

Aaniiih & Nakoda Environmental Newsletter

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Landusky water treatment facility in 2004. Courtesy of Bureau of Land Management

Aerial images help state agency discover illegal mining of Superfund site

After capitalizing on a two-day lapse in a federal mining ban at Montana's beleaguered Zortman-Landusky mines in 2020, a small mining company appears to have been developing its claims without the authorization of the state environmental

agency.

By Laura Lundquist | July 20, 2022 https://www.courthousenews.com/aerial-images-help-state-agency-discover-illegal-mining-ofsuperfund-site/

(CN) — After capitalizing on a two-day lapse in a federal mining ban at Montana's beleaguered Zortman-Landusky mines in 2020, a small mining company appears to have been developing its claims without the authorization of the state environmental agency. In early July, the Montana Department of Environmental Quality drafted an administrative order that would require two individuals and their mining companies to reverse the damage they've caused to the site of the former Zortman gold

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mines. They'd also be required to pay more than a half-million dollars in penalties for violating the Montana Metal Mine Reclamation Act by operating without permits and for refusing to post bond money for reclamation.

However, at this point, the administrative order is only a draft document, said Montana DEQ spokeswoman Moira Davin. But Davin said it's being used as a stick to encourage Luke Ployhar of Bozeman and Owen Voigt of Helena to stop their digging, which is destroying some of the reclamation work that's been completed since the mine was listed as a federal Superfund site in 2004.

"The negotiations are ongoing. DEQ reserves the right to issue the order if discussions aren't successful," Davins said.

The Assiniboine and Gros Ventres tribes of the Fort Belknap Reservation are following the proceedings closely, as are three environmental groups: Earthworks, the Montana Environmental Information Center and Montana Trout Unlimited. They reacted Wednesday upon learning of the draft administrative order.

"The devastation at Zortman-Landusky from previous mining activity is unforgivable. The Little Rockies and the Zortman-Landusky area should be off limits to any more mining," said Derf Johnson, Montana Environmental Information Center attorney. "It's jaw dropping that someone would risk even further environmental devastation, and so we're heartened to see DEQ crack down on risky mining activity."

When it comes to examples of mining's devastating environmental damage in Montana, the Zortman-Landusky gold and silver mines, located in the Little Rocky Mountains just south of the Fort Belknap Reservation, are probably second only to the extensive copper mines of Butte. Pegasus Gold Corporation used the caustic process of cyanide heap leach mining to extract gold from the Zortman Mine from 1979 until it declared bankruptcy in 1998. After that, the cost of cleanup and reclamation fell to the taxpayers as the state of Montana and the U.S. Bureau of Land Management assumed responsibility. land on the Zortman mine site in 2001, which later became part of the Superfund site. According to the draft administrative order, Ployhar's purchase agreement required Ployhar to allow DEQ access to the property for reclamation activities and that the water on the property be treated forever.

The Zortman mine was one of the first large cyanide heap leach operations in the nation to open, and it experienced many problems, including cyanide spills and surface and groundwater contamination. The mine contains high amounts of sulfide rock, which produces sulfuric acid when exposed to water, either in the form of groundwater or precipitation.

After suffering years of contamination, locals finally sued Pegasus Gold under the Clean Water Act and came away with a \$36 million settlement in 1996. However, that doesn't go far when water has to be treated in perpetuity. The water sources for Fort Belknap are still threatened by acid mine drainage, but currently the tribes' funding for water treatment lasts only until 2028.

"The Aaniiih and Nakoda Tribes thank the DEQ for upholding the law and issuing a penalty that is commensurate with the egregious violation committed. We will continue to protect our precious water and sacred sites in this area of the reservation," said Jeffrey Stiffarm, Fort Belknap Indian Community president on Wednesday.

Montanans voted in 1998 to ban cyanide heap leach mining.

After the Zortman Mine was designated a Superfund site in 2004, the BLM built five water treatment plants and started mine reclamation activities, which to date have cost \$80-\$85 million, according to the administrative order.

After all that investment, Montana DEQ employees weren't happy this March to see that unscheduled excavation had disturbed some of the reclamation work.

They had been looking through World Imagery aerial photos from Sept. 20 for evidence after Voigt informed them he'd been digging for samples in the

As Pegasus Gold pulled out, Ployhar bought some



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treatment plant sludge at the Landusky silver mine, two miles away from the Zortman mine. Voigt's company, Legacy Mining, had gathered the samples to validate his proposal to process the sludge for metals, but he hadn't gotten permission to dig.

DEQ sent Ployhar and Voigt a letter saying any disruption of completed or ongoing reclamation work could risk liability under Superfund law. DEQ requested Ployhar send a written response acknowledging that he understood, but Ployhar never responded.

In addition to Voigt's sludge excavation, DEQ discovered seven other illegal dig sites in the photos, all of which were located in three regions of Ployhar's property where Ployhar and Voigt have been applying for exploration licenses since 2020. That's when Ployhar and his company Blue Arc filed a mining claim with the BLM in a two-day window immediately after a 20year mining moratorium at Zortman-Landusky expired but before the BLM could get another moratorium in place, according to the Daily Montanan.

Even though Ployhar owns the property, the BLM is involved because it oversees mineral rights and BLM land surrounds the two mine sites. So the agency banned mining within the mine sites starting in 2000 while it was cleaning up public land. The BLM has also placed mineral right moratoriums on 3,600 acres of public land surrounding the mine sites.

DEQ denied three successive exploration applications from Ployhar for various reasons. For the first proposal, Ployhar never posted the required reclamation bond. The second application proposed to reopen two underground tunnels, but Ployhar withdrew that eight months later. For the third application to dig a long deep trench, DEQ went through with an environmental assessment but several public comments said the proposal should be rejected because the area had cultural importance for the Fort Belknap tribes. A decision hadn't been reached before DEQ discovered the illegal digging.

DEQ personnel visited the eight sites at the end of March to verify what they'd seen in the aerial images. They confirmed that the digging had damaged reclamation work, including areas where vegetation, soil and capping material had been removed, causing more of an acid threat to groundwater. They also discovered that the capped entrances to the two underground tunnels Ployhar had applied to develop had been altered.

"The operator's disturbance of the adit, without review/approval from DEQ, was ill-advised as it potentially damaged the groundwater monitoring well, increased water leaving the adit and infiltrating into the groundwater and created significant safety concerns," the draft administrative order said.

Ployhar said he was just "cleaning up the entry to add doors to secure for safety and access," according to the administrative order.

Bonnie Gestring, Earthworks Northwest Program director, praised DEQ for being prepared to take enforcement action.

"It's infuriating to see such blatant disregard for the decades of reclamation work to control acid drainage and improve water quality in the Little Rockies," Gestring said.

Based on all the evidence it had found, DEQ sent letter to Ployhar and Voigt, accusing them of mining without a permit or bond. In the letter, DEQ offered the men an out by either reclaiming the disturbed areas or obtaining the necessary permits with the required bonds. The current negotiations likely include similar offers and requirements.

Two weeks later, Ployhar emailed DEQ, protesting that what DEQ thought was mining was really just preparations for campgrounds and cabins.

Ployhar most recently tried to appeal to Montana Gov. Greg Gianforte. Ployhar's June 1 email said he'd moved to Montana in 2016 to develop the mineral and recreational reserves of his property. He went on to say DEQ's requirements were unreasonable and that his mine could provide jobs. He inaccurately claimed that DEQ wouldn't need to treat the water anymore if he could mine the ore because more of the sulfide rock would be removed.

In other situations, Gianforte has expressed unqualified support for mining companies. In July 2021, his administration dropped a DEQ lawsuit begun by the

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previous administration that would have labeled Hecla Mining Company CEO Phillips Baker Jr. as a "bad actor" for his role in the Pegasus Gold abandonment of the Zortman-Landusky mines. Baker was the top financial officer for Pegasus Gold during the bankruptcy. If Baker were found to be a bad actor under Montana law, his current company, Helca, wouldn't be allowed to develop two mines proposed in western Montana.

Gianforte has criticized state and federal officials for how long it has taken to get the two mines permitted, according to the Montana Free Press.

However, the state of Montana isn't the only one to make the call. The BLM also has to approve Ployhar's claim.

"Filing a claim doesn't mean developing a claim. There'd be an extraordinarily high bar here to meet including bonding and environmental considerations," said BLM spokesman Al Nash in December. "It would be an extraordinary financial hurdle to get us to a place where we might give serious consideration for exploration there."

Zortman-Landusky mine owner fined more than \$500K for mining violations

Great Falls Tribune | August 6, 2022 https://www.greatfallstribune.com/story/news/2022/08/06/zortman-landusky-mine-owner-fined-more-than-500k-for-miningviolations/65394320007/

Using satellite imagery, the Montana Department of Environmental Quality has cited a mine owner and operator more than a half-million dollars in fines for illegally exploring mining without proper permits and warned that years of clean-up and remediation done to alleviate toxic acid mine drainage may be have been undone.

