

State Implementation Plan Process Improvement Project

Final Report

Recommendations for improving the development and approval of
State Implementation Plan (SIP) revisions in EPA Region 10

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I. The Need for the Project

State, local, and EPA air program directors in Region 10 recognized the need to improve the State Implementation Plan (SIP) development and approval process to strengthen working relationships, produce higher quality SIP revisions, shorten approval times, reduce re-work, and streamline document preparation. The thirteen state and local agencies in Region 10 generate 20 - 30 SIP revisions each year, creating a significant workload. A more effective process would help EPA to complete its technical and legal reviews and approve SIP revisions within statutory deadlines.

In 2002, EPA Region 10, with support from each state and local air program director, convened state and local agency representatives (the Core Design Team or CDT) to develop recommendations for improving the SIP process. The CDT's recommendations also include mechanisms for process implementation, and process evaluation and improvement. These recommendations were summarized in the 2002 SIP Process Improvement Project (SIP PIP) Final Report.

In June 2012, Washington Department of Ecology and Puget Sound Clean Air Agency participated in a Lean Kaizen event hosted by EPA Region 10. The 2002 Final Report is updated to reflect the outcomes of the Lean event and changes to the process resulting from experience implementing SIP PIP over the past decade.

II. Key Points from the 2002 SIP Process Improvement Project with Updates from the 2012 SIP Lean Event

- 1. EPA and state and local agencies will coordinate closely to manage SIP workload and priorities.** EPA will coordinate annually with each state to identify in the "Annual SIP Priorities Document" SIPs in development, submitted SIPs and the priorities for the coming year. State and EPA SIP coordinators will communicate regularly (e.g., monthly) to track and update the progress of these SIPs.
- 2. EPA and state and local agencies will work closely in the planning and development phase of a SIP and will work to identify and resolve issues before the SIP is adopted by the state or local agency.** State and local agencies will prepare a SIP Development Plan prior to initiating work. EPA will participate in this planning to help identify what rules are and are not appropriate for inclusion in the SIP and what rules are and are not required by the Clean Air Act.

The SIP Development Plan will identify technical, legal, and policy issues that need to be resolved. It will also include a schedule of major milestones and clarify the role of each person involved in the SIP process. EPA Region 10 will put increased priority on identifying and resolving issues before SIP revisions are adopted by the state or local agency.

- 3. EPA and state and local agencies will determine the appropriate level of process for a SIP revision.** There are three levels of SIP revisions: (1) Complex, (2) Moderate, or (3) Minor. EPA, with the state or local agency's input, will evaluate the level of process that would be most appropriate as the agencies are having discussions about the SIP Development Plan. SIPs will be categorized based on the specific facts for that SIP. Most SIP revisions will be in the moderate category. SIPs such as attainment plans and regional haze plans, however, would generally be in the complex category, while SIPs such as 2nd 10-year maintenance plans and recodifications could be in the minor category. The SIP category decision should be agreed to by EPA and the state or local agency prior to initiating work. State and local agencies may complete a Fast Track Checklist for SIPs they believe are in the minor category and they would like to be processed using the fast track process.
- 4. State and local agencies should prepare and submit to EPA well documented rationale and justification for SIP revisions.** This will simplify EPA's work in preparing supporting documentation and Federal Register notices. EPA will provide the state and local agencies with past EPA technical support documents and Federal Register notices to inform SIP development and to augment the templates already in SIP PIP.

III. The Benefits from Implementation of the Recommendations

Implementing the SIP PIP recommendations will provide the following benefits to state and local agencies and to EPA Region 10:

- 1) Higher quality SIP revisions with improved documentation of the rationale for decisions.
- 2) Mutual expectations for completing SIP approval.
- 3) A "lean" federally-approved SIP requiring fewer federal actions as agencies update their regulations.
- 4) Less EPA research to justify approval decisions.
- 5) A "blue-print" for SIP development, review and approval resulting in clearer roles and responsibilities for all parties involved in the process.
- 6) Realistic time frames for decision making and work completion.
- 7) Timely dispute resolution to keep the process "moving" and minimize re-work.
- 8) Mechanisms for identifying future process changes and improvements.

IV. Coordination of SIP Workload and Priorities

EPA will coordinate annually with each state to identify the SIPs in development, the submitted SIPs and the priorities for the coming year resulting in an "Annual SIP Priorities Document." State and EPA SIP coordinators will communicate regularly to track the progress of these SIPs. This coordination will help EPA and state and local agencies to better plan and manage their workload. If a new SIP needs to be added or changes need to be made to priorities, staff should

contact the State and EPA SIP Coordinators.

