence. Accordingly, a SIP provision that operates at the state’s election to eliminate the authority of the EPA or the public to pursue enforcement actions in federal court would undermine the enforcement structure of the CAA and would thus be substantially inadequate to meet fundamental requirements of the CAA. Also, states should not adopt overly broad enforcement discretion provisions for inclusion in their SIPs, even for their own personnel. Section 110(a)(2) requires states to have adequate enforcement authority, and overly broad enforcement discretion provisions would run afoul of this requirement if they have the effect of precluding adequate state authority to enforce SIP requirements. If such provisions are sufficiently specific, provide for sufficient public process and are sufficiently bounded, so that it is possible to anticipate at the time of the EPA’s approval of the SIP provision how that provision will actually be applied and the potential adverse impacts thereof, then such a provision might meet basic CAA requirements. In essence, if it is possible to anticipate and evaluate in advance how the exercise of enforcement discretion could affect violations and other CAA requirements, then it may be possible to determine in advance that the preauthorized exercise of director’s discretion will not interfere with other CAA requirements, such as providing for attainment and maintenance of the NAAQS.

When using enforcement discretion in determining whether an enforcement action is appropriate in the case of excess emissions during a malfunction, satisfaction of the following criteria should be considered:

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 were 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.

F. Affirmative Defense Provisions in SIPs

The EPA believes that SIP provisions that function to alter the jurisdiction or discretion of the federal courts under CAA section 113 and section 304 to determine liability and to impose remedies are inconsistent with fundamental legal requirements of the CAA, especially with respect to the enforcement regime explicitly created by statute. Affirmative defense provisions by their nature purport to limit or eliminate the authority of federal courts to find liability or to impose remedies through factual considerations that differ from, or are contrary to, the explicit grants of authority in section 113(b) and section 113(e). These provisions are not appropriate under the CAA, no matter what type of event they apply to, what criteria they contain or what forms of remedy they purport to limit or eliminate.

Section 113(b) provides courts with explicit jurisdiction to determine liability and to impose remedies of various kinds, including injunctive relief, compliance orders and monetary penalties, in judicial enforcement proceedings. This grant of jurisdiction comes directly from Congress, and the EPA is not authorized to alter or eliminate this jurisdiction under the CAA or any other law. With respect to monetary penalties, CAA section 113(e) explicitly includes the factors that federal courts and the EPA are required to consider in the event of judicial or administrative enforcement for violations of CAA requirements, including SIP provisions. Because Congress has already given federal courts the jurisdiction to determine what monetary penalties are appropriate in the event of judicial enforcement for a violation of a SIP provision, neither the EPA nor states can alter or eliminate that jurisdiction by superimposing restrictions on that jurisdiction and discretion granted by Congress to the courts. Accordingly, pursuant to section 110(k) and section 110(l), the EPA cannot approve any such affirmative defense provision in a SIP. If such an affirmative defense provision is included in an existing SIP, the EPA has authority under section 110(k)(3) to require a state to remove that provision.

Couching an affirmative defense provision in terms of merely defining whether the emission limitation applies and thus whether there is a “violation,” as suggested by some commenters, is also problematic. If there is no “violation” when certain criteria or conditions for an “affirmative defense” are met, then there is in effect no emission limitation that applies when the criteria or conditions are met; the affirmative defense thus operates to create an exemption from the emission limitation. As explained in the February 2013 proposal, the CAA requires that emission limitations must apply continuously and cannot contain exemptions, conditional or otherwise. This interpretation is consistent with the decision in Sierra Club v. Johnson concerning the term “emission limitation” in section 302(k). Characterizing the exemptions as an “affirmative defense” runs afoul of the requirement that emission limitations must apply continuously.

The EPA wishes to be clear that the absence of affirmative defense provisions in SIPs does not alter the legal rights of sources under the CAA. In the event of an enforcement action for an exceedance of a SIP emission limitation, a source can elect to assert any common law or statutory defenses that it determines are supported, based upon the facts and circumstances surrounding the alleged violation.
Under section 113(b), courts have explicit authority to impose injunctive relief, issue compliance orders, assess monetary penalties or fees and impose any other appropriate relief. Under section 113(e), federal courts are required to consider the enumerated statutory factors when assessing monetary penalties, including “such other factors as justice may require.” For example, if the exceedance of the SIP emission limitation occurs due to a malfunction, that exceedance is a violation of the applicable emission limitation but the source retains the ability to defend itself in an enforcement action and to oppose the imposition of particular remedies or to seek the reduction or elimination of monetary penalties, based on the specific facts and circumstances of the event. Thus, elimination of a SIP affirmative defense provision that purported to take away the statutory jurisdiction of the federal court to exercise its authority to impose remedies does not disarm sources in potential enforcement actions. Sources retain all of the equitable arguments they could have made under an affirmative defense provision; they must simply make such arguments to the reviewing court as envisioned by Congress in section 113(b) and section 113(e).

Once impermissible SSM exemptions are removed from the SIP, then any excess emissions during such events may be the subject of an enforcement action, in which the parties may use any appropriate evidence to prove or disprove the existence and scope of the alleged violation and the appropriate remedy for an established violation. Any alleged violation of an applicable SIP emission limitation, if not conceded by the source, must be established by the party bearing the burden of proof in a legal proceeding. The degree to which evidence of an alleged violation may derive from a specific reference method or any other credible evidence must be determined based upon the facts and circumstances of the exceedance of the emission limitation at issue. Congress vested the federal courts with the authority to judge how best to weigh the evidence in an enforcement action.

G. Anti-Backsliding Considerations

The EPA recognizes that one important consideration for air agencies as they evaluate how best to revise their SIP provisions in response to this SIP call is the nature of the analysis that will be necessary for the resulting SIP revisions under section 110(k)(3), section 110(l) and section 193. Under section 110(l), the EPA is prohibited from approving any SIP revision that would interfere with any applicable requirement concerning attainment and reasonable further progress or any other requirements of the CAA. Section 193 prohibits states from modifying regulations in place prior to November 15, 1990, unless the modification ensures equivalent or greater reductions of the pollutant. SIP revision must be evaluated for compliance with section 110(l) and section 193 on the facts and circumstances of the specific revision. Section X of this document provides three example scenarios in which a state might remove an impermissible SSM provision from its SIP, including how sections 110(l) and 193 considerations might apply. These examples are intended to provide general guidance on the considerations and the nature of the analysis that may be appropriate for different types of SIP revisions. Air agencies should contact their respective EPA Regional Offices (see the SUPPLEMENTARY INFORMATION section of this document) for further recommendations and assistance concerning the analysis appropriate for specific SIP revisions involving changes in SSM provisions.

\footnote{For example, the degree to which data from continuous opacity monitoring systems (COMS) is evidence of violations of SIP opacity or PM mass emission limitations is a factual question that must be resolved on the facts and circumstances in the context of an enforcement action. See, e.g., Sierra Club v. Pub. Serv. Co. of Colorado, Inc., 894 F.Supp. 1455 (D. Colo. 1995) (allowing use of COMS data to prove opacity limit violations).}