State Implementation Plan (SIP) Lean Toolkit for Collaboration Between EPA and Air Agencies

United States Environmental Protection Agency December 6, 2019

EPA's SIP Lean Toolkit for Collaboration Between EPA and Air Agencies

I. Purpose of this Document

This document provides non-binding tools for state and local air agencies to support coordination and collaboration with the U.S. Environmental Protection Agency (EPA) during the development of state implementation plans (SIPs) under the Clean Air Act. The document is the product of recent joint EPA and air agency SIP process improvement efforts, which have built on previous collaborative work. Although use of this Toolkit is completely voluntary, it is intended to be helpful in supporting development of all types of SIPs, and in promoting timely SIP review and action by EPA.

The specific focus of this Toolkit is to support early engagement between air agencies and EPA during the air agency's SIP development process. Early engagement is an important collaboration tool because it provides opportunities to identify and raise issues that may impact approvability of a SIP submission early enough in the air agency's SIP development process to enable changes prior to the public comment period at the state/local level. In addition, early engagement enables EPA to develop familiarity with forthcoming SIP submittals so that EPA is poised to take timely action on incoming submittals from air agencies.

II. Background on EPA SIP Lean Process

EPA strives to take timely action on newly submitted SIPs while also taking action on SIPs that are past due for action pursuant to Clean Air Act (CAA) timelines described in section $110(k)(2)^2$. EPA is using continuous improvement (lean) tools to identify and implement further improvements in EPA's SIP review and action processes.

EPA and air agencies have focused considerable attention and resources over a number of years on improving SIP management and reducing the SIP backlog. The current SIP lean effort was initiated in February 2018 with a week-long kaizen event involving EPA participants representing every Region and Headquarters, along with four state and local air agency representatives. A primary recommendation that emerged from the SIP kaizen event is for EPA to work more proactively with air agencies during SIP development to identify and resolve issues before the SIP is adopted by the air agency and formally submitted to EPA. EPA's improved process, developed from the kaizen event recommendations, suggests that early engagement can help to support air agencies in SIP development as well as improve the timeline for EPA review and action on a submitted SIP.

III. Early Engagement During Air Agency SIP Development

¹ For brevity, this document refers to all state implementation plan submissions, including revisions of a State Implementation Plan as "SIPs." This includes plans addressing implementation of national ambient air quality standards (NAAQS) and the regional haze program.

² EPA considers SIPs to be "backlogged" if EPA has not taken final action within the CAA deadlines. Under CAA section 110(k)(2), EPA is required to take action on a SIP within 12 months after it is deemed complete. If EPA does not make a completeness determination, a SIP is deemed complete by operation of law 6 months after receipt of the SIP submittal.

A. General Process

Under the framework of "early engagement," EPA could be working with air agencies from the time the air agency begins planning for the development of the SIP³ to the time the SIP is formally submitted to EPA for review and action via the State Planning Electronic Collaboration System (SPeCS).⁴ A key aspect of early engagement is that it occurs early enough in the air agency's SIP development process that there is sufficient time for EPA to review and provide feedback on the content, and for the air agency to make changes, all prior to the public notice and comment period at the state/local level. The idea here is that if EPA can provide feedback, particularly in terms of flagging issues that could impact approvability, on an early engagement draft SIP, EPA will be better able to take more efficient action when the SIP is formally submitted for EPA review and action, resulting in less re-work and more routine achievement of the statutory deadline for final action on the SIP.

Early engagement does not guarantee that no other issues will arise regarding the SIP revision once it is formally submitted to EPA for review and action; however, EPA expects that early engagement will reduce those occurrences. Further, early engagement with EPA does not ensure that adverse public comments will not be received during the local, state, and/or federal public comment period, or that the SIP will not be delayed due to other unforeseen circumstances such as a court decision. If adverse comments are received or other novel issues arise, additional discussions between EPA and the air agency would likely occur.

B. Workload Planning

A key element of prior SIP improvement efforts was an emphasis on coordination between EPA and air agencies, such as planning for the annual SIP workload. To support this goal, EPA Regional offices encourage air agencies to provide them with a list of SIPs air agencies anticipate developing in the upcoming federal fiscal year and beyond, if possible.⁵ This workload planning can help identify the SIPs for which it will be most important to allow time for early engagement. EPA intends to prioritize early feedback to air agencies on draft SIPs submitted to EPA with sufficient time for such review. Regular communications between air agencies and EPA Regional offices are expected to result in refinements and updates to this initial list throughout the year. EPA recognizes that it may not be possible to fully identify all SIPs in advance of the fiscal year.⁶

The air agency and Region may consider whether to establish or update their memorandum of agreement (MOA), 4-year plan, or other documents related to SIP coordination and planning to

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³ EPA also encourages coordination with potentially impacted Tribe(s) early in the SIP process so that they have the opportunity for meaningful input. In some cases, EPA will also offer consultation with the potentially impacted Tribe(s).

⁴ Ideally, there will be some level of engagement and coordination between the air agency and EPA for every SIP revision being developed. However, if resources do not allow for full "early engagement," a Region can prioritize engagement on certain types of SIP revisions (e.g., complex SIP revisions), and would likely engage with air agencies in identifying priorities.

⁵ Complex SIPs that involve modeling or other technical components may take air agencies years to develop. For those SIPs, workload planning and early engagement should start as early as possible,

⁶ Multi-year SIP plans are a useful tool for long term workload planning.

include expectations regarding the SIP lean process, particularly early engagement (*see* the MOA/Joint Agreement Template in Appendix C). While some air agencies may find MOAs to be useful, they are not mandatory.

C. Who at EPA is involved in the Early Engagement Process?

There are several EPA personnel who are critical to successful implementation of the SIP lean process and will participate in the early engagement process with air agencies:

SIP Lead: The SIP Lead is the Regional staff person assigned to a SIP with overall responsibility for shepherding a SIP through EPA's review and action process, and who plays a strong convening role throughout the process.

