HOUSEHOLD AIR SAMPLING IN PITTMAN

What you need to know about indoor air testing in the East Pittman neighborhood in Henderson, Nevada
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Background

The Nevada Division of Environmental Protection (NDEP) is committed to protecting public health and the natural environment. Due to past industrial operations, NDEP has directed the Nevada Environmental Response Trust (NERT) to collect hundreds of samples over the past five years to determine whether elevated levels of chloroform were present near the Black Mountain Industrial (BMI) Complex in Henderson. If inhaled or consumed on a regular basis at high enough levels, chloroform may cause adverse health effects.

Fortunately, all of NERT’s environmental analyses, scientific modeling, and human health risk assessments – which were completed in July 2021 – found NO health concerns for chloroform in the surrounding communities, and the likelihood of elevated chloroform levels in nearby homes remains low.

Nevertheless, out of an abundance of caution, NDEP has directed NERT to evaluate several homes in the East Pittman community to confirm that indoor chloroform levels are consistent with modeling results.
What are the potential health impacts of inhaling or swallowing elevated levels of chloroform?

Exposure to low levels of chloroform has not been shown to cause adverse health impacts. Breathing in harmful levels of chloroform for a short period of time may cause minor symptoms like dizziness, fatigue, and headaches. Regularly breathing in air, eating food, or drinking water containing harmful levels of chloroform for excessive periods of time may impact your liver or kidneys (see chart on Pg. 4). Higher levels of chloroform produce a distinct, sweet-smelling scent that can be detected by people.

What type of testing will be done inside homes?

From November 2021 to January 2022, NDEP will be collecting indoor air samples from several homes around the community.

These samples will be analyzed at a state-certified laboratory. The final results will be shared with area residents and posted on NDEP’s website.
If elevated levels of chloroform vapor are found inside my home, what can I do to fix the issue?

While highly unlikely, if elevated levels of chloroform are found, there are several low-cost devices available that effectively remove chloroform vapor from homes. NDEP stands ready to work with area residents to discuss options, recommendations, and resources available to help meet the needs of your household.

Where did the chloroform come from?

Chloroform is not known to have ever been intentionally produced by any of the past or current companies at the BMI Complex. Data shows chloroform developed as a byproduct of water disinfection and industrial chlorination processes.

Chlorine production at the BMI Complex began in the 1940s and continued through the 2010s. Chloroform may have formed unintentionally as a byproduct of these processes.

Recently, elevated levels of chloroform have been found in the soil and groundwater in some areas beneath the BMI Complex.
Chloroform can evaporate from groundwater and travel up through soil as a type of vapor, which can then enter buildings and homes. This process is called “vapor intrusion.”

Sampling around the BMI Complex detected low levels of chloroform in groundwater and soil. While these levels do not pose a risk to public health, out of an abundance of caution, the U.S. Environmental Protection Agency (EPA) recommended testing homes nearby for chloroform vapor.

Currently, soil models and groundwater data collected by NDEP show that vapor intrusion is likely NOT impacting any homes. Additionally, data shows that chloroform levels have been steadily declining over the years due to water treatments and natural processes.

Is vapor intrusion the only way that chloroform (or other chemical vapors) can get into my home?

No. There are small levels of chemical vapors in virtually every home nationwide from products like paint and/or cleaning supplies. Chloroform is also used to disinfect drinking water, and due to evaporation, homes routinely test positive for trace levels of chloroform vapor. These small levels have not been shown to be harmful to people.
Is my drinking water safe?

Groundwater is not a source of drinking water in Henderson, so if you are on the city’s municipal water system, your drinking water is safe.

Henderson tests drinking water to ensure all EPA drinking water standards are met and publishes these results in an annual Water Quality Report (https://tinyurl.com/4tadz7y9).

How can I stay informed on the latest updates on the household air sampling project?

As part of our mission, NDEP is committed to keeping area residents informed every step of the way throughout this project. Regular updates will be posted on NDEP’s website at bit.ly/3pAlJSG and provided via email. If you have questions, please call JD Dotchin at (702) 668-3914.

NDEP BMI Center Website:
https://tinyurl.com/2zk5ffmx

Agency for Toxic Substances and Disease Registry (ATSDR) Chloroform Fact Sheet and Frequently Asked Questions:
https://tinyurl.com/ypyaa5ck

EPA Chloroform Fact Sheet:
https://tinyurl.com/a7s82svk

NDEP BISC Contact Page:
https://tinyurl.com/yr4znjcu