V. An Overview of the Three SIP Revision Processes

A. Complex SIP Revision Process

Complex SIP revisions have technical, legal or policy issues that require a high level of involvement and coordination with EPA. A complex SIP will require significantly more “up-front” collaboration between EPA and the state or local agency than a moderate or minor SIP. Examples of a complex SIPs include attainment plans for nonattainment areas and regional haze SIPs. This type of SIP can be initiated by a designation of a nonattainment area for a National Ambient Air Quality Standard (NAAQS). It may be required by a new or revised EPA regulation, initiated through a SIP call under Section 110(k)(5) of the Act, by an agency’s desire to re-designate back to attainment, or as a state or local agency’s periodic update to the SIP.

SIP Project Planning Phase (State or local agency lead)

Step #1: Define Scope

Scoping will include determining the geographic extent of the affected area and which pollutants will be affected. It will consider the rules to be revised and the impact on other provisions of the SIP. The state or local agency will gather the relevant existing knowledge and background.

Step #2: SIP Development Plan

Project planning will cover the SIP process from conception to final EPA approval. The SIP Development Plan should identify the major elements that will need to be in the SIP such as air quality data, emission inventories, control measures, attainment demonstration etc. The SIP Development Plan clarifies the roles of various persons involved in the SIP development and approval process, establishes a timeline for completion of major milestones, identifies resource needs and identifies potential policy, technical, or legal issues that need to be resolved with EPA. These issues may include SIP relaxation, jurisdiction, or recent relevant court decisions. The state or local agency should draft a SIP Development Plan and get feedback from EPA before finalizing.

At this point, the state or local agency and EPA should have a good understanding of what the SIP will entail and both the state or local agency and EPA have communicated their expectations for this effort. The SIP Development Plan is a guide for the development of a specific SIP revision. It will also minimize “second guessing” and “late hits” in the SIP approval phase of process. Agreement must be reached on the SIP Development Plan before proceeding. EPA may lead a learning check to evaluate how the process in this phase worked.

Step #3: Develop Technical Analysis Protocol (TAP), including Inventory Preparation Plan (IPP), and Rule Revision Analysis, as appropriate

The TAP presents the basic technical approach that will be used to support the SIP control strategy or used to demonstrate impacts. It will include identification and justification of the base year and future year emission inventory, practices and procedures that will be used to estimate emissions, and air quality models that will be used to demonstrate adequacy of the control strategy.

The state or local agency may need to complete a rule revision analysis (see Appendix) to determine what, if any, additional demonstration is needed. The demonstration is needed to show that the SIP revision will not interfere with any applicable requirement concerning attainment of the NAAQS and reasonable further progress or other applicable requirements of the CAA (e.g., applicable PSD increments, progress towards meeting the national visibility goal in mandatory federal Class I areas). See CAA 110(l).

Step #4: Dispute Resolution

If agreement cannot be reached at the staff level on the SIP Development Plan, the dispute resolution process is initiated.

SIP Development Phase (State or local agency lead)

Step #5: Technical Data Gathering and Modeling

This step collects new information and data needed for the technical elements of the SIP including emission inventory data, meteorological data, or other data. If an air quality model, other than a “guideline” model is planned, this step includes performance testing to assure adequacy.

Step #6: Control Strategy Development (for Nonattainment Areas)

The state or local agency identifies the control measures that will reduce emissions sufficiently to attain the NAAQS. The control measures may include new emission limitations or work practice requirements on industrial sources, emission reduction programs such as residential wood combustion control programs, fugitive dust suppression measures and other measures designed to reduce emissions.

Control measures need to be adopted before submitting SIP revision to EPA. This means that if the SIP depends on a city residential wood combustion curtailment ordinance, that ordinance needs to have been passed by the city prior to submission.

This step is an iterative process with the Demonstration Step below. If the preliminary control

strategy is not adequate to demonstrate attainment, additional control measures will need to be developed.

Step #7: Demonstration (for Nonattainment Areas)

This step is where the state or local agency provides the rationale that the SIP control strategy is adequate to attain and maintain the NAAQS. In general air quality dispersion modeling based on allowable emissions is used for this demonstration. However, the demonstration may use other information to develop a “preponderance of evidence” that demonstrates the adequacy of the control strategy.

Step #8: Drafting the Plan or Rule

The SIP is drafted consolidating all the technical, program, and legal work that has been completed. The SIP Templates will be used to help guide what should be included in the SIP. For rules, this step includes creating a redline/strikeout version of the proposed revisions showing changes from the current SIP.

Step #9: Review Draft SIP

The state or local agency must provide EPA the draft SIP for review. EPA needs at least 30 days for its review of the draft SIP. EPA must provide the state or local agency comments on the SIP, particularly anything that would preclude EPA from approving the SIP. This review is completed prior to the public process so that major changes do not need to go through additional public process. There is a dispute resolution process at this point for major issues that cannot be resolved at staff level. EPA may lead a learning check to evaluate how the process in this phase worked.

