



Regional Haze planning and other emerging topics (part 3 of 3 part series)

Air Quality Bureau

April 27, 2023



Photo: Bosque del Apache wilderness area – Photo credit: Rhett Zyla

Today's Agenda

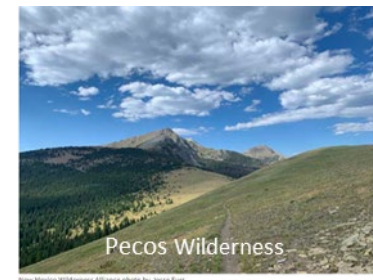
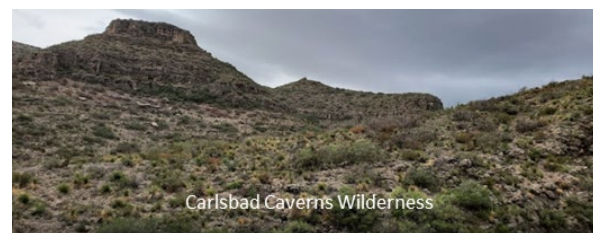
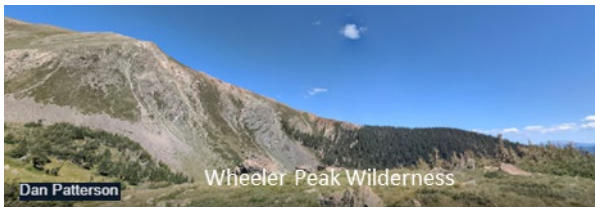
- ❑ Welcoming and Introduction
- ❑ Regional Haze
 - ❑ Step 3: Selection of sources for analysis
 - ❑ Step 4: Characterization of factors for emission control measures
 - ❑ Review of milestones for stakeholder engagement & participation
- ❑ Other emerging topics



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Air Quality Bureau – Our Mission

To protect the inhabitants and natural beauty of New Mexico by preventing the deterioration of air quality



Planning Section Introductions

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Stakeholder Engagement

Objective:

Improve our relationship and engagement process with stakeholders by building trust and capacity to fully participate in our processes.

Through this engagement, stakeholders can be empowered to make informed decisions regarding air quality and their health.

- Outreach
- Education
- Communication
 - ▣ **Your input is Vital**
 - Guides development of SIPs, rules, and programs
 - Allows for local (i.e., New Mexican) solutions
 - NMED AQB v. EPA
 - Region 6 in Dallas, TX, or
 - HQ in Washington, D.C.
 - ▣ Continuous Dialogue
 - Beyond individual projects and pollutants



EPA's guidance on state implementation plans (2nd implementation period)

Step 1	Ambient data analysis
Step 2	Determination of affected Class I areas in other states
Step 3	Selection of Sources for Analysis
Step 4	Characterization of Factors for Emission Control Measures
Step 5	Decisions on Control Measures Necessary to Make Reasonable Progress
Step 6	Regional Scale Modeling of the LTS to set RPGs for 2028
Step 7	Progress, Degradation, and URP glidepath checks
Step 8	Additional Requirements for SIPs

Mostly completed – under internal review

In progress

Regional Haze planning overview

- ❖ New Mexico's Regional Haze State Plan Development for 2nd Implementation Period (2019-2028)
 - ❖ Step 3: Selection of sources for analysis
 - ❖ Step 4: Characterization of factors for emission control measures

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EPA/WRAP Step 3

Selection of Sources for Analysis



Step 3: Selection of sources for analysis

- The Regional Haze Rule requires that each state select emission sources that will be subject to an analysis for potential new control measures that may be cost-effective to implement at the source.
- “The State must include in its implementation plan a description of the criteria it used to determine which sources or groups of sources it evaluated...” [excerpt from 40 CFR 51.308(f)(2)(i)]



Additional guidance in EPA's 2021 clarification memo

- EPA's 2021 memo, *Clarifications Regarding Regional Haze State Implementation Plans for the Second Implementation Period*, states that "source selection is a critical step in states' analytical processes. All subsequent determinations of what constitutes reasonable progress flow from states' initial decisions regarding the universe of pollutants and sources they will consider for the second planning period."
- **Pollutants Considered for Source Selection and Control Strategy Analysis**
 - Consistent with the first planning period, EPA generally expects that each state will analyze sulfur dioxide (SO₂) and nitrogen oxide (NO_x) in selecting sources and determining control measures. In nearly all Class I areas, the largest particulate matter (PM) components of anthropogenic visibility impairment are sulfate and nitrate, caused primarily by PM precursors SO₂ and NO_x, respectively.



