



By: Phillip Mee-Air Quality Specialist  
**Mold Basics:**

Mold is an organism that is present both outdoors and indoors and is a part of the natural environment. Outdoors, it is a type of fungus that plays an important part in nature by decomposing dead material such as, fallen leaves, dead trees, and dead animals and return the nutrients to the environment. Mold requires; air, food, temperature and moisture, in order to live and grow, but water is the key for mold growth. Fragmentation and sporulation is how mold spreads and reproduces, meaning that, tiny lightweight spores are released and travel through the air in search of water/moisture. If mold growth happens indoors, it's because mold spores landed on a surface that was wet/moist. If there is mold growth in your home, you must clean up the mold and fix the water problem. If you clean up the mold, but don't fix the water problem, then, most likely, the mold problem will come back. Mold will not grow if there is no moisture. Stop the water, stop the mold.

The best way to clean up mold is with warm soapy water. Clean the area thoroughly and be sure to completely dry afterwards. It's best to dry water-damaged areas and items within 24-48 hours to prevent mold growth. There is proper protection equipment/PPE that should be worn such as; a respirator or a N95 mask, gloves, eye protection, and if needed, a protective suit, when a person is cleaning or removing mold. There are some items

that can't be cleaned. If you have mold on clothes, carpets and/or furniture, these items would be harder to clean. Depending on the damage you may have to get rid of the items or find a specialist that can clean up the items for you.

Not all mold is bad, but should be treated as such since mold has the potential to cause health problems. Mold produces allergens (substances that can cause allergic reactions), irritants, and in some cases, potentially toxic substances (mycotoxins). Touching or inhaling mold or mold spores may cause allergic reactions to sensitive individuals. Allergic responses include, sneezing, runny nose, red eyes, and skin rash (dermatitis). Exposure to mold can irritate eyes, skin, nose, throat and lungs of both mold-allergic and non-allergic people. Mold can also cause asthma attacks in people with asthma who are allergic to mold. If you have an allergic reaction or irritation issues from coming in contact with mold and it lasts for a long period of time. Visit your doctor to see what can be done to stop the issues.

If anybody has any concerns about their Indoor Air Quality (IAQ). Please contact Phillip Mee at the Office of Environmental Services at, 918-968-0046, or phillip.mee@sacandfoxnation-nsn.gov to set up an individual consultation where we can discuss any specific concerns/issues and determine if an indoor air quality assessment needs to be conducted.



**Winter is just around the corner...** By Dale Miller

The days are getting shorter and the nights are getting colder. Many are preparing our homes for the coming winter. The furnaces are being serviced and filters changed. Windows sealed shut and curtains drawn. Cracks around the doors are getting fresh sealant put into fill them. Insulation is even being checked and in some cases added to the ceilings and walls. Blankets are being pulled out of storage and sweaters are moving out of the backs of closets.

Now these are common for most, but there is another house that gets neglected until something bad happens. The well house that supplies the water to drink, bath, clean, and generally live comfortably. It's the last thing you want to have a problem with on a freezing cold day.

The well house needs to be winterized just like the rest of your home.

- \* Fix anything broken-door, walls, roof, valves
- \* Insulate everything-pipes, walls, roof, door
- \* Consider putting a heat lamp or small heat source inside
- \* Seal it up to prevent bugs, mice, rodents from using as their winter home
- \* Check the well cap make sure it is sealed and sanitary
- \* Winter is inevitable don't wait until something bad happens at the worst time possible. Protect yourself and your family. Enjoy working in this wonderful weather, instead of the sleeting, blowing, ice storms that may be on the way this winter.

**Protectors Unseen**

By: Environmental Director, Jeremy Fincher

I would like to share with everyone some operations of the Office of Environmental Services (OES) that some may not be aware of. The Office of Environmental Services receives no tribal funding and has no permanent positions, as a result, OES prepares, writes, and submits its own grant applications for Federal grant funding every year in hopes that the department can continue to exist. This fiscal year OES had 3 grant applications approved where federal funding was awarded. In this article I will focus on the Clean Water Act (CWA) Section 106 grant that was awarded. This grant has been an important component to the existence and success of the OES department over the last several years.

