



STATE OF
COLORADO



55-Gallon Drum in Walnut Creek Drainage

Keim, Andrew <Andrew.Keim@lm.doe.gov>

Tue, Dec 17, 2024 at 4:59 PM

To: "Walker - CDPHE He Him, Brian" <brian.walker@state.co.us>

Cc: "Nicholson, Brandon" <Nicholson.Brandon@epa.gov>, Richard Mruz - CDPHE <richard.mruz@state.co.us>, "Franke, Michelle" <michelle.franke@lm.doe.gov>, "Santi, Dana (CONTR)" <Dana.Santi@lm.doe.gov>, "Briscoe, Kirk (CONTR)" <kirk.briscoe@lm.doe.gov>, "Wisniewski, Ryan (CONTR)" <ryan.wisniewski@lm.doe.gov>

Brian,

On Wednesday, December 11, 2024, the U.S. Department of Energy, Office of Legacy Management (LM) successfully removed the 55-gallon drum in the North Walnut Creek drainage following the procedures outlined in our email to CDPHE on November 21st. In addition to the screening measures outlined in our email, we also screened the drum using a photoionization detector (PID). There were no indications of any environmental impacts associated with the drum. The drum did not have a label affixed to it. However, we did find part of a label for "Trichloroethane" in the excavation. Trichloroethane is used as a solvent and degreaser, and is a highly volatile compound.

Based on the results of the drum screening and removal, and the highly volatile nature of trichloroethane, we are not planning to take soil samples at this time. We will store the drum until it can be disposed of offsite. A summary of the drum removal process is provided below and photos are attached.

Drum Removal Process

1. Before removing the drum, we:
 - a. Removed the tarp covering the drum.
 - b. Inspected the drum and area around the drum. No discoloration or staining of soil was identified.
 - c. Visually inspected the interior of the drum with a borescope camera. No free-standing liquid was identified. There was a mouse nest and moisture inside the drum but no indication of any noxious material.
 - d. Performed monitoring of the immediate area around the drum and the surface of the exposed drum, including the area immediately around the small hole that was initially made in the top of the drum. Oxygen levels were normal (19.5%), carbon monoxide and hydrogen were at non-detectable levels, and combustible gas was less than the lower explosive limit (LEL).
 - e. Performed a radiological survey of the drum and the immediate area around the drum with all readings at background levels or less.
 - f. Determined that there was no free-standing liquid inside of the drum.
2. To remove the drum, we:
 - a. Removed soil in 6-inch lifts and monitored the uncovered soils and the surface of the drum as they were exposed; no discoloration or staining of the soil was identified. Monitoring continued with the 4-gas meter and radiation detection instruments to verify acceptable conditions. The excavation was completed at less than 30 inches below ground. All readings were at background or non-detectable levels.
3. After the drum was removed, we:
 - a. Visually inspected the excavation and did not identify any staining or discoloration.
 - b. Inspected the removed drum. It is dented and rusty with some holes. No labels, serial numbers or other markings were found on the drum. The decomposed remnants of a label with trichloroethane information was discovered in the bottom of the excavation. The label was removed from the excavation and bagged.
 - c. Placed the excavated soil back into the excavation.
 - d. Completed the wrapping, marking, and storing of the drum into an onsite CONEX box. The drum remained wrapped and undisturbed until an operating PID with a 11.7 eV lamp was available to monitor the drum for volatile organic compounds. Monitoring was performed with a PID on December 13, 2024, and measurements were less than detectable levels.

Please let us know if you have any questions or need additional information.

Best regards,

Andy Keim, PG | Site Manager

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6 attachments



Drum Removal_1.jpg
1632K



Drum Removal_2.jpg
2497K





Label.jpg
4479K



Excavation.jpg
5851K



Nest_in_Drum.png
455K



Prior_to_Removal.jpg
3642K





STATE OF COLORADO

Walker - CDPHE He Him, Brian <brian.walker@state.co.us>

55-Gallon Drum in Walnut Creek Drainage

Franke, Michelle <michelle.franke@lm.doe.gov>

Mon, Jan 27, 2025 at 4:21 PM

To: "Walker - CDPHE He Him, Brian" <brian.walker@state.co.us>

Cc: "Nicholson, Brandon" <Nicholson.Brandon@epa.gov>, Richard Mruz - CDPHE <richard.mruz@state.co.us>, "Santi, Dana (CONTR)" <Dana.Santi@lm.doe.gov>, "Briscoe, Kirk (CONTR)" <kirk.briscoe@lm.doe.gov>, "Wisniewski, Ryan (CONTR)" <ryan.wisniewski@lm.doe.gov>, "Keim, Andrew" <Andrew.Keim@lm.doe.gov>

Brian,

A couple of weeks ago, you and I spoke over the phone and you mentioned that you would like a GPS point of where the drum was located. It was located at the following coordinates: 39°53'49.8"N 105°11'50.4"W (39.897177, -105.197320) <https://maps.app.goo.gl/uh4uNoV7DaiG8vde9>. I've also attached a KMZ file with the location for your reference.

Please reach out with other questions.

Kind regards,

Michelle



Follow us on social media

Michelle Franke, PE

Site Manager

U.S. Department of Energy

Office of Legacy Management

MOBILE 303.746.5409

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 **Drum Location.kmz**
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