

Chapter 2

Characteristics of Implementation Plans

This chapter explains what an implementation plan is, compares tribal implementation plans (TIPs) and state implementation plans (SIPs), introduces the technical information that can support a TIP and the potential elements of a TIP, and explains the other elements that may accompany a TIP when it is submitted to the Environmental Protection Agency (EPA). More detailed information about the technical information that can support a TIP (such as emission inventories and air quality modeling) is found in Chapter 3. More detailed information on the potential elements of a TIP is found in Chapter 4.

Implementation Plan Basics

What is an Implementation Plan?

As mentioned in Chapter 1, EPA established the National Ambient Air Quality Standards (NAAQS) for the six criteria pollutants to protect public health and the environment. An implementation plan is a set of programs and regulations developed by the appropriate regulatory agency in order to assure that these air quality standards are

attained and maintained. These plans can be developed by the state, tribe, or EPA, depending on which has jurisdiction in a particular area.

How do TIPs compare to SIPs?

The Clean Air Act (CAA) requires each state to adopt a SIP. Several sections of Title I of the CAA provide structured, mandatory requirements for SIP contents.¹ The EPA's requirements for SIPs are laid out in Title 40 of the Code of Federal Regulations (CFR) part 51. The SIP programs can reflect each state's particular needs and air quality issues, but they must meet certain federal standards. If a state fails to submit an approvable SIP within the schedules provided in the CAA, sanctions are imposed on the state and the EPA is required to develop and enforce a federal implementation plan (FIP) to implement the applicable CAA requirements for that state.

Section 301(d) of the CAA as amended in 1990 and as implemented through the Tribal Authority Rule (TAR), provides for tribal implementation of CAA programs. Tribes can choose to implement certain CAA programs by developing a TIP. TIPs are different from SIPs. TIPs:

- » Are optional
- » Are modular
- » Have flexible submission schedules
- » Allow for joint tribal and EPA management

" TIPs are optional

The CAA requires each state to adopt a SIP. Unlike states, tribes are not required to adopt an implementation plan. In the Tribal Authority Rule, EPA recognized that not all tribes will have the need or the desire for an air pollution control program. Where tribes elect not to develop a TIP EPA will adopt, without unreasonable delay, such Federal implementation plan provisions as are necessary or appropriate to protect air quality. However, where tribes elect to adopt rules to regulate sources of criteria air pollutants under their jurisdiction, these rules will form the core of a TIP.

" TIPs are modular

The TAR offers individual tribes the flexibility to include in a TIP only those TIP elements that address their specific air quality needs and that they have the capacity to manage.

The modular approach gives the choice to adopt only the TIP elements considered most relevant to the air quality needs of each tribe and that each tribe has the capacity to manage.

Under this modular approach, the TIP elements the tribe adopts must be “reasonably severable” from the package of elements that can be included in a whole TIP.

“Reasonably severable” means that the elements selected for the TIP are not integrally related to elements that are not included in the TIP, and are consistent with applicable CAA and regulatory requirements.²

TIP elements are discussed in more detail in the next section of this chapter and in Chapter 4.

" **TIPs have flexible submission schedules**

Neither the CAA nor the TAR requires tribes to develop TIPs. Therefore, unlike states, tribes are not required to meet the implementation plan submission deadlines or attainment dates specified in the CAA. Tribes can establish their own schedules for developing TIP elements (e.g., regulations to limit emissions of a specific air pollutant) and submitting them to EPA. Tribes will also not face sanctions for failing to submit or for submitting incomplete or deficient TIPs.

Once TIP elements are approved, EPA will expect tribes to diligently implement them. Therefore, tribes should work with their EPA Regional Offices to develop schedules to expeditiously implement the regulations and programs included in TIP elements. If a tribe fails to implement an approved regulation or program, EPA may exercise its authority to enforce the TIP. EPA could also sanction the tribe (e.g., withhold grant funds) for failing to implement an approved program.³

" **TIPs allow for joint tribal and EPA management**

Joint management can be helpful because it allows tribes to concentrate on specific areas of interest or need. Tribes can revise a TIP and take on or give back programs based on changes in tribal need or capacity. The EPA may regulate emission sources that the tribe chooses not to include in a TIP if it is necessary or appropriate to adequately protect air quality. The EPA may also promulgate federal regulations initially through a FIP, and later approve tribal rules covering particular types of sources or activities in a TIP.

This type of joint management should result in a program fully protective of tribal air resources.

