### **TRIBAL AIR NEWS**

### Tribal School Air Toxics Monitors Find New Homes

by Angel McCormack, OAQPS

#### **INSIDE THIS ISSUE:**

SOLAR	
POWER	2
ENERGY	
CONFERENCE	4
TRIBAL	
ALASKA	6
TAMS CENTER	
TAMS CENTER 10 YEARS	
	8
10 YEARS	8
10 YEARS	8
10 YEARS LATER	8 11
10 YEARS LATER REGULATORY	Ū
10 YEARS LATER REGULATORY	Ū
10 YEARS LATER REGULATORY UPDATES	11

The Tribal Air Monitor Support (TAMS) Center has recently deployed air monitors that will monitor air pollutants at schools to two new tribes—the Navajo Nation in Arizona, and the Red Lake Band of Chippewa Indians in Minnesota. The monitors will be at these sites for approximately 60 days. They will travel to yet another tribal site



as approved through an application process. The application process is conducted by the TAMS steering committee. Tribes interested in participating in this monitoring program must fill out an application, which can be obtained from any of the contacts listed below.

Through the coordination of EPA's Office of Air Quality Planning and Standards (OAQPS) and TAMS Center personnel, additional monitors have been sent to the TAMS Center to supplement the original monitoring inventory. The TAMS Center is conducting an inventory, attending training to assist in technical support, and calibrating the monitors to be deployed to tribal applicants. The monitor and inventory list will be available through the TAMS Center or through OAQPS' Community and Tribal Programs Group in order for tribes to determine which monitor they would like to request on their application. Once approved, the TAMS Center will work with the tribe to accommodate or plan for more specific timing

The monitoring lab work and assessments are currently being supported by an EPA contractor (ERG) through an agreement between the TAMS Center and OAQPS. Tribes are encouraged to apply if interested in participating in this monitoring program and also to assist in determining needs and strategies for the future of this program.

For further information or to request an application, please contact a OAQPS or TAMS representative:

Farshid Farsi, TAMS / EPA, 702-784-8263, <u>farsi.farshid@epa.gov</u> Christopher Lee, TAMS / ITEP, 702-784-8278, <u>christopher.lee@nau.edu</u> Angel McCormack, OAQPS, 919-541-3588, <u>mccormack.angel@epa.gov</u> Laura McKelvey, OAQPS, 919-541-5497, <u>mckelvey.laura@epa.gov</u>

EPA OFFICE OF AIR QUALITY PLANNING AND STANDARDS

#### Fort McDowell Yavapai Nation Solar Project

by Dan Catlin, Fort McDowell

In March 2010, the Fort McDowell Yavapai Nation completed installation of their 12 kilowatt demonstration photovoltaic (PV) solar project. The system is composed of 54 fixed solar panels installed on the roof of HQ2, a tribal government building. The project was funded with Clean Air Act section 103 tribal grant funds and a rebate from the Salt River Project, the local utility company.

Over its lifetime, the project is expected to generate more than 25 megawatt hours annually, or 15-20 percent of the building's power. However, in the first four months of operation, the panels exceeded expectations and provided more than 23 percent of the building's power needs, offset 16,000 pounds of carbon dioxide, and saved the tribe \$800 in electric costs.

Dan Catlin, the tribe's Air Quality Specialist, spearheaded this project and worked with an energy company to install the system. The system includes an online monitoring and diagnostic program which calculates energy usage and trouble shoots problems, ensuring that the system is virtually maintenance-free. The project cost approximately \$54,000 and took 15–18 months to complete, with the bulk of the time spent on getting siting and system specification approvals.

Because of the success of this demonstration project, the tribe is looking into other larger renewable energy and energy saving projects like installing PV solar panels on parking structures, and purchasing solar water heating units for tribal enterprises. If implemented, these new projects could help qualify the buildings for LEED certification. For more information on this solar project, please contact Dan Catlin (dcatlin@ftmcdowell.org).



