

Four Corners Air Quality Group Update on Recent Agency Activities –May 30, 2012

EPA's Activities

Approved Southern Ute Indian Tribe's Title V Operating Permit (Part 70) permitting program on March 2, 2012
Contact Eric Wortman, EPA Region 8, wortman.eric@epa.gov

Regional haze

- Proposed approval of Colorado's regional haze SIP on March 26, 2012
- Proposed to partially approve/partially disapprove Utah's regional haze SIP on May 16, 2012. *Contact Laurel Dygowski, EPA Region 8, dygowski.laurel@epa.gov*

Recently designated non-attainment areas for the 2008 ozone standard (75 ppb) *Contact Scott Jackson, EPA Region 8, jackson.scott@epa.gov*

Other

- Finalized new NSPS and NESHAPs for oil and gas sources on April 17, 2012
- Winter ozone research conducted during the recent Uintah Basin 2012 Winter Ozone Study and ongoing research by NOAA in the Denver-Julesberg Basin north of Denver.
- Mercury and Air Toxics Standards (MATS) for power plants finalized in December 2011.
- Tribal minor NSR final rulemaking in July 2011

Southern Ute Indian Tribe's Activities

On February 28, 2012, the EPA approved the Tribe's Air Quality Program revised QAPP for air monitoring on the Reservation that includes monitoring for visibility at the Ute 3 air monitoring station. The Tribe's Ute 3 visibility data for the month of March 2012 has been submitted to AQS.

On March 2, 2012, the EPA approved the Southern Ute Indian Tribe's Title V Program. A copy of the Federal Register can be found on the Tribe's Air Quality Program website at: <http://www.southern-ute.nsn.us/air-quality/part-70> .

Tribe's Air Quality Program participated in the 2009 EPA School Air Toxics Monitoring Initiative. A short term air toxics monitoring study was conducted at the Sunnyside Elementary School. The final 2009 air monitoring results can be found on EPA's School Air Toxics website at: <http://www.epa.gov/schoolair/schools.html> .

Contact: Brenda Jarrell, Southern Ute Indian Tribe, Air Quality Program Manager, P.O. Box 737 MS #84, Ignacio, CO 81137, Office: 970-563-4705 ext. 2246, Website: <http://www.southern-ute.nsn.us/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.epa.gov/compliance/resources/policies/nepa/air-quality-analyses-mou-2011.pdf>
 - 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 glycol dehydrators
- Vapor recovery units or combustors for tank batteries, dehydrators, separators

Monitoring Activities

- Ozone: Bayfield, CO (Shamrock site); Mesa Verde National Park; Coyote Ranger District, Santa Fe National Forest (early Summer 2012)
- Mercury: Molas Pass
- Visibility: Engineer Mountain; Bayfield, CO (Shamrock site); San Pedro Parks, Santa Fe National Forest (early Summer 2012)
- Ozone – Norwood, Colorado (installed 2010)
- NO_x – Shamrock, Bayfield Colorado
- Atmospheric deposition/wilderness lake sampling
- Wet/Dry Deposition: Bayfield, CO (Shamrock site); Molas Pass; Wolf Creek Pass; San Pedro Parks Wilderness (Fall 2009)
- NH_x monitoring: Mesa Verde, CO, Bandelier, NM, Chiricahua, AZ
- IMPROVE Speciated PM_{2.5} 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>

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

Navajo Nation EPA's Activities

Official Government to Government Consultation between Navajo Nation and EPA HQ, EPA Region 9 & 6 on matters that have tribal implications such as Utility MACT, BART for Four Corners Power Plant and BART for San Juan Generating Station. For more information contact Eugenia Quintana, Air & Toxic Department Manager, Navajo EPA, 928-871-7800, eugeniaquintana@navajo-nsn.gov.

On March 13, 2012, Environmental Appeals Board upheld a Clean Air Act operating permit issued by Navajo Nation EPA to Peabody Western Coal Company. The EAB Denying Petition for Review states that "Peabody has not identified any procedure used by NNEPA that is inconsistent with part 71 requirements". For more information on this case and other Title V permit renewals issued by NNEPA contact Anoop Sukumaran, 928-729-4094 or asukumaran@navajo-nsn.gov.

The proposed Open Burning Regulations, pursuant to the Navajo Nation Air Quality Pollution Prevention and Control Act would regulate the burning of household waste on Navajo Nation lands, where no collection or disposal service within ten (10) miles exists. The proposed regulation is projected

to be legislated by the resource committee of the Navajo Nation Council for approval. For more information contact Amos Johnson , 928-729-4314 or amosfjohnson@navajo-nsn.gov .

