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Minor Source Permitting Rule on Track

The Environmental Protection Agency (EPA) is expecting to propose two New Source Review (NSR) regulations for Indian Country in 2006. The long awaited regulations would fill a significant regulatory gap because there is currently no permitting mechanism for minor stationary sources located anywhere in Indian Country or for major stationary sources located in areas of Indian Country not attaining the National Ambient Air Quality Standards (NAAQS).

EPA has identified and sets NAAQS to protect human health and welfare for six pollutants: ozone, carbon monoxide, particulate matter, sulfur dioxide, lead, and nitrogen oxide. The NSR program requires stationary sources of air pollution to get permits before these sources can start construction. Permits are legal documents that the source must follow and they specify what construction is allowed, what emissions limits must be met, and often how the source must be operated.

The first rule would apply to new and modified minor stationary sources, minor modifications at major stationary sources, and to major stationary sources looking to voluntarily limit emissions to become minor sources of NAAQS pollutants and/or Hazardous Air Pollutants (HAP). HAPs include asbestos, beryllium, mercury, and benzene. The second rule will address new major stationary sources and major modifications to major stationary sources located in areas of Indian country that are designated as not attaining the NAAQS. Under the proposed rule, the permitting requirements would apply to new major stationary sources and major modifications at existing major stationary sources of air pollution that are located in areas of Indian Country that are designated as not attaining the National Ambient Air Quality Standards. (Nonattainment major NSR rule.) These sources would be subject to a number of requirements to limit their emissions, including control technology and emissions offsets.

Minor sources, for the purposes of this rule, are new stationary business or existing stationary businesses that change equipment or how they operate, resulting in small increases in emissions. Examples of minor sources could include gasoline stations, dry cleaners and automotive repair shops. A major stationary source is one who emits or has the potential to emit 100 or 250 tons per year depending on the source and the location of the source. Any stationary source with the potential to emit quantities of pollutants that places it in a major source category could to accept enforceable emission limits to avoid review as a major source. Such sources are referred as “synthetic” minor sources.

EPA could implement the program if a tribe chooses not to (or cannot). A tribe could accept delegation of the program or they can develop a Tribal Implementation Plan (TIP), which would make them responsible for issuing permits. EPA will retain the sole authority to enforce these rules.

For more information please contact Jessica Montañez at 919-541-3407 or at montanez.jessica@epa.gov.

TAMS Learning Center Naming Ceremony

Friends and colleagues of ITEP's co-founder and former director, Virgil Masayesva, gathered in Las Vegas, Nevada, on March 22 to pay tribute to Virgil's legacy by renaming a significant tribal resource at the Tribal Air Monitoring Support (TAMS) Center in his honor. The TAMS Learning Center will now be known as the Virgil Masayesva Environmental Learning Center. Virgil served as ITEP's director from its inception in 1992 until his passing in 2005. He was a graduate of the University of Arizona and Arizona State University, and was a tireless advocate for the tribes and their efforts to develop sovereign environmental programs.

ITEP staff member Christy Nations is pictured with the portrait she painted of Virgil that was unveiled at the ceremony and now hangs on the Center's wall along with a plaque on which are engraved Virgil's words: "Perhaps by doing our one small part, we become part of an entire nation of people tending to their small circle of life, and in so doing we join in the most effective kind of collective, taking the local, individual actions that, together, help to improve the lives of all people."

Several members of Virgil's family attended the ceremony, including his son, Dr. Brett Masayesva, who noted: "My memories of my dad were things like him laying on the couch watching Sunday football. Who would have thought that he was the visionary that we've since found out that he was."

Brett pointed out that naming the Learning Center for his father was especially fitting because Virgil always stressed the importance of education, a value that his son said extends back a generation to Virgil's parents. Virgil's father, Victor Masayesva Sr. was on hand for the event. Virgil's mother, Zetta, passed away at her home in the Hopi village of Hotevilla just a week before the ceremony.

Tribal, EPA and other guests traveled from around the U.S. for the event, which was hosted by Jed Harrison, Director of EPA's Radiation and Indoor Environments National Laboratory.

Remembering Virgil and honoring him as a friend and for his significant contributions to the advancement of Native American environmental management were a series of speakers, including Bill Auberle, ITEP co-founder with Virgil; Mehrdad Khatibi, ITEP's acting director; Greg Green of U.S. EPA; David Comacho, representing Northern Arizona University president John Haeger; Laurence Gishey, director of NAU's Institute for Native Americans; and Matt Haber and Elizabeth Cotsworth of U.S. EPA.