## **TRIBAL AIR NEWS**

### Remodel for Energy Efficiency

by Regina Chappell, OAQPS

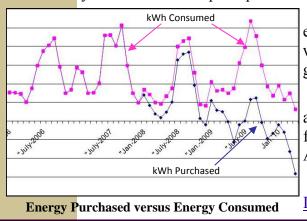


Not only has Dan Catlin been working with the Fort McDowell Yavapai Nation Solar Project but he also has been working with his wife, Carol, to remodel their own home for complete energy efficiency. Dan and Carol live in Mesa, Arizona, and began with their existing 1993 built home. When they started remodeling in 2007, they set the goal high for zero energy consumption year-round without sacrificing comfort. For them, the choice to go solar was simple; their reasons were: environmental—help decrease the need for new power plants as well as mitigating the negative impacts of fuel sources (emissions, greenhouse gases, etc.); patriotic—decrease our dependency on foreign fuel; economic—tax credits and rebates toward the purchase of renewable energy; and finally the fact that solar power

and energy efficiency

upgrades and improves your property.

In 2007, they began with the simple installation of a solar water heater. From 2007 - 2010, the Catlins installed over 40 solar panels. In 2009, they replaced some of their old home appliances with new energy efficient ones—new heat pump, EnergyStar refrigerator, solar powered clothes dryer, and installation of compact fluorescent light bulbs. They also installed a solar powered attic fan and replaced windows and doors with more energy efficient ones.



This year it was their hope to produce more





energy than they could use and because of this, they will receive a credit from the power company for generating power.

Dan and Carol are very proud of their home and what they have accomplished. Their home was featured in the Fall 2009 Arizona Solar Energy Association National Solar Tour.

For more information, please contact Dan Catlin (dcatlin@ftmcdowell.org).

#### Fort Belknap Indian Community Showcases Tribal Energy Development by Allyson Kelley-Fort Belknap Indian Community

In August 2010, over 165 people gathered in Billings, MT, to learn about energy development on tribal lands. Fort Belknap Environmental Director, Ina Nez Perce led the initiative that attracted the attention of federal, state, tribal, and local representatives from across the nation. Energy development on tribal lands has occurred for decades, and the environmental and cultural impacts from development persist. Development has not always included the tribal environmental departments, community members, and tribal leadership. The authority and decisions surrounding energy development on tribal lands has been unclear at best. Fort Belknap Indian Community shared their concerns with other regional tribes and found that they had the same questions and concerns.

Tribes are now taking responsibility and a leadership role in the energy development process. The conference highlighted the work of tribes and federal, state, and local agencies in this process. While federal agencies such as the EPA, BIA, and BLM take an active role in the energy development process, the decisions regarding energy development are made by tribes. This was evident in the number of presentations highlighted at the conference and the stories told by participants and tribal leaders alike.

• Chairman Wendsler Nosie Sr., of the San Carlos Apache Tribe, inspired the audience to take an active role in energy development, and said that tribes were once victims but are now challenged to become the leaders in energy development. Chairman Nosie encouraged the audience to cross boundaries and unite with other leaders to protect tribal lands.

◆ Gerald Wagner, Environmental Director of the Blackfeet Nation, shared information about energy development without the consent of the tribe and the need for additional oversight and communication among agencies and energy companies to protect tribal lands.

♦ Ken Haukauss, of the Rosebud Sioux Tribe Utility Commission highlighted alternative energy projects including the largest wind turbine in the nation and various solar energy projects on the Rosebud Reservation. Mr. Haukauss stressed the importance of alternative energy on tribal lands and the practicality of using renewable energy resources.

◆ Joe Walks Along, Water Quality Director of the Northern Cheyenne Tribe, said that tribes must protect water quality and culture from the negative impacts of energy development.

• Earl Old Person, Chief of the Blackfeet Nation, cautioned the audience and Tribal Leaders to be careful about their decisions surrounding energy development.

◆ Steve Brady, Northern Cheyenne Cultural Committee Chairman, shared his experience with protecting cultural resources on the Northern Cheyenne Reservation.

• President Tracy King said tribes will no longer allow the federal government and energy development companies to ruin tribal lands.