The DEQ cited Luke Ployhar, Blue Arc LLC, Owen Voigt and Legacy Mining LLC on June 20 for multiple violations at the Zortman-Landusky site. Gold mining was in operation there for years until a Canadian-based firm shuttered operations, leaving the state and federal government to clean up acid-mine drainage, partly caused by a cyanide leeching process.

Furthermore, the DEQ in its fines classified them as

"major," and had the chance to reduce the fines because of cooperation or remediation by Ployhar, but chose not to because they characterized Blue Arc as being uncooperative and unresponsive.

"Blue Arc, LLC and Mr. Ployhar have consistently worked with the DEQ, namely with respect to the water treatment on the formerly mined areas, and Blue Arc, LLC and Mr. Ployhar fully intend to continue to do so in response to this most recent misunderstanding," said Kaden Keto, a Helena-based attorney who represents Blue Arc, in a statement to the Daily Montanan.

On Wednesday, the DEQ confirmed that while it had previously granted Ployhar permission to do a small-

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scale exploration, no permit for the actual work had been issued, and his company could not proceed until the violations are settled.

The DEQ said that inspections on March 28 and May 27 revealed that Ployhar and his group had "engaged in exploration activities at eight locations on four properties owned by Blue Arc LLC."

Those activities, according to report, didn't have proper permits and did not undergo environmental reviews to make sure they would avoid or minimize harm. Furthermore, Blue Arc did not post a bond that would have assured any damage would be fixed.

The DEQ classified the event as "major," and said that part of that activity disturbed 0.6 acres of land that was affected by previous mining damage and being remediated by the Federal Comprehensive Environmental Response, Compensation and Liability Act, known as "CERCLA."

The department claimed that Ployhar and others knew the law, and knew they were required to obtain a permit, but disregarded it.

"Yet (they) still engaged in exploration activities prior to obtaining an exploration license. Respondents did not take any reasonable precautions to avoid the violation of exploring without a license," the report said.

The DEQ's fines appear to be the most it could levy and Ployhar did not receive any benefit for "good faith or cooperation" which could have reduced the base penalty by as much as 10 percent.

The report also raises the possibility that water that's being treated for toxic acid mine drainage may be at risk because of the activities.

"The eight locations of disturbance created by respondents have been left unreclaimed since at least Sept. 20, 2021, which creates a greater risk of impact from stormwater infiltration and acid rock drainage," the report said.

The DEQ said it learned and tracked the violations through satellite images.

"Each of the eight disturbance locations represents a

distinct site of mining exploration, as each site presents a risk for stormwater infiltration and acid rock drainage," the report concludes.

Inspectors said that the total maximum amount that could have been fined was well above \$2 million, but that even the current fines, totaling \$516,567 is "an adequate deterrent."

The DEQ also pointed out that a performance bond for those eight sites would have been approximately \$53,000, or cost Ployhar and the companies less than \$2,000 during the eight-month time period.

Controversy from the beginning

Ployhar, who previously told the Daily Montanan, that his family has mining ties to central Montana, bought the former mine site in a bankruptcy sale. He said that plans show a huge reserve of gold and other minerals, but the company which went bankrupt simply didn't have the capital to develop it. He, along with Voigt, told the Daily Montanan that new mining techniques could make mining on the border of the Fort Belknap Indian Community more safe, and bring a needed economic boost to the area.

However, tribal leaders and conservation organizations opposed restarting any mining activities on the site, and a two-day window that was blamed on an administrative delay allowed just enough time for Ployhar to legally apply for mining permits from the Bureau of Land Management, even though the federal agency had planned to continue to run environmental remediation at the site, foreclosing the possibility of restarting the mine.

Fort Belknap leaders also accused the DEQ of not consulting with them before permitting new mining, as well as putting their water source at risk.

"The Aaniiih and Nakoda tribes thank the DEQ for upholding the law and issuing a penalty that is commensurate with the egregious violation committed," said Jeffrey Stiffarm, President of the Fort Belknap Indian Community. "We will continue to protect our precious water and sacred sites in this area of the reservation. This is exactly why we have been fighting over the years for the return of the Grinnell Notch to us."

The Road to Tribal Water Quality Standards — Protect Our Waters

By Mitchell Healy, WQ Coordinator | Sept 2022

Tribal Water Quality Standards (TWQS) are a major component of the Water Quality Program and a very technical document that takes time to develop. Below is a summary of the TWQS progress.

- 1. In 2007, the initial draft of the TWQS was submitted to the U.S. Environmental Protection Agency (EPA) for review and recommendations.
 - a. The initial draft mirrored the Montana Water Quality Standards Use Classifications, which did not include cultural uses.
- 2. In 2012, EPA responded to the 2007 draft, with comments, and TWQS were submitted back to EPA.
 - a. Major issues were the MT Use Classifications did not provide the full protection of tribal waters and a different approach needed to be discussed.
 - b. Other issues were of the Antidegradation Policy and Criteria Tables.
- 3. In 2015, EPA responded to the 2012 draft, and there were still major issues that needed to be resolved.
 - a. At this time, the TWQS underwent a complete over haul and the entire document was changed in an effort to make it user friendly and more understandable.
- 4. In 2021, discussions picked up again, major revisions were completed, and the TWQS were submitted to EPA.
 - a. EPA received an overhauled document with the same required components.
- 5. In 2022, EPA responded to the new TWQS with several meetings set up to discuss the remaining issues.
 - a. First meeting discussion on the requirements and general process of getting the TWQS adopted by the Tribal Council.
 - b. Second meeting discussion on definitions and criteria tables. There are over 100 definitions, still included from the initial 2007 draft, and a majority are not necessary. The criteria tables needed some minor revisions in regards to certain concentrations and references. The

MT Water Quality Standards that were used in the initial 2007 draft were replaced with the EPA human health and aquatic life criteria.

- c. Third meeting discussion on the antidegradation policy regarding the process of determining the appropriate Tier for a tribal water that may be subject to water quality degradation from all types of projects in or near the water.
- d. Future meetings are necessary to address the remaining issues, which at this point, are minor and need to be better clarified.

So, up to this point, the TWQS has been a major work in progress. It's a technical document that requires professional input and consistent focus. The WQ Program was established for a reason, with the initial purpose to monitor for mine impacts to specific waters entering the reservation. Eventually, the monitoring expanded to other waters throughout the reservation, and during my time, the Program has been strengthened to provide improved monitoring strategies, technical data assessments and reports, and overall capacity to obtain key data for reservation waters. The only component missing is having TWQS, which adds regulatory and protective measures under the Clean Water Act. This is the ultimate level of protecting tribal waters. However, in order to achieve this level of protection and authority, the process is technical and extensive, and is briefly summarized.

- Obtain Tribally-adopted TWQS through the Tribal Council Resolution process. This is the current phase we are working towards. By obtaining Tribally-adopted TWQS, this aids in the TAS requirement of demonstrating the Tribal Capability to administer effective water quality standards and water quality certifications programs. Basically, a pre -requisite, not required, but definitely the route to go.
 - a. Included with this process is an optional step of providing a presentation to the Tribal Council prior to public comment period. This would provide a layout of the purpose of TWQS and

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The Road to Tribal Water Quality Standards — Protect Our Waters

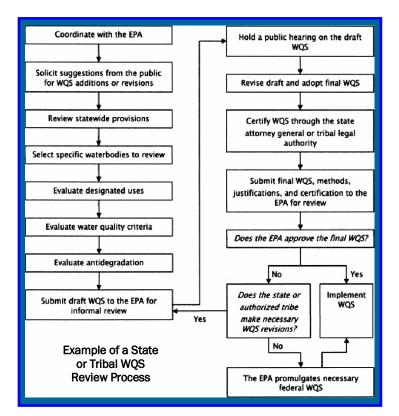
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the goals of the Water Quality Program.

- b. Public comment period and public hearing opportunity for <u>TRIBAL</u> stakeholders and tribal members to provide input. Public hearings only apply to communities within the reservation and tribal members.
- c. A response to comments completed after the public comment period. All comments taken into consideration and the TWQS updated with the legal guidance of tribal attorneys.
- d. Final TWQS and supporting documentation sent to Tribal Council for prior review. Meeting scheduled to seek Tribal Council adoption.
- e. Tribally-adopted TWQS could be adopted as tribal law, but would only pertain to tribal activities and members within the reservation. There would be no regulatory implementation from the CWA. Accomplishing this first major step, is progress towards the ultimate goal of EPA approved TWQS.
- Apply for Treatment in a Similar Manner as States (TAS) for a CWA Section 401 Water Quality Certifications and CWA Section 303(c) Water Quality Standards programs.
 - a. Application can be completed anytime, but likely ideal after tribal adoption.
- 3. Seek EPA approved TWQS. The current TWQS draft includes all of the required components for EPA approval: 1) General Provisions; 2) Designation of Uses; 3) Water Quality Criteria; and 4) Antidegradation Policy. These components likely would be reviewed stringently to ensure the TWQS are prepared to implement CWA requirements. This process is similar to the tribal adoption process, but with key differences.
 - a. Public comment period and public hearing opportunity for <u>ALL</u> stakeholders to which the CWA provisions would apply. This includes offreservation stakeholders upstream of the border, as well as tribal stakeholders and tribal members. The public comment process extends well beyond the reservation and comments could be from other States, Tribes, and Stakeholders that wish to provide comments.
 - b. A response to comments completed after the public comment period. All comments taken into consideration and the TWQS updated with the legal guidance of tribal attorneys.

