INFRASTRUCTURE SIPS

Focus on Elements 110(a)(2)(A)-(C)

July 17, 2025 - WESTAR ISIP Workgroup

AGENDA

01	Introductions & Homework Discussion
02	ISIP Overview
03	Key Dates for ISIPs
04	The ISIP Submittal Process
05	ISIP Elements 110(a)(2)(A)-(C)
06	Open Discussion

INTRODUCTIONS

- Name
- State/Agency
- Job Title
- Description of your ISIP role

HOMEWORK

The “work-work” assignment

- Read your state’s ISIP – take note of questions that arise
- Does your state’s ISIP cover multiple NAAQS or just one?
- Find out if your state plans to take the same approach for the next submittal?

In the chat

- What questions came up during your ISIP reading?

WHAT IS AN ISIP?

- Administrative document
- Show that states are prepared to implement, maintain, and enforce NAAQS
- All states – submittal required after a new or revised NAAQS is promulgated
- CAA 110(a)(1) and 110(a)(2)

Nevada
2012 PM2.5 NAAQS

https://ndep.nv.gov/uploads/air-plan_mod-docs/infrastructure_sip-2012_pm25_submitted_2015.pdf

Utah
2012 PM2.5 NAAQS

https://lf-public.deq.utah.gov/WebLink/ElectronicFile.aspx?docid=572024&eqdocs=%20DAQ-2025-002448&dbid=0&repo=Public

Washington
2010 Nitrogen Dioxide, 2008 Ozone, and 1997, 2006, and 2012 Fine Particulate Matter NAAQS

https://apps.ecology.wa.gov/publications/documents/1402011.pdf

110(a)(1)

- New NAAQS promulgated by US EPA
- Each State …
- … after reasonable notice and public hearing …
- … adopt and submit plan within 3 years …

ISIP TIMELINE

THE SUBMITTAL

SPeCS for SIPs

Cover letter addressed to the Administrator

Plan + documentation of public notice, hearing, comments, and responses

110(a)(2)(A)

include **enforceable emission limitations and other control measures, means, or techniques** (including economic incentives such as fees, marketable permits, and auctions of emissions rights), as well as **schedules and timetables for compliance**, as may be necessary or appropriate to meet the applicable requirements of this chapter;

Enforceable emission limitations

- Narrative explanation of permitting program - e.g. PSD
- References to pollutant specific limits – make the connection between sources & pollutant(s)
- References to source specific limits – by industry (kraft paper mills, smelters, refineries) or area type (outdoor burning, wood stoves)
- Include reference to any relevant EPA approvals or submissions
- Also reference statutory authority to set limits

Other control measures, means, or techniques schedules

- References to state statutes that support air programs

Timetables for compliance

- Narrative with reference to compliance schedules e.g. permit program requirements, sources specific requirements

Washington primarily imposes NO_2, O_3, and $PM_{2.5}$ emission limitations through its permitting programs. In Washington's 1997 ozone NAAQS and 2008 lead NAAQS infrastructure SIP revisions, Washington relied on the existing SIP, codified in 40 CFR part 52, subpart WW, to show that Washington had adequate general regulatory and statutory authority for its minor source permitting program to ensure protection of those NAAQS. For major sources, Washington relied on the Federal Implementation Plan (FIP) in place to implement the Prevention of Significant Deterioration (PSD) program (40 CFR 52.2497). EPA approved the 1997 ozone NAAQS infrastructure SIP revision on May 24, 2012 (77 FR 30902) and proposed to approve the 2008 lead NAAQS infrastructure SIP revision on May 14, 2014 (79 FR 275233).

In order to ensure that the current SIP covers all relevant NAAQS, including the 2010 NO_2, 2008 O_3, and 1997, 2006, and 2012 $PM_{2.5}$ standards, Washington submitted chapter 173-476 WAC "Ambient Air Quality Standards", adopted on November 21, 2013, for approval in the SIP. EPA approved chapter 173-476 WAC in the SIP on March 3, 2014 (79 FR 12077).

