

MEMORANDUM

TO: Air Quality Board

THROUGH: Bryce C. Bird, Executive Secretary

THROUGH: Bo Wood, Rules Coordinator

FROM: Ryan Bares, Environmental Scientist

DATE: November 2, 2022

SUBJECT: PROPOSE FOR PUBLIC COMMENT: New Rule R307-313. VOC and Blue Smoke Controls for Hot Mix Asphalt Plants.

On August 3, 2018, the U.S. Environmental Protection Agency (EPA) designated Utah's Northern Wasatch Front (NWF) as a nonattainment area (NAA) for the 2015 National Ambient Air Quality Standard for 8-hour ozone concentrations (83 FR 25776). On October 7th, 2022, EPA finalized the reclassification of the NWF NAA from marginal to moderate status (87 FR 60897) because the area did not attain the standard by the attainment date. As a result of this classification, the state of Utah must identify and implement reductions of Volatile Organic Compound (VOC) emissions in the designated area as part of its State Implementation Plan (SIP) obligations under section 182(b)(A)(i) of the Clean Air Act.

R307-313 will reduce visible blue smoke and the associated VOC emissions from hot mix asphalt (HMA) plants operating in Salt Lake, Weber, Davis, Tooele, and Utah counties by requiring the installation of emission capture and control technologies on the plant and on associated oil storage tanks located on site. These emission reductions contribute to efforts to meet Clean Air Act requirements and attain the health-based standard.

Utah Division of Air Quality (UDAQ) staff conducted both an emission estimate and a cost of controls analysis for the proposed control technologies. Staff identified 15 HMA plants permitted to operate in the five targeted counties in 2020 with 158 associated oil tanks. The combined annual emissions from these facilities is approximately 202.18 tons per year (tpy) of VOCs, of which 176.44 tpy would be reduced with the installation of controls. UDAQ staff determined that the cost for the installation of controls has an initial capital cost of approximately \$511,075 per HMA plant with ongoing annual operating costs of \$19,100 per plant. Assuming a 35-year life expectancy, staff estimates the annualized cost of controls for this proposed rule to be \$6,197 per ton of VOC emissions reduced from the installation of controls on HMA plants and \$2,052 per ton of VOC emissions reduced from the installation of controls on tanks. The combined cost per ton of VOC emissions reduced from the installation of both emission reduction technologies is \$3,436, which DAQ considers cost effective for a health-based standard.

R307-313 will require operators of HMA plants in Salt Lake, Davis, Weber, Tooele, and Utah counties to retain a copy of the manufacturer's recommendations for proper operation and maintenance of the equipment, establish a maintenance plan based on those recommendations,

and retain records showing proper operation and maintenance of equipment. In order for the emission reductions to be included in the State's 182(b)(A)(i) requirements, controls must be installed by May 1, 2023.

Recommendation: Staff recommends the Board approve R307-313; VOC and Blue Smoke Controls for Hot Mix Asphalt Plants for a 30-day public comment period.