Four Corners Air Quality Group Update on Recent Agency Activities –December 2016

EPA's Activities:

The Clean Power Plan

- If implemented, the Clean Power Plan will reduce carbon pollution from power plants, the nation's largest source, while maintaining energy reliability and affordability.
- These are the first-ever national standards that address carbon pollution from power plants.
- On February 9, 2016, the Supreme Court stayed implementation of the Clean Power Plan pending judicial review. For states that choose to continue to work to cut carbon pollution from power plants and seek the agency's guidance and assistance, EPA will continue to provide tools and support.

Final Tribal Minor New Source Review Permit Rule

- On June 3, 2016, EPA published its Final Rule designating use of a federal implementation plan ("FIP") to carry out the Federal Indian Country Minor New Source Review ("NSR") Program issued under the federal Clean Air Act ("CAA").
- The FIP will apply to new and modified minor sources used in oil and natural gas exploration and production operations that are or will be located in Indian country.

Final Control Technique Guidelines for the Oil and Gas Industry

- On October, 20, 2016, EPA issued the final Control Techniques Guidelines for reducing VOCs from existing sources in the oil and natural gas industry.
- The final CTGs are designed to reduce smog-forming volatile organic compounds (VOCs) from existing equipment and processes in states with ozone nonattainment areas classified as "Moderate" and above.

Proposed 2015 Ozone Implementation: SIP Requirements Rule

• On November 2, 2016, the Administrator signed our proposed approach to implementing the 2015 ozone standards. This proposed action largely retains and updates the implementing regulations that apply for the 2008 ozone standards, for purposes of the 2015 ozone standards.

Monitoring

 Ozone monitoring in the Four Corners region is ongoing by CDPHE, NM Environment Department, Southern Ute Indian Tribe, Navajo Nation, National Park Service, and US Forest Service.

Southern Ute Indian Tribe's Activities

The Southern Ute Indian Tribe (Tribe) is a signatory party to the *Memorandum of Understanding* for the Interagency Policy Oversight Group of the Four Corners Air Quality Group.

 $Air\ Monitoring: \ \underline{http://www.southernute-nsn.gov/environmental-programs/air-quality/ambient-monitoring/}$

- o The Tribe operates two air monitoring stations, the Ute 1 (Ignacio, CO) and Ute 3 (Bondad, CO) which record meteorological data, visibility, CO, O3, NO2, PM10, and PM2.5
- o Ambient air monitoring data submitted to AQS and AirNow.
- o Real-time air monitoring and meteorological data available on the Tribe's ambient monitoring webpage.
- o Incorporating two new 55i Methane Analyzers into the monitoring network at Ute 3 and mobile monitoring station.
- o Mobile air monitoring station co-located at the Ute 3 monitoring station for data calibration and validation. The mobile monitoring station is equipped to monitor for O₃, NO₂, SO₂, CH₄, and non-methane hydrocarbons.

Title V Operating Permit Program: http://www.southernute-nsn.gov/environmental-programs/air-quality/air-permitting/

- o The Tribe has full delegation of a Title V operating permit program.
- o The Southern Ute Reservation has 37 Title V sources, including 32 natural gas compressor stations, 3 natural gas treatment plants, 1 natural gas processing plant, and 1 municipal solid waste landfill.
- o The Tribe's EPA approved Compliance Monitoring Strategy requires Title V sources to be inspected once every 2-years.
- o The Tribe conducted 23 compliance inspections of Title V sources in fiscal year 2016.
- o Non-compliance is addressed according to the enforcement pathways and protocols outlined in the Tribe's Enforcement Procedures and Penalty Policy.
- o Five enforcement actions were finalized through Settlement Agreements in fiscal year 2016.

Emissions Inventory Development

- The Tribe is preparing a comprehensive emissions inventory for the Reservation for calendar year 2015 to quantify emissions from all oil and gas activities and other significant point and non-point sources.
- Small oil and gas source emissions quantified from equipment counts and production data obtained from a Clean Air Act Section 114 information collection request issued by the Tribe to all oil and gas operators on the Reservation in June, 2016.

