

MEMORANDUM

TO: Air Quality Board

THROUGH: Bryce C. Bird, Executive Secretary

THROUGH: Bo Wood, Rules Coordinator

FROM: Joel Karmazyn, Environmental Scientist

DATE: October 5, 2022

SUBJECT: PROPOSE FOR PUBLIC COMMENT: Amend R307-328. Gasoline Transfer and Storage.

The purpose of R307-328 is to establish requirements for the control of gasoline vapors during the filling of gasoline cargo and storage tanks. The rule is based on a series of Environmental Protection Agency (EPA) control technique guidance documents released from 1975 through 1978. These requirements are commonly referred to as stage I vapor recovery.

Staff has been engaged in conducting the inventory and control measures analysis for the ozone state implementation plan. Part of that process includes the review of all rules and established control measures. In doing so, staff has realized that a clarification is necessary in R307-328-5(3)(c) regarding the vent pipe of underground storage tanks. The current text does not adequately explain that vent pipes must be equipped with a pressure vacuum relief valve. A pressure relief valve is a safety device used to control pressure that would otherwise build up and create an upset. The valve is designed to open at a predetermined pressure to protect the tank from exceeding its design limit. Its secondary function is to control fugitive emissions from the tank when tank pressure is suitable.

Staff is recommending a clarification to the rule that would require all service stations to install a pressure relief valve. This requirement is in line with EPA's emission factor for fugitive vapor loss from underground gasoline storage tanks (UST). That emission factor applies to all UST's that are controlled.

There are 2600 UST's registered statewide, of which, 74% currently have a PV installed on their vents. The proposed amendment would apply to all UST statewide, but of particular interest for DAQ in developing the Ozone SIP are the 266 registered UST's located within the Northern Wasatch Front nonattainment area that either do not have a PV installed on the vent or a PV could not be confirmed on the vent.

EPA has adopted by reference in its National Emission Standards for Hazardous Air Pollutants (NESHAP 6C, Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities; and Gasoline Dispensing Facilities) tank testing methods developed by the California Air Resource Board (CARB). CARB Test Procedure 201.1E is included in this proposed clarification as a means of insuring that pressure valves are operating correctly. Once installed, pressure relief valves would be required to be tested every 3 years.

Proposed change costs: relief valves cost between \$250-500. The valves are threaded such that installation is straight forward. Bench testing the valves is approximately \$150.

Staff Recommendation: Staff recommends the Board propose Rule R307-328: Gasoline Transfer and Storage, as amended, for a 30-day public comment period.