

State Implementation Plan

A State Implementation Plan (SIP) describes how the state implements, maintains, and enforces National Ambient Air Quality Standards (NAAQS). The federal Clean Air Act is the legal foundation for the national ambient air pollution control program. This law requires each state to develop a SIP; an enforceable plan developed by the state and approved by the U.S. Environmental Protection Agency (EPA).

SIP and SIP revision

The overall Michigan SIP is a cumulative record of hundreds of documents developed in phases over many years. As federal requirements change States must add to, delete from, or revise something in the SIP. The change is commonly referred to as a SIP, though it should more accurately be called a “SIP revision”. The Michigan SIP contains rules, statutes, permits, consent orders, plans, emissions inventories and budgets. The plan also contains binding commitments to take future actions under certain circumstances.

SIP Types

Some of the major SIP types are:

Infrastructure SIPs: An infrastructure SIP shows that Michigan has the legal authority, regulatory structure, and resources to implement each new NAAQS in all areas of the state. The requirements for this type of SIP are contained in Section 110 (a)(1)and(2).

Attainment plans for nonattainment areas: An attainment plan is developed to solve an air quality problem known to cause detrimental effects to human health or welfare. This SIP includes a characterization of the air quality problem; development of a control strategy; a demonstration that the control strategy will attain the standards; rules, regulations, and work practice requirements that have been adopted by Michigan; and other administrative requirements. Some of the measures in attainment plans are prescribed by the Clean Air Act in Part D; the States are given flexibility to individually tailor some elements in the plan. This is the most complex type of SIP revision.

RACT SIP: This SIP contains provisions requiring existing sources to install reasonably available control technology (RACT), a requirement that is generally applicable to major sources, those with the potential to emit 100 tons per year or more in nonattainment areas. The major source threshold is smaller in more severely polluted areas. EPA issued a series of Control Technique Guidelines (CTGs) to provide a generic definition of RACT for specified industrial categories. EPA issued 29 CTGs prior to the 1990 amendments to the Clean Air Act. New CTGs continue to be published for other source types and also to update previously issued CTGs to reflect improving technologies. RACT requirements are in Part D of the Clean Air Act.

Maintenance plans for former nonattainment areas: Section 175 A requires the submittal of a maintenance plan as part of a redesignation request. After a nonattainment area meets the NAAQS, states submit the documentation necessary for EPA to redesignate to attainment. The maintenance plan describes the actions the area will be taking for the next 10 years to ensure the area will continue to meet the NAAQS. The plan contains emissions budgets for the area as well as commitments to implement contingency measures in the event the NAAQS are violated in the future. Transportation plans for the redesignated area must adhere to the motor vehicle emissions budgets approved in the SIP.

Program SIP: A program SIP implements programs or parts of programs required by the Clean Air Act. An example of a program SIP is the New Source Review rules that are applicable to major and minor sources.

Site Specific SIP: A site specific SIP applies to a particular facility or source and contains requirements for compliance with the Clean Air Act. This SIP type is often utilized when circumstances require timetable extensions or customized strategies.

How are SIP revisions developed?

The Michigan Department of Environmental Quality (DEQ) is responsible for developing SIP revisions. Submittals for inclusion to the SIP must be sent by the Governor or his/her designee. The Director of the DEQ is the designee in Michigan.

Development of an attainment plan involves an intense period of research, data collection, and modeling. In order to design optimal strategies that are both cost-effective and suitable for each region, stakeholders from the affected community are involved in the process. The Air Quality Division partnered with planning agencies and stakeholders in both Southeast and West Michigan to develop effective strategies to address region-specific nonattainment challenges during the process of SIP development. All revisions to the SIP, whether or not rules are part of the revision, must have public comment period and an opportunity for a public hearing.

What is the nexus of the SIP with the EPA?

When the EPA approves a SIP element it becomes “federally enforceable”; that is, the EPA may step in and enforce a rule in the SIP. All SIP approvals and disapprovals undergo a federal public participation process with a public comment period.

