Four Corners Air Quality Group Update on Recent Agency Activities – November 2021

Power Plants

Colorado:

- During the 2019 legislative session, Colorado adopted <u>Senate Bill 19-236</u> which is contained in 40-2-125.5 C.R.S. This legislation directed Qualifying Retail Utilities (QRU) to submit a <u>Clean Energy Plan (CEP)</u> as part of their next Electric Resource Plan (ERP) filing with the Colorado Public Utilities Commission (PUC). The legislation also allows for voluntary CEP filings by electric cooperatives, municipals, and small investor owned utilities that do not meet the customer size threshold of a QRU. As part of the CEP process, the Air Pollution Control Division (APCD) is required to participate in the PUC proceeding and provide a verification of the CO2 emissions reductions projected by the CEP in calendar year 2030, when compared to the 2005 baseline.
- Also during the 2019 legislative session, Colorado adopted <u>House Bill 19-1261</u> which is contained in section 25-7-105 C.R.S. In addition to setting economy-wide Greenhouse Gas (GHG) emissions reduction targets for Colorado, this legislation created a mechanism by which utilities with an approved CEP can attain regulatory certainty with the Air Quality Control Commission (AQCC) through 2030, commonly referred to as the "Safe Harbor" provision.
- Colorado coal-fired power plant closure dates:
 - Craig Unit 1 will close on or before December 31, 2025.
 - Nucla Station closed in September 2019.
 - Cherokee Unit 4 will close no later than December 31, 2028.
 - ColoWyo Coal Mine will cease coal production no later than December 31, 2031.
 - Comanche Unit 1 will close no later than December 31, 2022.
 - Comanche Unit 2 will close no later than December 31, 2025.
 - Comanche Unit 3 will close no later than December 31, 2035.
 - Craig Unit 2 will close no later than September 30, 2028.
 - Craig Unit 3 will close no later than December 31, 2029.
 - Martin Drake Units 6 and 7 will close no later than December 31, 2022.
 - Nixon Unit 1 will close no later than December 31, 2029.
 - Rawhide Unit 1 will close no later than December 31, 2029.

New Mexico:

- The New Mexico Energy Transition Act, signed into law March 2019, sets a statewide renewable energy standard of 50 percent by 2030 for New Mexico investor-owned utilities and rural electric cooperatives and a goal of 80 percent by 2040. It also sets zero-carbon resources standards for investor-owned utilities by 2045 and rural electric cooperatives by 2050.
- The Public Service Company of New Mexico (PNM) San Juan Generating station, currently operating 2-units at 847 MW capacity, located in Northwestern New Mexico, plans to permanently close in June 2022 and will be replaced by 650MW of solar capacity and feature 300MW/1200MWh of accompanying energy storage divided over several projects in the state.
- o The Tri-State Generation and Transmission Association Escalante Station, a 253-megawatt, coal-fired power plant near Prewitt, N.M., was decommissioned in June 2020. The plant was screened as one of NM's Four Factor Analysis sources for the 2nd Round of Regional Haze planning with at 2016 emissions inventory including approx. 2,500 tons NO_x and almost 1,000 tons SO2. The plant was a distance of 128 km from the nearest CIA, San Pedro Parks. The plant retirement qualified as a substitute for installing potential additional controls.

Oil and Gas

Colorado:

In January 2020, EPA classified the DM/NFR as a "serious" nonattainment area under the 2008 ozone standard. The attainment deadline for the 2008 standard was July 20, 2021, based on 2018-2020 ozone season data. For more information see Colorado's Ozone planning information webpage.

