



State of Utah

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Department of  
Environmental Quality

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Executive Director

DIVISION OF AIR QUALITY  
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Director

DAQ-032-22

**MEMORANDUM**

**TO:** Air Quality Board

**THROUGH:** Bryce C. Bird, Executive Secretary

**FROM:** Chelsea Cancino, Environmental Scientist

**DATE:** March 24, 2022

**SUBJECT:** PROPOSE FOR PUBLIC COMMENT: Utah State Implementation Plan. Section XX.A: Regional Haze Second Implementation Period; Utah State Implementation Plan. Emission Limits and Operating Practices: Section IX, Part H.21 and Part H.23; R307-110-17. Section IX, Control Measures for Area and Point Sources, Part H, Emission Limits; and R307-110-28. Regional Haze.

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The Regional Haze State Implementation Plan (SIP) for the second planning period addresses requirements for periodic comprehensive revisions of implementation plans for regional haze (RH). The Regional Haze Rule (RHR) requires Utah to address RH in each mandatory Class I Area (CIA) located in Utah and in each mandatory CIA located outside of Utah that may be affected by pollutants emitted from sources within Utah. Utah is required to submit a SIP revision to the EPA addressing the specific elements required by the rule.

The objectives of the RHR are: 1) to improve existing visibility in 156 national parks, wilderness areas, and monuments 2) to prevent future visibility impairment by manmade sources, and 3) to meet the national goal of natural visibility conditions in all mandatory CIAs by 2064. Utah's CIAs are Arches National Park, Bryce Canyon National Park, Canyonlands National Park, Capitol Reef National Park, and Zion National Park.

The RHR establishes several planning periods extending from 2005 to 2064. The State of Utah is required to develop an RH SIP for each period. The first implementation period spanned from 2008 to 2018. This SIP revision consists of the second implementation period spanning from 2018 to 2028. This SIP was originally due to the EPA on July 31, 2018. However, the deadline was extended to July 31, 2021. In this revision, UDAQ demonstrates the visibility progress to date in each of Utah's CIAs and analyzes Utah's

emissions trends and sources of visibility impairment. Utah is required to set reasonable progress goals which:

- 1) must provide for an improvement in visibility for the most impaired days throughout the implementation plan, and
- 2) ensure no degradation in visibility for the least impaired days over the same period.

For this purpose, Utah has outlined its Long-Term Strategy (LTS) in this document as well as the determination of reasonable progress goals (RPGs) for CIAs in Utah.

The RH SIP must also address mandatory CIAs outside of the state that are reasonably anticipated to be affected by emissions from Utah as well as out-of-state sources impacting Utah CIAs. For this requirement, UDAQ analyzed Western Regional Air Partnership (WRAP) photochemical modeling and found that Utah does not significantly impact visibility at out-of-state CIAs. Utah has also determined that Utah's CIAs are not significantly impacted by out-of-state sources. Upon consultation with Utah's surrounding states, Utah will not require any actions from other states for impacts on Utah's CIAs and Utah has received no requests for actions regarding Utah sources' impacts on out-of-state CIAs.

Throughout this second implementation period, UDAQ has participated in the WRAP, which has conducted modeling and technical analysis to support state RH planning. UDAQ has also consulted with federal land managers (FLMs), Tribes, Utah's surrounding states, as well as environmental advocates, industry stakeholders, and the public.

This SIP revision also examines the need to implement additional emission reduction measures on sources that are reasonably anticipated to contribute to visibility impairment. The examination required to determine actions for this period is known as a four-factor analysis and consists of four criteria each selected source must consider when analyzing the possible installation of controls: 1) cost of compliance, 2) time necessary for compliance, 3) energy and non-air quality environmental impacts, and 4) remaining useful life.

To determine which sources must submit a four-factor analysis to the State, UDAQ performed a Q/d (emissions/distance) analysis to determine which of Utah's sources have the highest potential visibility impact on Utah's CIAs. These facilities include the Ash Grove Cement Company Leamington Cement Plant, the Graymont Western US Inc. Cricket Mountain Plant, PacifiCorp, the Sunnyside Cogeneration Associated Sunnyside Cogeneration Facility, and the US Magnesium LLC Rowley Plant. UDAQ requested each facility to submit a four-factor analysis for this second implementation period. UDAQ has received each facility's four-factor analysis, provided each with an evaluation of their analysis, and received evaluation responses from each. After consideration of the information provided, as well as the modeling results provided by the WRAP, UDAQ has made reasonable progress determinations for each facility.

The actions deemed necessary for reasonable progress to be made in Utah's CIAs for this implementation period consist of establishing a firm closure date for units 1 and 2 of the Intermountain Generation Station, setting mass-based emissions limits for PacifiCorp's Hunter and Huntington Power Plants, and requiring the installation of a Flue Gas Recirculation (FGR) unit on the Riley Boiler at US Magnesium's Rowley Plant. The emissions limits proposed for PacifiCorp ensure their emissions do not exceed their modeled or recent actual emissions levels to maintain Utah's 2028 "on-the-books" projections as modeled by WRAP to ensure reasonable visibility progress at Utah's CIAs by the end of this implementation period.

Recommendation: Staff recommends that the Board propose the Utah SIP, Section XX.A: Regional Haze Second Implementation Period; Utah SIP, Emission Limits and Operating Practices: Section IX, Part H.21 and Part H.23; R307-110-17, Section IX, Control Measures for Area and point Sources, Part H, Emission Limits; and R307-110-28, Regional Haze, for a 30-day public comment period.