- c. Final TWQS and supporting documentation sent to the U.S. EPA for review and approval.
- d. If approved, The FBIC Tribal Government would have the ability to review and approve or deny 401 permitting activities both offreservation and on-reservation that potentially could impact the water quality and designated uses of tribal waters.

Hopefully, this summary of TWQS provided awareness and more understanding of the significance and opportunity to protect tribal waters to the fullest extent. As we continue developing the TWQS and working towards achieving a significant goal, it's highly encouraged for tribal communities to be involved at all levels and provide any information of the waters in your areas. As an add-on, everything depends on water for survival, from our human bodies to the plants to the smallest of aquatic organisms, but not just any water, clean and healthy water, and as a luxury, we get to enjoy the water for our personal, recreational, and cultural needs, so it's very necessary to respect the water that is left and not take it for granted. With that, if there are suspicious activities occurring in or near the water that could be impacting the water, please don't hesitate to call the Environmental Protection Department or myself at 406-353-8433. Thanks for reading and wish all good health.



Boil Water Advisories and Orders

What they mean and how to respond.

By Ida Jett-Smith, Technical Assistance Provider, Missouri, Midwest Assistance Program https://www.rcap.org/rural-matters/ https://online.flippingbook.com/view/540957896/10/

It is not often employees of small cities and towns hear gratitude, but they did after their experience with the polar vortex that spanned the U.S. in February 2021. The extreme freezing temperatures led to severe water main breaks in many cities and towns, resulting in widespread Boil Water Orders and Boil Water Advisories.

The media attention on the polar vortex amplified concerns. When residents heard the name of their town or city on the television, radio, or social media

platforms issuing a boil water advisory or order, panic followed. Questions such as: "Are my children and pets safe?" "Can we eat the dinner I cooked?" "I just showered; am I now going to be sick?" and "When will the water come back on?" became trending topics.

Most people do not think about the water that comes to their home for bathing, cooking, and drinking unless the amount or quality is threatened. This article dives into a few of the most frequent questions about boil water notices for water consumers.

What is a Boil Water Order or Boil Water Advisory?

Public water systems and water operators take water quality very seriously. Routine testing and maintenance occur 24 hours a day, seven days a week. However, occasionally, there is a problem with water quality that can lead to a Boil Water Order or Boil Water Advisory.

The public water system can advise you to boil water—**issue a Boil Water Advisory**—when there is an unconfirmed concern or potential problem with the quality of your drinking water. Significant water main breaks or other low-pressure events where the possibility of contamination intrusion exists can trigger a Boil Water Advisory. It can take 24 to 48 hours to re-

"There's plenty of water in the universe without life, but nowhere is there life without water."

ceive sample results from the laboratory to confirm that the water is safe.

A **Boil Water Order** occurs when there is a likely threat to public health issued by the regulator—in this case, the Missouri Department of Natural Resources (DNR). The most common reason for issuing a Boil Water Order is the presence of fecal coliform or E. coli bacteria, typically caused by low water pressure or inadequate levels of chlorine in systems that require chlorination.

Other technical terms you occasionally hear causing Boil Water Orders are:

- High turbidity levels
- Cross-connections contamination
- Inadequate treatment techniques

• The presence of other microbial pathogens such as Giardia or Cryptosporidium.

How is water quality maintained?

Water operators, the state regulator which, for Missouri, is the DNR—and the Environmental Protection Agency (EPA) work hard to monitor, inspect, maintain, and regulate public water

systems 24 hours a day, seven days a week, 365 days a year.

Testing

Samples are taken monthly, or more frequently depending on system size, by an employee of the city, town, or state and submitted to a certified lab to be tested. This tests whether the drinking water is safe for direct consumption, bathing, and cooking. Water operators perform tests regularly to detect contamination. If contamination is suspected, the public water system needs to contact the state regulator regarding the results. Every water system requires re-

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ports of the events recorded with the regulator, which are then accessible online via their Drinking Water Watch.

Flushing

Have you ever seen water flowing from fire hydrants and water towers? You might think there's a problem. However, it can part of a standard maintenance strategy to keep water fresh and safe to drink within the pipes, also known as the distribution system. Flushing is used as a tool to remove sediment from water lines that may build up over time. Flushing also helps to get water moving and can be used to replace stagnant water with fresh water in areas without much flow in the distribution system.

Water main break repair

If you have a water main break, water quality can be impacted either through the break or through a pressure drop during the break or the repair. Flushing is often used following break repair to expel any contaminated water.

What steps should I take if I'm under a Boil Water Order or Advisory?

Knowledge is power. Understanding why a boil water notice occurred is the first step; knowing what to do is the next. Educating yourself and your family on the proper procedure to follow if a Boil Water Order or Advisory is issued will help build confidence in your drinking water quality when they occur and reduce risks involved with contaminated drinking water.

- Boil water vigorously for three minutes before use. Use only boiled water for drinking, diluting fruit juices, other food preparation, and brushing teeth. Note: Let the water cool sufficiently before drinking (to approximately 110 degrees F or below) to avoid scalding
- Buying bottled water may be a practical alternative to boiling drinking water under a Boil Water Order or a Boil Water Advisory. Bottled water offers a safe water source for drinking, cooking, and brushing your teeth. We would recommend larger bottles versus individual-sized in order to limit the impact on the solid waste stream

- Dispose of ice cubes, and do not use ice from a household automatic icemaker—remake ice cubes with boiled water.
- Disinfect dishes and other food contact surfaces through immersion for at least one minute in clean tap water that is mixed with one teaspoon of unscented household bleach per gallon of water.
- Usually, you don't need to boil water for bathing or for your children to play in a kiddie pool, sprinkler, or under the hose. Watch closely that children are not ingesting any water as they play.
- Waterborne diseases can affect specific groups of people. Contact your physician for additional information if you have or are caring for someone who has cuts, severe rashes, or reduced immune function or who is under six months of age or elderly. Additionally, chemotherapy, organ transplants, and diseases like HIV/AIDS can reduce immune function and increase the risk of waterborne illness.

What are the symptoms of water-borne illness?

It's not entirely uncommon to experience a waterborne illness, as 7.2 million Americans (1 in 44 people) get sick from diseases spread through the water every year. We share this not to scare you, but to inform you. Disease symptoms include diarrhea, cramps, nausea, jaundice, associated headaches, and fatigue. However, these symptoms do not result only from disease-causing organisms in drinking water—several factors other than your drinking water can cause these symptoms.

What can we do to help?

From personal experience, when a Boil Water Order or Advisory is issued, the public is likely to remain calm if given guidelines and prompt communication. Proactive and timely communication in understandable language is key. Many cities and towns post updates on social media accounts such as Facebook to keep the citizens informed on the progress of repairing a water main break or waiting on the results from a laboratory.

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Boil Water Advisories and Orders

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As a resident, be patient with the employees and water operators. They are the experts and do the best they can. Most live in the community and experience the same conditions in their own homes, and they want the repairs completed or results back as quickly as you do. Learning about your town's infrastructure and your role in spreading helpful information will create a stronger community during a crisis.



Residents, city and town employees, businesses, and the infrastructure itself felt the stress of the polar vortex in 2021. However, seeing communities unite and develop an appreciation for drinking water was an unexpected gift. Not every emergency will be of that magnitude, but it's important to remember that every event shapes the relationship between a public water system and the community it serves.

Private Well Testing Information

By Mitchell Healy, Water Quality Coordinator | August 11, 2022

Having private wells or a water supply for drinking purposes, is the responsibility of the private well owner to ensure the well is safe at all times. However, despite the efforts, contamination may still occur from different sources, and if there's any suspicion or concern of contamination, the initial step is to stop using the water and get the well tested. The type of testing necessary would be based on what the potential issue is, and it would be ideal to document what activities or reasons that have led to the concern. There are resources available that provide assistance and important information for private well owners. The Indian Health Service (IHS)/Tribal Environmental Health Program can be contacted, and the U.S. EPA has a fact sheet available online.

 Home Water Testing Fact Sheet: https://www.epa.gov/sites/default/files/2015-11/ documents/2005 09 14 fag fs homewatertesting.pdf

Private Wells are Unregulated Water Systems...