The celebration concluded with songs performed by a Native drum group whose members included Gary Elthie of ITEP (Diné), Leander Elthie (Diné,), Herbert McCabe (Diné), and Laurence Miguel (Cree).

The Virgil Masayesva Environmental Learning Center is a state-of-the-art multimedia facility equipped with portable computer stations, modern presentation technology, and classroom space for training Native environmental professionals in air monitoring and other air quality management technologies. It is a resource, primarily for Native environmental professionals that meets the technical and logistical needs of tribes and also provides a Native theme in keeping with its primary constituency.

The TAMS Center is co-managed by U.S. EPA and ITEP. The Center offers tribal environmental professionals support in the form of classroom training, personal and onsite technical support, and a variety of informational resources. Visit the TAMS Center website via TAMS's home page at www4.nau.edu/tams/.

First Part 71 Permit Under Federal Air Rules for Reservations (FARR) Issued in Idaho

U.S. EPA Region 10 issued the first final part 71 (Title V) air quality operating permit that incorporates the requirements of the Federal Air Rules for Reservations (FARR) to the Plummer Forest Products, Inc. (PFP) facility. The facility is a sawmill, located on the Coeur d'Alene Indian Reservation, south of Plummer, Idaho on May 17, 2006.

Part 71 operating permits incorporate all applicable requirements to which the facility is subject. The FARR, a federal implementation plan, only applies to activities located in Indian Country in Idaho, Oregon and Washington. The FARR establishes emission standards, such as for visible emissions, emissions of particulate matter and emissions of sulfur dioxide that are comparable to those in surrounding jurisdictions. In contrast to prior part 71 operating permits, this permit contains conditions requiring compliance with the requirements of the FARR, and includes monitoring, recordkeeping and reporting requirements to assure compliance with the FARR requirements. In addition, as required by part 71, the facility is required to certify compliance with the provisions in their permit, on an annual basis. This permit provides for adherence to a high level of environmental performance.

NEI Data Import Available on ITEP Website

The National Emission Inventory (NEI) is prepared by EPA with input from numerous state and local air agencies. These data are used for air dispersion modeling, regional strategy development, regulation setting, air toxics risk assessment, and tracking trends in emissions over time. Tribes can view and analyze this data using the Tribal Emission Inventory Software Solution (TEISS). The TEISS software is available at no cost to all tribes courtesy of the Tribal Data Development Working Group of the Western Regional Air Partnership.

The final version of the 2002 NEI was released by EPA earlier this year, but in a format inaccessible to tribes using the TEISS software. ITEP staff has been working on the data set and have created state files for Point and NonPoint (Area) sources that can be input into TEISS. The state datasets are now available for download in zipped 2003 Microsoft® Access format. Tribal Point Source data is also available. To get the NEI data for the states surrounding you visit: http://www4.nau.edu/it ep/resources/teiss_nei.asp

For questions regarding TEISS or the NEI data available from ITEP, contact Sarah Kelly at (928) 523-6377, email: Sarah.Kelly@nau.edu or Jenifer Pond at (480) 985-9570, email: Jenifer.Pond@nau.edu

IMPROVE Update: Shrinking Budget may Close Sites

The Interagency Monitoring of Protected Visual Environments (IMPROVE) Network includes over 160 rural/remote monitoring sites. Nine sites are currently operational on tribal lands. The filters, that are collecting particles over a 24-hour period, are sent to laboratories for gravimetric mass and composition analysis and the data are made available on the IMPROVE and VIEWS web sites (Go to *http://vista.cira.colostate.edu/improve* and *http://vista.cira.colostate.edu/views*).

The IMPROVE Network was established in the mid-1980s to establish current conditions, track trends and identify causes of visibility impacts as required by the federal visibility protection regulations resulting from the 1977 Clean Air Act Amendments. The IMPROVE network was expanded from 30 to 110 sites between 1999 and 2002 to meet the additional monitoring requirements of the Regional Haze Rule that specifies that IMPROVE aerosol monitoring (or equivalent) should be used to characterize haze trends for 156 visibility-protected federal class I areas.

