
Regional Haze – Alaska's 2nd Plan Overview

Presented by:

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Outline

- **Basic Review Regional Haze Program**
- **2nd Implementation Plan overview**
 - **New information through modeling and analysis**
 - **Proposed Regulation topics**
 - **Updated Enhanced Smoke Management Plan**
 - **Updated information from Stationary Sources**
 - **1st Regional Haze Plan Carry overs**

Basic Review of Regional Haze Program

- **What is it?**
 - A federally required program to improve visibility from human-caused sources of pollution
 - Goal is to reach natural conditions by 2064 in all Class I Areas
 - New plan is required every 10 years
 - Alaska submitted its 1st plan in 2011
 - 2nd plan was due July 2021



2nd Implementation Plan

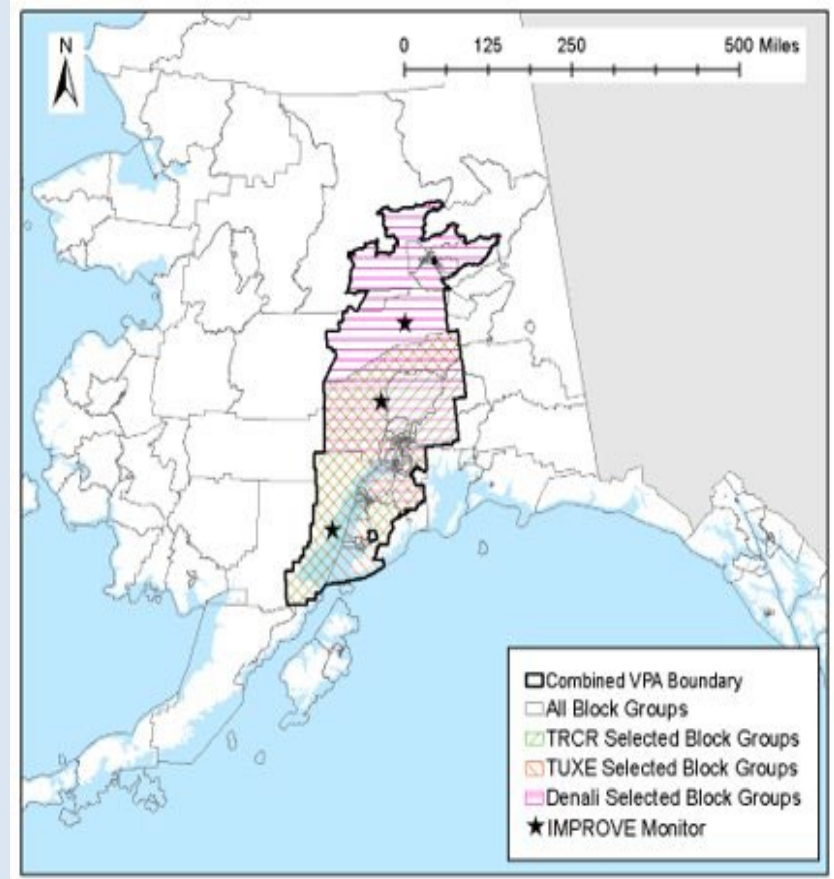
- Baseline plan: 2014-2018
- New federal requirements to meet
- Reanalyzed emission data from all sources
- Collected latest emission data from Alaska sources
- Incorporated some limited modeling and analysis
- Focused on developing regulatory structure to collect additional information from sources to support requirements of 2nd progress report and future plans.

New information through modeling and analysis

- Environmental Protection Agency (EPA) provided information on marine emissions and federal regulation impacts on ports.
- University of Fairbanks (UAF) conducted modeling using the GEOS-chem model at a larger scale. They looked at pollution over a 200-kilometer grid and included Asia and Alaska to account for international emissions influence.
- EPA completed air quality modeling for the year 2016 over the entire state of Alaska using the Community Multiscale Air Quality (CMAQ) on a finer grid of 27 kilometers.
- A DEC contractor conducted an analysis of volcanic emissions and off-gassing of sulfur dioxide.
- The modeling and analysis strengthen evidence that Alaska Class I Areas are impacted by international and naturally occurring emissions.