The U.S. EPA does not have water quality criteria for private wells nor regulates private wells, but provides useful information regarding guidance on treatment measures and technologies to treat a private well water system for contaminants. EPA regulations for public water systems do not apply to private wells. Unregulated water systems are defined as having less than 15 service connections or serving less than 25 people, which means, they are not subject to the Safe Drinking Water Act, and thus, private well owners are

solely responsible for their well water safety. What is the reason for this? This is out of my field of expertise, but logically thinking, it could be a matter of the Legislative process, and States and Counties making efforts to either improve local Health Departments and Programs services to include private well testing for at least the common constituents. Doing some research, I found that some States are already in various stages of Law Reform to help address the need of having regulatory criteria for non-public water systems, because water borne illness is a major issue and affects all of the users. in addition to the costs associated with testing. Montana does not have drinking water regulations for private well owners, unfortunately, but there are regulations regarding well development and installation. I assume to ensure a well is developed in the most ideal location with the appropriate assessment of the surrounding environmental layout. So, in essence, if you have a private well or planning on having one, just know that the responsibility is yours to ensure the water is safe for drinking, and there are resources available to help you understand your water system and make managing it somewhat better.

When To Test...

In general, routine testing should be done every year to monitor the water quality of the well water. This routine testing could be once a year, but keep in mind, that more samples taken provides a much better history and can be more helpful in assessing the

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Private Well Testing Information

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needs of a well. In many cases, testing is done in late spring to early summer or when there's wet conditions, as this is the most likely for contamination to occur from either surface run-off or ground infiltration. If there's any concern, private well owners should have a contact list to arrange the testing by a professional and the samples analyzed by a certified laboratory. Another option is an instant testing kit. These kits are available online and provide immediate results if the well water is contaminated or not, and are useful in random testing to check the water quality of a well for common constituents associated with well water. However, if you're unsure of what kit to purchase and how to use them, consult IHS/Tribal Sanitarian (406) 353-8374 or Tribal Engineer (406) 353-8353. If there's a noticeable observation of the water quality changing such as odor, color, taste, suspended solids, or maybe health issues derived from drinking the water, this warrants an immediate inspection and testing of the wells. So, private well owners need to take action immediately if any changes are happening.

What To Test...

There are many constituents that can be tested for wells, but it really depends on the potential sources of contamination and other factors such as household health needs, location of wells, etc.

In general, it's recommended all private wells tested annually for Nitrate and Bacteria.

Bacteria

Bacterial contamination is one of the major concerns of a drinking water supply, and includes testing for total coliform bacteria. If total coliform bacteria is present, this indicates that the well is or has been influenced by a contamination pathway or in other words, an outside source is getting into the well somewhere in the system. Total coliform bacteria is found naturally in the environment in the soil and water, and is mostly harmless, but can be accompanied by other pathogenic bacteria such as fecal coliforms and E.coli. So, if total coliform bacteria are present in a well, testing of fecal coliforms and E.coli are warranted to determine if there is potential fecal bacteria contamination. If fecal coliforms and E.coli are not present, the well system should still be inspected and/or repaired, and boiling of water is advised until further testing and disinfection confirms the contamination is no longer an issue.

Nitrate

Testing of nitrate goes hand in hand with bacteria. If nitrate is found in well water, it indicates potential contamination from animal waste, septic systems, wastewater, flooded sewers, polluted storm runoff, etc. However, the surrounding geology may be a factor and could be natural background concentrations. If nitrate is an issue and there is no other known sources of contamination, it's recommended to look elsewhere for water or seek guidance on treatment measures and technologies for nitrate. In any case, presence of bacteria and/or nitrate is a high risk of illness.

Other symptoms to consider are taste, smell, odor, and visual of suspended solids. There are specific constituents that cause these symptoms, and private well owners are highly encouraged to have instant test kits on hand to find out what is present in the water, log the results, and contact the local health department.

The Montana State University Extension Water Quality Program & Well Educated Program has information on private well testing and can be found at: <u>https://</u> <u>carbon.msuextension.org/documents/fam%</u> <u>20ground%20water%20qual.pdf</u> <u>https://waterquality.montana.edu/well-ed/index.html</u>

For quick reference on where a test kit can be picked up.

You can contact the Blaine County Extension Office 406-357-3200 in Chinook or the Phillips County Extension Office 654-2543 in Malta.

How contamination gets into a well...

- 1. Defective or missing well cap seals around wires, pipes, and the well casing may be cracked and/or leaking.
- Seepage through the well casing cracks or holes in the well casing allows water that has not been filtered through the soil to enter the well. This is a common issue with wells made of concrete, clay tile, or brick.

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Private Well Testing Information

(Continued from page 11)

- 3. Seepage on the outside of the well casing this is an issue with older wells that were not sealed with grout.
- 4. Flooding of the well this is a common issue during flooding events and wet weather if the wellheads are located below the ground.

A Local Example...

In July 2022, a flash flooding event occurred in Lodgepole Creek, likely other streams as well, but the outcomes of this natural event caused high concern of private wells and the public water system. Some residences in the floodplain of Lodgepole Creek experienced flooding, and testing of all the water sources was required to determine if any contamination occurred from the flooded septic systems and the ash that flushed through the community of Lodgepole, from the previous year Pine Grove fire. In summary, there were positive results for E.coli in some of the private wells and in Lodgepole Creek. The public water system was tested by Prairie Mountain Utilities (PMU) and tested negative. The E.coli contamination was likely a combination of sources in the flood water zone including animal waste and septic systems. As far as wells go, I believe the process is to disinfect the system and conduct continuous testing until there are a certain number of negative results in a row, but well testing is out of my scope of work, so folks should contact IHS/Tribal Environmental Health Program for more information. For surface water like Lodgepole Creek, it's a moving system that has a natural buffer and dilution ability and within a reasonable time period, pending there are no sources of contamination leaking into the stream, the water quality should be back to natural conditions and safe for designated uses as before, swimming, fishing, cultural, etc. However, more sampling of Lodgepole Creek is necessary to address the water quality concern of the ash and possibly the retardant(s) used for the Pine Grove fire.

Water Quality Program...

The Water Quality Program was involved with the testing of Lodgepole Creek for E.coli, and developed a Health Advisory for no direct contact with the stream until further notice. However, in order for the Water Quality Program to be involved with the sampling of Lodgepole Creek, there are requirements and processes that need to be approved by the U.S. EPA since they are the funding Agency. Normally, all work and tasks are planned and budgeted a year in advance, and once funding is approved, there's very little room for substantial changes, especially with lab costs. In the Lodgepole flood situation, EPA was contacted and I worked diligently to revise the Water Quality Program Quality Assurance Project Plan (QAPP), which is a document required for all field work, and received approval within a timely manner. With this revision, a couple monitoring sites in the Milk River were replaced with a couple sites in Lodgepole Creek. On top of this, additional parameters and equipment were necessary to collect the water samples to address the ash concern, which was not budgeted. So, there was a lot of behind the scenes work done to be able to sample Lodgepole Creek, and it's not as simple as one might think. The Water Quality Program has a purpose and can be involved with sampling outside of the initial funded work, but it's a matter of what the work being asked of the Program is and getting approval. Considering that more sampling is necessary for Lodgepole Creek, I have planned to change the Watershed rotation for next sampling season, 2023, to monitor Lodgepole Creek from April-September. The data collected will be compared to the data pre-fire and flood, and going above and beyond, I will continue to work with EPA on how the Water Quality Program can address emergency sampling and possibly well sampling, as the Program falls under surface water monitoring.

Future and Long-term recommendations...

The fact of the matter is private well owners are responsible for monitoring the quality of their drinking water and ensuring it is safe at all times. From what you have read, it may seem daunting, but in reality, it's a matter of having a routine maintenance and monitoring plan, consider all the other factors, and being prepared in case of an emergency. Having a storage of drinking water is a good idea. Having instant test kits on hand. In some cases, private well owners made the decision to connect to the public water system. It is a costly investment of having a well, not to mention the work that accompanies this responsibility, so if there are any folks considering having a private well, consider all of the responsibilities that come with it, and utilize all of the Programs and Services available. Thanks for reading this article and hope that it provided you with some valuable information. Stay Safe and Stay Healthy.







https://www.cdc.gov/opioids/basics/fentanyl.html

What is fentanyl?

Pharmaceutical fentanyl is a synthetic opioid, approved for treating severe pain, typically advanced cancer pain. It is 50 to 100 times more potent than morphine. It is prescribed in the form of transdermal patches or lozenges and can be diverted for misuse and abuse in the United States.

However, most recent cases of fentanyl-related harm, overdose, and death in the U.S. are linked to illegally made fentanyl. It is sold through illegal drug markets for its heroin -like effect. It is often mixed with heroin and/or cocaine as a combination product—with or without the user's

knowledge-to increase its euphoric effects.