State and Local Adoption Phase (State or local agency lead)

Step #10: Public Involvement

The state or local agency must follow the established administrative procedures for public participation. This step includes notification of SIP availability, and opportunity for comment and a public hearing. The state or local agency sends EPA a copy of the version of the SIP revision that goes out for public review.

Step #11: Finalize the SIP

The state or local agency prepares the final SIP, incorporating changes as appropriate based on public comment and is adopted by the state or local agency. Local agency SIPs must also be adopted by the state.

Step #12: SIP Submittal

The state prepares and submits the SIP to EPA. This package includes a transmittal letter from the Governor or the designee, 1 hard copy of the SIP submittal, a disk with an electronic version of the SIP submittal package, including a MS Word version of any submitted rules, any needed technical justification, and documentation that the administrative procedures were followed.

SIP Approval Phase (EPA lead)

Step #13: Completeness Checklist

EPA may review the SIP against the “SIP Completeness Checklist” (40 CFR Part 51, Appendix V) to determine whether it is complete. If it is incomplete, it will be returned to the state. If the SIP is determined complete, then compliance with submission schedules will have been met or sanctions clocks, initiated for failure to submit by statutory deadlines, will be stopped. EPA may document the completeness determination by letter to the state. If no completeness determination is made within 6 months of submittal, it will be deemed complete by operation of law.

Step #14: Review and Update SIP Review Schedule

EPA in consultation with the state or local agency will review the SIP Development Plan schedule for approving the SIP to determine if adjustments are needed. A schedule adjustment may be needed due to workload, other higher priority SIP actions, or litigation. The state or local agency will agree to EPA’s schedule change or initiate the dispute resolution process.

Step #15: Technical, Policy and Legal Review

EPA conducts the technical, policy and legal review of the SIP against statutory and regulatory requirements and guidance.

Step #16: Write Federal Register Notice

EPA may prepare a Technical Support Document (TSD) documenting the findings of its review. The TSD provides the rationale and justification for EPA decisions to approve, take no action on, or disapprove specific SIP provisions. EPA will draw upon language in previously prepared documents for much of the basic rationale, but will make an independent determination on the adequacy of the SIP provisions. At this step EPA will also decide which of two rulemaking processes to use: direct final notice, or proposed and final action. It is generally expected that complex SIP revisions would use the proposed and final action rulemaking process. EPA prepares the Federal Register notice for publication in the Federal Register. In some cases, there won’t be a separate TSD and the rationale and justification will be included in the Federal

Register. There may be a learning check at this point that will review the SIP process.

B. Moderate SIP Revision Process

This SIP process is similar to the complex SIP revisions process above but entails less EPA involvement and generally less technical justification. Moderate SIP revisions generally need some technical and legal review by EPA. Most SIP revisions will be moderate SIP revisions.

C. Minor SIP Revision Process

Minor SIP revisions are simple revisions that result in a minimal effect on emissions. The Fast Track checklist in the Appendix identifies the considerations in determining whether a SIP revision is minor and appropriate for fast track processing. These SIPs might include, among other things; second 10-year maintenance plans, or re-codification of provisions. These revisions need minimal EPA involvement, and need minimal explanation to support EPA's action on the SIP.

Step #1: Define Scope and Fast Track Checklist

The state or local agency will define the scope of the proposed SIP revision. The state or local agency will consider combining this proposed SIP revision with other anticipated SIP revisions. The state or local agency will also consider alternatives that would achieve the same goal as the proposed SIP revision. The state or local agency completes the Fast Track Checklist and submits the checklist to EPA. EPA reviews the checklist and communicates its decision to the state or local agency about whether the revision qualifies for fast track processing. If the revision does not qualify for fast track processing, then the revision will be processed using the moderate SIP revision process. EPA and the state or local agency discuss and agree whether a SIP development plan is needed and at what point in the process EPA will review the draft SIP revision (prior to public comment period or concurrently with the public comment period).

Step #2: Drafting the Plan or Rule

The state or local agency drafts the proposed rule / SIP.

Step #3: Review Draft SIP

The state or local agency will submit and EPA will review the SIP revision to determine whether there are comments that require revision prior to the public involvement process. EPA needs at least 30 days for its review of the draft SIP. The state or local agency and EPA may decide that EPA review will happen concurrently with the public comment period. There is a dispute resolution process at this step.

Step #4: Public Involvement

The state or local agency must follow the established administrative procedures for public participation. This step includes notification of SIP availability, and opportunity for comment and a public hearing. The state or local agency sends EPA a copy of the version of the SIP revision that goes out for public review.