SIP Team: EPA Regional offices will assign the appropriate technical and legal experts to assist the SIP lead through the early engagement process and in timely review of the submitted SIP. Depending on the type of submittal, the Regional office would also reach out to EPA Headquarters offices for involvement of experts there as needed.

D. Early Engagement Process Steps

(1) Air Agency Drafts a SIP Development Schedule

Participants in the SIP lean kaizen event recommended that the air agency initiate the SIP development process by drafting a SIP Development Schedule (see Appendix A). The purpose of the SIP Development Schedule is to facilitate communication between the air agency and EPA on key milestone dates for developing the SIP and to identify potential issues needing resolution. To be most useful, the SIP Development Schedule would be completed before the air agency begins drafting the SIP, ideally least six months prior to when EPA's review of the early engagement draft SIP is expected. EPA appreciates that this process is not required and may not be needed on every SIP, but sharing anticipated timing and schedules would help EPA and air agencies plan workloads to better meet targeted dates. This approach is especially recommended for complex SIPs or when air agencies anticipate adverse comment at the state/local level. For such SIPs, the air agency may find it useful to submit portions of the SIP to EPA for feedback prior to sharing a complete draft. Such reviews may be iterative and to that end, ideally the schedule would provide adequate time to accommodate these early reviews. Air agencies and EPA Regional offices may want to discuss the SIP Development Schedule and reach an understanding regarding next steps for moving forward. Questions to guide this discussion are identified in Appendix A of this document.

A key aspect of the schedule is an opportunity for the air agency to share a complete early engagement draft of the SIP for EPA review prior to the air agency's public comment period,

⁷ In recommending use of a SIP Development Schedule, EPA does not view this as requiring additional burden or work on the part of the air agency. Discussions with air agencies indicate that many air agencies already use these types of tools as part of their SIP development processes. Sharing this information can help facilitate effective communication with EPA. This process is recommended to improve efficiency, but is not required.

ideally 4 months to 1 year⁸ prior to the planned date for formal submittal of the SIP to EPA. Keeping with the idea of the schedule, the schedule ideally would also provide adequate time for EPA review and comment on the early engagement draft (30 to 60 days, depending on the complexity⁹ of the SIP)¹⁰ and allow for additional time for resolution of any approvability issues (consistent with the air agency's needs). For SIP revisions required for 2015 ozone nonattainment areas, please *see* the Ozone Quick Start Guide for additional information.

The SIP Lead will strive to provide feedback to the air agency within 14 days after receiving the draft SIP Development Schedule. The air agency is encouraged to complete the SIP Development Schedule within 14 days of receiving EPA's feedback.

(2) Initial Conceptual Discussions between EPA and Air Agency

Conceptual discussions are informal discussions between the air agency and EPA regarding the air agency's approach to a complex SIP revision prior to the air agency drafting a SIP submission. Conceptual discussions involve the air agency presenting ideas and asking questions to get EPA's initial feedback to inform SIP development. To the extent possible, issues identified by the air agency and EPA ideally would be resolved during these conceptual discussions. These discussions could also cover the technical aspects of the SIP, including model protocols and inventory development, as appropriate, to reach agreement on the approach to modeling and emissions inventory.

(3) Ongoing Discussions

Consistent with current common practice, EPA and the air agency will likely continue to have discussions on SIP development and may establish regular meetings for complex SIP revisions. In some cases, particularly for complex SIP revisions, it might be helpful for the air agency to submit pieces of the draft SIP for informal review as they are ready, prior to submitting a complete early engagement draft for EPA review. Where applicable, draft modeling protocols and inventory development plan are relevant topics for ongoing discussions between EPA and air agencies, and air agencies are encouraged to share those documents with EPA. The SIP Development Schedule could be updated, as needed, to reflect those discussions between EPA and the air agency.

For attainment plans, EPA has developed the Attainment Plan Development Checklist (see Appendix B), which the air agency can use in developing the SIP revision. The Checklist can

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⁸ Air agencies' SIP development procedures vary widely. In addition, the time needed for SIP development depends on the nature of the SIP and the specific issues in the area. Therefore, the 4 to 12 months timeframe is a suggested range. For any given SIP, the time needed for early engagement may be longer or shorter. The air agency and Region should agree on the appropriate timeframe for each SIP.

⁹ A "complex" SIP is generally one where the Region needs to involve EPA Headquarters. Complex SIPs include "first of their kind" SIPs and significant SIPs such attainment plans. Complexity may arise due to inconsistency with previous actions, matters in litigation, and other issues likely to receive significant adverse public comment.

¹⁰ There may be situations where EPA needs more time for early engagement review and that will need to be negotiated with the air agency. Complexity of the SIP will be assessed and determined on an individual basis. For complex SIP revisions, EPA Headquarters may participate as part of the SIP Team.

¹¹ EPA cannot provide a full evaluation at the conceptual discussion stage. In addition to further development of the SIP revision between conceptual design and submittal, often other events (for example, litigation, policy, and/or regulatory changes) may occur between the time of the conceptual discussion and when the SIP is submitted that may change EPA's position.

assist the air agency in identifying where and how in the attainment plan various CAA and regulatory requirements are met. EPA may also use this checklist to review the draft early engagement SIP.

(4) Air Agency Notifies EPA of Early Engagement Draft Submission

For this step, the air agency is encouraged to notify EPA, preferably two to four weeks in advance of sharing the early engagement draft with EPA. Such discussions on the status of SIP development may also take place during the monthly planning calls between air agencies and Regional offices. Should workload or other availability issues for the EPA SIP Team come up at this point, EPA may collaborate with the air agency to establish a longer review period. Likewise, if the air agency needs EPA review in less than 30 days from the date the draft SIP is submitted, the air agency is encouraged to communicate this with EPA.