Deaths involving illicitly manufactured fentanyl are on the rise

Rates of overdose deaths involving synthetic opioids other than methadone, which includes fentanyl and fentanyl analogs, increased over 56% from 2019 to 2020. The number of overdose deaths involving synthetic opioids in 2020 was more than 18 times the number in 2013. More than 56,000 people died from overdoses involving synthetic opioids in 2020. The

Related Pages

- <u>CDC MMWR: Drug and Opioid-Involved Overdose Deaths – United States, 2017-2018</u>
- <u>Fentanyl: Preventing Occupational Exposure to</u> <u>Emergency Responders</u>
- CDC Health Advisory Network Update: Rising Numbers of Deaths Involving Fentanyl and Fentanyl Analogs, Including Carfentanil, and Increased Usage and Mixing with Non-opioids
- <u>CDC Health Advisory Network Update: Influx</u> of Fentanyl-laced Counterfeit Pills and Toxic Fentanyl-related Compounds Further Increases Risk of Fentanyl-related Overdose and Fatalities
- <u>CDC Health Advisory Network Update: Increas-</u> es in Fentanyl Drug Confiscations and Fentanyl -related Overdose Fatalities

latest provisional drug overdose death counts through June 2021 suggest an acceleration of overdose deaths during the COVID-19 pandemic.

What can be done?

The increase in overdose deaths highlights the need to ensure people most at risk of overdose can access



care, as well as the need to expand prevention and response activities. CDC issued a Health Alert Network Advisory to medical and public health professionals, first responders, harm reduction organizations, and other community partners recommending the following actions as appropriate based on local

needs and characteristics:

- Increase Education and awareness of the dangers of fentanyl
- Expand distribution and use of naloxone (Narcan) and overdose prevention education
- Expand awareness about and access to and availability of treatment for substance use disorders
- Intervene early with individuals at highest risk for overdose
- Improve detection of overdose outbreaks to facilitate more effective response
 - 2006). Journal Of Medical Toxicology: Official Journal of the American College Of Medical Toxicology [serial online]. March 2013; 9 (1):106-115.
 - 2. Department of Justice, Drug Enforcement Administration, DEA Investigative Reporting, January 2015.
 - Hedegaard H, Miniño AM, Spencer MR, Warner M. <u>Drug overdose deaths in the United States, 1999–2020. NCHS Data Brief, no 428</u>. Hyattsville, MD: National Center for Health Statistics. 2021. DOI: <u>https:// dx.doi.org/10.15620/cdc:112340</u>
 - 4. <u>CDC Health Alert Network Advisory: Increase</u> in Fatal Drug Overdoses Across the United States Driven by Synthetic Opioids Before and During the COVID-19 Pandemic. CDCHAN-00438, 2020 Dec 14.

- NCHS Data Brief: Drug Overdose Deaths in the United States, 1999–2020 [PDF]
 Additional Resources
- <u>National Alliance for Model State Drug Laws:</u> <u>Naloxone</u>
- DEA Issues Nationwide Alert on Fentanyl as Threat to Health and Public Safety
- Tracking Fentanyl and Fentanyl-Related Substances Reported in NFLIS-Drug by State, 2016–2017
- SAMHSA Opioid Overdose Toolkit [PDF]
- Call Poison Control at 1-800-222-1222. **References**
- 1. Algren D, Monteilh C, Rubin C, et al. <u>Fentanyl-associated fatalities among illicit drug users in Wayne County, Michigan (July 2005-May</u>

AANIIIH & NAKODA ENVIRONMENTAL NEWSLETTER

Ponca Tribe of Oklahoma makes history declaring rights of rivers



News Release | Ponca Tribe of Indians of Oklahoma

https://www.msn.com/en-us/news/us/ponca-tribe-of-oklahoma-makes-history-declaring-rights-of-rivers/ar-AAZHZI4?li=BBnbfcL

On July 6th, 2022, the Ponca nation made history for the protection of water. The Ponca Tribe of Indians of Oklahoma Business Committee unanimously adopted a new statute recognizing the "immutable Rights of Rivers" for two rivers and other water bodies that flow through their territory, Ni'skà, (the Arkansas River) and Ni'ží'dè, (the Salt Fork River). In 2016 they were also the first tribe in the US to recognize the Rights of Nature to help stop fossil fuel projects on Ponca territory.

The Rights of Nature is the fastest growing environ-

mental movement in history with 24 countries and 9 tribes passing laws in the US and Canada. Globally Indigenous peoples have led the Rights of Nature movement because our cosmology recognizes that human laws must realign with the laws of the natural world. Western law says the Earth is property. Indigenous wisdom understands humans are a part of nature, not owners of it and we have an obligation to protect it.

Ni'zide and Ni'ska rivers not only run through Ponca territory, they flow from the north and west, then downstream throughout Oklahoma. "Water is sacred and our survival depends on our ability to place human activities within the

boundaries of the Earth's ability to absorb what we do," says Casey Camp Horinek, Ponca elder who serves as the Tribe's Environmental Ambassador and who presented the Rights of Rivers as well as the Rights of Nature laws to the Ponca Business Committee for their approval. "This is just another step in protecting the sacred waters which are the life sources of all things on Mother Earth, not just for our tribe. We have so much to learn from our waters, everything upstream impacts everything downstream, we are all connected."

The environmental impacts of fossil fuels played a big



The Ponca Tribe of Indians of Oklahoma made history July 6, 2022 by recognizing the "immutable Rights of Rivers" for two rivers and other bodies of water flowing through their territory,

part in the Ponca tribes' decision to adopt laws recognizing ecosystem rights. The tribe lives in a fossil fuel epicenter of fracking, pipelines, petrochemical plants, and refineries. No Ponca family is untouched by industry-related illnesses and deaths.

Ponca Chairman Oliver Littlecook says, "Politicians and Big Oil call it 'economic progress'. The Ponca call it 'environmental genocide'. We can do better for our communities without sacrificing the water." Tens of thousands of man-made earthquakes caused by fracking and toxic waste injection wells create cracks

> in the pipelines, leaching into ground and well water. For decades the tribe has had to purchase drinkable water from Ponca City and today the new well water system is in extreme danger of pollution as well as possibly drying up as the groundwater is being siphoned off by surrounding industries.

> "All of this destruction to human and natural communities has been legalized, but thanks in great part to leadership like the Ponca nation, this is changing," says Shannon Biggs, co-founder of Movement Rights, an organization that has supported the tribe's work. "Our legal system talks in terms of 'rights'" says Biggs, "But

from an Indigenous perspective this is really about recognizing our human responsibilities to protect the health of ecosystems and waterways that ensure all communities can survive and thrive."

There are 39 sovereign Indigenous Nation/Tribes in Oklahoma, many of which are located along these rivers and tributaries, as well as tribes in adjacent states. Some have expressed interest in joining in an intertribal effort to protect the rivers. Along with passing this Rights of Rivers law, the Ponca Nation will be hosting the first of four statewide gatherings along

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Ponca Tribe of Oklahoma makes history declaring rights of rivers

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the rivers on September 21 and 22, 2022. The "Convening of the 4 Winds" will bring together 200-400 local and regional tribal communities, national Indigenous Rights and climate justice allies. The purpose of these gatherings is to promote discussion about Indigenous-led water protection, tribally-led scientific studies and ceremony and the role of Rights of Nature in supporting healthy river systems for all.

Casey adds, "We must always remember that we humans are not protecting Nature, we ARE Nature protecting itself."

FEMA Releases First-Ever National Tribal Strategy

Release Date: August 18, 2022 | Release Number: HQ-22-104 <u>https://www.fema.gov/press-release/20220818/fema-releases-first-ever-national-tribal-strategy</u>

WASHINGTON – FEMA released a national tribal strategy – the agency's first ever – to better address its responsibilities to federally recognized tribal nations when responding to and preparing for disasters affecting tribal lands.

The "2022-2026 FEMA National Tribal Strategy" provides FEMA with a roadmap to refine and elaborate on major strategic goals and objectives we are working to achieve. It includes information requested and recommended by tribal nations through extensive outreach sessions led by FEMA National Tribal Affairs Advisor Denise "Bambi" Kraus. Key issue areas were added to address requests from tribal nation members, to include tribal-specific technical assistance and tailored resources to support tribal emergency management programs.

Through this new strategy, FEMA will initiate a national study on tribal emergency management capacity and capabilities, develop a comprehensive FEMA Guide of programs, develop tribal-specific technical assistance resources, regularly convene an annual meeting of national and regional tribal liaisons and expand training opportunities for tribal nations, and other related objectives.

"On his first day in office, President Biden called on all federal agencies to advance racial equity and support underserved communities nationwide. The FEMA workforce remains committed to this critical mission by instilling equity as the foundation of emergency management and always putting people first," said FEMA Administrator Deanne Criswell. "FEMA's firstever National Tribal Strategy will be key to achieving this ambitious goal, which represents a significant milestone for the agency and reflects our deep commitment to better partner with and serve all 574 federally recognized tribal nations." The "2022-2026 FEMA National Tribal Strategy" follows the structure of the "2022-2026 FEMA Strategic Plan," and better aligns FEMA capabilities to the needs of tribal governments as they lead their communities to a future that is more prepared for and resilient against disasters. Both documents position FEMA, and the emergency management community at large, toward a future where it must embrace its expanding role in a quickly changing landscape.