SUIT/CO Environmental Commission (Commission): http://www.southernute-nsn.gov/environmental-commission/

- o The Commission oversees development and implementation of air quality programs for all land within the exterior boundaries of the Southern Ute Reservation.
- o Commission meetings are held on a semi-annual to quarterly basis.
- The last meeting of the Commission was October 25, 2016and agenda items included an update on the 2015 comprehensive emissions inventory for the Reservation, a Title V program compliance and enforcement update, revisions to the Reservation Air Program Long Term Plan, 2016 ozone season data results, and discussion of NAAQS attainment, and program updates.

 More information about the Commission, meeting dates, meeting agendas and a copy of the Tribe's Reservation Air Code are available on the Tribe's Environmental Commission website.

Program Development

 Hosted oil and gas operator stakeholder meeting to discuss ozone trends on the Reservation and to gauge interest in participation in voluntary emission reduction programs.

Awards

o The Tribe's Title V operating permit program received the EPA's 2016 Clean Air Act Excellence Award for Regulatory Policy Innovations.

Air Quality Program contact: Mark Hutson, Southern Ute Indian Tribe, Air Quality Program Manager, P.O. Box 737 MS #84, Ignacio, CO 81137, Office: 970-563-0100 ext. 2246, Website: http://www.southernute-nsn.gov/environmental-programs/air-quality/

Federal Land Managers' Activities

Oil and Gas

- June, 2011 Memorandum of Understanding: Multi-Agency Air Quality Analyses and Mitigation for Federal Oil and Gas Decisions through the NEPA Process (NPS, FWS, BLM, USFS, EPA) provides for:
 - o interagency consultation throughout the NEPA process,
 - o common procedures for determining appropriate AQ analyses,
 - o specific provisions for analyzing and discussing impacts to AQ and for mitigating such impacts,
 - o and a dispute resolution process.
 - o http://www.nature.nps.gov/air/hot/index.cfm
- NO_x emissions stipulation required for new stationary gas field compressor engines.
- Facility optimization/centralization/co-location included in Land Use Plans for new development.
- Condensation tank and petroleum liquid storage tank VOC controls for SW Colorado.
- Low-bleed pneumatic devices required.
- Reduced emission gas well completions included in Land Use Plans.
- Mandatory continuous dust abatement.
- Land Use Plans call for use of low or zero emission dehydrators.
- Vapor recovery units or combustors for tank batteries, dehydrators, separators.
- Collaboration among agencies on energy development planning including proposed leasing near Chaco Culture National Historical Park and Mesa Verde National Park, and regional air quality modeling to predict the effects of development in SW Colorado and NW New Mexico.
- Work underway to develop a 2014 oil and gas inventory for the North and South San Juan Basin through operator surveys; work to conclude by end of 2015.

Monitoring Activities

- Ozone: Bayfield, CO (Shamrock site); Mesa Verde National Park; Coyote Ranger District, Santa Fe National Forest (early Summer 2012), Norwood, Colorado (installed 2010), installation of ozone monitor at Chaco Culture National Historic Park in November 2015
- Mercury: Molas Pass, Mesa Verde National Park
- Visibility: Engineer Mountain; Bayfield, CO (Shamrock site); San Pedro Parks, Santa Fe National Forest (early Summer 2012)
- NOx Shamrock, Bayfield Colorado
- Atmospheric deposition/wilderness lake sampling
- Wet/Dry Deposition: Mesa Verde National Park, Bayfield, CO (Shamrock site); Molas Pass; Wolf Creek Pass; San Pedro Parks Wilderness (Fall 2009)
- NHx monitoring: Mesa Verde, CO, Bandelier, NM, Chiricahua, AZ
- IMPROVE Speciated PM2.5 monitoring representative of all Class I areas
- Mesa Verde National Park participates in a multi-agency dust monitoring network spread across the Colorado Plateau. Includes a webcam that records dust storms in the area. Impacts of recent, major dust deposition events include reduced visibility and the early onset of snowmelt. http://www.nps.gov/meve/naturescience/dustmonitoring.htm.
- Throughfall/lichen monitoring for nitrogen, sulfur, & metals in northwest New Mexico on Carson and Santa Fe National Forest (Fall 2013).
- Lichen monitoring (species and elemental analysis) through BYU at Wheeler Peak, San Pedro Parks, and Pecos Wilderness (Summer 2013-Summer 2014).
- Lichen monitoring through FIA in New Mexico (2010- preliminary data is now available).
- Coordinating with NOAA and NASA on research of methane concentrations in the Four Corners region.

