

EPA Emergency Response Site Update

Helena Mercury Spill

Operations Period 01

May 31 - June 1, 2024

Safety Message

Mercury is a contaminant that is toxic to humans at very low levels and it is easily spread.

The bathhouse has been cleared for use by guests of the retreat. The garage has been secured as an Exclusion Zone and EPA's response team is blocking a significant portion of the retreat center's parking lot.

[Website](#)

Site Description

On May 30, 2024, an employee picked up an unlabeled bottle while cleaning out a detached garage at a yoga retreat center. The bottle was heavier than expected and slipped from his hand. The bottle hit a work bench and shattered, which resulted in a reported 500mL of mercury being released to the garage (note the response team has already collected more than 500mL of mercury). The employee left the garage, bagged their contaminated clothing just outside the door, walked to a nearby bathhouse and rinsed themselves in a shower. Staff at the retreat center closed and isolated the garage before calling the National Response Center.

An EPA response team arrived at the yoga retreat center on May 31, 2024 and initiated a response effort.

Site Objectives

- Safety of the employees of the retreat center, its guests and response personnel is top priority.
- Collect and dispose of recoverable mercury.
- Clear the bathhouse for use.
- Clear the garage for use.
- Collect and dispose of a limited amount of hazardous chemicals found at the garage.
- Provide timely and accurate communication of response information to the public and stakeholders.

Operations Period Objectives

1. Conduct initial screening and assessment of both the bathhouse and the garage.
2. Clear the bathhouse for use.
3. Mobilize a lined roll off dumpster with a lid up a narrow road.
4. Establish exclusion, contaminant reduction and support zones.
5. Begin effort in the garage.

Operations Period Accomplishments

EPA's response team of 1 EPA OSC and 8 EPA contractors (2 START and 6 ERRS) arrived on May 31, 2024 and made initial entries into both the bathhouse and garage.

Air monitoring readings from the breathing zone in the bathhouse were well below residential standards. Readings from the 3-foot by 3-foot concrete floor of the shower that was used by the employee who discovered the mercury were elevated as were several floor mats. Results indicated that there were no beads of mercury in the floor drain of the shower. No other levels of concern were detected in the bathhouse.

Air monitoring readings from the breathing zone in the garage upon entry was 72,360 nanograms per cubic meter (ng/m³). A reading from near the location of the spill was 229,000 ng/m³. The lowest reading obtained during the initial assessment of the garage was 34,840 ng/m³. This exceeds the limit of 3,000 ng/m³ for commercial settings.

EPA's response team focused its initial efforts on the bathhouse. All the rugs were removed for disposal as was a wood pallet on the floor of the shower, a shower curtain and the wood trim just outside the shower. The floor of the shower was cleaned with a vacuum designed to collect mercury. The entire shower was then treated several times with a chemical reagent designed to produce a non-vaporizing sulfide when it comes in contact with mercury. Particular attention was paid to the floor of the shower. Subsequent to this effort, contamination levels were significantly reduced. Out of an abundance of caution, the concrete floor of the shower was sealed with a coating and allowed to dry.

After two days of being closed, the OSC cleared the shower for use due to the low levels of contamination detected in the breathing zone of the bathhouse and on the floor of the shower as well as the sensitivity of the equipment used to collect readings over a small, contained space.

EPA's response team has begun its effort at the garage. The team navigated the delivery of a roll-off dumpster to the Site over a narrow access road. The team established exclusion, contaminant reduction and support zones to ensure safety around the garage.

The team worked its way from the garage entrance to the location of the release. Items that cannot be decontaminated are being removed and sampled for appropriate disposal. Two specially-designed vacuums are being used to collect pools and beads of mercury. Over 500 milliliters of elemental mercury have already been collected. The OSC anticipates that this process will continue during the next Operations Period (June 2, 2024).

Decontaminated and sealed shower stall.



Team working their way to location of release.



First ½ liter of mercury collected with mercury vacuum.