The strategy implementation is channeled through deliberate actions designed to foster stronger collaboration and information sharing between FEMA and tribal nations, including, among other initiatives:

- Initiate a national study on tribal emergency management capacity and capabilities.
- Develop a comprehensive guide of programs and assistance that FEMA offers.
- Create a new FEMA Tribal Affairs Work Group, which will serve as an internal body tasked to ensure the agency's approach during the engagement and service of tribes is elevated, coordinated, resourced and matured across all FEMA mission areas.
- Review and revise FEMA training opportunities for tribal nations and develop and/or update resources to address the specific tribal training needs identified by tribal nations.

FEMA understands that sovereign tribal nations have unique needs, capabilities and roles in emergency management. Inherent to the aspirations of the new National Tribal Strategy is a focus on improved engagement, partnership and service between FEMA and the 574 federally recognized tribal nations it serves.



Brownfields...We're back!

Kermit Snow Jr, BTRP Compliance Officer

Wahey Neetine, hello my relatives. It's been a long two plus years, but we made it and are able to venture out and go places and see old friends and make new ones. It has been a pretty busy summer here for the Brownfields Program. I am still in the process of helping Island Mountain Development Group (IMDG) in their transition of taking over Kwik Stop, which they renamed Little River Trading Post. This pandemic has put somewhat of a damper on things, as we will have to wait for at least a year to get new tanks to replace the old ones, which are 33 years old. We continue to keep moving forward, working with Victoria Flowers and her group Oneida Engineering Solutions (OES) in the planning stages as we continue updating the store. On June 29, 2022, we were paid a visit by Region 8 EPA for their annual 3-Year UST Inspection. The management and staff took great pains to get ready for this, as they got themselves and the clerks their certifications for Class A/B/C Operating certificates. It was a job well done, as they passed the inspection. This showed a lot of initiative, as they just took over in December 2021 and have been working hard on getting to know what all goes into owning a gas station. It's been great working with this group, as they make it easy in my job tasks pertaining to UST's and working together to make this store compliant in all aspects of UST Compliance. I am looking forward to the day we get the new tanks here and all updated equipment.

My first trip in a long time, was to the UST Bootcamp in Arlington, Texas, where the Little River Trading Post Business Development Officer Eddie Moore Jr. also participated in this training. He has been doing a lot to try and get to know all the ins and outs of UST's and this is a great place to continue. The facility here is great, as they have everything that a gas station should have, just outside the classroom. We also got to tour a Choctaw Nation Fuel Station and were given a great presentation by the staff involved there. We got to look at everything that you would see during a UST inspection and the different types of spills and what to do and what types of spill containment to use, presentation by the Choctaw Environmental Department. We got to learn what it takes to run a successful operation and what all goes in to it from an Automatic Tank Gauge (ATG) functionality testing, reports, tank testing, and electronic line leak options. A big issue we talked about was Financial Responsibility Insurance, of which we are trying to deal with right now.

The Tribal Lands and Environmental Forum (TLEF) in Milwaukee, Wisconsin was next on the agenda. I haven't been to this since August 2019. This conference is always one of the best, as you get to see Tribes and Professionals from all around the country. This conference is hosted by the Institute of Tribal Environmental Professionals (ITEP). One of the best parts of this conference are the field trips and trainings. I went on the Franklin Fuels field trip the first day, something I hoped would help me with my duties concerning Underground Storage Tanks (UST's). We learned about new technology developing every day, fuel compatibility, the new ATG's coming out, and also got to tour their factory. We also got to tour the Milwaukee Public Museum, opened just for TLEF attendees to see not only their exhibits, but were also treated to a special film showing of "Restoring Néške'emāne" (Restoring Mother Earth) followed by a panel discussion. I also went on another field trip of the Urban Ecology Center and a tour of the Three Bridges Park, which was transformed from a Brownfields to Natural Space. The Opening Plenary session was great, where we also learned of Former ITEP Director Ann Marie Chischilly moving on to become the new Vice President, Office of Native American Initiatives for Northern Arizona University. The Oneida Nation Honor Guard and the Buffalo Creek Singers from Oneida Nation welcomed us all to the conference. We

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Brownfields....We're back!

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then listened to welcoming remarks from Michael Regan (USEPA Administrator), Rafael DeLeon (USEPA Principal Deputy Asst. Administrator) and Anne Heard (USEPA OLEM). I really enjoyed the way Debra Shore (USEPA Region 5 Administrator) ended her remarks, "Natural Resources Are Cultural Resources". The keynote speaker Starla Thompson (Forest Potawatomi) gave a very passionate speech echoing the injustices of all Tribes, talking about Historical Trauma, such as the Boarding School issues going on in Canada. She talked of her life, illegally adopted, foster homes filled with hate, her grandmother dying before her mom turned nine. She talked of regaining her culture and starting Jingle Dress dancing. She talked of being a Generational Trauma (survivor) Breaker, the Women are Life Givers. She closed talking of the book by Nick Estes, Our History is the Future, an intergenerational story of resistance. The next three days were filled with sessions ranging from Capitalizing On Brownfields Infrastructure funding to UST's and Emergency Management: Response to Natural Disasters such as Windstorms, Flooding, and Fires to Per- and Polyfluoroalkyl Substances (PFA's) and Listening session with the Tribal PFA's Workgroup to name a few. The conference ended with the Closing Plenary Session keynote speaker Dr. Jonathan Gilbert, who talked about the American Marten, his research and that it is Wisconsin's only endangered species. The conference ended with the final raffle drawings. I was honored to talk about the importance of the Star Quilt and then to draw the name of the person who would be given the Star Quilt donated by the Fort Belknap Indian Community Council. The lucky man was Robert (forgot last name) from 29 Palms Band of Mission Indians. There was also a special presentation given to Victoria Flowers (Oneida Nation) for all her work with Tribal Waste and Response Committee (TWAR), she was given a Pendleton Blanket. I think the best part of this conference was seeing old friends who I not only haven't seen since 2019, but from many years ago. It was great to see all my old

friends again and to meet new ones. Hopefully I get to see you next year in New York at the Seneca nation.

I then attended the 2022 National Brownfields Conference in Oklahoma City, OK. Unlike the TLEF, this conference dealt with Brownfields only. They had a Tribal track, which I attended most of them. The other sessions are good, but you don't see many of those scenarios on most Reservations, as most are urban. They do have some good learning tools when getting into groups and doing group exercises, as you get to see how they think and go about using different ideas to try and solve problems. I started off with a session on Brownfields 101: Setting the Stage for Brownfields Revitalization, by Noemi Emeric-Ford (USEPA Region 9) who gave an overview and talked about seed money for Pilot Programs. She then talked about Identifying Brownfields through Inventory and using KSU-TAB BIT. We ended the day with the EPA Opening Plenary with EPA Administrator Michael Regan welcoming everyone to the 2022 Brownfields Conference. He mentioned he is 16th Administrator and the first Black man and second person of color to hold this position. He talked about his days as the Secretary of the North Carolina DEQ. He talked about the great things going on all over the USA with cleanups, what they were doing in Oklahoma City and how Brownfields has helped clean up their city. He talked about the money that is being invested in Brownfields to help all communities nationwide. The day ended with an opening celebration in the Exhibit Hall, were everyone gathered to meet and make new friends, hosted by the Chickasaw Nation. The Mayor's Roundtable on Day 2 was pretty good, as we got to hear from Mayor's from five different communities, such as Oklahoma City, Ferguson, MO, Lorain, OH, Wheeling, NV, and Naranjito, Puerto Rico. It was good to see how each mayor tackled their problems ranging from blight, wastelands, and natural disasters.

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Brownfields....We're back!

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One of the Tribal sessions was on Restoring Tribal Lands, where I got to see again "Restoring Néške'emāne" (Restoring Mother Earth) film about old Conch Indian Boarding School. The presentation on the final day by Keynote Speaker Dr. Jonathan Reichental (Human Future), talked about how technology has helped both the private and public sectors. I also enjoyed the session on Legal Topics in Tribal Sovereignty and Brownfields, where they talked about Native American Rights: Tribal Sovereignty (The Right to Govern), Treaty Rights, Reserved Rights Doctrine. This was also a good conference, where I hope I can use here on my Reservation or I can call on someone from the conference for help, as they say "Don't try and reinvent the wheel", someone out there has what you need, just ask. A'Ho

Chemists discover new method to destroy "forever chemicals"

By Jacob Knutson | Aug 19, 2022 | Energy & Environment https://www.axios.com/2022/08/19/chemists-discover-destroy-forever-chemicals-pfas?utm_campaign=Hot% 20News&utm_medium=email&_hsmi=223520796&_hsenc=p2ANqtz-_hiyuyIEERrezsUJkSzI8QpjFWWdHGQCdHlcZUBCd2PUdJDfuRYGKwV0vVBGP5v7yRzbwetCA6SkV1NkZ3gc_6YTckJg&utm_content=22 3520796&utm_source=hs_email

Chemists at University of California, Los Angeles, and Northwestern University discovered a new way to destroy "forever chemicals," using a common ingredient in soap and an organic solvent, according to a study published in the journal Science on Thursday.