Ongoing Commitments

- Active participation in Four Corners Air Quality Policy Oversight Group.
- Collaboration among agencies on data exchange and retrieval.
- Continued support of modeling studies, monitoring sites, and partnerships.

BLM is conducting an air quality analysis with photochemical modeling for development, including oil and gas production, in Colorado. This comprehensive study is called CARMMs, and has been expanded this fall to include the Mancos Shale development in northwestern New Mexico. Some modeling results are available now. Modeling results for comparison with the new ozone standard were completed at the end of 2015.

The new BLM Farmington Air, Water, Soil Program Specialist is Katherina E Diemer. Phone: 505-564-7666, e-mail: kdiemer@blm.gov.

Navajo Nation EPA

The Tribe to become a signatory party to the *Memorandum of Understanding for the Interagency Policy Oversight Group of the Four Corners Air Quality Group*.

❖ Continue to operate two dedicated air monitoring sites: Shiprock Air Monitoring Site (Shiprock, NM) and Nazlini Air Monitoring Site (Nazlini, AZ). These monitors are established for informational purpose only.

- ➤ Shiprock monitoring site collects O₃, NO₂, and SO₂ air data with upload to US EPA Air Quality System (AQS) data base. Meteorological data is collected but not uploaded to AOS.
- ➤ Nazlini monitoring site collects PM_{2.5} air data using collocated filter based (FRM) monitors with upload to EPA's AQS data base.
- ❖ In April 2016, the AQCP deployed a mobile air monitoring unit in the greater Counselor, NM area to monitor NO_x, SO₂, O₃, and PM₁₀ in response to community air quality concerns.
- ❖ The AQCP has included an Indoor Air Quality (IAQ) component and has begun conducting IAO assessments within tribal homes.
- ❖ The AQCP continues to implement Navajo Nation Open Burn Regulations to prevent open burning of prohibited materials.

Navajo Nation EPA Part 71 Operating Permit Program:

- ❖ Title V Permit Renewals:
 - ➤ The final Title V Operating Permit for El Paso Natural Gas (EPNG) Gallup Compressor Station was issued on September 21, 2016. NNEPA is currently drafting the Title V permit for Resolute Aneth Unit and EPNG White Rock Station. PSD permit for Resolute Montezuma Creek facility has also been finalized.
 - ➤ Title V Permits for FCPP and NGS were drafted and comments have been received. OPP is coordinating with USEPA in currently revising the FIP requirements for FCPP and NGS to reflect the changes in the affirmative defense clause and also change the opacity requirements once the PM CEMS to comply with MATS regulations are installed and certified. The FCPP FIP will also incorporate the requirements of the Consent Decree which was finalized on August 17, 2015. The final permits will be issued once the FIPs are finalized.
 - ➤ Even though the Clean Power Plan (CPP) is currently on hold, EPA proposed and requested comments on the design details of the Clean Energy Incentive Program (CEIP), a component of the CPP. The Nation submitted comments on November 1, 2016.
 - > FCPP is currently in the process of installing SCRs on the two remaining units, Units 4 & 5, by July 31, 2018 to comply with the Regional Haze Rule (RHR) BART requirement.
 - ➤ To comply with RHR BART, NGS will need to shut down one unit by 2020 and install SCRs on the remaining two units by 2030.
 - ➤ AQCP determined that they will use modeling to demonstrate compliance DRR for the 2010 1-hr SO2 NAAQS. The modeling studies done for FCPP and NGS EIS with modifications have been submitted to Region 9.
 - ➤ Review the Draft Environmental Impact Statement (EIS) for NGS/Kayenta Mine.
 - NNEPA/OPP is also reviewing and possibly commenting on the regulations that are currently proposed by EPA like the Ozone Implementation Rule, E-Notice Rule, etc.

Colorado's Activities

Air Quality Monitoring: Ozone monitoring in Cortez (PM_{2.5} monitoring ended 12/31/2014); PM₁₀ monitoring in Durango and Pagosa Springs; Colorado monitoring in the Four Corners area shows attainment with the ozone, PM_{2.5} and PM₁₀ NAAQS.