For example, your tribe may initially want to adopt and implement rules for open burning and construction activities to address particulate matter concerns, but defer regulation of industrial sources of emissions to EPA. At a later date, your tribe may decide to adopt rules for industrial sources of emissions as well. This modular approach would allow for an easy transition from the federal industrial source rules to the tribal rules. When the tribal rules are approved, they become the federally enforceable requirements and replace the existing FIP requirements.

It is important to remember that as part of your tribe's overall air program, the tribe may develop requirements that are not part of your TIP. These requirements can support other environmental and cultural issues that are important for the tribe and do not have to be approved by EPA. For example, a tribe may want to adopt regulations on residential wood combustion or open burning (as many tribes have already done).

Where are the Statutory and Regulatory Requirements for a TIP?

Title I of the Clean Air Act contains the requirements that SIPs and, as appropriate, TIPs must meet.⁴ However, in some instances these regulatory requirements may be inconsistent with the Clean Air Act as amended in 1990, and to facilitate SIP development under the amended CAA, EPA has issued several guidance documents that may be useful to consult if you are developing a TIP.

Your tribe should also review EPA's Tribal Authority Rule (TAR) [40 CFR Part 49] which has specific provisions regarding TIPs. In addition, the preamble notices accompanying the proposed and final TAR provide guidance regarding TIP requirements.⁵

It is important to keep in mind that TIP requirements may vary depending on the specific TIP elements your Tribe intends to adopt. For this reason, and in light of the large body of potentially applicable requirements, EPA strongly encourages you to speak with your Regional contact to determine the requirements that may apply to your specific

TIP. Your EPA Regional contact can also identify other relevant guidance documents that may be useful for you to consult as you develop your TIP.

Developing a TIP

What technical information do you need to develop a TIP?

Information on existing emissions and ambient air quality in the area over which your tribe seeks to run a TIP will help determine your air quality goals and which TIP elements to develop. Two mechanisms for obtaining such data, emissions inventories and air quality monitoring, are introduced below and discussed in greater detail in Chapter 3.

" Emissions Inventory

An emissions inventory is a quantitative list of the amounts and types of pollutants that are entering the air from each source on your reservation. Your inventory may be comprehensive, looking at all pollutants, or focused on only selected pollutants of concern. The fundamental elements in an emissions inventory are the characteristics and locations of the sources, as well as the amounts and types of pollutants emitted. A tribe may want to develop an emissions inventory to help identify air pollution concerns and determine the air quality goals your tribe wants to address in your TIP.

" Air Quality Monitoring



An air monitoring station at the Tribal Air Monitoring Support (TAMS) Center in Las Vegas.

The concentration of various air pollutants can be measured using devices called monitors. Monitoring data collected on or in the vicinity of your reservation can help determine if the existing air quality on your reservation meets the NAAQS and set air quality goals. Your tribe may monitor the short-term and annual concentrations of pollutants that your tribe is concerned about to determine if those concentrations are above or below the NAAQS. Alternatively, if your tribe decides not to develop an air quality monitoring network, it may be able to utilize air quality data from nearby monitors operated by other entities such as states, regional planning organizations, or the federal government. And, your tribe can still develop a TIP without already having monitoring data as some TIP elements, such as regional haze plans, can be developed

without knowing the exact current concentrations of pollutants on the reservation.

What are the potential elements in a TIP?

The CAA and TAR give EPA broad discretion in approving TIPs to address the specific air quality problems and circumstances of individual tribes. As described above, a TIP can address one or more relevant criteria pollutants, and may include selected elements of a complete NAAQS implementation plan, provided those elements are reasonably severable from the other CAA elements not included in the TIP. The potential elements of a TIP are:

- » Maintenance strategies
- » Attainment strategies
- » Source preconstruction permits
- » Regional haze plans

The EPA believes these elements are “reasonably severable” from each other and can be approved for tribes to implement. These elements are briefly described below; more detailed descriptions are provided in Chapter 4. Tribes may elect to develop TIPs that include one or several of these elements. Elements that are initially excluded from a TIP can be included at a later date. The EPA expects that in some cases, a TIP may need to be supplemented with a FIP if it is necessary or appropriate, to protect air quality.