Why it matters: The extremely durable and toxic chemicals have been in drinking water systems around the U.S. and are linked to adverse health effects. The new method is a relatively cheap and mild way to break them down.

Per- and polyfluoroalkyl substances (PFAS) – dubbed "forever chemicals" for their durability – are a family of nearly 5,000 types of chemicals that largely resist degradation by repelling oil and water and withstanding high temperatures.

- They have been used in several nonstick, waterrepellent and fire-resistant industrial and consumer products for decades, including cookware, some food packaging and fire fighting materials.
- Because they resist degradation, PFAS can accumulate in people, livestock, fish and wildlife if they enter the environment through production or waste streams.

How it works: The chemists discovered that a mixture of sodium hydroxide, or lye, combined with dimethyl sulfoxide, a common organic solvent, in water heated 176 to 248 degrees Fahrenheit was able to break the strong bonds that hold together perfluoro carbox-



A sign warning people of PFAS contamination in the Rogue River in Rockford, Michigan, in October 2021. Photo: Matthew Hatcher/ Bloomberg via Getty Images

ylic acids (PFCAs), one of the largest classes of PFAS.

- The reaction leaves behind fluoride ions that can be easily captured and carbon-containing byproducts.
- The researchers said the new mild process is unlike many other harsh and energy-intensive PFAS destruction techniques, which include incineration, electrochemical degradation and supercritical water oxidation.

The big picture: The class of chemicals has recently received increased scrutiny from the federal government, with the Environmental Protection Agency issuing new health advisories for four PFAS compounds earlier this year.





Comment sought on St. Mary/Milk rivers study

By Tim Leeds | Last updated 8/16/2022 at 11:02am https://www.havredailynews.com/story/2022/08/16/local/comment-sought-on-st-marymilk-rivers-study/539288.html

A board is looking for public comment on and is holding a virtual webinar this week about a work plan to be submitted to the commission that oversees the waters that flow between the U.S. and Canada about how to apportion waters of the St. Mary and Milk rivers, a release about the study said.

The work plan is being written as work progresses to rehabilitate the system that diverts water into the Milk River, the very issue that led to the creation of the International Joint Commission that oversees water on the borders of the two countries.

As part of its ongoing public consultation process, the International St. Mary and Milk Rivers Study Board is holding a virtual webinar Thursday, Aug. 18, at 7 p.m. to outline its draft work plan and provide the public with an opportunity to share feedback directly with the board.

The board is welcoming public input on its work plan, with the comment period open to Monday, Aug. 29.

People can register for the webinar at https://bit.ly/3SRtAHz.

The board's website says the study, "launched in November 2021, is exploring options to improve access to apportioned waters by each country, in recognition of climate change and challenges to apportionment since the original 1921 order was issued. The effort includes a desire to achieve long-term resilience in accessing the shared waters of the St. Mary and Milk Rivers."

The work plan describes the history leading up to the St. Mary and Milk Rivers study and the study's objectives. It explains how the board intends to conduct its work and achieve its objectives. The work plan also includes details about public engagement activities, how the board's advisory groups and technical teams are organized, and how its study findings will be reviewed.

The International St. Mary and Milk Rivers Study Board is conducting study and analyzing data to develop recommendations to improve each country's access to apportionment — share of the natural flow of these watersheds. These recommendations will then be submitted to the International Joint Commission at the study's conclusion in 2025. The public is invited to share feedback on the work plan by visiting the study board's website at https:// www.ijc.org/en/smmr/st-mary-and-milk-rivers-studyboard-draft-work-plan.

The St. Mary and Milk Rivers originate in the mountains and foothills of the eastern slopes of the Rocky Mountains, flowing northeast across the international border from Montana into Alberta, Canada. The St. Mary River continues north, while the Milk River turns east and parallels the international border for 70 miles before turning south back into Montana.

The St. Mary Diversion and Conveyance Works was one of the first projects the U.S. Bureau of Reclamation was authorized to build when it was created at the start of the last century. It stores water at Sherburne Dam on Swiftcurrent Creek, which is then diverted through 29 miles of canals, dikes, siphons and drop structures into the north fork of the Milk River.

After 20 years of work to find a way to rehabilitate the diversion and conveyance works — it was shut down for the summer two years ago when a drop structure at the end of the system collapsed — major funding is finally being put to the rehabilitation effort. The Bipartisan Infrastructure Act passed last year allocated \$100 million for work on the system, and the members of Montana's congressional delegation are pushing for passage of the St. Mary's Reinvestment Act, which would authorize \$52 million for rehabilitating the system and require an ability-to-pay study on what the users of water in the Milk River can afford and set the cost share accordingly.

Disputes over the ownership of the water in question is what led to the creation of the International Joint Commission to oversee water apportionment between the two countries.

The dispute led to the Boundary Waters Treaty of 1909, which the IJC website says is "perhaps the most important bilateral agreement between Canada and the United States. Over the past century, it has provided a foundation for cooperation on shared natural resources on the basis of equality between the two countries.

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Comment sought on St. Mary/Milk rivers study

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Signed at a time when disagreement over the shared waterways — in several regions — could have divided the nations, the Boundary Waters Treaty established an organization, the International Joint Commission, to investigate, resolve and prevent boundary water disputes between the two countries," the website says.

It says that, since holding its first meeting in 1912, the IJC has resolved more than 100 matters raised by the U.S. and Canadian governments The IJC provides direction for the measurement and apportionment — sharing — of water that crosses the international boundary in the St. Mary and Milk River basins, in accordance with the Boundary Waters Treaty of 1909 and the IJC Order of 1921.

The 1921 order provided instructions on how the measurement and apportionment of water from these two rivers will be managed by the accredited Irrigation and Reclamation Officers — now known as the Accredited Officers — appointed by each country.

Grow Our Own Nursing Program at Aaniiih Nakoda College Seeks National Accreditation

Submitted by Brigit Hemmer, MSN, RN, Nursing Program Director | bhemmer@ancollege.edu

What does national accreditation with ACEN mean? Accreditation Commission for Education in Nursing (ACEN) "is a peer-review process intended to enhance quality improvement in nursing education" (2022). There are varied benefits, but the primary benefits for graduates of Aaniiih Nakoda College's nursing program is eligibility for funding support from various federal and state agencies, admission to bachelor and graduate-level nursing programs, and job opportunities with institutions that require graduates from a nationally accredited agency in nursing education. The Nursing Program will also earn recognition for program quality. This national recognition can open important grant opportunities for the college. The Grow Our Own Nursing Program would be in an elite group of programs that are awarded this high level of distinction.

What is the accreditation process? Aaniiih Nakoda College's Nursing program has completed the eligibility process, completed a candidacy presentation, and has now been granted candidacy status to move forward with the ACEN initial accreditation process. The process so far has been over a year in the making with a rigorous review to achieve the level of candidacy. The next step involves reviewing all aspects of the program in a written lengthy self-study report and a site visit to campus and clinical agencies by ACEN reviewers. These reviewers can be from all over the US and will make a very thorough investigation to confirm the written report. What is the current approval for the nursing program? Aaniiih Nakoda College's nursing program is fully approved via a three-phase process by the Montana Board of Nursing. This process had to be completed before the college could admit any students. The Board of Nursing also requires annual reports that Program Director Brigit Hemmer completes and then attends the Board meetings. There is important oversight of each program in the state by the Board of Nursing. Separately, Aaniiih Nakoda College is accredited as a college by Northwest Commission on Colleges and Universities and this accreditation process also involves continued work in program evaluation for all the College.

Who completes the work for this process? Brigit Hemmer, Nursing Program Director is the lead on the accreditation process and is the responsible administrator for all documents written and for the next phase of the in-depth self-study and site visit. Cynthia Gustafson, a Nursing Advisory Board member, retired nursing educator and former Executive Director for the Monana Board of Nursing, has been in the role of consultant in this process to assist Ms. Hemmer and the nursing faculty members including Sandy Filesteel and Deborah Wilson. If questions, feel free to contact Brigit Hemmer in the Nursing Program at 406-353-3931. Community members will be called upon to assist in the site visit to validate the quality and importance of the nursing program for the community.