Step #5: Finalize the SIP

The state or local agency prepares the final SIP, incorporating changes as appropriate based on public comment, and is adopted by the state or local agency. Local agency SIPs must also be adopted by the state.

Step #6: SIP Submittal

The state or local agency prepares the SIP revision for submission to EPA. This will include the transmittal letter, 1 hard copy of the submittal, a disk with an electronic copy of the SIP submittal, including a MS Word version of any submitted rules, all technical justification, and other administrative procedures. The state submits the SIP revision to EPA.

Step #7: SIP Review

EPA conducts a brief review and writes the Federal Register Notice either approving or disapproving the SIP. EPA expects that minor SIP revisions would be processed in less than 12 months of receipt of the SIP submittal.

VI. The Appropriate Content of a Federally Approved SIP

Some state or local agency regulations and requirements are not appropriate for the federally approved SIP because they address issues beyond the National Ambient Air Quality Standards or beyond the requirements for SIPs in the Clean Air Act. These could include such things as odor and noise provisions, and air toxic emission requirements. Guidance in the Appendix of this document outlines what should and should not be included in the federally approved SIP

The federally approved SIP generally consists of two types of SIP elements, regulatory and non-regulatory. Regulatory SIP elements are state statutes, regulations or local ordinances that control emissions, establish permit programs or impose related monitoring, recordkeeping, or reporting requirements. These elements are generally approved by EPA and incorporated by reference (IBR) in the appropriate section of the Code of Federal Regulations (CFR). Examples of these SIP elements are emission limitations (including RACT emission limitations) or other work practice requirements for a specific source or source category; monitoring, recordkeeping, and reporting requirements; and PSD,NSR, and minor permit program requirements.

Non-regulatory SIP elements are general SIP provisions that are approved by EPA, but do not

generally directly restrict emissions. Examples of these SIP elements are the emission inventory, demonstration of attainment, program descriptions (such as Smoke Management Programs), RACT determination rationale, authorizing legislation, and enforcement-related provisions. Approved SIP elements remain on file in the Regional Office.

VII. Dispute Resolution

State and local agencies and EPA will work collaboratively to develop SIPs and reach decisions by consensus whenever possible. Agencies may turn to the dispute resolution process described below to help reach consensus or otherwise resolve issues. This process can be used to resolve disagreements over substantive issues, such as technical requirements or policy applications, or dissatisfaction with the SIP process itself, particularly an agency's failure to meet commitments. Although dispute resolution may be used at any point, the SIP process summaries identify key decision points where the parties will use dispute resolution to keep the process moving.

Dispute resolution process:

Step 1: Any state, local, or EPA person working on a SIP may initiate dispute resolution at any point in the SIP process by communicating that intent and the issues to be resolved to the other parties involved. Those parties will attempt to resolve the issues identified within one week.

Step 2: Any party not satisfied after Step 1 may raise the unresolved issues to their immediate manager who will discuss the issue with the immediate managers of the other parties involved. Those managers will attempt to resolve the issues within one week. If these managers cannot agree, the EPA's Air Planning Unit Manager will resolve the issues and communicate the resolution to the other managers involved.

Step 3: Any manager dissatisfied after Step 2 may request his or her agency's air quality Director to review the resolution with the Director of EPA's Office of Air, Waste and Toxics.

VIII. Implementation Strategy

Principles:

The strategy to improve the SIP process must be locally led and managed using existing resources and mechanisms with minimum disruption to achieve a high level of success within budget constraints. It is important to integrate the SIP development process into local systems while maintaining the integrity and intent of EPA Region 10's role. We encourage positive interagency working relationships and collaboration between state and local agencies and EPA.

IX. Process Evaluation and Improvement

The purpose of this element is to provide a valid basis for improving the SIP development

process both during the development of a specific SIP and for improving the overall SIP process. This step will also provide the basis for improving, reinforcing, and correcting working relationships in the SIP development and approval process.

There are several evaluation tools available for this element. There are “Learning Checks” at points in the process where the process could be evaluated for a particular SIP. There are also working agreements that can be used as a basis for comparing commitments with actual performance. These include:

- 1) PPA
- 2) MOA
- 3) Grant agreements

There are also quantitative statistics available to assess improvements

- 1) Scheduled milestones vs. actual completion dates
- 2) Number of SIP actions at EPA
- 3) Number of final SIP actions in a year

Evaluation Discipline: How will it occur?

EPA will have the lead role for the overall evaluation and improvement process. State and locals will have a strong input role.

EPA responsibilities will include:

- 1) Assure that EPA regularly gets input from state and local agencies on SIP processing and working relationships.
- 2) Gather learnings from EPA staff learning check leads (EPA person working on SIP) as basis for process change.

What is Done with the Learnings?

EPA lead will consider changes to the processes as appropriate and will communicate with state and local agencies to get their input.