◆ Dr. Richard Littlebear, President of Chief Dull Knife College, stressed the importance of language and culture and the role of tribal colleges to develop skills and training.

*The Fort Belknap Indian Community Environmental Department led by Ms. Nez Perce and Mr. Dale Snow received funding through a grant from the EPA to host the conference.* 

# **TRIBAL AIR NEWS**

### Fort Belknap Indian Community Hosts Energy Conference

by Jen Youngblood—NTAA Staff

The Fort Belknap Indian Community Environmental Department and Tribal Council hosted a conference in Billings, Montana during the week of August 16<sup>th</sup>, titled "*Energy Development in Indian Country: Protection of Air Quality and the Environment.*" The conference was attended by representatives of many Tribal Nations from across the United States, several Tribal council members, and numerous representatives from various federal agencies. The President of the Fort Belknap Indian Community, Tracy King, began the conference with a welcome after the opening prayer by Joseph Ironman, Sr., a Fort Belknap Tribal Elder and posting of the colors with the Dry Lake Singers drum group.



The three day conference, included discussions related to the NEPA process, climate change and many aspects of oil and gas development on tribal lands. Tribes such as Northern Cheyenne, Rosebud Sioux, and Crow Tribe discussed their own programs for alternative energy development and the importance of cultural resource preservation when developing oil, gas, and alternative energy programs.

During the conference, San Carlos Apache Chairman Wendsler Nosie, Sr., highlighted many of the human rights issued involved with Tribal communities and energy development and NTEC/ NTAA's Bob Gruenig, was part of a panel answering legal questions about energy development in Indian Country. Many thought provoking questions were posed to the panel.

The conference closed with an eco café and the retiring of the colors with the Dry Lake Singers. The presentations from this conference will be available at: <u>http://www.fbicedc.org/</u>.

If you have any questions about the conference, please feel free to contact the Fort Belknap Indian Community Conference Planning Team: Allyson Kelley at (406) 855-7334 or <u>kelleyallyson@gmail.com</u>; Ina Nez Perce at (406) 353-8429 or <u>nezperceina@yahoo.com</u>; Kermit Snow at (406) 353-8368 or <u>c2nites2000@yahoo.com</u>; or Adriann Killsnight at (406) 477-3638 or <u>Blackbirdwoman@hotmail.com</u>.



### Tribal Alaska: Collaboration on Air Concerns–Recent Efforts

by Mary Manous, Region 10

The sources of air pollution in tribal communities of rural Alaska have been the target of a variety of collaborative efforts by tribes, consortia, nonprofit organizations, the State of Alaska and federal agencies. Tribes in Alaska face unique challenges to protecting air quality and reducing health risks in their communities:

- \* Most tribes do not have a reservation or defined lands where they can assert jurisdiction to address air quality issues.
- \* Frozen ground prevents burying waste in landfills, and many communities resort to burning trash which creates air pollution.
- \* Electricity primarily comes from diesel generators which produce particulate matter and other air pollutants.
- \* The cold climate means people spend a lot of time indoors in air tight homes and buildings where indoor air pollution and humidity can rise to unhealthy levels.
- \* Many homes have older wood stoves which can be inefficient and create air pollution.
- \* Dust from unpaved roads may contain pollutants that can be inhaled or deposited on subsistence food sources.

The five most common issues relate to solid waste burning, road dust, diesel emissions, wood burning, and indoor air. Each of these may involve different responsible individuals and sources of technical or programmatic support. In many cases, there are actions that individuals in the communities themselves can do to reduce the pollution and its impacts. An increasing number of projects and initiatives have been undertaken recently to raise awareness of air pollution sources and options for addressing them. Effective collaboration and involving all the responsible or interested partners has been the key to success in these projects.

One such collaboration has resulted in the "Clean Air, Healthy Villages" Video and Fact Sheet series on the five main air pollution issues or challenges faced by rural Alaskan tribal communities. Each short video covers one of the problems from the view point of tribal community members, possible health impacts from professionals, and options that may be available to address the pollution source.