(5) Air Agency Submits Early Engagement Draft

The air agency submits an early engagement draft (i.e., a complete draft SIP) to EPA, ideally through SPeCS, ¹² for review and comment prior to the air agency's public comment period. EPA is encouraging the early engagement draft prior to its public comment period and at least 4 to 12 months prior to formal submittal. ¹³

(6) EPA Reviews Early Engagement Draft and Provides Comments

EPA anticipates making early review of draft SIP submissions a high priority and will engage the SIP Team to provide a thorough review, with a focus on identifying approvability issues.

To the extent possible, EPA intends to provide early engagement comments to the air agencies categorized as follows:

- **Key Comments** potential approvability issues that could impact EPA's ability to take final approval action on the SIP such that EPA recommends the air agency address these issues prior to formal submittal.
- General Comments issues that if resolved would strengthen the formal submission.
- Other Comments helpful things to alert the air agency to but not critical for the air agency to address in their formal submission.

Within the agreed-upon timeframe, the Regional office provides the comments to the air agency in the manner the air agency prefers, but typically in writing, to the extent practical. If EPA is not able to provide complete comments during the early engagement stage because additional discussions on a particular issue are needed, the Region will follow up with the air agency to communicate the status and plan for EPA's input.

(7) The Air Agency Addresses EPA's Comments

A recommended best practice is for EPA and the air agency to meet to hold a conference call to discuss EPA's comments, and changes anticipated by the air agency in response to EPA feedback. EPA appreciates that such meetings may not always be practical to schedule; however,

¹² EPA appreciates that stakeholders are interested in transparency regarding the status if EPA's review. Moving towards one submittal system for draft SIPs would support that goal.

¹³ Because the details of each SIP are unique, 4 to 12 months may not be appropriate. A different timeframe could be agreed upon by the air agency and EPA Region.

success of early engagement hinges on ongoing and regular communications and EPA encourages holding these specific meetings or calls, particularly for complex SIPs. For simpler SIPs, other communication options may suffice.

(8) Air Agency Initiates Public Comment Period

After considering EPA's comments, and finalizing a draft SIP revision, the air agency usually then prepares for its public comment period. EPA encourages air agencies to submit to EPA the link to the public comment period proposed SIP revision, preferably through SPeCS. The air agency public comment period is another opportunity to get input from potentially impacted Tribe(s), in addition to the recommended coordination earlier in the SIP development process.

(9) EPA's Review and Comments during the Air Agency's Public Comment Period

EPA may provide comments on the SIP during the air agency's public comment period. Examples of comments EPA may make at this stage include, but are not limited to: "Key Comments" identified by EPA during early engagement that have not yet been addressed in the public comment draft SIP; any new EPA "Key Comments" that were not identified during early engagement review due to, for example, new litigation considerations, policy changes, or recent regulatory actions that change how EPA would review and comment on the SIP; and any new language that has been added that EPA did not have an opportunity to comment on during early engagement.

EPA may also provide comments on SIPs where there was no review of an early engagement draft of the SIP. If a thorough EPA review of a SIP within the air agency's 30-day public comment period is not possible, the Regional office will alert the air agency regarding EPA's inability to provide approvability feedback at this stage. The air agency may decide to allow more time for EPA to provide input or may decide to move forward with the SIP with the understanding that issues may be identified by EPA after the SIP is formally submitted.

The SIP Lead will notify the air agency in advance whether EPA is planning to submit comments. EPA will then submit a comment letter to the air agency as appropriate. The SIP Lead will offer to hold a conference call with the air agency to discuss the comments and answer questions. This call may include others on the SIP Team as appropriate. The air agency is encouraged to continue to coordinate with EPA as it makes any further revisions to the SIP before submission to EPA.

If EPA is not able to provide the air agency with complete comments during the public comment period because additional discussions on a particular issue are needed, the Region will follow up with the air agency to communicate the status and plan for EPA's input. EPA acknowledges that air agencies may not be able to address EPA comments received after the close of the public comment period.

E. Air Agency Adoption & Submittal of SIP Revision (Post-Early Engagement)

(1) Air Agency Addresses Public Comments

Ideally, air agencies will let EPA know if they receive an adverse public comment during their public comment period that raises a significant new issue which might affect the approvability of

the SIP. Further discussion may be helpful between the air agency and EPA to resolve any issues that emerge during the public comment period. A key idea associated with early engagement is that potential approvability issues would be addressed prior to the air agency formally submitting the SIP to EPA.

(2) Air Agency Adopts SIP Revision and Submits it to EPA through SPeCS

The final step in the air agency's SIP revision process is adoption of the formal submission by the air agency, consistent with individual air agency processes, and submittal to EPA.

IV. Checklist for the SIP Lean Toolkit

This checklist is a discretionary tool for air agencies to use in managing a SIP revision through the SIP lean early engagement process in a manner consistent with existing SIP development obligations. The steps summarized here are explained in detail in the previous sections of this SIP Lean Toolkit. This checklist is organized into tables according to the key steps in the process. For reference, the step numbers in the table correspond to the process step numbers in the Toolkit.

Early Engagement during Air Agency SIP Revision Development								
~	Action	Responsible Person (and others that might be involved)	When (Recommended timeframes)					
1.	Air Agency Initiates SIP Development by Drafting a SIP Devel	lopment Schedule						
	Air agency develops the SIP Development Schedule and shares with the SIP Lead for review and feedback on draft.	Air Agency (SIP Lead)	Completed at least 6 months prior to when EPA review of the early engagement draft SIP is expected. EPA should provide feedback within 14 days of receipt of draft					
	Air agency finalizes SIP Development Schedule (SDS) and provides to SIP Lead for awareness.	Air Agency (SIP Lead)	Final SDS within 14 days of EPA feedback					
2.	Initial Conceptual Discussions between EPA and Air Agency							
	Air agency or SIP Lead schedule discussions with air agency, as appropriate, to discuss potential issues, ask questions, identify relevant guidance, and communicate EPA's expectations.	SIP Lead (Air Agency, SIP Team)						
3.	Ongoing Discussions							
	EPA and the air agency continue to have discussions on SIP development and may have regular meetings for complex SIPs. Submission of portions of SIPs to facilitate discussion is encouraged if the entire SIP is not yet available.	SIP Lead (Air Agency, SIP Team)						
4.	Air Agency Notifies EPA of Early Engagement Draft Submissi	on						
	The air agency notifies EPA in advance of sharing an Early Engagement Draft to EPA for review.	Air Agency	2-4 weeks before air agency plans to send Early Engagement Draft					
5.	Air Agency Submits Early Engagement Draft							