Safer Communities by Chemical Accident Prevention RMP Proposed Rule Fact Sheet

August 2022

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EPA is proposing to strengthen its Risk Management Program (RMP) regulations (40 CFR Part 68) following a review of the existing RMP requirements. These proposed amendments, the Safer Communities by Chemical Accident Prevention (SCCAP) proposed rule, further protect vulnerable communities from chemical accidents, especially those living near facilities with high accident rates. The proposed rule also includes new provisions that have not been addressed in prior RMP rules. EPA believes these revisions will foster safer communities by reducing the frequency and severity of accidental chemical releases. The Agency looks forward to working with communities with environmental justice concerns, public health advocates, and other stakeholders during the public comment process.

What does the RMP rule regulate?

Currently, EPA regulates approximately 12,000 facilities subject to RMP regulations throughout the country such as agricultural supply distributors, water and wastewater treatment facilities, chemical manufacturers and distributors, food and beverage manufacturers, chemical warehouses, oil refineries, and other chemical facilities. RMP facilities are those facilities that use extremely hazardous substances above the regulated threshold and are required to develop a Risk Management Plan which:

- Identifies the potential effects of a chemical accident;
- Identifies steps the facility is taking to prevent an accident; and
- Specifies emergency response procedures should an accident occur.

The Agency's RMP rule protects public health and the environment by requiring industrial facilities with high

accident rates to prevent accidental air releases of dangerous chemicals that could cause deaths, injuries, property and environmental damage, or require evacuations in surrounding communities.

Who lives near RMP facilities?

Historically underserved and overburdened populations disproportionately live within close proximity to RMP facilities compared with other populations. While the average percentage of historically underserved and overburdened racial and ethnic persons in the U.S. is 37%, 50% of inhabitants located within one mile of RMP facilities fall into that category. For facilities where chemical accidents have occurred between 2004 and 2020, the percentage of historically underserved and overburdened populations living near these facilities is even higher (57%). Communities living near RMP facilities are most at risk of exposure in the event of an accidental chemical release.

What are the proposed changes in the SCCAP Proposed Rule?

EPA is proposing to strengthen RMP regulations to require some facilities to do more to prevent chemical accidents, particularly types of facilities that have had the most frequent or severe accidents. The proposed rule includes new safeguards that have not been addressed in previous RMP rules, such as empowering workers in safety decisions and increasing transparency by increased access to RMP facility information for fenceline communities.

The proposed rule also includes:

 Promoting environmental justice through increased availability of information, such as the requirement for facilities to provide chemical hazard information, names of regulated substances, accident history and emergency response information upon request of community members located within 6-miles as well as to make the infor-

(Continued on page 22)

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mation available in the language preferred by the requestor.

- Requiring safer technologies and alternatives analysis for certain facilities with high accident rates.
- Advancing greater employee participation and opportunity for decision-making in facility accident prevention requirements.
- Requiring third party audits for facilities with a bad track record of accidents.
- Emphasizing the requirement for regulated facilities to evaluate risks of natural hazards and climate change, including any associated loss of power.
- Enhancing facility planning and preparedness efforts.

EPA expects that benefits of the provisions may reduce potential exposure to accidental chemical releases for historically underserved and overburdened populations.

How can I comment on the proposed rule?

EPA welcomes comments from all stakeholders during a robust public comment period. The public may comment on the proposed rule at www.regulations.gov (Docket ID No. EPA-HQ-OLEM-2022-0174) until 60 days after publication in the Federal Register. EPA is also holding three virtual public hearings on the proposed rule on September 26, 27, and 28, 2022.

EPA 540-F-22-004 August 2022

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EPA is proposing to strengthen its Risk Management Program (RMP) regulations (40 CFR Part 68) following a review of the existing RMP requirements and after considering information gathered from the 2021 Virtual Public Listening Sessions. These proposed amendments, the Safer Communities by Chemical Accident Prevention (SCCAP) proposed rule, further protect vulnerable communities from chemical accidents, especially those living near facilities with high accident rates. The proposed rule also includes new provisions that have not been addressed in prior RMP rules. EPA believes these revisions could increase protections for human health and the environment from chemical hazards, through advancement of process safety and lessons learned. The Agency looks forward to working with communities with environmental justice concerns, public health advocates, and other stakeholders during the public comment process.

What are the proposed changes in the SCCAP Proposed Rule?

Prevention Program (Subparts C and D)

- Natural hazards and power loss*: (1) Adding amplifying regulatory text to emphasize that natural hazards (including those that result from climate change) and loss of power are among the hazards that must be addressed in Program 2 hazard reviews and Program 3 process hazard analyses.
 (2) Requiring a justification in the Risk Management Plan when hazard evaluation recommendations are not adopted.*
- Facility Siting: (1) Emphasizing that facility siting should be addressed in hazard reviews and explicitly define the facility siting requirement for Program 2 hazard reviews and Program 3 process hazard analyses. (2) Requiring a justification in the Risk Management Plan when facility siting hazard recommendations are not adopted.*
- Safer technologies and alternatives analysis (STAA): (1) Requiring a STAA and practicability of inherently safer technologies and designs considered for (a) RMP-regulated processes classified under North American Industrial Classification System (NAICS) code 324 and 325 within one mile of another RMP-regulated facility that also has a process classified under NAICS code 324 or 325 and (b) RMP-regulated hydrofluoric acid alkylation processes classified under NAICS 324.
 (2) Requiring a justification in the Risk Management Plan when STAA recommendations are not adopted.* Increased access to this information promotes transparency and gives more opportunities for the public to be involved.
- Root cause analysis: Requiring a formal root cause analysis incident investigation when facilities have had an RMP-reportable accident.
- Third-party compliance audits: (1) Requiring the

*Indicates provisions that have not been addressed in prior RMP rules.



(Continued from page 22)

next scheduled compliance audit be a thirdparty audit when an RMP-regulated facility experiences: (a) two RMP-reportable accidents within five years, or (b) one RMP-reportable accident within five years by a facility with a Program 3 process classified under NAICS code 324 or 325 within one mile of another RMP regulated facility that also has a process classified under NAICS code 324 or 325. (2) Requiring a justification in the Risk Management Plan when third-party compliance audit recommendations are not adopted.*

Employee participation*: (1) Requiring employee participation in resolving process hazard analyses, compliance audit and incident investigation recommendations and findings. (2) Outlining stop work procedures in Program 3 employee participation plans. (3) Requiring Program 2 and Program 3 employee participation plans to include opportunities for employees to anonymously report RMP-reportable accidents or other related RMP non-compliance issues.

Emergency Response (Subpart E)

- Community Notification of RMP Accidents*: (1) Requiring non-responding RMP facilities to develop procedures for informing the public about accidental releases. (2) Requiring release notification data be provided to local responders. (3) Ensuring a community notification system is in place for notification of RMP-reportable accidents.
- Emergency Response Exercises: (1) Requiring a 10-year frequency for field exercises unless local responders indicate that frequency is infeasible.
 (2) Requiring mandatory scope and reporting requirements for emergency response exercises.

Information Availability (Subpart H, § 68.210)

• Enhanced Information Availability*: New requirements for the facility to provide chemical hazard information upon request to residents living with 6 miles of the facility, in the language requested. Under the current regulation, facilities are not required to provide this information.

Other Areas of Technical Clarification (Subparts A, C, D)

Minor regulatory edits proposing to:

 Require Program 3 process safety information be kept up to date,

- Make Program 2 and Program 3 requirements consistent for recognized and generally accepted good engineering practices (RAGAGEP),
- Retain hot work permits for five years,
- Further define the 'storage incident to transportation' term and the retail exemption, and
- Require RAGAGEP review in process hazard analyses.

What are the proposed compliance dates for the proposed changes?

EPA is proposing to require regulated sources to comply with:

- New STAA, incident investigation root cause analysis, third-party compliance audit, employee participation, emergency response public notification, exercise evaluation reports, and information availability provisions, three years after the effective date of the final rule.
- Revised emergency response field exercise frequency provision by March 15, 2027, or within 10 years of the date of an emergency response field exercise conducted between March 15, 2017, and the date of publication of the proposed rule in the Federal Register.
- Updates and resubmission of risk management plans with new and revised data elements, four years after the effective date of the final rule.

What are the estimated costs for the proposed RMP SCCAP Rule?

EPA estimates the rule will cost approximately \$77 million a year.

Where can I get more information?

- SCCAP Proposed Rule (Prepublication Version):
- <u>https://www.epa.gov/system/files/</u> <u>documents/2022-08/Prepub%20Version%</u> <u>20RMP%20SCCAP%20Proposed%20Rule_0.pdf</u>
- SCCAP Proposed Rule Docket: <u>www.regulations.gov/docket/EPA-HQ-OLEM-2022</u> -0174
- EPA RMP SCCAP webpage: <u>www.epa.gov/rmp/</u> <u>risk-management-program-safer-</u> <u>communitieschemical-accident-prevention-</u> <u>proposed-rule</u>
- EPA RMP webpage: <u>www.epa.gov/rmp</u>

Fort Belknap Indian Community ENVIRONMENTAL PROTECTION DEPARTMENT

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