Step 3 - NMED and CAQB approach

- The City of Albuquerque Environmental Health Department ("EHD") cooperated closely with the New Mexico Environment Department ("NMED") in a statewide source selection process
- WRAP developed a work group that provided some guidance to states on a methodologies that might be prudent:
<https://www.wrapair2.org/rhpgwg.aspx>
- EHD and NMED used this WRAP guidance with the following considerations:
 - Q/d where Q = Total Point Source (Title V) SO_2 and NO_x emissions and d is distance to nearest CIA.
 - NM selected a Q/d threshold that encompassed 80% of the total SO_2 and NO_x emissions = 5.5.
 - Consultations with FLMs were a part of the process and they concurred with our selection of 24 point sources using this criteria.



Step 3 – List of facilities selected for analysis

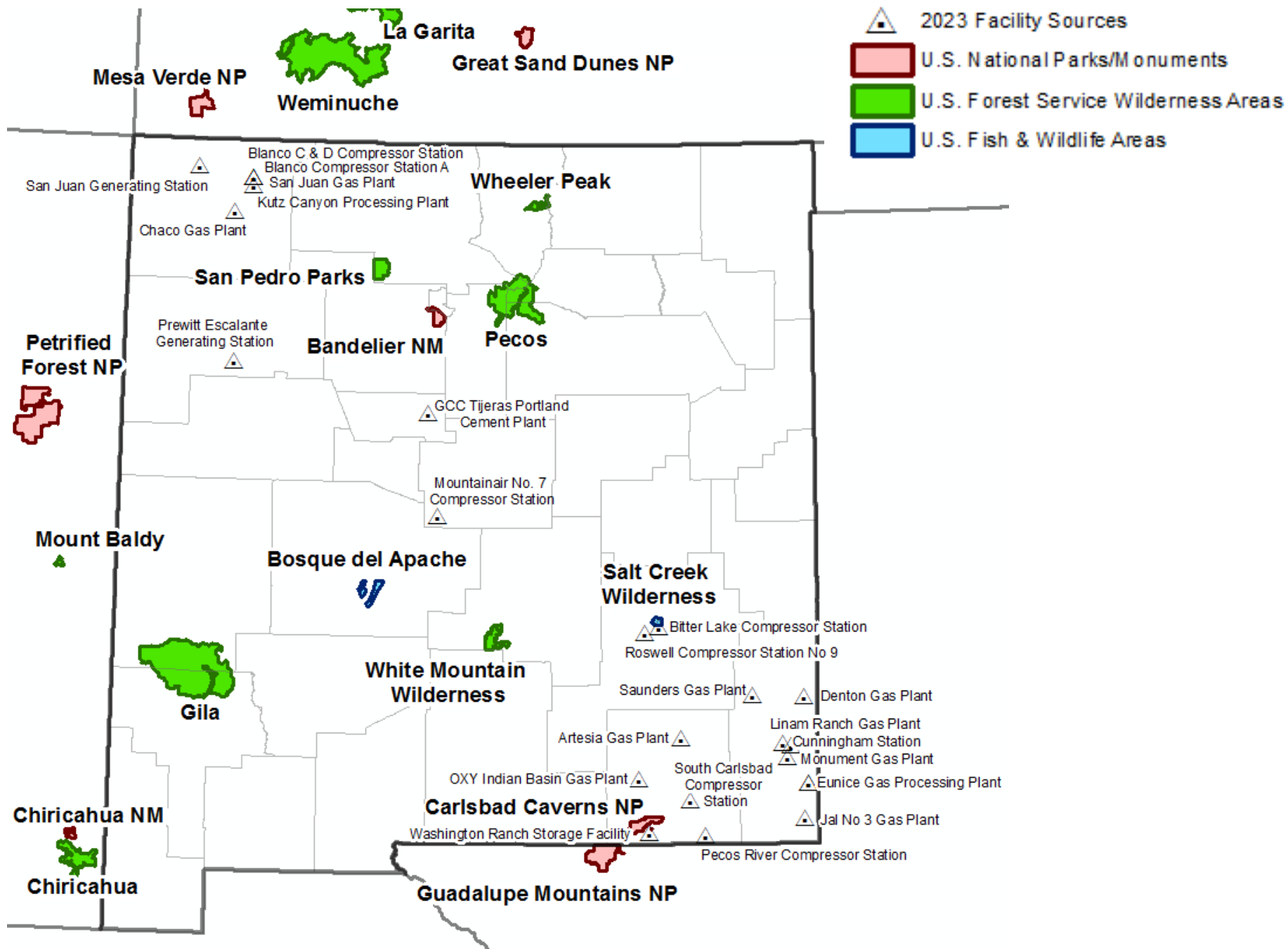
Q/d score	Facility Name	Owner / Operator	County	Name of Nearest Class I Area
461.0	San Juan Generating Station	Public Service Co. of New Mexico	San Juan	Mesa Verde National Park (CO)
50.3	Bitter Lake Compressor Station	IACX Roswell, LLC	Chaves	Salt Creek Wilderness Area (NM)
28.3	Chaco Gas Plant	Enterprise Field Services	San Juan	Mesa Verde National Park (CO)
26.1	Prewitt Escalante Generating Station	Tri State Generation	McKinley	San Pedro Parks Wilderness Area (NM)
23.6	Washington Ranch Storage Facility	El Paso Natural Gas Co.	Eddy	Carlsbad Caverns National Park (NM)
20.5	Jal No 3 Gas Plant	ETC Texas Pipeline Ltd.	Lea	Carlsbad Caverns National Park (NM)
20.4	Monument Gas Plant	Targa Midstream Services	Lea	Carlsbad Caverns National Park (NM)