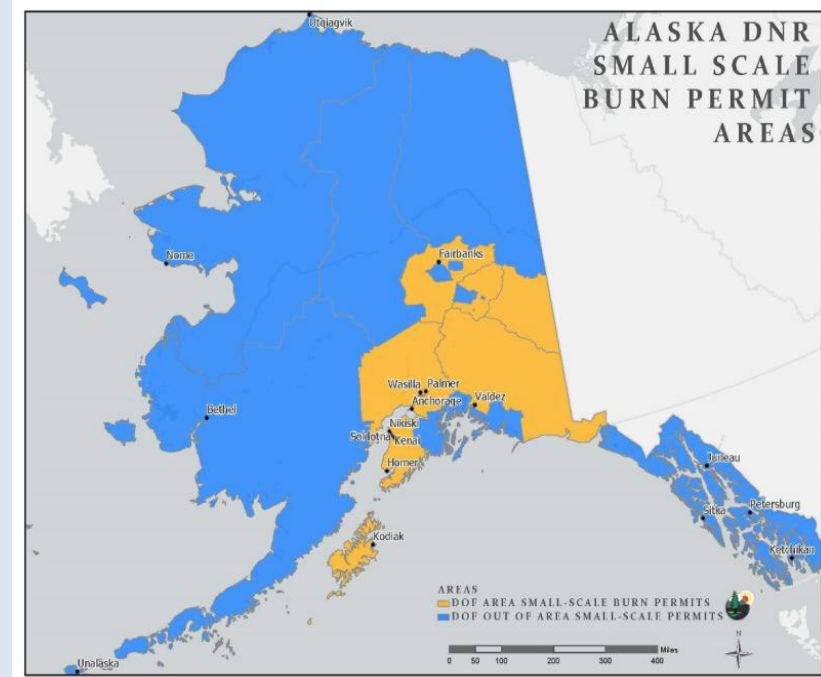
Proposed regulation topics

- Establish a new Visibility Protection Area
- Detailed methodology on how boundaries were established is included in the plan
- Only sources within the area that require Title I or Title V air permits will have additional requirements
- Permit applications for new industrial sources located within the area will be required to:
 - Provide additional information and;
 - Use a screening tool to determine if emissions may impact the Class 1 Areas (Denali and Tuxedni)
- Screening tool for permit process developed and posted



Updated Enhanced Smoke Management Plan (ESMP)

- Required element of the Plan
- Developed in coordination with Alaska Wildfire Coordinating Group (AWFCG)
- More coordination between AWFCG and DEC has been added
- Continues requirements of:
 - Prescribed burns above 40 acres must apply for an Open Burn Approval from DEC.
 - Open burning prohibited in Fairbanks and Juneau between 11/1 and 3/31.
 - DNR issues small and large-scale burn permits; required between 4/1 and 8/31.
 - Post-burn reports required 90 days after prescribed burn occurs.



Updated information from Stationary Sources

- Focused attention on sulfur dioxide emissions
- Reviewed all sources identified in screening criteria
 - This included:
 - Power plants,
 - Oil and gas platforms,
 - Petroleum refineries
 - Source Sector analyses
- Conducted new 4-factor analysis
- Proposed or confirmed requirements on 6 sources:
 - North Pole Power Plant
 - Healy Power Plant
 - Chena Power Plant
 - Eielson Air Force Base
 - Fort Wainwright
 - Fairbanks Campus Power Plant

1st Plan Carryovers

- Items carried over from the 1st Regional Haze Plan
 - Best Available Retrofit Technology (BART) Program is still in place, though no facilities added.
- Permitting program
- Required emissions inventories submittals
- Other program carryovers:
 - New Source Review (NSR),
 - Prevention of Significant Deterioration (PSD), and
 - Reasonably Attributable Visibility Impairment (RAVI)
 - Other state air program requirements

Questions?

State of Alaska, Department of Environmental Conservation

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Non-Point Mobile Sources

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