

ADEQ 2021 Regional Haze State Implementation Plan Four Factor Resource Guide

The Regional Haze program requires decadal evaluations of controls for sources of particulate emissions that significantly impact visibility in Class I areas. The goal of a State adopted control program is to provide reasonable progress towards Class I area visibility improvement. Adopted controls are evaluated for reasonableness through the utilization of the four factor analysis.¹ This document compiles resources and guidance that sources may find useful in conducting a four factor analysis for the second round of Regional Haze planning.

ADEQ Specific Guidance

1. Any source choosing to submit a four factor analysis to ADEQ must submit by the December 1, 2019 deadline. ADEQ recommends that sources work closely with the department throughout the process.
2. Any control recommendation must include a control efficiency, emission limit, and averaging time.
3. ADEQ will provide each source with a list of processes to consider for the four factor analysis along with the methodology utilized in the development of those list of processes.

List of Resources

Regional Haze Rule

- On January 10, 2017 U.S. EPA finalized amendments to the regulatory requirements for state regional haze plans.
- Available Here: [Link](#)

Guidance for the Second Implementation Period

- On August 20, 2019 U.S. EPA published final guidance on Regional Haze State Implementation Plans for the Second Implementation Period.
- Available Here: [Link](#)

Previously Conducted Four Factor Analyses

- A source may find previously approved reasonable progress determination in SIPs and FIPs useful for the second round of implementation. Of particular interest would be the reasonable progress FIP determinations for Phoenix Cement Clarkdale Plant and the CalPortland Cement Rillito Plant, as these are Arizona specific sources which previously underwent an approved reasonable progress four factor analysis.

¹ 40 CFR 51.308(d)(1)(i)(A)

- Available Here: [Link](#)

EPA RACT/BACT/LAER Clearinghouse

- The RACT/BACT/LAER Clearinghouse is a central database of air pollution control technology information that can be used to identify available controls, determinations, and emission limits.
- Available here: [Link](#)

EPA Air Pollution Control Cost Manual

- For the second implementation period, EPA recommends that four factor analyses adhere to the accounting principles, generic factors, and generic cost estimates/algorithms from the EPA Control Cost Manual. Where cost estimates in the cost manual are outdated or inappropriate for a given source, ADEQ will entertain well-justified revisions to these cost estimates; however, sources should adhere to the accounting principles and methods outlined in EPA's cost manual
- Available Here: [Link](#)

EPA Menu of Control Measures for NAAQS Implementation

- The EPA Menu of Control Measures contains information on existing emissions reduction measures, as well as relevant information concerning the efficiency and cost effectiveness of the measures.
- Available Here: [Link](#)