18.5	Eunice Gas Processing Plant	DCP Midstream	Lea	Carlsbad Caverns National Park (NM)
16.0	GCC Tijeras Portland Cement Plant[1]	GCC Rio Grande Inc.[1]	Bernalillo	Bandelier Wilderness Area (NM)
13.9	Pecos River Compressor Station	El Paso Natural Gas Co.	Eddy	Carlsbad Caverns National Park (NM)
13.1	Eunice Gas Processing Plant	Targa Midstream Services	Lea	Carlsbad Caverns National Park (NM)
11.8	Saunders Gas Plant	Targa Midstream Services	Lea	Salt Creek Wilderness Area (NM)
10.3	Kutz Canyon Processing Plant	Harvest Four Corners LLC	San Juan	Mesa Verde National Park (CO)
9.5	OXY Indian Basin Gas Plant	OXY USA	Eddy	Carlsbad Caverns National Park (NM)
8.4	San Juan Gas Plant	Hilcorp / Harvest Four Corners LLC	San Juan	Mesa Verde National Park (CO)
7.8	Blanco C & D Compressor Station	Enterprise Field Services	San Juan	Mesa Verde National Park (CO)
7.7	Cunningham Station	Xcel Energy	Lea	Carlsbad Caverns National Park (NM)
7.7	Denton Gas Plant	Davis Gas Processing	Lea	Salt Creek Wilderness Area (NM)
7.7	Linam Ranch Gas Plant	DCP Midstream	Lea	Carlsbad Caverns National Park (NM)
7.7	Roswell Compressor Station No 9	Transwestern Pipeline	Chaves	Salt Creek Wilderness Area (NM)
5.9	South Carlsbad Compressor Station	Enterprise Field Services	Eddy	Carlsbad Caverns National Park (NM)
5.8	Mountainair No. 7 Compressor Station	Transwestern Pipeline	Torrance	Bosque del Apache Wilderness Area (NM)
5.7	Artesia Gas Plant	DCP Midstream	Eddy	Carlsbad Caverns National Park (NM)
5.6	Blanco Compressor Station A	El Paso Natural Gas Co.	San Juan	Mesa Verde National Park (CO)