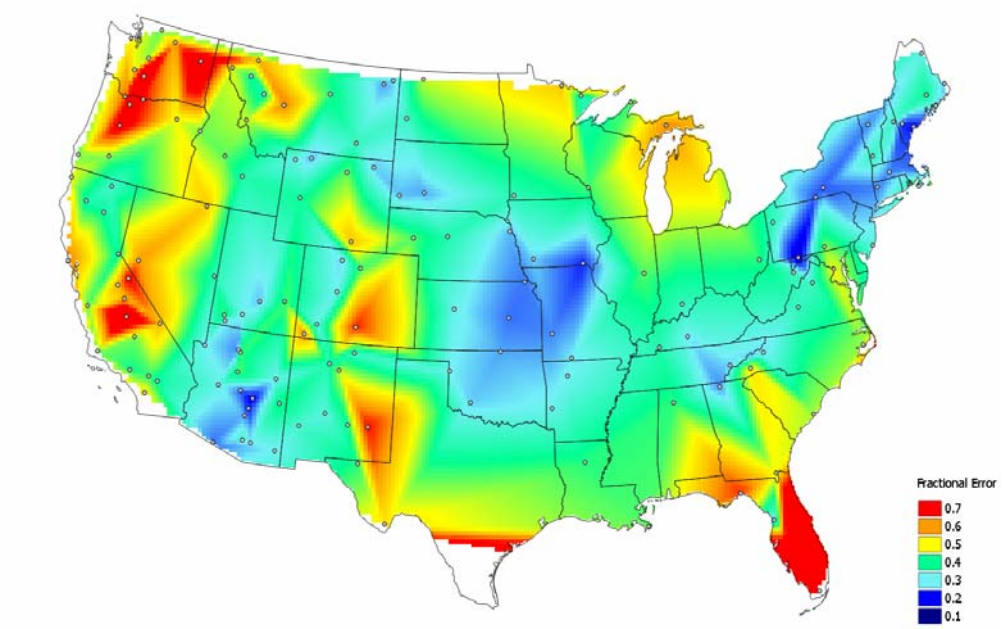

Figure above shows fractional errors based on a distance weighted (1/r) prediction of the aerosol extinction for a site using the five nearest neighboring sites. Monitoring sites in regions shaded with blues and greens generate data that is more redundant of the data from their neighboring sites than for sites in the warmer colored regions.

Additional sites, known as IMPROVE Protocol sites, that employ identical monitoring methods were funded by states, tribes, and other federal agencies to expand coverage of the federal class I areas and to improve understanding of PM and haze in regions without federal class I areas. There are approximately 50 such remote or rural area IMPROVE Protocol sites funded by particular sponsors, including nine that are currently operational on tribal lands.

Anticipated reductions in EPA resources for Fiscal Year 2007 will likely result in a smaller budget for IMPROVE that will require decommissioning of some of the monitoring sites. A process has been developed and implemented (May through July 2006) to identify a priority listing of sites that may potentially be shut down to cope with these future budget reductions.

An objective method was used to determine regions where similar data are being collected by neighboring sites. Some of the sites in such a region can be shut down with less loss of information then would be the case if sites with more unique data were decommissioned. As an example, the figure above shows a map of the fractional error in aerosol light extinction estimated using the IMPROVE and IMPROVE Protocol monitoring data. Regions with larger values have sites with data that are not well estimated from the data of neighboring sites, so these sites

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should be among the last to be shut down. This type of analysis needs to be redone with each site that is listed as a priority for discontinuing, since its neighboring sites would no longer have the benefit of its data.

Additional site specific technical information such as the length of monitoring, data recovery performance, and collocation of other monitoring equipment are factors that are weighed in judging which sites in areas of relative redundancy should be shut down.

This assessment is being done because of an expected shortfall in state-focused grant funds including those that cover the cost for the 110 site IMPROVE Network. Tribal grants that pay for IMPROVE Protocol sites come from a separate budget line item which is not facing reductions in 2007, so this assessment is not intended to recommend that any tribal IMPROVE Protocol sites be discontinued. However, the data from all sites will be considered in assessing redundancy, and the relative redundancy of all sites will be shown so that all Protocol site sponsors will have the benefit of this information.

This is not to say that reductions in the number of IMPROVE or IMPROVE Protocol sites will have no impacts on tribal sites. The cost to sponsors for each of the IMPROVE and Protocol monitoring sites are determined by dividing the total network cost by the number of sites being operated. The cost per site per year determined by this method has been about $35,000 for the last two years. About half of the total budget is used to support network-wide activities like maintaining the data web site and implementing quality assurance activities that do not scale with a change in the number of monitoring site. This means that if the number of sites is reduced, the cost per site per year will increase to those who continue to fund their sites. If the total number of sites shut down were about 40 (a reasonable upper limit), the cost per site would have to increase to about $40,000 per site per year.