- The Division continues to work with stakeholders in developing <u>RACT for major sources</u> of NOx or VOCs in the Denver Metropolitan/North Front Range moderate ozone nonattainment area.
- In July 2019, the Commission adopted VOC content limits to reduce emissions from consumer products and architectural, industrial and maintenance coatings.
- At the Commission's directive, the Division initiated and led the Statewide Hydrocarbon Emissions Reduction (SHER) stakeholder process and the Pneumatic Controller Task Force (PCTF) over the 2018-2019 timeframe. The SHER Team evaluated topics including the frequency of leak detection and repair inspections, transmission segment compressor emissions, and natural gas-driven and zero emission pneumatic controllers state-wide. The SHER Team's efforts informed a 2019 rulemaking proposal. The PCTF completed a study of rates of improper operation for pneumatic controllers in the DM/NFR nonattainment area in June 2020. The PCTF used the results of this study to understand the costs and effectiveness of the current pneumatic controller inspection program. PCTF findings and recommendations were presented to the Commission in August 2020.
- In September 2020, the Commission approved new rules that require emissions monitoring at oil and gas sites during the early stages of operations at new oil and gas wells. The rules require operators to report carbon dioxide and N2O emissions. The rules also set emission standards for natural gas-fired reciprocating internal combustion engines equal or greater to 1,000 horsepower.
- On May 30, 2019, Governor Polis signed into law the "Climate Action Plan to Reduce Pollution", known as <u>House Bill 19-1261</u>, and codified in the Colorado Air Pollution Prevention and Control Act, largely at §§ 25-7-102 and -105, C.R.S. House Bill 19-1261 established statewide greenhouse gas reduction targets of: 26% by 2025, 50% by 2030, and 90% by 2050.
- On September 30, 2020, State agencies made public the first draft of the <u>Greenhouse Gas</u>
 <u>Pollution Reduction Roadmap</u>. The GHG Roadmap identified several sectors from which
 reductions will need to be realized to achieve Colorado's climate goals. Two of these sectors
 include emissions from the oil and gas industry: the Oil and Gas Fugitive Emissions Sector and
 the Industrial Sector.
- o On October 23, 2020, the Air Quality Control Commission (AQCC) issued the Resolution to Ensure Greenhouse Gas Reduction Goals Are Met in support of the roadmap.
- On July 2, 2021, Governor Polis signed into law the "Environmental Justice Disproportionate Impacted Community", known as <u>House Bill 21-1266</u>, which is set forth required reductions of greenhouse gas emissions from the oil and gas industry under the O&G Sector and the Industrial Sector. These targets are:
 - 36% reduction in the O&G Sector by 2025 (from 2005 baseline)
 - 60% reduction in the O&G Sector by 2030 (from 2005 baseline)
 - 20% reduction in the Industrial Sector (from 2015 baseline)
- The Environmental Justice Act also requires CDPHE to prioritize near-term reductions of greenhouse gas and achieve reductions of greenhouse gas and co-pollutants in disproportionately impacted communities.
- The Division submitted a rulemaking package to the Air Quality Control Commission on August 31, 2021. The Division's proposal package can be found here. The Commission considered whether to commence formal rulemaking at its September 17, 2021 meeting. Visit the Colorado Air Quality Control Commission website for more information on the rulemaking in progress. The Division's package of regulatory proposals has been set for hearing from December 14 17, 2021, with a public comment opportunity on the evening of December 14, 2021.
 - Regulation Number 7 Notice of Rulemaking Hearing
 - Regulation Number 22 Notice of Rulemaking Hearing

New Mexico:

 March 25, 2021 - The Energy, Minerals and Natural Resources Department's (EMNRD) adopted the natural gas waste reduction rules requiring oil and gas operators to capture 98 percent of their natural gas waste by the end of 2026.