" Maintenance Strategy (for areas that attain the NAAQS or are unclassifiable)

In an attainment area, the air quality is as clean as or cleaner than the NAAQS for all of the criteria pollutants.⁶ Areas for which there are insufficient air quality data to determine if the NAAQS are met may be designated “unclassifiable” and are treated as attainment areas. If your reservation is in an attainment or unclassifiable area, a goal of your TIP could be to maintain that good air quality. The reservation does not need a NAAQS designation however, for your tribe to develop a TIP . A maintenance strategy includes:

- » Enforceable emission limits for existing emission sources and

- » Evidence the emission limits are adequate to prevent NAAQS violations on the reservation and in other jurisdictions
- » Schedules for implementing emission limits expeditiously

Tribes may submit a TIP that includes enforceable emission limits and compliance schedules for a single source, and not include evidence that the emission limits are adequate to prevent NAAQS violations in other jurisdictions. The EPA can fully approve such TIP elements as progress toward developing a more complete implementation plan that meets the tribes air quality goals. The EPA may also evaluate whether the emission units are adequate to prevent NAAQS violations, if necessary and appropriate.

Construction of new sources on the reservation could add enough emissions that the goal of the TIP to maintain the NAAQS would not be met. Therefore, the tribe may also want to include in their TIP source preconstruction permit programs, one of the next severable elements discussed.

" **Attainment Strategy (for areas that are in nonattainment for NAAQS)**

A goal of a TIP in an area with air quality worse than the NAAQS for some criteria pollutants (a “nonattainment” area) would be to reduce the concentrations of those pollutants below the NAAQS.⁶ The EPA and the tribe can work together to develop an attainment strategy for a nonattainment area. An attainment strategy generally includes:

- » Enforceable emission limits that will require application of at least Reasonably Available Control Measures (RACM) or Reasonably Available Control Technology (RACT) for existing sources
- » Evidence the emission limits are adequate to prevent NAAQS violations on the reservation and in other jurisdictions (an “attainment demonstration”)
- » Schedules for implementing emission limits and evidence that the compliance schedules will produce



The Dexter Road Project of the Oneida Tribe of Indians of Wisconsin. The Oneida Reservation contains approximately 65,000 acres. The Dexter Road Project involves native grassland restoration and reforestation. (Photo courtesy of the Oneida Tribe of Indians of Wisconsin.)

annual reductions in emissions until the NAAQS are met

- » Additional regulation to achieve emission reductions beyond those necessary to meet the NAAQS, to be held in reserve and used only if the primary regulations do not result in attainment of the NAAQS (“contingency measures”)

Tribes may submit a TIP that includes enforceable emission limits and compliance schedules for a single source, and not include evidence that the emission limits are adequate to prevent NAAQS violations. The EPA can fully approve such TIP elements as progress toward developing a more complete implementation plan that meets the tribes air quality goals.

When tribal lands are part of a multi-jurisdictional area, if the tribe does not show that the emission limits in their TIP are adequate to prevent NAAQS violations, EPA will review the emission limits and compliance schedules to assure that they will not interfere with the overall plan to attain the NAAQS in the area. In cases where sources on tribal lands would interfere with an area meeting its attainment date, EPA will develop a FIP to reduce emissions from those sources, where necessary and appropriate, since the tribe is not required to meet the attainment date.

Construction of new sources on the reservation could add enough emissions that the goal of the TIP to attain the NAAQS would not be met. Therefore, the tribe may also want to include in their TIP source preconstruction permit programs, the next severable elements discussed.

The ambient air quality on the reservation may violate the NAAQS because emissions from sources located outside of your reservation are transported there. Sources of pollutants outside the TIP area may be a concern if your reservation is adjacent to or surrounded by a nonattainment area, or if it is downwind of major sources of emissions that are not under your tribe’s jurisdiction. Although your tribe can only regulate sources in the area covered by its

approved TIP, the *Regional Air Quality* section in Chapter 4 describes ways your tribe can address this problem.

" **Source Preconstruction Permit Programs**

The CAA provides for programs to review and permit new major sources and major modifications to existing sources as part of an overall strategy to attain or maintain the NAAQS.⁶ These programs are collectively known as New Source Review.

- » The Prevention of Significant Deterioration (PSD) program is a federal program for attainment and unclassifiable areas. Under this program, new major sources and major modifications to existing sources must obtain a PSD permit before construction.⁷ Tribes can adopt a PSD program of their own that meets EPA requirements, or a tribe can accept delegation to manage the federal PSD program.
- » The nonattainment New Source Review (NSR) program is for nonattainment areas. Tribes can adopt statutory requirements for an NSR program of their own to regulate emissions from new major sources and major modifications to existing sources. In the future, when EPA establishes a federal nonattainment NSR program tribes will be able to accept delegation to manage that program.

Tribes in attainment, unclassifiable, and nonattainment areas may also develop a minor New Source Review program (minor NSR). With a minor NSR program, enforceable emission limits are established for minor new sources to limit the source's potential to emit,⁸ help attain or maintain the NAAQS, and help prevent significant deterioration of air quality. EPA is continuing to develop a federal minor NSR rule and anticipates that it will include a provision for delegation of the federal program to interested tribes.