These videos and fact sheets were produced through a partnership and collaboration of tribal members and staff from Orutsararmiut Native Council, Bethel, Native Village of Napakiak, University of Alaska Fairbanks Cooperative Extension Service, Center for Disease Control, Yukon Kuskokwim Health Corporation, Alaska Department of Environmental Conservation, RurALCAP, Alaska Native Tribal Health Consortium, and EPA Region 10 with funding support from the EPA Office of Air and Radiation. The series is available at <a href="http://yosemite.epa.gov/R10/TRIBAL.NSF/">http://yosemite.epa.gov/R10/TRIBAL.NSF/</a> programs/tribalairalaska and are the core materials for the new Alaska Tribal Air Toolkit that can be ordered through that website by Alaskan tribes. They are being used for outreach to tribal communities, councils, and schools and at training sessions and conferences across the state.

### "Clean Air, Healthy Villages" Video and Fact Sheet Series

*This video and fact sheet series looks at some of the major air quality issues facing Alaskan Native Villages and explores solutions to help tribal communities address those challenges.* 



**Introduction -** This video summarizes five of the major air quality challenges for rural Alaskan Native Villages: diesel emissions; indoor air quality; road dust; solid waste burning; and wood smoke. <u>Audio transcript</u>

**Diesel Emissions -** Diesel fuel is used in rural Alaska to produce electricity and fuel boats, vehicles, and planes. This video explains how to minimize exposure to diesel exhaust and maximize the efficiency of diesel engines.

Diesel Emissions Fact Sheet (PDF); Audio transcript

**Indoor Air Quality -** In many Alaskan communities, the cold climate means people spend a lot of time indoors in air tight homes and buildings where indoor air pollution and humidity can rise to unhealthy levels. This video highlights sources of indoor air pollution and how to address them. <u>Indoor Air Quality Fact Sheet (PDF)</u>; <u>Audio transcript</u>

**Road Dust** - In rural Alaska, ATVs and other vehicles driving on dirt roads contribute to airborne dust that can aggravate respiratory problems, settle on subsistence foods, and contribute to poor indoor air quality. This video explains how to limit the impacts of road dust and protect community health. <u>Road Dust Fact Sheet (PDF)</u>; Audio transcript

**Solid Waste Burning -** Burning garbage is a common practice in many rural Alaskan communities. However, air pollution from burning waste is hazardous to human health, especially for elders and children. This video explores solutions to reduce impacts of solid waste burning. <u>Solid Waste Burning Fact Sheet (PDF)</u>; <u>Video transcript</u>

**Wood Smoke** - Many people in rural Alaska use wood stoves to heat their homes and bath houses. This video summarizes the health impacts from wood smoke and provides step-by-step instructions for how to burn "small, dry, and hot" to save fuel and keep the air clean. Wood Smoke

### TAMS Center 10 Year Anniversary Celebration

by Farshid Farsi, TAMS Center

In 1999, the visionaries from Northern Arizona University / Institute for Tribal Environmental Professionals (NAU/ITEP) and EPA Radiation and Indoor Environments (R&IE) National Laboratory came up with the idea of creating a Center to respond to increasing technical demands of tribes in the air quality arena. Utilizing the vast resources at R&IE Lab in Las Vegas, NV, and receiving technical support from EPA's Office of Air and Radiation (OAR), a Center for technical service excellence was established where tribal technical air quality needs are met in a highly efficient and expeditious manner. The Tribal



Air Monitoring Support Center (TAMS) was created to assist tribes to build and advance their technical air quality management capacity, so they can better manage and protect their air, environmental, and cultural resources while exercising their tribal sovereignty.





