



REGION 8

DENVER, CO 80202

ACTION MEMORANDUM

SUBJECT: Action Memorandum for a Removal Action at the Cody Regional Health Mercury Spill Site pursuant to the On-Scene Coordinator's delegated authority under CERCLA Section 104.

FROM: Joyel Dhieux, OSC
Oil Section

THRU: Steven Merritt, Supervisor
Oil Section

Deirdre Rothery, Manager
Emergency Management Branch

TO: Aaron Urdiales, Director
Superfund and Emergency Management Division

I. Purpose

The purpose of this memorandum is to document the decision to initiate emergency response actions described herein for the Cody Regional Health Mercury Site located in Cody, Park County, Wyoming pursuant to the On-Scene Coordinator's delegated authority under CERCLA Section 104. This emergency response involved the assessment and removal of mercury due to a broken barometer within a storage closet at the facility. Conditions existing at the Site present a threat to public health or welfare or the environment and meet the criteria for initiating a removal action under 40 CFR 300.415(b)(2) of the National Contingency Plan (NCP).

II. Site Information

A. Site Description

Site Name: Cody Regional Health Mercury Site
Site Spill ID (SSID): B8M4
NRC Case Number: 1416902

CERCLIS Number: WYN000826468

Site Location: Cody Regional Health, 1025 9th Street, Cody, Wyoming 82414

Lat/Long: 44.526447008609, -109.070320990435

Potentially Responsible Party (PRP):

NPL Status: Non-NPL

Removal Start Date: 11/21/2024

B. Site Background

1. Site Evaluation

On November 20, 2024, the Worland Wyoming Fire Chief contacted EPA and requested assistance with assessment and removal of a mercury spill located within the Cody Regional Health Big Horn Basin Cancer Center in Cody, Wyoming. While calibrating a large wall-mounted barometer inside a storage closet, hospital staff noticed mercury dripping from the barometer onto the floor. Hospital staff responded quickly and efficiently to the mercury spill. Following EPA guidance available on the internet, hospital staff used a syringe to collect mercury from the floor and step ladder. The barometer, step ladder and other items impacted by the mercury spill were isolated and bagged for disposal. Duct tape was used to complete the cleaning. Ventilation in the storage closet was taped closed. The storage closet was sealed with tape around the door seams and a "Do Not Enter" sign posted. Hospital staff transferred the bagged barometer and impacted items to a detached storage garage for safe keeping.

An EPA OSC, Superfund Technical Assessment and Response Team (START) and Environmental Rapid Response Services (ERRS) team responded to the spill on November 20, 2024. The team initiated an assessment on November 21, 2024, and confirmed lingering mercury beads and vapors within the storage closet.

Once released into the environment, mercury beads can easily spread to outside of the initial spill location. During the assessment, EPA's START team screened hallways, offices, and the treatment room for mercury. Levels within the cancer center were below EPA's action level for mercury. The mercury spill was confined to the storage closet and to the detached garage where the bags had been transferred.

2. Physical location and Site characteristics

The incident occurred within the Cody Regional Health Big Horn Basin Cancer Center, located adjacent to the Cody Regional Health facility in Cody, Wyoming. The Cancer Center is located at 1095 9th Street, Cody, Wyoming 82414. The hospital and cancer center are within downtown Cody, Wyoming, near museums, restaurants, shops, residences, and city parks. The Cancer Center serves the population of northeastern Wyoming.

According to EPA's Environmental Justice (EJ) Screening and Mapping Tool, the data indicate potential areas of EJ concern at or near the Site.

3. Release or threatened release into the environment of a hazardous substance, pollutant or contaminant.

Mercury is the contaminant of concern at the Site and is a listed hazardous substance in 40 CFR 302.4.

Mercury is the only metal that is liquid at room temperature. In its pure form (often called metallic), mercury is a shiny, silver-white, odorless liquid. At room temperature, mercury vaporizes into a toxic, colorless, odorless gas.¹ In its vapor form, mercury is easily inhaled and extremely toxic. For liquid mercury, the most important route of absorption is through inhalation. Because of the chemical nature of mercury vapor, deposition and retention in the lungs are quite high (on the order of 80 percent in humans).²

When spilled or tracked into a small or poorly ventilated room, mercury can pose significant health threats. Very small amounts of mercury, released into an enclosed space (such as a home or classroom), can raise air concentrations to harmful levels. Metallic mercury is extremely difficult to remove from shoes, clothes, furniture, carpet, and other porous items. It is easily tracked and transferred. If these items are not properly disposed or cleaned, the mercury can linger for months or years and continue to pose a health threat.³

III. Threats to Public Health Welfare or the Environment

A. Nature of Actual or Threatened Release of Hazardous Substances, Pollutants or Contaminants.

During the initial assessment, the EPA Response Team confirmed the presence of mercury in the storage closet and the detached storage garage. While hospital

¹ United States of America, Agency for Toxic Substances and Disease Registry, Division of Toxicology and Environmental Medicine Prevention, Response and Medical Support Branch Emergency Response Team. (2012, March 22). Action Levels for Elemental Mercury Spills.

² Arch Environ Health, 1976 Nov-Dec; 31(6):302-9. Clearance of mercury (HG-197, HG-203) vapor inhaled by human subjects.