- September 2021 New Mexico Environment Department (NMED) proposed a rule (20.2.50 NMAC, Oil and Gas Sector Ozone Precursor Pollutants) that would require VOC and NOx reductions from the oil and gas sector, as part of the Department's requirements under New Mexico state statute 74-2-5.3 NMSA 1978, Duties and powers of Environmental Improvement Board and local board for attainment and maintenance of National Ambient Air Quality Standards for ozone, to take action to reduce ozone pollution in counties where ozone levels approach the federal standard.
- Southern Ute Indian Tribe (SUIT): Title V Operating Permit Program, Emissions Inventory, State of Colorado Environmental Commission, Minor Source Program
 - Title V Operating Permit Program: The Southern Ute Indian Tribe (SUIT/The Tribe) has full delegation of a Title V operating permit program. SUIT regulates 35 oil and gas-related Title V sources, which consist primarily of natural gas compressor stations, treating plants and processing plants. SUIT's EPA-approved Compliance Monitoring Strategy requires each Title V source to be inspected once every 2-years. Non-compliance is addressed according to the enforcement pathways and protocols outlined in SUIT's Enforcement Procedures and Penalty Manual. More information on the Tribe's Title V Operating Permit Program can be found on the SUIT's Title V webpage: https://www.southernute-nsn.gov/justice-and-regulatory/epd/air-guality/air-permitting/.
 - Emission Inventory: SUIT is currently compiling a comprehensive emission inventory of all air pollution sources located within the exterior boundaries of the Southern Ute Indian Reservation for calendar year 2020. The emission inventory covers point, non-point, mobile, and wildfire emission sources on the Reservation. The final report will be available on SUIT's Air Quality Program webpage: https://www.southernute-nsn.gov/justice-and-regulatory/epd/air-quality/emissions-inventory/. The most recent comprehensive emission inventory from 2017 is currently available for viewing.
 - <u>SUIT/State of Colorado Environmental Commission</u>: More information about the Environmental Commission, meeting dates, meeting agendas, and a copy of the Tribe's Reservation Air Code are available on SUIT's Environmental Commission webpage: https://www.southernutensn.gov/justice-and-regulatory/epd/air-guality/env-commission/.
 - Minor Source Program: In the October 2019, the SUIT and State of Colorado Environmental Commission signed a resolution requesting the Tribe apply to EPA Region 8 for administrative delegation of the federal tribal minor new source review programs. These programs are listed at 40 CFR Part §49.101 105 and §49.151 164. In April 2020, the Tribe submitted a conditional delegation request application to EPA Region. The Tribe and EPA are currently in discussions with EPA about the approval of the Tribe's request. Delegation of the minor source programs to the Tribe would add nearly 250 true minor sources to the Tribe's air quality regulatory program.

U.S. EPA:

- Oil and Gas Emissions Rule Proposal EPA is taking a significant step in fighting the climate crisis and protecting public health through a proposed rule that would sharply reduce methane and other harmful air pollution from both new and existing sources in the oil and natural gas industry. The proposal would expand and strengthen emissions reduction requirements that are currently on the books for new, modified and reconstructed oil and natural gas sources, and would require states to reduce methane emissions from hundreds of thousands of existing sources nationwide for the first time. Learn more.
- Bureau of Land Management: New comprehensive U.S.-wide Federal coal, oil and gas (onshore) annual GHG emissions report developed 2021 to support lease sale environmental assessments: 2020
 BLM Specialist Report GHG Emissions and Climate Trends

NM office

■ The RMPA/EIS is currently in "Draft Proposed Final" stage, awaiting completion of the NHPA Sec. 106 Programmatic Agreement (PA) before final reviews and publication. The

PA is being developed in collaboration with potentially impacted Tribes and Pueblos, and will line out the NHPA Sec. 106 process for undertakings authorized by the Amendment. Although the PA has been in development since 2019, much of the progress slowed during the COVID-19 pandemic as focus shifted to the higher priority of caring for communities. This past February, the Assistant Secretary of Lands and Minerals approved a pause on the EIS to allow work on the PA to catch up. As work on the PA progresses, the timeline will dovetail back into the overall RMPA/EIS timeline. As coleads, each agency (BLM and BIA) will sign their own ROD. The agencies are aiming to complete the RMPA/EIS by late fall 2022.

https://www.blm.gov/programs/planning-and-nepa/plans-in-development/new-mexico/farmington-rmp-mancos-gallup-amendment

Other Sources

Colorado:

- Greenhouse Gas Emissions
 - Statute from recently passed House Bill 21-1266 requires industrial manufacturing facilities that show they are using GHG Best Available Control Technologies and Energy Best Management Practices to achieve an additional 5% reduction in their GHG emissions. These requirements were addressed in phase one of the Greenhouse Gas Emissions and Energy Management for Manufacturing rulemaking in October 2021.
 - House Bill 1266 also requires Colorado's manufacturing sector as a whole to reduce their emissions 20% by 2030, based on 2015 reported emissions, which will be addressed in a second phase of the industrial manufacturing GHG rulemaking in 2022.
- Clean Car Rulemaking is underway with NMED's Petition for Regulatory Change being filed with the Environmental Improvement Board on December 1, 2021. During the December 17, 2021, monthly meeting of the EIB, NMED will ask the EIB for a coordinated rulemaking proceeding in May of 2022 alongside the Albuquerque Bernalillo County Air Quality Control Board. NMED and the City of Albuquerque Environmental Health Department are requesting the joint rulemaking to ensure the standards are consistent statewide. New Mexico is looking to become a section 177 state by adopting the Advanced Clean Cars I standards from California starting with model year 2026 vehicles. Members of the public and other interested persons will have opportunities to provide input on the proposed rules before and during the regulatory hearing. Additional information is available at *The Road to Clean Cars New Mexico* website https://www.env.nm.gov/the-road-to-clean-cars-new-mexico/.