More information: BART & Utility MACT

- Submitted Nation's comments on BART FIP's for FCPP, SJGS and Utility MACT.
- Engaged in Government to Government Consultation with EPA HQ, EPA Region 9 & 6.
- Proposed BART FIP for NGS is pending. <http://www.epa.gov/region9/air/navajo/>
- Nation was involved in providing data and submitting comments on the NREL study "NGS and Air and Regulations". <http://www.doi.gov/navajo-gss/index.cfm> .
- "NGS and Kayenta Mine – An Economic Impact Study" W.P. Carey School of Business; ASU, Feb 2012. www.ngspower.com/pdf/SRPASUNGS.pdf

Title V Permits & Tribal New Source Review

- In Peabody Western Coal Company CAA Appeal No . 11-01 Order Denying Petition for Review- "Peabody has not identified any procedure used by NNEPA that is inconsistent with part 71." http://yosemite.epa.gov/oa/eab_web_docket.nsf/Filings%20By%20Appeal%20Number/B296145E296FC37E852579C0006CE555?OpenDocument
- NNEPA is currently in second round Part 71 permits renewals; NGS and FCPP Title V permit will be up for renewal in 2013. <http://www.navajonationepa.org/opp/permits.html>
- Tribal New Source Review is effective August 30, 2011. <http://www.epa.gov/air/tribal/tribalnsr.html>
- Navajo Nation is strategically planning to obtain delegation from EPA in parts or full implementing Minor Source Program.

Air Monitoring Section & Proposed Open Burning Regulations

<http://www.navajonationepa.org/aqcp/AirMonitoringData.html>

<http://www.navajonationepa.org/aqcp/OpenBurn.html>

- Completed Tribal School Air Toxic Monitoring at Nenahenzhad School
- Collaborative Study with NAU to measure for Uranium Tailing impacts in Shiprock Area.
- MOU with Aneth Chapter, Utah to set up Gaseous Analyzer to measure for H₂S and Ozone
- Proposed Air Monitoring Site at Chinle, AZ – MOU with NPS
- Proposed Air Monitoring Site at Kayenta, AZ- MOU with Kayenta Township- Draft
- Setting up Portable EBAM measuring for PM10 and PM2.5 during wildfires, citizen complaints, and minor source operations.
- Navajo Nation Open Burn Regulation will be finalized by summer 2012
- Restricts burning of Household waste if transfer station located within 10 miles
- BIA issuing Open Burn Permit – potential for MOU to address overlapping requirements
- Co-ordination between Navajo Public Safety , Rangers, Fire department on Criminal enforcement

Colorado's Activities

Air Quality Monitoring

- Ozone and PM2.5 monitoring in Cortez
- PM10 monitoring in Durango and Pagosa Springs
- Colorado monitoring in the Four Corners area shows attainment with the ozone, PM2.5 and PM10 NAAQS

School Bus/Fleet Retrofit

- DERA/ARRA funding received
- 88 school buses retrofitted in La Plata, Dolores, Montezuma and Archuleta Counties

Oil and Gas

- Green completion techniques used when technically feasible
- All existing engines greater than 500 hp required to retrofit by mid-2010
- All new and modified pneumatics must be low bleed beginning October 1, 2009
- Worked with EPA in connection with the adoption of new federal oil and gas rules. Once they are effective the Colorado Air Quality Control Commission will consider proposal to adopt federal rules by reference
- Closer collaboration between Colorado Department of Public Health and Environment (CDPHE) and Colorado Oil and Gas Conservation Commission (COGCC) on oil and gas activities
- Joint CDPHE and COGCC outreach on oil and gas in Durango on May 31, 2012

Air Quality Forecasting

- Starting in 2009 Colorado Air Pollution Control Division (APCD) has had the capability to issue air pollution health advisories throughout the state
 - o July 2011 ozone health advisory for Southwestern Colorado
- APCD increasing its capacity to provide daily air quality indexes for areas in Colorado
 - o Grand Junction: 2010
 - o Colorado River Valley: 2012

Regional Haze

- Colorado completed its Regional Haze State Implementation Plan in January 2012, which will result in approximately 35,000 tpy reduction of NO_x and 36,000tpy of SO₂ by 2018.
- Collaborative and innovative process that resulted in the retirement of a number of older coal fired power plants
- EPA has proposed full approval of Colorado's SIP.

Public Outreach

- APCD is now using social media, like us on Facebook, www.facebook.com/cdphe.apcd and follow us on Twitter, www.twitter.com/cdpheapcd.

New Mexico's Activities

Regional Haze:

- On June 2, 2011 the Environmental Improvement Board approved New Mexico's State Implementation Plan for Regional Haze which includes a Best Available Retrofit Technology (BART) determination at San Juan Generating Station.
- This BART determination would result in a reduction of 4,900 tons per year of NO_x emissions.
- Visibility would be improved in Mesa Verde, San Pedro Parks, and Bandelier.