Types of selected facilities

- (13) Natural gas plants
- (7) Natural gas compressor stations
- (2) Coal-fired electric generating stations
- (1) Gas-fired electric generating station
- (1) Portland cement Plant*

*City of Albuquerque Environmental Health Department jurisdiction



- ❖ Characterization of factors for emission control measures



Step 4 - Characterization of factors for emission control measures

- States must evaluate and determine the emission reduction measures, or controls, for selected sources that are necessary to make reasonable progress by considering the four statutory factors.
 - costs of compliance;
 - time necessary for compliance;
 - energy and non-air quality environmental impacts of compliance; and
 - the remaining useful life of any existing source.



Step 4 - Characterization of factors for emission control measures

- NMED AQB has recently reengaged facilities selected for control measure analysis for this current Regional Haze planning 2nd implementation period (2019-2028).
- The Department is currently reviewing the Four Factor analyses and supplemental information submitted by the screened facilities.
- Communication with the selected facilities will continue as NMED determines what potential reasonable control measures will be included in NM's long-term strategy.

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5-Minute Break

Question and answer Steps 3&4

- Step 3: Selection of sources for analysis
- Step 4: Characterization of factors for emission control measures (under review)

Regional Haze plan preparations

Review of milestones for stakeholder
engagement & participation



RH SIPr - Milestones for outreach, education and engagement

- **Reengagement phase January – December 2023**
 - ▣ Feb 23, 2023 – April 27, 2023 - reengagement webinar series
 - Feb 23, 2023 - Background and ambient data analysis.
 - March 30, 2023 - interstate considerations.
 - April 27, 2023 - overview of selected sources.
 - ▣ Website update - “Outreach, Education, Engagement.”
 - ▣ Continuing engagement opportunities on a case-by-case basis with stakeholders
 - ▣ Completion of a comprehensive first SIPr proposal*
 - *Timeline being developed



RH SIPr - Formal Federal Land Managers (FLMs) consultation period

□ **Formal FLM Consultation Period**

- NMED offers virtual or in-person meetings with FLMs to discuss NMED's proposal.
- FLMs to provide written comments on state's policy analyses of its Long-term strategy emission reduction obligation.
- NMED decides on any revisions necessary based on comments
- NMED prepares written response to comments on how state addressed comments as part of the hearing phase, and in proposal revisions.



RH SIPr - Hearing Phase: Milestones for public and other stakeholder participation

□ Hearing phase

▣ Request a hearing

■ NMED requests a hearing before the **Environmental Improvement Board**

- Includes a Statement of Reasons and a Petition for Regulatory Change.
- Formal responses to FLM comments and a new draft plan submitted to EIB at this time.

▣ Public Notice and Formal Public Comments

■ Newspapers, NM Register, Website, Field Offices, etc.

■ Notice includes

- Date, time, location of the hearing,
- Instructions for participating and requesting accommodations

▣ Hearing of the board and decision on the proposed SIPr.



NMED/Albuquerque Regional Haze contacts

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leadership / direction	Kirby Olson	kirby.olson@env.nm.gov	505-629-5107
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technical lead	Mark Jones	mark.jones@env.nm.gov	505-629-6626
technical support	Neal Butt	neal.butt@env.nm.gov	505-629-2972
emissions inventory, modeling, interstate impacts	Sufi Mustafa, Angela Raso Roslyn Higgin	sufi.mustafa@env.nm.gov angela.raso@env.nm.gov roslyn.higgin@env.nm.gov	505-629-3808
Albuquerque EHD – coordination	Ken Miller	kjmillier@cabq.gov	505-768-2660

Regional Haze NMED AQB website: <https://www.env.nm.gov/air-quality/reg-haze/> (you may sign up to receive notices from our listserv on the website as well.) You may contact Mark Jones and Michael Baca for interest in additional engagement opportunities or questions/comments.



NM's Regional Haze planning website: <https://www.env.nm.gov/air-quality/reg-haze/>

The blue skies and scenic vistas of New Mexico are considered some of the most beautiful in the United States, but air pollution can threaten those views. Human-caused pollution of varied concentrations and sizes in the atmosphere can, along with natural events like dust storms and wildfires, impair or reduce visibility. Widespread visibility impairment caused by man-made pollutants over a broad geographic area is known as regional haze.

EPA Requirements on Regional Haze

New Mexico is required to develop and submit to EPA its own regional haze plans. NMED cooperates with the City of Albuquerque Environmental Health Department (EHD), which implements air quality regulations in Albuquerque and Bernalillo County. Because NMED and EHD have separate jurisdictions, they submit separate Regional Haze State Implementation Plans to EPA.

Outreach, Education, and Engagement

Public comment is an important part of the regional haze planning process. Regional haze planning is currently in the second implementation period of planning. Resources for outreach, education, and comments received are identified below.

- **NM Regional Haze Guiding Principles** describes the strategy and goals New Mexico focuses on for addressing regional haze.
- **Timeline for Developing the New Mexico Regional Haze SIP Revision - 2nd Implementation Period** presents a draft of the timeline for revisions to the regional haze State Implementation Plan.
- **NMED Air Quality Bureau Stakeholder Engagement: Regional Haze & Other Emerging Topics, Feb. 23, 2023** (video, 2 hours 1 minute) is part 1 of NM 2023 regional haze stakeholder re-engagement 3-part series. (**Regional Haze and Emerging Issues Slides, Feb. 23, 2023**).
- **NMED Air Quality Bureau Stakeholder Engagement: Regional Haze & Other Emerging Topics, March 30, 2023** (video, 2 hours 17 minutes. Start of meeting is at 27:30) is part 2 of NM 2023 regional haze stakeholder re-engagement series. (**Regional Haze and Emerging Issues Slides, March 30, 2023**).
- **NMED Air Quality Bureau Stakeholder Engagement: Regional Haze & Other Emerging Topics, April 27, 2023** (video, 1 hours 6minutes.) is part 3 of NM 2023 regional haze stakeholder re-engagement series.
- **Regional Haze Stakeholder Comments** provides a folder of the comments from the public about regional haze.