The TAMS Center is governed by seven Steering Committee (SC) members who are selected each year by their peers representing tribes in their regions at the TAMS semi-annual face to face meetings. The term for the TAMS SC members are three years staggered. During a typical meeting, topics most relevant to the tribes are discussed in detail and action plans are assigned to the TAMS staff to carry out and address. Currently, SC membership includes one member from Region 1 tribes, one from Region 4 tribes,

two from Region 5 tribes, one from Region 8 tribes, one from Region 9 tribes, and one representing Alaskan Native Villages and Region 10 tribes. After the in-person meetings, conference calls are held to discuss action items and progress since the face to face meeting. Although the majority of technical training opportunities that the TAMS Center has offered have had a particulate matter monitoring focus, in recent years the TAMS Center has expanded its offering of classroom training sessions to cover

topics such as gaseous pollutant monitoring, data management, Quality Assurance Project Plans, Indoor Air Quality, Air Quality System (AQS), Geographic Information System (GIS) for air quality, and ecosystems and air quality.

Continued on Page 9

# **TRIBAL AIR NEWS**

Continued from Page 8



A majority of the requests the TAMS Center has received in recent years have been for one on one Professional Assistance (PA) where TAMS sends an expert (principally the ITEP Technology Specialist) to a tribal monitoring site to assist the tribal professionals with needs such as siting of a new instrument, set up of a meteorological tower, and troubleshooting of existing equipment. Complementing the PA program is the equipment loan program at the TAMS Center in which calibrated air



monitoring equipment can be shipped to tribes for deployment. These instruments in most cases are used by tribes to gain a better understanding of their tribal air quality status. To date, over 1100 tribal professionals have received technical assistance from the TAMS Center either in classroom

training courses or through the PA program.

On September 15, 2010, the 10 year TAMS anniversary celebration began with a prayer and welcome remarks by the Chairperson of the Las Vegas Paiute Business Council. The sessions on the agenda brought a sense of belonging to all present. Tribal professionals testified personal experiences of how the TAMS Center assisted them in building their program capacity. The highlight was the opportunity for the previous SC members

to witness the progress of the TAMS Center through photographs, as well as an opportunity to mingle with current SC members and staff. The ceremony continued with entertainment provided by native drummers and singers. Steve Page, EPA-OAQPS Director, provided the keynote address for a reception dinner the same night. The reception also provided for opportunities for visiting and mingling.

For the coming years, the TAMS Center strives to stay a step ahead of technology so that top quality service and assistance can be provided to the tribes in current and new arenas such as climate change adaptation, radon, and weatherization.



#### Salt River Wins Award at EI Conference

by Sally Dombrowski, OAQPS

The 19th International Emission Inventory Conference was held in San Antonio, Texas, the week of September 27, 2010. This year's Conference focused on how emission inventories inform emerging air quality and environmental issues. The conference provided a useful forum for the exchange of ideas and information on the development and uses of emissions data. Participating organizations included state, tribal, local, regional, international government officials and industry representatives.

Of particular note this year was the submission of data to the new Emission Inventory System (EIS). The EIS is the new information system for storing all current and historical emissions inventory data. It will be used to receive and store emissions data and generate annual and the triennial National Emission Inventories. At the plenary session, several governmental agencies were recognized. Among those receiving recognition was the Salt River Pima Maricopa Indian Community (SRPMIC). SRPMIC was the first tribe to submit data to the new EIS production environment. Chris Horan accepted the award.

The proceedings for this conference will be published on-line at <u>www.epa.gov/ttn/chief/</u> <u>conference/ei19</u> by mid-November. Chris Horan's paper, as well as Kris Ray's of the Confederated Tribes of the Colville Reservation, will be available under the Tribal Session. If you are interested in information on how to register for the EIS, please contact Sally Dombrowski at <u>dombrowski.sally@epa.gov</u>.



### **REGULATORY UPDATES**

Advance Notice of Proposed Rulemaking on the New Source Performance Standards (NSPS) Review Strategy Under the Clean Air Act Section 111(b)(1)(B) is scheduled for signature in December 2010. POC for this Strategy is Tina Ndoh (<u>ndoh.tina@epa.gov</u>).

Notice of Proposed Rulemaking (NPR) on **NSPS / Emission Guidelines for Sewage Sludge Incinerators** is scheduled for signature in December 2010. The public can provide comments on this rule by November 15. POC for this rule is Amy Hambrick (<u>hambrick.amy@epa.gov</u>).