In January 2014, Washington submitted an update to chapter 173-400 WAC "General Regulations for Air Pollution Sources." This SIP revision includes updates to the minor source permitting program and seeks EPA approval of Washington's major source PSD and nonattainment new source review programs. While Washington awaits EPA action on the chapter 173-400 WAC submittal, the existing SIP provisions codified in 40 CFR part 52, subpart WW continue to meet the emission limitation and control measure requirements of CAA 110(a)(2)(A).

Washington also has additional SIP-approved ozone, fine particulate matter, and source-specific SIP-approved regulations. They include:

Additional O_3 requirements:

- Chapter 173-422 WAC "Motor Vehicle Emission Inspection" (State adopted date 6/3/93; EPA effective date 9/25/96; 61 FR 50235)
- Chapter 173-490 WAC "Emission Standards and Controls for Sources Emitting Volatile Organic Compounds" (State adopted date 3/22/91; EPA effective date 7/12/93; 58 FR 37426)
- Chapter 173-492 WAC "Motor Fuel Specifications for Oxygenated Gasoline" (State adopted date 10/19/96; EPA effective date 4/30/97; 62 FR 23363)

Additional $PM_{2.5}$ requirements:

- Chapter 173-425 WAC "Open Burning" (State adopted date 3/20/93; EPA effective date 6/2/95; 60 FR 28726)

SECTION 110(a)(2) ELEMENT	CURRENT PROGRAMS AND PROVISIONS IN THE APPLICABLE NEVADA SIP[1]
(A)	Emission limits and other control measures: Each such plan shall [. . .] include enforceable emission limitations and other control measures, means, or techniques (including economic incentives such as fees, marketable permits, and auctions of emissions rights), as well as schedules and timetables for compliance, as may be necessary or appropriate to meet the applicable requirements of this Chapter.
Based on the 2011 NEI v2, the dominant source sectors for fine particulate matter ($PM_{2.5}$) emissions in Nevada are dust (30 percent), industrial processes such as cement and chemical manufacturing and mining (27 percent), and fire (23 percent).[2] Smaller sources (less than nine percent each) in Nevada in descending order include mobile, fuel combustion (e.g., boilers, electric generation), miscellaneous and solvent. Measures for controlling emissions of sulfur dioxide and nitrous oxides are applicable because they are precursors to $PM_{2.5}$. *The applicable Nevada SIP includes enforceable emission limits and other control measures, means, or techniques, as well as schedules for compliance to support element (A) in Nevada Administrative Code (NAC) Chapter 445B and in Air Quality Articles:* • *445B.075 "Fugitive dust" defined.* • *445B.109 "Nitrogen oxides" defined.* • *445B.121 "Opacity" defined.* • *445B.129 "Particulate matter" defined.* • *445B.135 "PM_{10} defined."* • *445B.1348 "$PM_{2.5}$" defined.* • *445B.145 "Process weight" defined.* • *LCB File No. R027-15 section 2 "$PM_{2.5}$ emissions" defined.* • *LCB File No. R027-15 section 3 "PM_{10} emissions" defined.* • *445B.22017 Visible emissions: Maximum opacity; determination.*	

110(a)(2)(B)

provide for **establishment and operation of appropriate devices, methods, systems, and procedures** necessary to--

(i) **monitor, compile, and analyze data** on ambient air quality, and

(ii) upon request, **make** such **data available** to the Administrator;

Establishment and operation of appropriate devices, methods, systems, and procedures to monitor, compile, and analyze data

- Narrative description of monitoring network – including use of FRM/FEM devices
- Reference to Annual Network Plan – may include discussion of monitoring requirements based on most recent design values
- Statutes that provide agency authority/responsibility for monitoring

Make data available

- Narrative description of AQS submittals
- Statement regarding data availability to EPA upon request

SECTION 110(a)(2) ELEMENT	CURRENT PROGRAMS AND PROVISIONS IN THE APPLICABLE NEVADA SIP[1]

The applicable Nevada SIP contains the following provisions that provide for an ambient air quality monitoring program.
Nevada Revised Statutes (*NRS*)*:*

- *445B.210 Powers of Commission.*
- *445B.230 Powers and duties of Department.*

NRS 445B.210 and NRS 445B.230 provide the authority necessary for the NDEP to implement the state's ambient air quality monitoring program. The NDEP commits to an ambient air quality monitoring program in its CAA section 105 grant work plan. The NDEP operates a monitoring network that collects ambient air quality data that are compiled, analyzed, and reported to USEPA in accordance with 40 CFR 58. The network comprises federally-approved monitors that measure PM_{10}, $PM_{2.5}$ and ozone. The NDEP submitted its 2015 Annual Monitoring Network Plan to USEPA on June 24, 2015 (Appendix D). USEPA has not provided a review as of October 12, 2015.