Ea	rly Engagement during Air Agency SIP Revision Develop	pment			
~	Action	Responsible Person (and others that might be involved)	When (Recommended timeframes)		
	Air agency submits Early Engagement Draft for EPA review.	Air Agency	4 -12 months before formal SIP submittal		
6.	EPA Reviews Early Engagement Draft and Provides Commen	ts			
	 EPA reviews Early Engagement Draft with a focus on identifying approvability issues. EPA comments may include: Key Comments - potential approvability issues that should be addressed by the air agency before formal submission of the SIP for EPA review and action, General Comments - issues that if resolved would strengthen the formal submission but EPA could address in EPA's proposed action without the air agency addressing them, and Other Comments - helpful things to alert the air agency to but not critical for the air agency to address in their formal submission. 	SIP Lead (SIP Team)	EPA provides comments to the air agency within the agreed upon timeframe (typically 30 – 60 days).		
7.	The Air Agency Addresses EPA's Comments				
	EPA and the air agency should have a follow-up call to discuss/clarify EPA comments; additional follow-up may be encouraged on certain issues. Air agency discusses any changes to SIP Development Schedule.	Air Agency, SIP Lead, (SIP Team)			
8.	Air Agency Initiates Public Comment Period				
	The air agency submits the weblink to EPA for the public comment period on the proposed SIP revision to EPA through SPeCS. The air agency public comment period is another opportunity to get input from potentially impacted Tribe(s), in addition to the recommended coordination earlier in the SIP development process.	Air Agency			
0	EPA's Review and Comments during the Air Agency's Public	Comment Period			
7.	ELA S ACVIEW and Comments during the All Agency 8 Fublic	Comment 1 et 10u			
	EPA may provide comments on the SIP during the air agency's public comment period. The SIP Lead notifies the air agency whether EPA is planning to submit comments.	SIP Lead, SIP Team	EPA provides comments within the public comment period, if applicable.		
	The SIP Lead offers to have a conference call with the air agency to discuss the comments and answer questions. If EPA is not able to provide the air agency with complete comments during the public comment period, the Region will follow up with the air agency to communicate the status and	SIP Lead, Air Agency SIP Lead, Air Agency			
	comments during the public comment period, the Region will		r		

Air Agency Adoption & Submittal of SIP Revision (Post-Early Engagement)							
~	Action	Responsible Person (and others that might be involved)	When				
The air agency should ensure that that it has adequately addressed all EPA Key Comments by providing EPA with a response to comments document and indicating any changes being made to the SIP to address EPA's comments. Air Agency (SIP Lead, SIP Team)							
Further discussion may be needed between the air agency and EPA to resolve any issues that emerge during the public comment period. 2. Air Agency Adopts SIP Revision and Submits Formal SIP Submittal to EPA through SPeCS							

Appendix A: SIP Development Schedule Template

A SIP Development Schedule is an optional but recommended tool for laying out the expected timeline for developing a particular SIP and identifying potential issues. A number of air agencies already use this type of planning tool to facilitate reaching general agreement among the parties involved as to how a SIP will be developed. The table below can be customized as needed. Ideally, a SIP Development Schedule would initiate the SIP development process and be completed by air agencies at least six months before EPA review is expected. As the rulemaking process progresses, the target dates may change, and the air agency is encouraged to notify EPA and other participating agencies of the changes.

Title of SIP:	
Submission Target Date:	

Milestones	Date
Initial Discussion(s) with EPA: Air agency and EPA discuss the	
questions listed below about project scope, potential issues, available	
guidance, scheduling needs, and feasibility.	
Draft SIP Development Schedule : Air agency initiates discussion of	
timing with EPA SIP Lead. This should be completed at least six	
months before EPA review is expected.	
Final SIP Development Schedule: EPA should provide feedback	
within 14 days of receipt of the draft schedule. The air agency should	
finalize it within 14 days of receipt of EPA's feedback.	
Revise SIP Development Schedule: As necessary, the air agency	
should update the schedule if dates for expected draft and formal	
submittal change.	
Modeling Protocol and Inventory Development: Air agency sends	
draft modeling protocol and inventory development plan to EPA, if	
applicable.	
Modeling Protocol and Inventory Development Review: EPA	
provides comments on modeling protocol and inventory development	
plan, if applicable.	
Modeling Results, Draft Control Strategy, and Draft Emissions	
Inventory: Air agency sends modeling results, draft control strategy	
and draft emissions inventory to EPA, if applicable.	
Modeling Results, Draft Control Strategy, and Draft Emissions	
Inventory Review: EPA provides comments on modeling results, draft	
control strategy, and draft emissions inventory, if applicable.	
Early Engagement Draft: Air agency sends a complete draft SIP	
revision to EPA for review prior to public comment period. Prior to	
this step, pieces of the draft SIP may be shared with EPA for informal	
review as they are completed. Ideally air agencies should provide the	

Milestones	Date
early engagement draft SIP 4 months to 1 year prior to planned	
official submission.	
EPA Feedback on Early Engagement Draft: EPA provides	
comments to air agency and identifies approvability issues. Air	
agencies should provide 30 days for EPA review of routine SIPs and	
60 days for review of complex SIPs.	
Follow-up Meeting: Air agency and EPA discuss EPA comments and	
potential revisions to the SIP Development Schedule. Air agencies	
should allow enough time to address EPA's comments after receiving	
them and before the air agency needs to provide documents for	
publication for their public comment period.	
Public Comment Period Opens: Air agency sends EPA a link to the	
public review draft and notifies EPA of the comment period closing	
date.	
Public Hearing : Air agency holds any required public hearings (see 40	
CFR 51.102).	
End of Public Comment Period: Final pre-submittal opportunity for	
EPA comments.	
SIP Submission: Air agency sends SIP submission to EPA.	
Process Evaluation: Air agency and EPA discuss the successes and	
challenges with the SIP development process on regular calls. The	
Region compiles recommendations to share with SIP lean workgroup.	

