U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION/SITUATION REPORT Braswell Place Mercury Spill - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Region IV

Subject: POLREP #2

Clean-up continues

Braswell Place Mercury Spill

Lenoir, NC

Latitude: 35.8848630 Longitude: -81.6823010

To:

From: Stephen Ball Date: 3/10/2011

Reporting Period: 03/07/11 - 03/09/11

1. Introduction

1.1 Background

Site Number: B4G2 Contract Number: D.O. Number: Action Memo Date:

 Response Authority:
 CERCLA
 Response Type:
 Emergency

 Response Lead:
 EPA
 Incident Category:
 Removal Action

NPL Status: Non NPL Operable Unit:

Mobilization Date: 3/6/2011 Start Date: 3/6/2011

Demob Date: Completion Date:

CERCLIS ID: RCRIS ID:

ERNS No.: State Notification:

FPN#: Reimbursable Account #:

1.1.1 Incident Category: Emergency Removal Action

1.1.2 Site Description: Detached single family residence.

1.1.2.1 Location: 1934 Braswell Place, Lenoir, NC

1.1.2.2 Description of Threat: Toxicity by inhalation, ingestion.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results: Visible mercury discovered in a glass container. Large (quarter-sized) beads and numerous smaller beads observed in kitchen where mercury was released by owner's family members. The glass container was flask-shaped and was allegedly corked. The home owner is alleged to have had possession of the mercury since his gold processing days. EPA has yet to determine the time frame for the former operation that required elemental mercury.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative:

On 3/7/2011 an initial screen of the kitchen with the Lumex indicated mercury levels of 1.5 ug/m³ in the breathing zone with a temperature of 40 degrees. ERRS removed all potentially contaminated items from the kitchen, bagged them and placed them outside on sheets of plastic. ERRS then vacuumed all visible mercury using a HEPA filtered mercury vacuum. The cabinet, counter top and half-wall where the spill occurred and the floor molding below the cabinet were also removed. START screened the resident's car in which the family traveled to the hotel. No mercury was detected inside the car with all doors and windows closed and a temperature of 60 degrees. START screened both hotel rooms where residents were staying and did not detect any mercury. Clothes and shoes of all residents who were inside the house when the spill occurred were also bagged and screened. One resident's clothes had a concentration of >100 ug/m³ after being heated for over an hour. This was the resident who noticed the spill. The clothes are being disposed of as waste. After wiping and vacuuming the kitchen thoroughly, removing contaminated items, and heating the kitchen to 75 degrees mercury concentrations of 4.9 ug/m³ in the breathing zone and 10 ug/m³ near the source of the spill were observed. The kitchen was sealed and heated and vented for the night.

On 3/8/2011 a dog and a bird being held at Caldwell County Animal Shelter were screened for mercury using the Lumex. The animals were in the home when the spill occurred. Both animals were negative for mercury contamination. EPA and START observed mercury levels of over 100 ug/m^3 in a small crawlspace located directly beneath the kitchen and adjacent to the basement. High concentrations of mercury vapors were limited to one corner of the crawlspace near the earthen floor. It is likely that mercury has contaminated some of the soil in the space and possibly has penetrated cracks in the concrete lining the crawlspace. ERRS removed some of the soil in the contaminated area and vacuumed with a mercury vacuum. START observed similar levels of mercury in the space afterwards. START also screened bags containing the dirt and some discarded personal items from the space; concentrations were over 100 ug/m^3 in the bags at 55 degrees. The kitchen was sealed and heated and vented for the night.

2.1.2 Response Actions to Date

- Removed and bagged all personal items in the kitchen.
- Removed visible mercury with a mercury vacuum.
- Removed the cabinet and counter where the spill occurred.
- Wiped and vacuumed kitchen to remove all residual mercury.
- · Screened the resident's car, clothing and hotel rooms.
- Vacuumed and removed soil from a crawlspace below the kitchen where high concentrations of mercury were discovered.
- Heated and vented the kitchen.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

2.1.4 Progress Metrics

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal

2.2 Planning Section

2.2.1 Anticipated Activities

- Remove additional soil and concrete from crawlspace
- · Install ventilation system in crawlspace
- Heat crawlspace cracks with torch
- Continue heating and venting kitchen
- 8 Hour home clearance
- Repair damaged counter top and restore kitchen to livable condition
- · Disposal of waste generated on site

2.2.1.1 Planned Response Activities

2.2.1.2 Next Steps

2.2.2 Issues

Some news media has been present on site

2.3 Logistics Section

Red Cross is assisting EPA by providing for temporary relocation of the residents during the clean-up.

2.4 Finance Section

No information available at this time.

2.5 Other Command Staff

No information available at this time.

3. Participating Entities

3.1 Unified Command

3.2 Cooperating Agencies

Caldwell County Health Department Caldwell County EMA

Red Cross

4. Personnel On Site

OSC (1) START (1) ERRS (5)

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.