The NDEP commits to meeting any changes in monitoring requirements related to the new or revised NAAQS. USEPA's new monitoring requirements for $PM_{2.5}$ (78 FR 3086, January 15, 2013) do not require monitoring for $PM_{2.5}$ within the NDEP's jurisdiction. The general requirements for the $PM_{2.5}$ NAAQS stipulate no monitors are required for a Metropolitan Statistical Area (MSA) with a population of 50, 000-500,000, if the area has a design value less than 85 percent of the NAAQS or no design value, i.e., no monitors. 40 CFR 58, Appendix D, section 4.7.1. All MSAs in the NDEP's jurisdiction have a population less than 500,000. Because $PM_{2.5}$ monitoring is not required in the NDEP's jurisdiction, no monitors meeting USEPA's criteria were operating until 2013; therefore, there is currently no design value. However, based on data obtained through special study monitoring in Carson City and Gardnerville, the NDEP established a $PM_{2.5}$ monitoring network in 2013. These sites will allow the NDEP to establish credible data to ascertain $PM_{2.5}$ conditions within both areas. By the end of 2016 a valid design value will be available. The NDEP will continue to evaluate the program and determine if increased $PM_{2.5}$ monitoring is needed within the monitored areas.

Section 110(a)(2)(B): Ambient Air Quality Monitoring or Data System

<u>Requirement Summary</u>
"Each such plan shall. . . provide for establishment and operation of appropriate devices, methods, systems, and procedures necessary to (i) monitor, compile, and analyze data on ambient air quality, and (ii) upon request, make such data available to the Administrator." 42 U.S.C. 7410 (a)(2)(B).

<u>Utah's Infrastructure</u>
SIP Section IV (*Ambient Air Monitoring Program*) outlines Utah's air quality surveillance network that meets the provisions of 40 CFR Part 58. This section of the SIP was codified at R307-110-5, and EPA approved it most recently on June 25, 2003, at 68 FR 37744. Utah prepares an Annual Network Review as required by 40 CFR 58.10. The plan is made available for public comment and is submitted to EPA by July 1st of each year. DAQ submits data to EPA's Air Quality System (AQS) as required by 40 CFR Part 58.

In 2012 EPA revised the NAAQS for the primary annual $PM_{2.5}$ standard. The standard was set at 12.0 microg/m^3. At this time there are no designated non-attainment sites for the 2012 annual standard. While the state is in compliance with the 2012 annual standard of 12.0 microg/m^3, three areas are designated as non-attainment for the 24-hour standard of 35 microg/m^3. DAQ currently operates 24-hour Federal Reference Method (FRM) $PM_{2.5}$ samplers throughout the state to demonstrate compliance with NAAQS, evaluate population exposure, support SIP development and model performance evaluation as well as

110(a)(2)(C)

include a program to provide for the **enforcement of the measures** described in subparagraph (A), and **regulation of the modification and construction of any stationary source** within the areas covered by the plan as necessary to assure that national ambient air quality standards are achieved, including a permit program as required in parts C and D of this subchapter;"

Program for enforcement of measures (described in A)

- Reference statutory provisions that provide authority to regulate sources of air pollution
- Narrative description of enforcement program – including permit program and references for relevant permitting rules

Program to regulate the modification and construction of any stationary source

- Narrative description of programs for preconstruction, operation, and modification of stationary sources – including references to relevant PSD, NSR rules
- Make note of any EPA approvals of programs or rules – or submittals that are pending review/approval

§110(a)(2)(C) Program to enforce control measures, regulate modification and construction of stationary sources and a permit program

Element summary: Include a program to provide for the enforcement of the measures described in subparagraph (A) and regulation of the modification and construction of any stationary source within the areas covered by the plan as necessary to assure that national ambient air quality standards are achieved, including a permit program as required in parts C and D.