For inquiries related to the development of the NM Regional Haze SIP, contact Mark Jones at 505-629-6626 or mark.jones@env.nm.gov. For inquiries related to the Albuquerque – Bernalillo County Regional Haze SIP, contact Ken Miller, City of Albuquerque at 505-768-2660 or kjmillier@cabq.gov. Input on New Mexico's Regional Haze Planning can also be sent to nm.regionalhaze@env.nm.gov.

Regional Haze in National Parks and Wilderness Areas

Q&A, Feedback, & Next Steps

- ❑ Questions, comments, or ideas
 - ❑ Projects, plans or rules
 - ❑ Enhanced stakeholder engagement efforts
- ❑ Additional resources
 - ❑ Contact information and websites



Opportunities for public to learn more about New Mexico's RH SIP and how to become involved in the development of the RH SIP.

- ❑ Website [<https://www.env.nm.gov/air-quality/reg-haze/>]
- ❑ WRAP "Storyboard". An overview of Western perspective on Regional Haze. Publicly accessible content, and abundant visuals.
[https://views.cira.colostate.edu/wrap_rhpwg_Storyboard_draftNov20_2019/]
- ❑ List Serve sign up.
<https://public.govdelivery.com/accounts/NMED/subscriber/new>
- ❑ Stakeholder Outreach Webinars. Past webinars available for viewing on RH website [<https://www.env.nm.gov/air-quality/reg-haze/>] Upcoming webinars advertised on NMED Events Calendar [<https://www.env.nm.gov/events-calendar/>]
- ❑ Comments, questions or requests for additional engagement
[nm.regionalhaze@env.nm.gov] mark.jones@env.nm.gov or (505) 629-6626]
- ❑ NMED's Smart Comment Portal. Not accepting comments for RH yet. Website [<https://nmed.commentinput.com/comment/search>]
- ❑ You Tube Tutorial on NMED Smart Comment Portal
- ❑ English [https://www.youtube.com/watch?v=narGKh_4HzY]
- ❑ Spanish [https://www.youtube.com/watch?v=sGhuYS_Ir4c]



AQ Resource Library

□ NMED

- Homepage: <https://www.env.nm.gov/>
- AQB: <https://www.env.nm.gov/air-quality/>
 - Planning: <https://www.env.nm.gov/air-quality/planning-section/>
 - Monitoring: <https://aqi.air.env.nm.gov/>
- EIB: <https://www.env.nm.gov/opf/environmental-improvement-board/>
- SmartComment Portal: <https://nmed.commentinput.com/comment/search>

□ EPA

- Clean Air Act: <https://www.epa.gov/clean-air-act-overview>
- NAAQS: <https://www.epa.gov/criteria-air-pollutants/naaqs-table>
- Nonattainment Areas: <https://www.epa.gov/green-book>
- NM SIP: <https://www.epa.gov/sips-nm>
- AirNow: <https://www.airnow.gov/>
- Fire and Smoke: <https://fire.airnow.gov/>
- Air Data: <https://www.epa.gov/outdoor-air-quality-data>
- Design Values: <https://www.epa.gov/air-trends/air-quality-design-values>



Wrap-up & next stakeholder engagement webinars

- **Additional stakeholder engagement events**
 - ▣ May 9, 2023 – Southern NM Dust Symposium, 9 AM – 12 PM
 - ▣ November 7-9, 2023 – Four Corners Air Quality Group Meeting
 - ▣ <https://www.env.nm.gov/events-calendar/>
- **Regional Haze Feedback**
 - ▣ Comments, questions or requests for additional engagement
 - nm.regionalhaze@env.nm.gov, mark.jones@env.nm.gov or (505) 566-9746
 - ▣ Website: <https://www.env.nm.gov/air-quality/reg-haze/>
- **Control Strategies**
 - ▣ Armando Paz; armando.paz@env.nm.gov; (505) 629-3242
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 - ▣ Neal Butt; neal.butt@env.nm.gov; (505) 629-2972
 - ▣ Michael Baca; michael.baca1@env.nm.gov; (505) 629-7891