Midland Reporter-Telegram
WEEKEND EDITION

New Mexico implementing new ozone rules in 2024

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Courtesy OTA Environmental A crew from OTA Environmental Solutions inspects a production facility. New Mexico will implement more stringent ozone precursor rules next year and operators are urged to start preparing for them now.

Fourteen months may seem like a long time, but oil and gas operators active in the New Mexico portion of the Permian Basin are urged to get busy today.

New Mexico's Environmental Department is implementing ozone-precursor rules in a bid to reduce ground level ozone, and while some regulations went into effect last August, new regulations are due to take effect on Aug. 5, 2024.

Courtesy OTA Environmental/ A Lead Detection and Repair crew surveys a production facility.

Ozone precursors are two types of air pollutants primarily resulting from industrial emissions: volatile organic compounds (VOCs) and nitrogen oxides (NOx). Combined with sunlight and heat, they form ground-level ozone, which can cause negative health impacts and is the main component of smog.

These new rules apply to oil and gas operations in specified high-ozone counties. In the Permian Basin, those are Chaves, Eddy and Lea counties.

“We’re trying to get the word out so everyone can get started as soon as possible and get ahead of the new regulations,” Luis Vasquez, vice president, environmental services at OTA Environmental Solutions, said.

Speaking with the Reporter-Telegram by telephone, Vasquez said regulations taking effect next August require operators to calculate the potential to emit (PTE) air pollution, in tons per year, for each piece of equipment at all facilities, certified by a qualified engineer. Operators must also begin routine technology-based leak detection and repair methods for both new and existing sites, with frequency depending on the detection method and site’s PTE or production volumes.

That can be a lot of equipment to inventory and significant amounts of data to gather, he said, making it important for operators to start now. Vasquez noted that the regulations also require operators to establish a database detailing the equipment, data sheets on that equipment and PTE, a task he said can be daunting. The rule also requires operators to be able to generate a report from that database, should regulators request it, by July 1, 2024.

Storage tanks are also on the table with a goal of reducing volatile organic compounds emissions by 95%. Combustion devices will be required to have at least a 98% destruction rate efficiency and vapor recovery units must have a backup for downtime or site must be shut down and the controlled equipment isolated. Routine monitoring began the first of the year, which generally required weekly AVO — audio, visual and olfactory — surveys and monthly leak inspection and throughput calculations. The rule applies to new vessels with a PTE greater than two tons per year of VOCs, greater than 3tpy of PTE for existing multi-tank batteries and greater than 4 tpy of PTE for existing single-tank batteries. The time-line for phasing storage tank emissions controls is 30% by 2025, another 35% by 2027 and 100% by 2029.

Pneumatic devices also fall under the regulations, with new devices non-emitting if installed after August 2022 and existing emitting controllers replaced with non-emitting devices over time. The schedule to phase-in pneumatic device controls is 25 to 8% by 2024, 65 to 85% by 2027 and 80 to 90% by 2030.

Having good contacts with equipment manufacturers, as well as a good field team knowledgeable about the equipment, what they’re looking for and skilled in retrieving the necessary data and organizing that data is key, said Vasquez.

He said New Mexico regulators are aggressively enforcing these new rules and imposing significant fines for both operating and data reporting violations. In one example, a small private operator in December was fined $1.82 million for significant unauthorized flaring, failing to report data and drilling changes without approval on three sites. In another, a major operator and mid-sized operator were fined $2.24 million and $7,200 for failing to comply with approved operating and reporting conditions for saltwater disposal underground injection wells at five sites.

“It’s vital for operators to stay compliant and stay ahead of the regulations,” Vasquez said.