

Potential Revisions to AQCC Regulation Number 7 - Update Presentation to the Southern Ute Indian Tribe/State of Colorado Environmental Commission

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November 20, 2024



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Background

- EPA Emissions Guidelines
 - On March 8, 2024, the EPA finalized 40 CFR Part 60, Subpart 0000c - Emissions Guidelines for Greenhouse Gas Emissions from Existing Crude Oil and Natural Gas Facilities (EG 0000c)
 - Colorado must adopt new requirements for oil and gas facilities, based on the Emission Guidelines, by 2029
 - As a first step, the Division is proposing revised requirements for pneumatic controllers and pumps at well production facilities, compressor stations, and gas plants; and revised leak detection and repair requirements for gas plants
- The Division is pursuing strategies to reduce ozone precursors in the short term, due to continued ozone nonattainment



EPA Emissions Guidelines - Designated Facilities

- Fugitive emissions - leak detection and repair (LDAR)
 - Well sites
 - Compressor stations
 - Natural gas processing plants
- Storage vessels
- Well liquids unloading
- Wells with associated gas
- Compressors - wet seal centrifugal, dry seal centrifugal, reciprocating
- Natural gas-driven process controllers
- Natural gas-driven pumps



Pneumatic Controllers

- Zero emissions standard for pneumatic controllers located at well production facilities, natural gas compressor stations, and natural gas processing plants
- Based on 2023 company-reported data:
 - 94,433 pneumatic controllers used statewide across 5,697 facilities
 - ~15,926 tons/year methane emissions total
 - ~4,099 tons/year VOC emissions total
- Phased-in compliance schedule
 - Full compliance by May 2027 for facilities located in the nonattainment area, to ensure needed near-term reductions
 - Full compliance by March 2029 for facilities located outside the nonattainment area
- Additional inspection, recordkeeping, and reporting requirements



Pneumatic Pumps

- Zero and reduced emissions standards for pneumatic pumps located at well production facilities, natural gas compressor stations, and natural gas processing plants
- Based on 2023 company-reported data:
 - 295 pneumatic pumps used statewide across 226 facilities
 - ~205 tons/year methane emissions total
 - ~19 tons/year VOC emissions total
- Full compliance by May 2026 for all facilities
- Additional inspection, recordkeeping, and reporting requirements



Gas Plant LDAR

- Currently, all natural gas processing plants are required to comply with LDAR requirements in EPA's NSPS 0000 or 0000a (40 CFR Part 60)
 - 0000 and 0000a incorporate the LDAR requirements from NSPS VVa, which requires the use of EPA Method 21 only for leak detection
- NSPS 0000b and EG 0000c specify the use of Appendix K of 40 CFR Part 60 for leak detection at gas plants
 - Appendix K contains 'optical gas imaging' protocols for leak detection
 - To align with EG 0000c, the LDAR requirements for gas plants in Regulation 7 would now reference NSPS 0000b, instead of 0000 and 0000a
 - EG 0000c is a model rule, and cannot be referenced directly
- The changes create requirements for the use of optical gas imaging (OGI) for leak detection at natural gas processing plants



Other Proposed Revisions

- Pre- and early-production oil and gas air quality monitoring
- Disproportionately impacted community definition
- Clean-up, typographical, and formatting revisions

Rulemaking materials at

https://drive.google.com/drive/folders/1pa3OR_MtSXZ_uGnklBqPqsK64gy_c0d8c