Questions for Initial Discussion with EPA (can be completed either before or during the initial meeting between EPA and the air agency)

- 1. What is the scope of the SIP Revision (in 1-3 sentences)? Include Clean Air Act requirement and available guidance.
- 2. Are there known technical, legal or policy issues that need resolution? Y/N If yes, what:
- 3. Is there a required deadline for the SIP submission or other timing considerations for the submission? Y/N If yes, what is it?

4.	Is the air agency requesting that EPA finalize action on the submission by certain date? Y/N If yes, by what date and why?
5.	Are there any expected impacts to tribal interests? If so, what communication and/or coordination is planned with the potentially impacted tribe(s)? ¹⁴
6.	Names of staff and managers that will be involved in preparing and reviewing the SIP revision:
	Air agency:
	EPA:
	Other agencies:

¹⁴ EPA encourages coordination with potentially impacted Tribe(s) early in the SIP process so that they have the opportunity for meaningful input. In some cases, EPA will also offer consultation with the potentially impacted Tribe(s).

EP.	'A Region: State/s:	Area:		N	AAQS:		
Oth	er EPA Regions (For Multi-jurisdicti	onal Areas):					
Ch	ecklist Purpose						
	is checklist is an <i>optional</i> tool that is int	ended to be used by both air agenc	ies and EPA staff to assist in	the dev	elopme	nt of atta	ainment plans that
	ntain the necessary information for time	•					*
reg	ulatory requirements for SIP submission	ns. *Use of this checklist does not e	ensure an attainment plan's	approva	bility by	<i>EPA</i> . *	
Pai	rt 1. Early Engagement & Communic	ations					
Cri	iteria			Yes	No	N/A	Optional Comment
1.	Was there "early engagement" between	n the state and EPA in developmen	t of this plan?				
2.	Has the air agency consulted with EPA	on the approach being taken in the	e submission?				
3.	For any SIP revisions, has the air agen-	cy consulted with EPA about wheth	her a non-interference		П	П	
	demonstration under CAA section 110	(l) is needed?					
4.	Was available EPA guidance identified	1?					
5.	For a plan needing a CAA section 110	1) demonstration, has the air agenc	y consulted with EPA on				
	adequacy of the demonstration?						
		n should adequately assess whether			П	П	
		naintenance of any of the national a					
	, , , , , , , , , , , , , , , , , , , ,	le further progress (RFP), or any or	ther applicable				
	requirement of the CAA	1.1.1	14 4 4 1				
6.	For a multi-State nonattainment area, of	<u> </u>	with the other relevant				
7	State air agency(ies) throughout the SI						
7.	Has the air agency consulted with EPA						
8.	Has the air agency consulted with EPA emission levels from attainment control	11	missions reductions or				

Appendix B: Attainment Plan Development Checklist

Part 2. General Elements

Criteria	Yes	No	N/A	Optional Comment
9. Does the plan clearly outline the geographical area(s) affected?				
10. Does the plan clearly list the relevant Clean Air Act (CAA) and regulatory requirements? The user of this checklist may also use the attached list of CAA and regulatory requirements by pollutant and identify where the plan addresses each requirement.				
Does the plan clearly describe how each CAA and regulatory requirement is met?				
11. Does the plan clearly include adequate information to support State's descriptions/claims for each CAA requirement (e.g., each SIP element)?				
12. Is the State's approach consistent with EPA's regulations, guidelines, and previous actions, if applicable?				
13. Is there anything in the State's approach that represents a new or modified approach to fulfilling a requirement?				
14. Where applicable, does the plan contain a CAA section 110(l) demonstration?				

Part 3. Attainment Plan Elements

Criteria	Yes	No	N/A	Optional Comment
BACKGROUND				
15. Is there a brief overview of why the plan was developed and which pollutants are covered?				
16. Are the dates for designation, classification (if applicable) and attainment relevant to the attainment area provided?				
17. Is there a summary of all actions (e.g., reclassification, extension of attainment dates, boundary changes, etc.) that have occurred since the original designation of the nonattainment area?				
MONITORING				
18. Is the ambient air quality monitoring network discussed, including such things as scale of representativeness, purpose of site, location of monitors, monitoring start date, and when EPA last approved the network?				
19. Does the plan address and provide air quality data and/or design values for all monitors in the area?				
20. Does the plan identify whether each monitor is using federal reference or equivalent methods (FRM/FEM)?				
21. Is the quality assurance, validity, completeness, and certification status of the data discussed?				
22. Do the data and/or design values included match Air Quality System (AQS)?				
23. Are any applicable special studies concerning air quality monitoring summarized?				