If a state fails to satisfactorily develop a required component of the SIP, the EPA must impose a Federal Implementation Plan (FIP) on the state. EPA may enforce any rule in the SIP even if it has been rescinded by the state. If a state fails to submit an approvable attainment plan for an

ozone nonattainment area or fails to attain by the deadline EPA may bump up the classification of the area, which results in more stringent requirements.

The Clean Air Act also authorizes the EPA to sanction the state by withholding federal transportation dollars, withholding state grant money for air programs, and setting more stringent pollution offset requirements for new air permits. In nonattainment areas offsets are the reduction of current emissions at a rate equal to or greater than the amount of emissions expected to be produced in a new project.

How can I find out what is in the Michigan SIP?

The EPA posts the rules and plans that have been approved into the SIP on its website. Submittals of SIP revisions may be approved, conditionally approved, or disapproved in part or whole.

<http://www.epa.gov/airquality/urbanair/sipstatus> → EPA Regional Office Implementation Plan Links → click on Michigan in the map → View all SIPs by State → Michigan → select a rule part such as Part 6. Emission Limitations And Prohibitions - Existing Sources of Volatile Organic Compound Emissions → select a rule such as Rule 625 Emission Of Volatile Organic Compound From Existing Equipment Utilized In The Manufacturing Of Synthesized Pharmaceutical Products → R 336.1625 → select action date → select *Federal Register* notice. This will provide the *Federal Register* notice and the version of the rule that is in the SIP.

Another route to the posted elements approved into the SIP is:

<http://yosemite.epa.gov/r5/r5ard.nsf/SIPs+View+By+State+Main+View!OpenView&CollapseView>

This link provides the status of Michigan's Infrastructure SIP submittals:

http://www.epa.gov/air/urbanair/sipstatus/reports/mi_infrabypoll.html

This link provides the status of Michigan's Designated Area SIP submittals:

http://www.epa.gov/air/urbanair/sipstatus/reports/mi_areabypoll.html

What is backsliding?

The rescission of measures for attainment approved into the SIP is considered backsliding. Measures required under one standard cannot be relaxed over time or with the implementation of a revised NAAQS. The Clean Air Act anti-backsliding provisions are:

“Section 110(l) Plan Revisions – Each revision to an implementation plan submitted by a State under this Act shall be adopted by such State after reasonable notice and public hearing. The Administrator shall not approve a revision of a plan if the revision would interfere with any

applicable requirement concerning attainment and reasonable further progress (as defined in Section 171), or any other applicable requirement of this Act.”

“Section 110(n) Savings Clauses – (1) Existing Plan Provisions – Any provision of any applicable implementation plan that was approved or promulgated by the Administrator pursuant to this section as in effect before the date of the enactment of the Clean Air Act Amendments of 1990 shall remain in effect as part of such applicable implementation plan, except to the extent that a revision to such provision is approved or promulgated by the Administrator pursuant to this Act.”

“Section 193 General Savings Clause - Each regulation, standard, rule, notice, order and guidance promulgated or issued by the Administrator under this Act, as in effect before the date of the enactment of the Clean Air Act Amendments of 1990 shall remain in effect according to its terms, except to the extent otherwise provided under this Act, inconsistent with any provision of this Act, or revised by the Administrator. No control requirement in effect, or required to be adopted by an order, settlement agreement, or plan in effect before the date of the enactment of the Clean Air Act Amendments of 1990 in any area which is a nonattainment area for any air pollutant may be modified after such enactment in any manner **unless the modification insures equivalent or greater emission reductions** of such air pollutant.”

However, with a demonstration of equivalency of emission reductions, EPA has allowed substitution of measures in certain situations. Michigan substituted a summertime low vapor pressure gasoline in a 7-county area of Southeast Michigan for an existing 3-county automobile tailpipe testing program. Equivalency was adequately demonstrated with emissions projections and photochemical modeling.