



Hot Air from EEOP – A Newsletter

Environmental Education Outreach Program (EEOP)
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<http://www.nau.edu/eeop/newsletter>

The Newsletter

This newsletter is a service of the Institute for Tribal Environmental Professionals (ITEP) Environmental Education Outreach Program (EEOP). The EEOP staff created this newsletter for K-16 students, educators, and tribal professionals that are interested in learning more about environmental issues with an emphasis on air quality. This issue of the newsletter will focus on mercury and uranium, two naturally occurring, toxic chemicals.

Revised EEOP Mission and Vision

The EEOP staff has been developing a new mission and vision statement. We would like to share this mission and vision statement with you and ask for your feedback.

“The vision and mission of the EEOP staff is to foster life-changing learning experiences in the application of science, mathematics, technology, and engineering to local issues that empower American Indian students of all ages to become self-determinate citizens of their sovereign tribal nation.”

Courts Responds on Mercury Pollution Lawsuit

The US Environmental Protection Agency (EPA) must require power plants, the leading source of mercury pollution in the US, to do a better job controlling their emissions of the dangerous toxin, a federal court ruled today. The DC Court of Appeals ruled that EPA violated the Clean Air Act (CAA) when it removed oil and coal fired power plants from the list of sources that are subject to the CAA's most stringent air pollution controls. The agency must now develop tougher standards to control mercury and other toxic pollutants from new and existing power plants.

"Today's decision is a huge victory as it requires EPA to get back to the business of protecting people's health rather than higher profits for electric utilities," said John Suttles, attorney with the Southern Environmental Law Center. "As a result of this ruling, EPA will have to go back to the drawing board and follow the Clean Air Act and the advice of the nation's leading health experts to adequately protect the public from this harmful neurotoxin."

Power plants are major sources of mercury, arsenic, lead, other heavy metals (including uranium), and dioxins. Because these toxic pollutants are all classified as "hazardous," the Clean Air Act (CAA) requires EPA to identify their sources and develop the most stringent standards to control emissions from those sources. The court ruled that EPA erred when it took power plants

off the list of hazardous pollution sources when issuing its Clean Air Mercury Rule. EPA now has two years to develop mercury emissions standards for existing plants.

The ruling will also have a significant effect on the nation's approximately 100 proposed new coal-fired power plants. According to the ruling, new plants must determine on a case-by-case basis how to control mercury pollution at least as well as the best-controlled similar source. This could result in as much as a 95 percent or greater reduction of mercury and other air toxics in the new coal-fired power plants.

Released in May 2005, the EPA's Clean Air Mercury Rule exempted power plants from the most stringent Clean Air Act requirements to control mercury and instead instituted a "cap and trade" approach, which allows facilities to trade mercury pollution credits with other less-polluting power plants. Under its plan, the EPA projected that US power plants will continue to emit nearly 20 tons of mercury into the air every year through 2025 or later.

While "cap and trade" may be appropriate for some pollutants such as carbon dioxide, "cap and trade" is not appropriate for an air toxic that tends to deposit downwind of the source, creating "hot spots". A pollutant such as carbon dioxide mixes throughout the atmosphere and does not create toxic effects for one particular region, while mercury tends to deposit downwind of the power-plant, creating a toxic area with measurable impacts on human health.

"The mercury emitted by our nation's coal-fired power plants poses serious health risks for all Americans," said Georges C. Benjamin, MD, executive director of American Public Health Association. "Congress and now the courts are recognizing the need for stronger environmental protections to safeguard human health. We call upon the EPA to uphold the intent of Clean Air Act and work to eliminate mercury emissions."

Mercury emissions from power plants are deposited in watersheds and water bodies, where it is converted to its most toxic form, methyl mercury. EPA estimates that as many as than 600,000 children are born each year with unhealthy levels of methyl mercury in their bodies. Despite this figure, EPA adopted the flawed mercury rule ignoring the counsel of its own Children's Health Public Advisory Committee and thousands of health professionals nationwide.

Uranium Mining

With the increasing value of uranium ore comes an increased interest in mining uranium. This sets the stage for a variety of conflicts. For example, recently the US Forest Service approved a series of uranium exploration sites only a few miles from the Grand Canyon. Three environmental groups filed suit in US District Court in Prescott claiming that the US Forest Service violated several environmental laws when it approved exploratory drilling without a full environmental review. The US Forest Service stated that the 1872 Mining Law specifically authorizes mining on public lands and that it could not prohibit the activity.

Mining companies are interested in renewing uranium mining in tribal communities as well. However, the tribal nations are fighting back. In 2005 the Navajo Nation passed the Diné Natural Resources Protection Act which prohibits uranium mining and milling on the Navajo Nation. The Navajo Nation passed the Protection Act in response to a 65-year legacy of death and disease according to Navajo Nation President Joe Shirley, Jr. "As long as there are no answers to cancer, we shouldn't have uranium mining on the Navajo Nation," the President said.