24. Is there an analysis of the air quality data provided? (e.g., data related to characterizing the source, transport, and fate of the pollution including seasonal variation, correlation to meteorological conditions, and trends.)			
25. Are violating data identified and explained, including references to exceptional events requests that have been submitted and/or approved?			
EMISSIONS INVENTORY			
26. Are all the required emissions inventories included in the plan?			
27. Does the plan include a comprehensive, accurate, current inventory of actual emissions from all sources of the relevant pollutant or pollutants in the area for the base year of the plan?			
28. Is there agreement on the emissions inventory years?		 	
29. Is the attainment year emissions inventory to any extent based on actual emissions? If yes, please identify the pollutant and source types relying on actual emissions.			
30. Does the plan include a detailed explanation of how the emissions inventories were developed including documentation of data sources?			
31. Where appropriate, do the emissions inventories in the plan match that reported to the NEI?			
32. Does the plan rely on the latest EPA approved emissions models for mobile sources (non-road and on-road sources?)			
33. Does the plan include motor vehicle emissions budgets (MVEBs) for the attainment and RFP or quantitative milestone years, or alternatively make an insignificance determination for on-road mobile sources for all pollutants of concern (including precursors) for transportation conformity purposes? (Notes: MVEBs and insignificant determinations are covered by the transportation conformity regulations (40 CFR Part 93). MVEBs should not be established in SIPs for revoked NAAQS. Transportation conformity does not apply to the sulfur dioxide and lead NAAQS.)			
ATTAINMENT DEMONSTRATION	•		
34. Does the plan include a demonstration based on modeling that the area will attain by the applicable attainment date?			
35. Is one of EPA's preferred modeling techniques as specified in EPA's Guidelines on Air Quality Models (Appendix W) used to demonstrate attainment of the NAAQS (e.g. Appendix W, Table 8-1)?			
36. If an alternative modeling technique not specified in EPA's Guidelines on Air Quality Models (Appendix W) is used, has the State consulted with EPA on adequacy and approvability of such modeling technique as part of the plan?			
37. Is the modeling adequately documented and are the used parameters sufficiently justified?			
38. Do the modeled emissions limitations restrict dispersion credit in accordance with good engineering practice requirements, per CAA section 123?			

39. Where applicable, instead of an attainment demonstration, does the plan include a demonstration that it is impracticable for the area to attain by its attainment date?			
CONTROL MEASURES			
40. Is there a description of each control measure contained in the control strategy along with a		 	
description of the sources covered and pollutants addressed?			
41. Are the control measure requirements identified?			
42. Are the adopted control measures permanent and federally enforceable?			
43. Are the adopted control measures part of the SIP or being incorporated into the SIP as part of this			
plan?	Ш		
44. Are reasonably available control measures (RACM) and technologies (RACT) identified by			
pollutant and source category, and properly justified?			
45. Does the plan discuss control technologies considered in the evaluation and selection of RACT in the context of technical and economic feasibility?			
46. Are the effective dates of each control measure identified?			
47. Is there an explanation of how the control measures are being or will be implemented?			
48. Is there an explanation of how the control measures are being or will be enforced?			
49. Is there an explanation of how the emission reductions are being or will be determined?			
50. Are emission reductions from adopted control measures quantifiable and surplus?			
51. For voluntary measures, is there a description of the reduction credit requested, how effectiveness			
will be tracked, and how the implementing agency will respond to shortfalls in emissions			
reductions?			
REASONABLE FURTHER PROGRESS			<u> </u>
52. Does the plan identify how the implementation of the adopted control measures achieves reasonable further progress (RFP)?			
53. Does the plan quantify incremental emission reductions needed to achieve RFP?			
54. Does the plan establish a schedule for emissions reductions (i.e., milestones) to track RFP?			
CONTINGENCY MEASURES			
55. Are the contingency measures identified?			
56. Do the contingency measures have an appropriate trigger?			
57. Does the plan contain or rely on early triggered contingency measures?			
58. Will the contingency measures take effect without further action by the state or EPA?			
59. Is an explanation provided on how the contingency measure emissions reductions will be quantified (e.g., 1 year's worth of RFP)?			

NEW SOURCE REVIEW		
60. Is the air agency revising its nonattainment new source review (NNSR) rules to meet current NNSR requirements for the area's classification?		
61. Is the air agency "certifying" that their existing SIP is sufficient to meet the current NNSR requirements for the area's classification and include this certification in the attainment plan submission?		
62. Do the NNSR rules address the required precursors (either by inclusion in the rule or through an insignificance demonstration)?		
63. If a precursor insignificance demonstration for NNSR has been approved in the past, is the air agency updating the precursor demonstration?		

Part 4. Completeness Criteria for Formal Submission

Criteria	Yes	No	NA	Optional Comment
64. Prior its formal submission to EPA, does the plan contain all the necessary administrative materials to meet the completeness criteria sections 2.1 and 2.3 of 40 CFR 51, Appendix V?				
 65. Prior its formal submission to EPA, does the plan contain the necessary technical supporting information in accordance with section 2.2 of 40 CFR 51, Appendix V? This includes but is not limited to: b. Demonstrations that the NAAQS, PSD increment, RFP, and visibility protection are protected if the plan is approved and implemented? c. Modeling information to support the submission with accompanying information relevant to determine the adequacy of the modeling (such as input data, output data, models used, assumptions used, etc.)? d. Information necessary to determine that emission limits are continuous? e. Appropriate compliance and enforcement strategies? 				

Useful Resources

- Guidance for 2010 1-Hour Sulfur Dioxide (SO₂) NAAQS Nonattainment Area SIP Submissions
- Implementation of the 2008 Ozone NAAQS SIP Requirements Rule
- Implementation of the 2015 Ozone NAAQS SIP Requirements Rule
- Implementation of the fine particulate matter (PM_{2.5}) NAAQS SIP Requirements Rule
- General Preamble for the Implementation of Title I of the Clean Air Act (CAA) Amendments of 1990 (57 FR 13498)
- EPA's September 23, 1987 Memorandum "Review of State Implementation Plans and Revisions for Enforceability and Legal Sufficiency" (See Page 366 of "Air Programs Policy and Guidance Notebook, Vol. 2")
- PM_{2.5} Precursor Demonstration Guidance
- Air Emissions Reporting Requirements Rule (AERR)
- Emissions Inventory Guidance for Implementation of Ozone and Particulate Matter NAAQS and Regional Haze Regulations
- Emission Inventory Improvement Program (EIIP)
- Modeling Guidance for Demonstrating Attainment of Air Quality Goals for Ozone, PM_{2.5}, and Regional Haze
- Information on Air Quality Dispersion Modeling
- General Guidance on Innovative and Voluntary Air Pollution Control Strategies
- Information on EPA's Mobile Source Emissions Models
- Guidance for Using Latest MOVES Model for SIP Development and Transportation Conformity Purposes
- Transportation Related Documents for State and Local Agencies