³ <https://www.epa.gov/mercury/health-effects-exposures-mercury>

staff completed an initial clean-up, mercury beads were visible on the floor within the storage closet. During the assessment and subsequent removal, mercury vapors within the closet ranged between 1,200 ng/m³ and 30,000 ng/m³. Mercury vapor levels rose quickly with movement inside the closet. EPA's National Elemental Mercury Response Guidebook (EPA, 2019) recommends less than 3,000 ng/m³ for commercial settings based on an 8-hour workday and 40-hour work week.

The storage closet was located within Cancer Center where residents routinely seek treatment. Without a removal action, the mercury would have likely spread throughout Center.

B. Check applicable factors (from 40 CFR 300.415) which were considered in determining the appropriateness of a removal action: EPA has considered all the factors described in 40 CFR 300.415(b)(2) of the NCP and determined that the following factors apply at the Site.

- Actual or potential exposure to nearby human populations, animals or the food chain from hazardous substances or pollutants or contaminants [300.415(b)(2)(i)].
- Actual or potential contamination of drinking water supplies or sensitive ecosystems [300.415(b)(2)(ii)].
- Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that pose a threat of release [300.415(b)(2)(iii)].
- High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface that may migrate [300.415(b)(2)(iv)].
- Weather conditions that may cause hazardous substances or pollutants to migrate or to be released [300.415(b)(2)(v)].
- Threat of fire or explosion [300.415(b)(2)(vi)].
- The availability of other appropriate federal or state response mechanisms to respond to the release [300.415(b)(2)(vii)].
- Other situations or factors that may pose threats to the public health or welfare of the United States or the environment [300.415(b)(2)(viii)].

IV. Selected Removal Action and Estimated Costs

A. Situation and Removal Activities to Date

1. Current Situation.

The EPA Emergency Response Branch initiated an emergency response pursuant to the On-Scene Coordinator's delegated authority under CERCLA Section 104 on November 20, 2024. The EPA response team mobilized to the Site on November 20, 2024. The team met with hospital staff, confirmed access, and initiated an assessment and removal on November 21, 2024. Field activities and demobilization were completed on November 22, 2024. Off-site disposal is pending.

2. Removal activities to date:

a) Federal Government/Private Party

On November 21, 2024, the EPA response team initiated an assessment and removal action within the storage closet and the detached garage. Hospital staff had previously transferred the bagged barometer and bagged mercury-impacted items to the detached garage. EPA's ERRS team transferred the bagged items to drums for transportation and disposal. As the contaminated items were packed, the START team collected samples for the required TCLP analysis necessary for disposal. Once the items were removed from the garage, the ERRS team cleaned the floor with HgX, a mercury decontamination product. The garage was subsequently heated and vented to further reduce vapors.

Prior to initiating work in the storage closet, ERRS constructed an isolation tent to prevent the release of mercury from the closet into the facility. The ERRS team vacuumed remaining mercury beads from the floor in the closet using a specialized merc-vac. Additional mercury-contaminated items were removed for disposal. The floor was cleaned multiple times with HgX and the room heated and vented. The START team conducted air sampling over-night to confirm that the removal action achieved levels below 3,000 ng/m³.

In addition, the EPA response team collected a small bottle of mercury from the Worland Fire Department for disposal. The team completed decontamination and demobilization on November 22, 2024.

b) State/local

Representatives from the Worland Fire Department and the Wyoming Department of Environmental Quality were on-site supporting the assessment and removal.

3. Enforcement

Where the responsible parties are known, an effort initially shall be made, to the extent practicable, to determine whether they can and will perform the necessary removal action promptly and properly.

B. Planned Removal Actions

1. Planned action description

Field activities and demobilization were completed on November 22, 2024. Impacted items and elemental mercury were transferred to the ERRS facility in

Denver, pending sample results and disposal. The containers were secured in DOT-approved containers for proper shipping and disposal.

2. Contribution to remedial performance
The proposed actions will, to the extent practicable, contribute to the efficient performance of any long-term remedial action at the site.
3. ARARs
Removal actions conducted under CERCLA are required to attain ARARs to the extent practicable. In determining whether compliance with ARARs is practicable, the OSC may consider appropriate factors, including the urgency of the situation and the scope of the removal action to be conducted. No ARARs were identified due to the urgency of the situation and the scope of the removal action to be conducted.
4. Project Schedule
Disposal actions are projected to be completed within the next few months.

C. Estimated Costs*

Contractor costs (ERRS/START staff, travel, equipment)	\$60,000
Other Extramural Costs (Strike Team, other Fed Agencies)	\$0
Contingency costs (20% of subtotal)	\$12,000
Total Removal Project Ceiling	\$72,000

*EPA direct and indirect costs, although cost recoverable, do not count toward the Removal Ceiling for this removal action. Liable parties may be held financially responsible for costs incurred by the EPA as set forth in Section 107 of CERCLA. "

V. Expected Change in the Situation Should Action Be Delayed or Not Taken

A delay in action or no action at this Site would increase the actual or potential threats to the public health and/or the environment.

VI. Outstanding Policy Issues

None

VII. Approvals

This decision document represents the selected removal action for this Site, developed in accordance with CERCLA as amended, and is not inconsistent with the National Contingency Plan. This decision is based on the administrative record for the Site.

Conditions at the site met the NCP section 300.415(b) criteria for a removal action and through this document, I am approving the proposed removal actions. The total project ceiling is \$72,000, this amount will be funded from the Regional removal allowance.

Joyel Dhieux,
Federal On-Scene Coordinator

Date

Attachments

Attachment 1: Map

Attachment 1: Map