Representatives from the IMPROVE Steering Committee are implementing the network reduction planning process in June. By the end of June the plan will be forwarded to all with an interest in the network including EPA, Federal Land Managers, states, tribes, RPOs, etc for their review. Comments from this review will be used as the basis for plan revisions that will be available by the end of summer. The 2007 fiscal year budget may not be known until the fall of this year and will not affect the IMPROVE Network until July 1, 2007.

Contact Dr. Marc Pitchford at Marc.Pitchford@NOAA.gov or 702-862-5432 for additional information.

Other Notes:

July 24-27 - Air Quality Education and Outreach course for tribal professionals will be conducted in Portland, Oregon. The course is designed to help tribal professionals prepare to conduct air quality education and outreach in their communities. Participants will learn about a variety of air quality activities that enhance learning about important air quality concepts. If you are a tribal professional interested in learning more about the course, please contact Mansel A. Nelson by phone at (928) 523-1496 or by email at mansel.nelson@nau.edu.

August 1-3 - Pacific Northwest Tribal Air Network Workshop on grants, diesel emission reduction projects, and residential woodsmoke from wood stoves and fireplaces. Location: Seattle, Washington. For more information contact: Gina Bonifacino, US EPA Region 10, (206) 553-2970.

Job Opening at the TAMS Center
Technology Specialist II
ITEP has a position open for a Technology Specialist II at the Tribal Air Monitoring Support (TAMS) Center in the Las Vegas, NV office. If interested you can view the position announcement (Job ID# 556403) by visiting the following website: http://hr.nau.edu/m/content/view/620/476/ then click on "Careers at NAU."

Indoor Air Quality – Short Internship Program

The Institute for Tribal Environmental Professionals (ITEP) Environmental Education Outreach Program (EEOP) staff is still looking for local tribal environmental offices and other agencies, to host students interested in participating in the Indoor Air Quality - Short Internship Program (IAQ-SIP). A tribal environmental professional from each tribe is invited to submit Short Internship Program (SIP) applications via the EEOP website. The Tribal Environmental Professionals selected for the IAQ-SIP will select three high school students from their tribe and have each of them complete a SIP application. The students and professionals will spend three days on Northern Arizona University (NAU) campus learning about Indoor Air Quality (IAQ). Following the on campus training program, the tribal environmental professionals will work with the students to complete an air quality assessment of a tribal building back at home.

The IAQ-SIP will cover the travel and lodging costs of the tribal environmental professionals. The IAQ-SIP will cover a portion of the student travel and lodging costs and a salary for the students while they complete the air quality assessment of a tribal building. The tribes are invited to provide a cost share of $150 per student (total of $450) and to continue paying the salary of the tribal environmental professional while they participate in the IAQ-SIP program.

With the support of the EEOP staff the IAQ-SIP participants will conduct IAQ assessments of a tribal building. The EEOP staff also has a variety of equipment available to help measurements such as CO, CO_2, temperature, humidity, and radon. This initial air quality assessment will be provided to the building manager for any appropriate follow-up.

If you would like to learn more about the IAQ-SIP Matthew Zierenberg by phone at (928) 523-8864 or by email at matthew.zierenberg@nau.edu.

Fish Consumption Survey Software

The U.S. Environmental Protection Agency's National Health and Environmental Effects Research Laboratory (NHEERL) is supporting efforts by EPA's Region 10 Office in Seattle, Washington, to assist Tribes developing of their own water quality standards. Scientists at NHEERL are developing tribal fish consumption survey software that can be used by Tribes in making regulatory decisions to protect water quality. The project is funded by EPA's Regional Applied Research Effort (RARE) program.

The survey instrument will be developed to facilitate collection of fish and shellfish consumption data by Tribes and will be designed to enhance standardization of survey methodology across Tribes. This tool would automate the methodology developed for a Region 10 Tribal fish consumption survey and will be designed for implementation as a computer assisted personal interviewing (CAPI) system so that survey questions and subject responses are directly recorded on a personal computer. Interested Tribes will be given an opportunity to test the software instrument. The tools are expected to be available for Tribal use in fall 2006.

For more information contact: Dr. Ann Williams, Human Studies Division, National Health and Environmental Effects Research Laboratory, 919-843-4833.

The Tribal Air News

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