U.S. EPA:

- o GHG Emissions Standards for Passenger Cars and Light Trucks In August 2021, the EPA proposed to strengthen federal greenhouse gas emissions standards for passenger cars and light trucks by setting stringent requirements for reductions through Model Year (MY) 2026. The proposed 2023-2026 MY standards would achieve significant GHG emissions reductions along with reductions in other pollutants. The proposal would result in substantial public health and welfare benefits, while providing consumers with savings from lower fuel costs. The proposal would incentivize technology available today to make vehicles cleaner and to encourage more hybrid and electric vehicle technology. Additional Information.
- HFC Phasedown On September 23, 2021, the EPA released a final rule, "Phasedown of Hydrofluorocarbons: Establishing the Allowance Allocation and Trading Program under the American Innovation and Manufacturing (AIM) Act" to provide for the phasedown of hydrofluorocarbons (HFCs). The AIM Act, which was included in the Consolidated Appropriations Act, 2021, directs the EPA to phase down production and consumption of HFCs in the United States by 85 percent over the next 15 years. A global HFC phasedown is expected to avoid up to 0.5° Celsius of global warming by 2100. This final rule is the first regulation under the AIM Act to address HFCs, which are potent greenhouse gases commonly used in refrigerators, air conditioners, and other applications. This final rule sets the HFC production

and consumption baseline levels from which reductions will be made, establishes an initial methodology for allocating and trading HFC allowances for 2022 and 2023, and creates a robust, agile, and innovative compliance and enforcement system. Additional Information.

WESTAR-WRAP:

Regional Haze, Oil & Gas Studies, Smoke & Fire Impacts Regional Haze west-wide analyses for the WESTAR-WRAP region with 118 Class I areas for SIPs due in 2021 were completed in the Summer 2021. Significant outreach to communicate results are recorded at: Regional Haze Planning Work Group. Delivery of analysis results is available at: WESTAR-WRAP Technical Support System. The WRAP Oil & Gas Work Group conducted detailed analyses to support Regional Haze modeling and planning work by individual states. OGWG work products are available at: Oil & Gas Work Group. Smoke impacts from wildfire were geographically widespread and occurred across several months in Summer and Fall 2021. The WESTAR-WRAP Fire & Smoke Work Group has several projects and ongoing efforts to share information about wildfire and prescribed fire activity data, exceptional events, and smoke management, see: Fire & Smoke Work Group.

Energy Efficiency, Conservation and Renewable Energy

Colorado:

 Statute from House Bill 19-1261 requires industrial manufacturing facilities utilize Energy Best Management Practices for their facility. These requirements were addressed in phase one of the Greenhouse Gas Emissions and Energy Management for Manufacturing rulemaking in October 2021.

Cross-Sector Control Strategies

- Colorado: In progress Colorado is developing a Regional Haze Plan revision to submit to EPA for the 2nd implementation period (2019-2028). EPA's Regional Haze program addresses reduced visibility in national parks and wilderness areas. More information can be found at: https://cdphe.colorado.gov/ozone-and-your-health/regional-haze
- New Mexico: In progress New Mexico is developing a Regional Haze Plan revision to submit to EPA for the 2nd implementation period (2019-2028). EPA's Regional Haze program addresses reduced visibility in national parks and wilderness areas https://www.epa.gov/visibility/list-areas-protected-regional-haze-program. NM's plan evaluates visibility at all of its 9 Class I Areas, including: Bandelier Wilderness Area; Bosque del Apache Wilderness Area; Carlsbad Caverns National Park; Gila Wilderness Area; Pecos Wilderness Area; Salt Creek Wilderness Area; San Pedro Parks Wilderness Area; Wheeler Peak Wilderness Area; and White Mountain Wilderness Area. NM's is evaluating potential additional controls for SO2 and NOx on 24 screened facilities. EPA's Rule requires states to make reasonable progress over time toward the long-term goal of natural visibility conditions at CIAs.