ATTACHMENT:

Nonattainment SIP Requirements under Clean Air Act by Pollutant

The table below lists the general nonattainment planning requirements by pollutant under part D of Title I of the Clean Air Act. The Clean Air Act, EPA's regulations in 40 CFR part 51, and applicable EPA policy and guidance should be consulted to ensure that all applicable requirements are adequately met. The last column of this table is recommended to be used in coordination with the Development Checklist to identify where the

applicable requirement is being addressed (e.g., page number, section, appendix) in the Attainment Plan.

CAA Provisions		Requirement	Applicability						Plan
CAATION	(1810118	Requirement	Ozone	CO	PM	SO ₂	Pb	NO ₂	Identification
Subpart 1	Section 172(a)(2)	Attainment Dates for Nonattainment Areas	X	X	X	X	X	X	
Subpart 1	Section 172(a)(b)	Schedule for Plan Submissions	X	X	X	X	X	X	
Subpart 1	Section 172(c)(1)	RACM/RACT	X	X	X	X	X	X	
Subpart 1	Section 172(c)(2)	RFP	X	X	X	X	X	X	
Subpart 1	Section 172(c)(3)	Emissions Inventory	X	X	X	X	X	X	
Subpart 1	Section 172(c)(4)	Identification and Quantification	X	X	X	X	X	X	
Subpart 1	Section 172(c)(5)	NNSR	X	X	X	X	X	X	
Subpart 1	Section 172(c)(6)	Other Measures	X	X	X	X	X	X	
Subpart 1	Section 172(c)(9)	Contingency Measures	X	X	X	X	X	X	
Subpart 2	Section 181	Classification and Attainment Dates	X						
Subpart 2	Section 182(a)(3)	Emissions Statements	X						
Subpart 2	Section 182(a)(4)	NNSR Offset Requirement for Marginal Areas	X						
Subpart 2	Section 182(b)(1)	RFP for Moderate Areas	X						
Subpart 2	Section 182(b)(2)	RACT (CTG and Major VOC)	X						
Subpart 2	Section 182(b)(3)	Gasoline Vapor Recovery	X						
Subpart 2	Section 182(b)(4)	I/M for Moderate Areas	X						
Subpart 2	Section 182(b)(5)	NNSR Offset Requirement for Moderate Areas	X						
Subpart 2	Section 182(c)(1)	Enhanced Monitoring for Serious Areas	X						
Subpart 2	Section 182(c)(2)(A)	Attainment Demonstration for Serious Areas	X						
Subpart 2	Section 182(c)(2)(B)- (C)	RFP for Serious Areas	X						
Subpart 2	Section 182(c)(3)	Enhanced I/M for Serious Areas	X						
Subpart 2	Section 182(c)(4)	Clean Fuel Vehicle Program (if applicable)	X						
Subpart 2	Section 182(c)(5)	Transportation Control (VMT Demonstration and TCM)	X						
Subpart 2	Section 182(c)(6)	NNSR De Minimis Rule	X						
Subpart 2	Section 182(c)(7)-(8)	Special Rules for Stationary Sources	X						

CAA Provisions		Requirement	Applicability						Plan
			Ozone CO		PM	SO_2	Pb	NO ₂	Identification
Subpart 2	Section 182(c)(9)	Contingency Measures for Serious Areas	X						
Subpart 2	Section 182(c)(10)	NNSR Offset Requirement for Serious Areas	X						
Subpart 2	Section 182(d)(1)	VMT (VMT Growth Demonstration and TCM)	X						
Subpart 2	Section 182(d)(2)	NNSR Offset Requirement for Severe Areas	X						
Subpart 2	Section 182(d)(3)	Penalty Fee Program under CAA Section 185	X						
Subpart 2	Section 182(e)(1)-(2)	NNSR Requirements for Extreme Areas	X						
Subpart 2	Section 182(e)(3)	Clean Fuels Requirement for Boilers	X						
Subpart 2	Section 182(e)(4)	Traffic Control Measures During Heavy Traffic Hours (Traffic Congestion Controls)	x						
Subpart 2	Section 182(f)	NOx Requirements (applying VOC requirements under Section 182)	х						
Subpart 2	Section 182(g)	RFP Milestones (for Serious, Severe and Extreme Areas)	x						
Subpart 2	Section 184(b)(1)	Plan Provisions in Ozone Transport Regions (Enhanced I/M and RACT)	x						
Subpart 3	Section 186	Classification and Attainment Dates		X					
Subpart 3	Section 187(a)(1)	Emissions Inventory		X					
Subpart 3	Section 187(a)(2)	VMT for Moderate Areas		X					
Subpart 3	Section 187(a)(3)	Contingency Measures for Moderate Area		Х					
Subpart 3	Section 187(a)(4)	I/M for Moderate Areas		X					
Subpart 3	Section 187(a)(5)	Periodic Emissions Inventory		X					
Subpart 3	Section 187(a)(6)	Enhanced I/M for Moderate Areas		X					
Subpart 3	Section 187(a)(7)	Attainment Demonstration and Specific Annual Emission Reductions		x					
Subpart 3	Section 187(b)(2)	VMT for Serious Areas		X					
Subpart 3	Section 187(b)(3)	Oxygenated Gasoline		X					
Subpart 3	Section 187(c)	Areas with Significant Stationary Source VOC Emissions		х					
Subpart 3	Section 187(d)	CO Milestone		X					
Subpart 3	Section 187(g)	Failure to Attain for Serious Areas		X					
Subpart 4	Section 188	Classification and Attainment Dates			X				
•	Section 189(a)(1)(A)	NNSR for Moderate Areas			X				