There are two components to the grant's funding, "Base" and "Variable". The foundation, or "Base" of this grant is to perform surface water monitoring for streams and rivers and then compile the data and submit reports back to the Environmental Protection Agency. It may not sound too interesting, but this actually allows us to put boots on the ground and go out into waterbodies within Sac and Fox Nation jurisdiction and seek out pollution and its sources. In past years, the CWA program maintained around 8 monitoring locations spread across 3 different watersheds. A watershed is all the land area that drains into a body of water. Within Sac and Fox Nation jurisdiction we have 3 different watersheds, one for each of the large rivers that flow through it. The Cimarron to the North, Deep Fork in the middle, and the North Canadian to the South. Next time you're driving North or South on Highway 99 between Cushing and Prague try to see if you can identify the ridges that separate the watersheds.

5 of the 8 monitoring locations in previous years were located in the Cimarron River watershed. This past year OES increased the number of location in the Cimarron River watershed to 7. Currently OES only has 1 monitoring location for the Deep Fork River watershed and 1 for the North Canadian River watershed. One of OES's goals over the next two years is to increase its number of monitoring locations for each of the 3 watersheds and Veterans' Lake. The number of monitoring locations should at least double over the next 2 years. After a sufficient number of monitoring locations are established for each watershed, OES plans to focus on a single watershed each year and rotate them so each watershed will be studied every 3 years. Currently, OES does not have the funding our manpower to monitor all 3 watersheds simultaneously. The rotating schedule allows OES to expand the reach of its monitoring program by

collecting samples in areas that have never been sampled before and be able to better assess the health of the entire watershed instead of the health in just one local area. The expansion of OES's surface water monitoring program is significant for many reasons. It will help determine and locate areas of concern, areas that may need additional monitoring, improve identification of different types and sources of pollution, and provide a better understanding of the health of the streams and rivers tribal members use and depend on.

Additionally, this past Spring Dale Miller, Water Quality Specialist, and I attended a workshop for first responders to fish kills and became a member of an inter-tribal/inter-agency group called the Oklahoma Kill Response Management Team (OKRMT, pronounced O-Kermit like the Muppet). This group was formed so when a fish kill is reported the information is received and communicated quickly to the entire group and whoever may be in the area can respond quickly and can request additional support and sampling equipment from other environmental professionals in the area. A quick response is key when trying to identify the cause of a fish kill because the "crime scene" is constantly moving as the water flows downstream. Participating in OKRMT is just an example of the many partnerships, strategies, and tactics OES is employing to keep improving the Department, even while funding may be declining, we strive to find ways to keep going.

Lastly, please know, year round OES is out in the field actually getting in these waters to collect samples and actively, proactively, seeking out and monitoring for any sources of contamination that could harm anyone using those waters, including the aquatic life and other animals. That is why we are focusing our efforts on expanding to include more monitoring locations so we can try to protect tribal members, the broader community, and the environment even more. So this winter when you're looking out the window at the snow and it's bitterly cold or you're watching the news and hear about another fish kill or chemical spill, know there is someone out there trying to make it better, even if unseen.

Please look for my article in next month's Newsletter where I will highlight the "Variable" funding portion of the CWA grant, including macroinvertebrate sampling, rural water well monitoring, habitat assessments, fish collections, and fish tissue biopsies and how they are used to help protect the Environment. Kiyakapati Aki.

Thanks for reading, JF.

## INDOOR AIR QUALITY

*Please mail or return form to the address below.*

*You may also contact us via email, phone, or fax.*

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NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

CONCERNS: \_\_\_\_\_

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**What's in your air?**

- Particulates: dirt, dust, pollen spores, pet dander, candle soot
- Bioaerosols: viruses, mold, bacteria, living micro organisms
- Volatile Organic Compounds: odor causing contaminants, chemical gases, solvents

SOURCE: oltrom.com/IAQ/index

*We are seeking input from Sac and Fox Nation Tribal Members so we may address their concerns over Indoor Air Quality (IAQ). All respondents will be contacted individually to better understand their concerns, provide insight into future project development, and determine if an IAQ assessment is needed. All personal information provided is confidential.*

*This service is provided at no cost to you!*

# America Recycles Day

## November 15

Dust  
Pollution  
Chemicals  
Mildew  
Quality  
Gases  
Mold  
Pollen  
Toxic  
Air  
Fumes

**Want to know about Indoor Air Quality?**

Learn what could be in your Indoor Air.

Learn about health issues from poor Indoor Air.

Learn how to make your Indoor Air better and healthier.

**Breathe Healthy Air!**

## DECEMBER 4, 2015

**Presentation will be in Stroud, OK at the Sac and Fox Nation Learning Center in the large conference room.**

**Participants will receive a bag including energy saving items and information handouts on Indoor Air Quality.**

**Snacks will be provided!**

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December 4, 2015 @ 2pm