" **Regional Haze Plans**

The purpose of regional haze plans is to improve visibility in mandatory federal Class I areas (primarily national parks and wilderness areas). In 1999, EPA issued regional haze regulations that require states to work together specifically to improve regional haze. Five regional planning



Your tribe may wish to develop a regional haze plan in order to protect or improve visibility.

What elements must accompany a TIP?

Conclusion

organizations were established to analyze the nature and causes of regional haze in mandatory federal Class I areas, evaluate potential emission reduction strategies for meeting the goals of EPA's Regional Haze Program, and generally facilitate the exchange of information among all participating governments (see Appendix E, *A Guide to Regional Air Quality Planning Organizations*).

The tribe may wish to include regional haze plans as part of its TIP if it is concerned about diminished visibility or if sources on your reservation contribute to haze in a federal Class I area. Tribes are encouraged to participate in these regional planning organizations regardless of whether they include regional haze plans in their TIPS. Participating in the regional planning organization would help the tribe learn about current developments in the area and allow the tribe to coordinate your efforts with those of other governments. Such participation will ensure tribal positions are considered in discussions of regional air quality for regional haze.

There are three elements that must accompany a TIP when it is submitted to EPA for approval: a request for a determination of eligibility; administrative elements; and a demonstration of enforcement authority. The request for a determination of eligibility is outlined in Chapter 1, Section "Tribal Air Programs and TIPS". A discussion of administrative elements⁹ can be found in Chapter 6, Section "What needs to be submitted to EPA along with your TIP?" A discussion of enforcement authority can be found in Chapter 5. A sample submission checklist is provided as Appendix K.

TIPs can be flexible enough to meet tribal needs while ensuring the NAAQS are attained and maintained. Your tribe can choose to adopt only those TIP elements that best address its air quality needs and that it has the capability to administer.

Setting air quality goals and gathering data to inform those goals is described in Chapter 3. The potential elements of a TIP - maintenance and attainment strategies, source preconstruction permit programs, and regional haze plans -

are described in Chapter 4. Compliance strategies and enforcement programs are described in Chapter 5.

Endnotes

1. The SIP requirements are established in the CAA section 110(a), Part C (*Prevention of Significant Deterioration*), and Part D (*Plan Requirements for Nonattainment Areas*). The EPA's SIP regulations are codified in 40 CFR parts 51 and 52.
2. The requirement that program elements be "reasonably severable" is set forth in the Tribal Authority Rule (TAR) at 40 CFR 49.7(c).
3. Once a TIP is approved, a tribe may be subject to sanctions when EPA determines that a requirement of the approved TIP is not being implemented. CAA section 179(a)(4).
4. See CAA Section 110, Sections 160-169, Sections 171-192, and 40 CFR Parts 51 and 52 for identifying requirements for the preparation, adoption, and submission of Implementation Plans.
5. The Tribal Authority Rule notices can be found at 63 Federal Register 7254, and 40 CFR Parts 9, 35, 49, 50, and 81.
6. See Chapter 3 of this document for more information on attainment, nonattainment, and unclassifiable air quality designations. Keep in mind that an area may be in attainment for some pollutants and in nonattainment for others. If this is the case on your reservation, the tribe may want to develop a maintenance strategy for some pollutants and an attainment strategy for others.
7. In general, major sources are sources that emit over a certain amount of a pollutant (the "major source threshold" for that pollutant); minor sources are sources that emit less than that amount. The major source threshold can vary depending on the particular pollutant and the air quality status of the area. For example, in an area designated attainment or unclassifiable for a particular NAAQS, a major stationary source is defined as any source that emits, or has the potential to emit, 250 tons per year (or, for specific types of sources, 100 tons per year) of that NAAQS pollutant subject to regulation under the CAA.

For attainment and unclassified areas, the definitions of major source and major modification are given in 40 CFR 51.166(b)(1) and (2), respectively. For nonattainment areas, the definitions of major source and major modification are given in 40 CFR 51.165(a)(1)(iv) and (v), respectively. For serious PM nonattainment areas, the definition of a major source is in the CAA section 188. For moderate, serious, severe, or extreme ozone nonattainment areas, the definition of major source is in the CAA

section 182(b), (c), (d), and (e), respectively.

8. A source's "potential to emit" estimate is based on its maximum capacity after taking into consideration enforceable permit conditions, such as the type of materials combusted, the type of materials processed, and the annual hours of operation.
9. More information on the criteria EPA uses to determine the administrative completeness of implementation plans can be found in 40 CFR 51 Appendix V.