Monitoring and Modeling

Colorado:

 New CDPHE ozone monitoring station to be added in Pueblo in early 2022. (Not in Four Corners area.)

New Mexico:

In support of our upcoming rulemaking activities, the department conducted a photochemical modeling study to enhance our understanding of ozone formation in the state and the sources that contribute to elevated levels. The results of the modeling support previous conceptual models of ozone formation in the state and the need for targeted control strategies to ensure emissions reductions across those sectors that cause elevated ozone. New Mexico O&G emissions had substantial contributions to ozone concentrations even when accounting for

estimated emissions reductions from the draft ozone precursor rule. For example, O&G emissions in the New Mexico portions of the Permian and San Juan Basins contributed as much as 2.0 to 3.0 ppb to the 2028 future year ozone design value when accounting for expected emissions reductions. The transportation sector also contributes 1.2 to 2.7 ppb to the ozone design value near traffic corridors and urban areas like Albuquerque, Santa Fe, and Las Cruces supporting the need for lower emitting vehicles in the state. A smaller but still important contribution, 0.4 to 0.5 ppb, from vehicles was modeled in San Juan County, New Mexico.

Earlier this year, NMED completed the first ever Minor Source Emissions Inventory for the state using base year 2020. The EI data collection process expanded from approximately 150 Title V sources to over 5,000 minor sources. Most of the minor industrial sources lacked experience in reporting their emissions and our online reporting tools were not equipped to handle the special needs of minor sources. These were revamped and numerous trainings were provided before the reporting period (Jan. 1 – Mar. 31). NMED plans on conducting these inventories on a triennial basis in line with the National Emissions Inventory.

Ute Mountain Ute Tribe

- Air Monitoring Program With air stations located at Towaoc, CO and one at White Mesa, UT, the AQ Program monitors continuous pm2.5 (FEM), ozone, TSP; and meteorological conditions; ozone data is reported to AQS. A portable ozone monitor and pm sensors can be located at sites of interest on Reservation Lands. AQI is reported to Tribal Members by local channels and social media.
- Renewable Energy A 1 MegaWatt community solar project went on-line in 2020 to offset community electric bills and Tribal casino electricity demands and offset greenhouse gas consumption. Two more planned community projects are forthcoming next year, and commercial renewable projects are being studied.

• Southern Ute Indian Tribe (SUIT): Air Monitoring Program, Air Quality Modeling:

- Air Monitoring Program: SUIT operates three air monitoring stations, the Ute 1 (Ignacio, CO), Ute 3 (Bondad, CO) and a mobile air monitoring station located at Lake Capote which record meteorological data, visibility, CO, SO2, O3, NO2, PM10, PM2.5, and Methane. In addition, in 2020 the SUIT setup a Purple Air sensor, a particulate matter monitor sensor, at the Environmental Programs Division office to better help inform Reservation residents of the health risks associated with high particulate matter concentrations from wildfire smoke and dust storms. In the upcoming year, SUIT will be adding a second federal reference method continuous particulate matter monitor to the Ute 1 station and a carbon monoxide detector. Ambient air monitoring data is submitted to AQS and AirNow. Real-time air monitoring, meteorological data and AirNow air quality health forecasts are available on the Tribe's ambient monitoring webpage: https://www.southernute-nsn.gov/justice-andregulatory/epd/air-quality/ambient-monitoring/.
- Air Quality Modeling: SUIT continues work on a CAMx photochemical grid modeling project for the Reservation. The purpose of the modeling study is to determine the source apportionment of pollutants (source and quantity of pollutants) driving ozone formation on the Reservation and to determine if ozone formation on the Reservation is limited by oxides of nitrogen or volatile organic compounds.

Bureau of Land Management:

New air pollutant (NOx, PM10, PM2.5 and ozone) monitoring station established late 2020 in the Piceance Basin (northwest Colorado): Northwest Colorado Air Quality | Piceance Mountain Top (colowhiteriverairquality.net)

Agency Acronym List and Contacts

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