In 2007 the U.S. Environmental Protection Agency's determined that that an area of land known as Section 8 within Church Rock Chapter is "Navajo Indian Country" within "a dependent Indian community." The determination means that the EPA has recognized the sovereignty of the Navajo Nation with regard to upholding the Diné Natural Resources Protection Act to prohibit uranium mining and processing on the Navajo Nation.

As the prices for uranium continue to rise, the stage for continued conflict has been set. The US 1872 Mining Law gives broad powers to miners. However, many communities, including tribal communities, recognize that the legacy of past uranium mining is one of destruction of the land and harm to human health. They are determined to use every means possible to keep future uranium mining out of their communities.

The EEOP staff is organizing a Uranium Education Conference which will focus on uranium mining in the past and future. If you are interested in learning more about uranium, complete the attached registration form.

Spotlight – An ITEP Intern

Contributed by Johna Boulafentis, Environmental Outreach Specialist, Nez Perce Tribe

The ITEP Summer Internship changed the course of my life. Sometimes while working at my desk or while teaching children about air quality I will happily think "Wow! Whoever thought I would be here doing this?" Back in the spring of 2004, I was contemplating my future career and knew from my previous employment and international experiences that I wanted to combine my interests in education and working with people. I started applying for admissions recruiter positions at colleges and universities in hopes of fulfilling these needs.

At that time, my alma mater, Dickinson College in Carlisle, Pennsylvania, had recently developed a listserv of jobs, internships, and other opportunities. Most of the postings did not interest me, but there was one that stood out; the ITEP Summer Student Internship Program. Being a senior majoring in anthropology and minoring in sociology, I felt anxious about finding a full-time job and paying off student loans. I debated applying for the internship, but thought it seemed like an opportunity of a lifetime. When would I have the chance to work for a tribe and do good deeds for the environment again?

So I applied and a few weeks later found out that I had been placed with the Nez Perce Tribe Environmental Restoration and Waste Management's Air Quality office in Idaho. I felt exuberant about the position of "Education and Outreach Intern." My main responsibility was gathering outreach suggestions and burn ordinance information for the 11 cities on and 5 counties that intersect the Nez Perce Reservation. I helped the office prepare for the implementation of EPA Region 10's Federal Air Rules for Reservations (FARR) in June 2005. I also developed and presented outreach materials on air quality. I taught a lesson during a Jr. High math and science camp and provided air quality information during a home fair.

The 10 weeks passed quickly and I felt saddened when leaving in August. However, I felt encouraged knowing that the office planned to hire an outreach person in the future. I maintained contact with my coworkers and in the interim traveled to Greece to visit family and worked as a K-12 substitute teacher in West Virginia. I interviewed for the position in January 2005 and within a month heard that I had received the job. At the end of February, I moved to Idaho with two pieces of luggage and Nosy, my 11 year old cat.

The last three years have been truly rewarding. My job is to educate people on the Nez Perce Reservation about air quality in general and specifically, the FARR. Implementing air quality rules that apply to both tribal and non-tribal members has a myriad of challenges, but over the years people have become more accustomed to contacting our program to obtain burn permits and information about air quality. I attend as many public events as possible from county fairs to health events to community organizations to school classrooms. My coworkers typically see me carting around a display booth and boxes of pamphlets en route to “some event.”

Over time as our office has participated in new projects my responsibilities have grown. Early on in my job, I learned how to conduct an indoor air quality assessment and have assisted in the evaluation of approximately 40 Nez Perce Tribal Administrative Buildings in Lapwai. In a collaborative project with the University of Montana, “Air Toxics and Health on the Nez Perce Reservation,” I also work with two high schools and a few college classes who are sampling for VOC’s in their homes. Lastly, I work with University of Montana researchers to coordinate our woodstove indoor air quality study and change-out of 16 tribal member homes on the Reservation. With this project I supervise two, ITEP Short Internship Program interns, who are conducting sampling in the homes.

When I think about my life I realize I am exactly where I am meant to be. I can honestly say that I would not want to be anywhere else right now. My needs for providing education, working with the public, and protecting the environment are all being met. And for these reasons, I will forever be abundantly grateful for the ITEP internship.

Future Issues

We are interested in articles sharing stories from students, teachers, or tribal professionals influenced by ITEP or EEOP activities. If you would like to be published in our newsletter, send Mansel your proposed article.

Next month we will explore how mercury from power-plants impacts on many tribal communities and we will continue to explore the issues associated with uranium mining.

Credits and Contacts

The US Environmental Protection Agency (USEPA) Office of Air and Radiation provides part of the funding to make this newsletter possible. The newsletter is disseminated on various list serves, however, if you would like to join the newsletter list serve, contact Mansel.

The author of the articles about mercury and uranium drew from several different sources, including Associated Press (AP) releases, several newspapers such as the Arizona Republic and the Arizona Daily Sun, and several websites, including the US EPA website.

Our staff looks forward to providing new services and developing new programs, as well as continuing existing programs. We especially look forward to hearing from you. So please visit our website at <http://www.nau.edu/eeop> or contact us via telephone or email.

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