Supplemental NPR on NSPS for Municipal Solid Waste Landfills is scheduled for signature in January 2011. POC for this rule is Hillary Ward (ward.hillary@epa.gov).

NPR on **Revisions to Definition of Volatile Organic Compounds (VOCs); Exclusion of Methyl Iodide** is scheduled for signature in February 2011. POC for this rule is Dave Sanders (<u>sanders.dave@epa.gov</u>).

NPR on **Oil and Natural Gas Sector - NSPS, National Emission Standards for Hazardous Air Pollutants** (**NESHAP**), and **Control Techniques Guidelines** is scheduled for signature in February 2011. For more information on this rule, visit <u>http://yosemite.epa.gov/opei/RuleGate.nsf/byRIN/2060-AP76</u>. POC for this rule is Bruce Moore (moore.bruce@epa.gov).

NPR on **NESHAP Risk and Technology Review (RTR) for Primary Lead Smelters** is scheduled for signature in February 2011. For more information on this rule, visit <u>http://yosemite.epa.gov/opei/RuleGate.nsf/byRIN/2060</u>-AQ43?opendocument.

Final Rule on **NESHAP for Gold Mine Ore Processing** is scheduled for signature in December 2010. POC for this rule is Chuck French (<u>french.chuck@epa.gov</u>).

Final Rule on **Revisions to Lead Ambient Air Monitoring Requirements** is scheduled for signature in December 2010. POC for this rule is Kevin Cavender (<u>cavender.kevin@epa.gov</u>).

Final Rule on **Revisions to Test Method for Determining Stack Gas Velocity** is scheduled for signature in January 2011. POC for this rule is Jason Dewees (<u>dewees.jason@epa.gov</u>).

Please note that this list is not all-inclusive—for information on these and additional upcoming EPA rules, go to <u>www.regulations.gov</u> or the Gateway website <u>http://yosemite.epa.gov/opei/RuleGate.nsf</u>.

**Opportunity** for Involvement for the Fort Hall Idaho Tribes on the NESHAP for Elemental Phosphorous Production and Residual Risk and Technology Review Amendments to the Phosphoric Acid and Phosphate Fertilizer Production NESHAPs rules. EPA is in the early stages of these rules and is seeking any and all data, stories, pictures, measurements, etc., that tribes or individuals may have collected. For more information on these rules or to submit data or stories, please contact Susan Fairchild at <u>fairchild.susan@epa.gov</u>, or (919) 541-5167.

Page 11



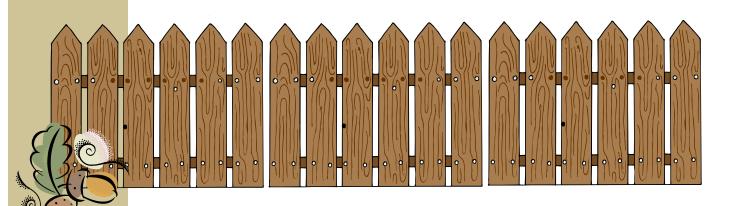
U.S. EPA OAQPS, C304-03 Research Triangle Park, NC 27711 Phone: 919-541-3650 E-mail: chappell.regina@epa.gov



### TRIBAL AIR NEWS

Tribal Air News is produced by the US Environmental Protection Agency's Office of Air Quality Planning and Standards, Outreach and Information Division, Community and Tribal Programs Group. The newsletter is produced quarterly and is distributed electronically. For more information about the newsletter or to contribute stories and pictures contact:

Regina Chappell (<u>chappell.regina@epa.gov</u>) or Angel McCormack (<u>mccormack.angel@epa.gov</u>).



### MARK YOUR CALENDAR



• <u>ITEP training sessions: www4.nau.edu/itep/air/training\_aq.asp</u>

GIS for Air Quality	November 16-18	Las Vegas, NV
Alaska Tribal Air Conference	December 1-2	Anchorage, AK
Air Monitoring Data Management	December 7-10	Phoenix, AZ
Intro to Tribal Air Quality	January 11-14	Flagstaff, AZ
Improve & Protect Air Quality in Indian Country	January 25-28	Las Vegas, NV