The following SIP-approved state regulations provide Washington State with civil and criminal enforcement authority for violations of Title 173 WAC under the approved SIP:

- WAC 173-400-230 "Regulatory Actions" (State adopted date 3/20/93; EPA effective date 6/2/95; 60 FR 28726)
- WAC 173-400-240 "Criminal Penalties" (State adopted date 3/22/91; EPA effective date 6/2/95; 60 FR 28726)

Ecology's and local clean air agencies' enforcement powers are derived from provisions in chapter 70.94 RCW:

- RCW 70.94.141 "Air pollution control authority — Powers and duties of activated authority"
- RCW 70.94.200 "Investigation of conditions by control officer or department -- Entering private, public property"
- RCW 70.94.211 "Enforcement actions by air authority -- Notice to violators"
- RCW 70.94.332 "Enforcement actions by department -- Notice to violators"
- RCW 70.94.425 "Restraining orders -- Injunctions"
- RCW 70.94.430 "Penalties"
- RCW 70.94.431 "Civil penalties — Excusable excess emissions"
- RCW 70.94.435 "Additional means for enforcement of chapter"

EFSEC's enforcement powers are derived from provisions in chapter 80.50 RCW "Energy Facilities – Site Locations."

- 80.50.040 "Energy facility site evaluation council--Powers enumerated"
- 80.50.150 "Enforcement of compliance--Penalties"

As previously noted, on January 23, 2014, Washington submitted a revision to chapter 173-400 WAC to comprehensively update the EPA-approved SIP, including the permitting program. Washington requested expeditious approval of the revised chapter 173-400 WAC. However, in the interim the existing EPA-approved permitting program codified in 40 CFR 52, subpart WW provides sufficient authority to ensure that the 2010 NO_2, 2008 O_3, and 1997, 2006 and 2012 $PM_{2.5}$ NAAQS are protected.

Utah's Infrastructure

SIP Section I (*Legal Authority*) identifies the statutory provisions that allow DAQ to prevent construction, modification or operation of any stationary source at any location where emissions from such source will prevent the attainment or maintenance of a national standard or interfere with prevention of significant deterioration requirements (See I.A.1.d). SIP Section I was codified at R307-110-2, and EPA most recently approved the SIP on June 25, 2003, at 68 FR 37744.

SIP Section II *(Review of New and Modified Air Pollution Sources)* provides that new or modified sources of air pollution must submit plans to the Utah Division of Air Quality and receive approval orders before operating. SIP Section II was codified at R307-110-3, and EPA approved the SIP most recently on June 25, 2003, at 68 FR 37744. The Utah Air Quality Rule R307-401 establishes a minor source permitting program in the state for new and modified sources. R307-401 was most recently approved by EPA on May 5, 1995, at FR 60 FR 22277. Utah's permitting rules require sources to install best available control technology (BACT) for all pollutants, including $PM_{2.5}$. *See* R307-401-8.

SIP Section VIII (*Prevention of Significant Deterioration)* was established as required by the Clean Air Act and applies to all air pollutants regulated under the CAA. SIP Section VIII was codified at R307-110-9 and R307-405, and EPA approved it most recently on July 15, 2011, at 76 FR 41712. On April 14, 2011, Utah submitted revisions to R307-405 to incorporate the federal Tailoring Rule provisions that were promulgated on June 3, 2010. EPA has not yet acted upon this submittal.

DISCUSSION

NEXT TIME

- Introductions & Homework Discussion
- ISIP Elements 110(a)(2)(D)-(G)
- Open Discussion

Full text of 110(a)

https://www.govinfo.gov/content/pkg/USCODE-2013-title42/html/USCODE-2013-title42-chap85-subchapI-partA-sec7410.htm

US EPA September 2013 Guidance for ISIPs

https://www3.epa.gov/airquality/urbanair/sipstatus/docs/Guidance_on_Infrastructure_SIP_Elements_Multipollutant_FINAL_Sept_2013.pdf