CAA Provisions		Requirement		Plan					
			Ozone	CO	PM	SO ₂	Pb	NO ₂	Identification
Subpart 4	Section 189(a)(1)(B)	Attainment Demonstration or Infeasibility			37				
		Demonstration for Moderate Areas			X				
Subpart 4	Section 182(a)(1)(C)	RACM for Moderate Areas			X				
Subpart 4	Section 189(b)(1)(A)	Attainment Demonstration or Infeasibility			37				
		Demonstration for Serious Areas			X				
Subpart 4	Section 189(b)(1)(B)	BACM for Serious Areas			X				
Subpart 4	Section 189(b)(3)	NNSR for Serious Areas			X				
Subpart 4	Section 189(c)	RFP Milestones			X				
Subpart 4	Section 189(d)	Failure to Attain for Serious Areas			X				
Subpart 4	Section 189(e)	Precursors			X				
Subpart 5	Section 191	Plan Submission Deadlines				X	X	X	
Subpart 5	Section 192	Attainment Dates				X	X	X	

Acronyms

BACM- best available control measures

CO- carbon monoxide

I/M- inspection and maintenance

NAAQS- national ambient air quality standard

NNSR- nonattainment new source review

NOx- nitrogen oxides

Pb- lead

PM- particulate matter

RACM- reasonably available control measures

RACT- reasonably available control technology

RFP- reasonably further progress SO₂- sulfur dioxide

TCMs- transportation control measures

VMT- vehicle miles traveled

Appendix C: MOA/ Joint Agreement Template for Early Engagement¹⁵



< Insert air agency logo >

EPA Region < insert region > and < Insert air agency >

PURPOSE

The purpose of this document is to establish a joint agreement between EPA Region <insert region > (hereinafter referred to as EPA region) and <insert air agency > (hereinafter referred to as air agency), outlining the key expectations for communication and planning between the two parties during the development and review of state implementation plans (SIPs). Both parties agree to annually review and update as appropriate this joint agreement and to abide by the principles, best practices and expectations outlined below and that are a part of the document, Best Practices for EPA, State and Local Agencies in the State Implementation Plan Development and Review Process.

COMMUNICATION

EPA region and air agency recognize the importance of consistent communication which includes sharing information of mutual interest and developing a relationship which will enable parties to improve interpersonal communication over time. EPA region and air agency managers should prioritize discussions relating to SIP issues and expectations, discussing interests openly prior to the SIP submission.

EPA region and air agency intends to:

- Be transparent about substantive approvability issues.
- Work collaboratively and early to resolve any identified deficiencies or key policy or legal issues in the submittal prior to submission of the SIP.

Both EPA and the air agency agree to try to operate as much as possible with a "no surprises" approach so that there is transparency in communications between the agencies.

¹⁵ This document was developed by the NACAA/ECOS SIP Reform Workgroup (SRWG) in December 2016 and provides a template agreement document for EPA and states to adopt that includes a set of commitments and best practices to clear SIP backlogs and process new SIP revisions in a timely manner. The edits highlighted in blue in underline/strikeout indicate changes to address the latest SIP lean effort.

PLANNING

EPA region and air agency recognize the importance of collaboratively prioritizing SIP actions to plan resources appropriately. To facilitate this, EPA region and air agency intends to:

- Hold routine conference calls < insert timeframe > (for example, monthly).
- Regularly identify and share a preliminary list of rules, SIPs, or policy projects that will affect the SIP to facilitate workload discussions. (This list could include deliverable products, persons involved, and a schedule of anticipated time frames).
- Coordinate the technical basis for the SIP revision to avoid duplication of effort and therefore avoid delays in EPA's review process.
- Include management on the routine calls.
- Ensure that a protocol is in place for EPA and the states for managers to relay information if not all staff can attend calls/meetings.

EPA region and air agency intend to:

- Meet in person annually (note: efficiency could be gained by timing with the CAA 105 or Performance Partnership Agreement (PPA)/Performance Partnership Grant (PPG) negotiations).
- EPA region will then complete the regional multi-year plan based on this information.

EARLY ENGAGEMENT

EPA region and air agency recognize the importance of coordination early in the SIP development process. "Early engagement" is expected to support the development of approvable SIPs and timely action on SIP submissions by EPA.

Air agencies will share plans for SIPs to be developed during annual workload planning discussions with EPA. SIP Development Schedules will be developed by air agency and shared with EPA to guide the planning process for each SIP revision.

To facilitate a thorough EPA review and early identification of approvability issues, air agency will make every effort to provide a complete draft of the SIP to the EPA region for review and comment prior to its public comment period and at least 4 to 12 months prior to submittal. EPA will have 30 days for review and comment on routine SIPs and up to 60 days for complex SIPs. For complex SIPs, EPA would ideally receive pieces of the SIP as they are developed before getting the complete draft for review.

EPA reviewers will review at this stage with a focus on identifying approvability issues. EPA region will engage all EPA offices that would eventually be involved in the review of the SIP once formally submitted. EPA will make reasonable efforts to identify and provide feedback on any approvability issues as early as possible within this review period. If issues have been elevated and will take more time than air agency can provide during the "early engagement" review period, EPA region will keep the air agency apprised regarding the status of EPA's review.

EXPECTATIONS

During the SIP process, EPA region and air agency agree to:

- A mutual understanding of each other's resources and resource constraints;
- A mutual understanding of each state's approval/adoption process;
- A mutual understanding of state/local administrative procedure laws/requirements;
- A mutual understanding that if air agency chooses to not address the approvability issues identified by EPA, EPA would plan to take appropriate action such as disapproval or return of an incomplete SIP.
- Acknowledge that addressing and preventing the SIP backlog will require mutual actions and commitments, and that regular and open communication is critical to reducing and preventing the SIP backlog and prioritizing EPA actions on SIPs.