



Dear friend of the Seneca Nation:

It has come to our attention that “treated” radioactive shale gas waste is proposed for discharge into the Ohi:yo’ (beautiful river in our language), more commonly known as the Allegany (also spelled Allegheny) River in Pennsylvania upstream from the Seneca Nation. Critical concerns first publicized by investigative journalists at Public Herald cite recent studies by scientists at Duke University, Duquesne University, and Penn State University that found an accumulation of radiation in river sediment near existing oil and gas wastewater treatment facilities in Pennsylvania.

Pittsburgh-based Epiphany Allegheny, LLC claims to have “new technology” that turns shale gas wastewater into “pure, clean water,” according to their August 2017 permit application to the Pennsylvania Dept. of Environmental Protection (PA DEP). However, this technology has not been thoroughly tested, and Epiphany does not plan to monitor key contaminants of concern, including radioisotopes, before discharging 42,000 gallons of treated waste into the Allegany River per day, with a potential daily maximum of 80,000 gallons.

Radioactive material in shale gas fracking waste will not be completely eliminated by treatment:

“Naturally-occurring radioactive material (NORM) and salts can be removed from the wastewater to background levels. However, even if only a small amount of radium would remain in the outfall, and the volume of effluents is large, one can expect to see build up of NORM in the impacted sediments.”

– Dr. Avner Vengosh, February 1, 2018

Our concerns are now echoed by the U.S. Army Corp of Engineers, U.S. Department of the Interior, Pennsylvania Fish & Boat Commission, New York State Department of Environmental Conservation, and several independent scientists in official comments submitted to PA DEP.

The Seneca Nation requested that PA DEP hold a public hearing on the nation’s territory downstream from the proposed facility. However, PA DEP denied that request. Since the state will not require continuous water quality testing and reporting for radioactive material in the influent and effluent we urge you to request PA DEP and U.S. EPA deny the Epiphany Allegheny, LLC permit application.

Sincerely,

Seneca Nation of Indians Council

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DANGERS OF EPIPHANY ALLEGHENY WASTE WATER PLANT

CONCERNS FROM OTHER AGENCIES:

The Department of Army, Corp of Engineers:

- The proposed facility will be located in a 100-year floodplain. Waste and chemicals stored onsite pose high risk to river ecosystem in the likely event of a flood.
- More thorough waste characterization and continuous water quality monitoring of distillate and discharge for contaminants of concern, including radioisotopes, benzene, barium, bromide, etc.

Department of the Interior, Fish & Wildlife:

- The federally endangered rayed bean mussel has been observed just downstream of the proposed discharge facility. Recent studies demonstrate mussels experience toxicity at concentrations below State and Federal standards for contaminants.

Pennsylvania Fish & Boat Commission:

- Several endangered and protected aquatic species live in the Allegheny River at the site of the proposed facility.

New York Department of Environmental Conservation:

- The discharge permit for this facility does not include monitoring of effluent limits of parameters of concern and recommends inclusion of continuous influent and effluent sampling.

OTHER IMPORTANT FACTS:

- There are no federal or state regulations being applied for daily testing of influent or effluent for radioactive elements. Therefore, the burden of proof rests on those directly impacted.
- Fracking includes a host of carcinogenic volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs). Daily testing for these compounds is also not required by state or federal agencies for the proposed facility.
- The company, Epiphany Allegheny LLC, claims that its treatment process will produce “pure, clean water.” This claim is false by definition and attempts to mislead the public.
- The Allegheny watershed is part of the Triple Divide, a precious ecosystem that gives birth to three major U.S. rivers (Ohio, Susquehanna, and Genesee) which serve water to millions of people downstream in addition to the Seneca Nation, from Lake Ontario to the Chesapeake Bay to the Gulf of Mexico. The accumulation of radioactive materials in these headwaters are a national issue.
- The recently released *Triple Divide [Redacted]* documentary about the Triple Divide and risks of water contamination related to fracking in Pennsylvania is available from Public Herald.

References:

1. Burgos, Williams D., etc. Watershed-Scale Impacts from Surface Water Disposal of Oil and Gas Wastewater in Western Pennsylvania. Environ. Sci. Technol., 2017, 51 (15), pp 8851-8860. July 12, 2017. <https://pubs.acs.org/doi/abs/10.1021/acs.est.7b01696>
2. Laure, Nancy E, Warner, and Vengosh. Sources of Radium Accumulation in Stream Sediments near Disposal Sites in Pennsylvania: Implications for Disposal of Conventional Oil and Gas Wastewater. Environ. Sci. Technol., 01 Jan 2018. <https://pubs.acs.org/doi/abs/10.1021/acs.est.7b04952>
3. Stolz, John, etc. Scintillation gamma spectrometer for analysis of hydraulic fracturing waste products. Journal of Environmental Science & Health, Part A - Toxic/Hazardous Substances and Environmental Engineering (2015) 50, 499-503. <http://www.tandfonline.com/doi/abs/10.1080/10934529.2015.992682>