Clean Power Plan: Colorado is awaiting resolution of litigation and associated stay. Documents, stakeholder meetings dates/times, and other relevant information are available at: https://www.colorado.gov/cdphe/CleanPowerPlan

Oil and Gas: Colorado fully adopted NSPS OOOO in February 2014: relevant information is available at: https://www.colorado.gov/pacific/cdphe/emissions-requirements-oil-and-gas-industry

- The Colorado Department of Public Health and Environment created the Oil and Gas Health Information and Response program to respond to public concerns about health related to oil and gas activities. See: http://www.oghir.dphe.state.co.us/ for more information.
- EPA recently promulgated the Oil and Gas Control Techniques Guideline (CTG) which provides recommendations on what constitutes reasonably available control technology (RACT) for the oil and gas sector in ozone non-attainment areas. The Denver Metro/North Front Range ozone non-attainment area, because of its moderate classification, must adopt oil and gas CTGs to satisfy RACT SIP requirements. Colorado anticipates initiating a stakeholder process in early 2017 and will propose a rulemaking later in the year.

Ozone Designation Recommendations: Colorado recommended on October 1, 2016 that EPA designate all areas of the state as attainment/unclassifiable, except for the Denver Metro/North Front Range area which is nonattainment for the 70 ppb standard.

Regional Haze: Colorado adopted its Regional Haze State Implementation Plan in January 2011, which will result in approximately 35,700 tpy reduction of NO_x and 36,000 tpy of SO₂ with the majority of reductions by 2018 and the remainder by 2022.

- A Colorado Air Quality Control Commission rulemaking set for December 15, 2016 will revise the Craig Unit 1 BART Determination and Nucla Station Requirements for NOx. Since the Commission approved the 2014 revisions, an agreement has been reached involving Craig Unit 1 and Nucla Station ("Nucla") with very specific commitments for each facility that will result in additional NO_x and other pollutant reductions. See: https://www.colorado.gov/pacific/cdphe/aqcc for more information.

Public Outreach: The Western Colorado Regional Air Quality Collaboration continues to be active with thirty counties and two cities participating as of December 2016. Promotes ongoing engagement and education on air quality issues. For more information check the website: www.colorado.gov/cdphe/regionalAQcollaboration.

New Mexico's Activities

SO2 Data Requirements Rule

- New Mexico has only one major source for which NMED must characterize air quality for the 1-hour primary SO₂ standard – San Juan Generating Station. NMED is currently modeling actual emissions from the plant and will submit a modeling report by January 13, 2016. This modeling will determine whether or not that area meets the standard.

2015 Ozone Standard (70 parts per billion)

- All areas of New Mexico appear to be in attainment of the new standard except for southern Dona Ana County, on the border with El Paso (Sunland Park) and Mexico

- (Santa Teresa) when looking at 2013-2015 data. For 2014-2016 data, only the Sunland Park area appears to be nonattainment.
- The New Mexico Environment Department followed EPA's guidance to prepare our designation recommendation. The public review copy of the Department's recommendation can be found here: https://www.env.nm.gov/aqb/documents/2015OzoneDesignationRequest.pdf

Regional Haze:

- On May 4, 2016, EPA proposed *Protection of Visibility: Amendments to Requirements for State Plans* [81 FR 26942]. The New Mexico Environment Department submitted comments to EPA on August 10, 2016

Oil and Gas:

- NMED is continuing cooperative projects with BLM Farmington Field Office including Condition of Approval on compressor engines 300 horsepower or less used during well production must be rated by the manufacturer as emitting NOx at 2 grams per horsepower hour or less.

NMED continues to support and participate in Western Regional Air Partnership activities, including the 2014 San Juan Basin emissions inventory and a new Four Corners modeling study

NMED is a partner in the Intermountain West Data Warehouse / Western Air Quality Study

- Contributing with emission inventory, modeling work in New Mexico.
- Participating on technical and oversight committees.

Contact:

Mark Jones, <u>mark.jones@state.nm.us</u>, 505-566-9746 or Rita Bates, <u>rita.bates@state.nm.us</u>, 505-476-4304.