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 NO_x at 2 grams per horsepower hour or less

School Bus/Fleet Retrofit

- NM has received federal funding for diesel retrofits and has funded projects in San Juan County.
- Includes the installation of 53 closed crankcase ventilations systems and 31 diesel oxidation catalysts in Farmington School District; and 76 fuel operated heaters in Bloomfield School District

Helped to initiate the West-wide Jump Start Air Quality Modeling Study (WestJumpAQMS)

Ozone

- NM has a statute if Ozone in New Mexico exceeds 95% of standard, a new plan with regulations must be prepared to reduce ozone precursors.

SO2

- In June 2010, EPA promulgated a new 1-hour standard of 75 ppb measured as the 99th percentile of 1-hour daily maximum concentrations, averaged over 3 years.
- EPA discussed a possible hybrid implementation approach in implementation rule
- relies on both monitoring and modeling data.
- EPA is now reevaluating and conducting a stakeholder process.
- Stakeholder meetings held 5/30 (Environmental/Public Health Group Representatives), 5/31 (State/Local/Tribal), and 6/1 (Industry) in Research Triangle Park
- NM will be responsible for demonstrating attainment.

Cooperative projects to monitor ammonia, mercury and other pollutants with EPA and Los Alamos National Laboratories (LANL)

On February 6 and March 16, 2012, the Environmental Improvement Board (EIB) approved the repeal of NM's Greenhouse Gas rules.

Contact:

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

Some of the Four Corners Air Quality Task Force Report (November 1, 2007) Mitigation Options that relate to the agency actions above

Oil and Gas

- Best Management Practices (BMPs) for Operating Tank Batteries
- Installing Vapor Recovery Units (VRU)
- Implementation of Reduced Emission Completions
- Convert High-Bleed to Low or no Bleed Gas Pneumatic Controls
- Zero Emissions (a.k.a. Quantum Leap) Dehydrator

Power Plants

- BEST AVAILABLE RETROFIT TECHNOLOGY (BART)
 - o Control Technology Options for Four Corners Power Plant
 - o Control Technology Options for San Juan Generating Station....
- Selective Catalytic Reduction (SCR) NOx Control Retrofit
- Mercury Control Retrofit.
- Clean Air Mercury Rule Implementations in Four Corners Area
- Participate in and Support Mercury Studies

Other Sources

- Develop Public Education and Outreach Campaign for Open Burning
- School Bus and other fleet Retrofits.

Renewable Energy and Energy Efficiency:

- CO and NM have implemented a range of EE measures and incentives for renewable energy and conservation. Measures are also being included in supplemental environmental projects (SEPs) in lieu of civil penalties.

Monitoring

- Interim emissions recommendation for Ammonia monitoring (for baseline 2007 – present)
- Mercury monitoring
- Perform monitoring for VOCs

- Monitoring for N, S and H+ in wet deposition via the NADP at the Molas Pass, Wolfe Creek Pass and Mesa Verde National Park sites
- Support a suite of ecological studies in order to measure potential harmful effects of N deposition on natural resources across an elevation gradient
- Complete a full analysis of existing Wilderness Lakes data
- Additional visibility monitoring established at locations in the region other than what exists in Class I areas.
- Install and operate a long-term monitoring station for mercury in wet deposition for a location at high elevation where precipitation amounts are greater than the site at Mesa Verde NP.
- Install and operate a long-term monitoring station for mercury in total deposition (wet and dry) for at least one MDN station in the Four Corners Region
- See more info, additional monitoring projects and other studies in the Four Corners area current studies handout

Overarching

- Improved Cumulative Inventory of Existing Emissions

Other Mitigation Options that have been implemented in some way since 4CAQTF Report completion

Oil and Gas

- Optical Imaging for Leak Detection
- Control of Existing/New Engines:
- Use of NSCR / 3-way Catalysts and Air/Fuel Ratio Controllers on Rich Burn Stoichiometric Engines
- Use of Oxidation Catalysts and Air/Fuel Ratio Controllers on Lean Burn Engines Install Lean Burn Engines
- Interim Emissions Recommendations for Stationary RICE
- Optimization/Centralization/Co-location.
- Follow EPA New Source Performance Standards (NSPS)
- Mobile/Non-road Dust Abatement
- Petroleum Liquid Storage Tank BMPs

Power Plants

- Lowering Air Emissions by Advanced Software Applications: Neural Net
- Baghouse Particulate Control Retrofit
- Enhanced SO₂ Scrubbing.

Other Sources

- Idling Ordinance
- Stage One Vapor Recovery
- Open Burning Regulation
- Fugitive Dust Regulation (CO)
- Use of Reformulated Gasoline

Renewable Energy

- Net Metering for Four Corners Area

Monitoring

- Installed Continuous Ozone Monitor in Cortez, CO
- Support a study of mercury incorporation and cycling in aquatic ecosystem food-webs, including total and methyl mercury in the food-webs of lakes and wetlands.
- See more info, additional monitoring projects and other studies in the Four Corners area current studies handout