U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Wrigley Charcoal Plant Site - Removal Polrep

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV

Subject: **POLREP #3**
Continuation of Asbestos Time Critical Removal Action
Wrigley Charcoal Plant Site
04X6
Lyles, TN
Latitude: 35.9026562 Longitude: -87.3510982

To: James Webster, USEPA R4 ERRPB
Andy Binford, TDEC

From: Steve Spurlin, OSC
Date: 8/25/2015
Reporting Period: August 8, 2015 to August 22, 2015

1. Introduction

1.1 Background

Site Number:	04X6	**Contract Number:**	EPS40702
D.O. Number:	0124	**Action Memo Date:**	6/30/2015
Response Authority:	CERCLA	**Response Type:**	Time-Critical
Response Lead:	EPA	**Incident Category:**	Removal Action
NPL Status:	NPL	**Operable Unit:**	
Mobilization Date:	7/13/2015	**Start Date:**	7/13/2015
Demob Date:		**Completion Date:**	
CERCLIS ID:	TND980844781	**RCRIS ID:**	
ERNS No.:		**State Notification:**	07/13/2015
FPN#:		**Reimbursable Account #:**	

1.1.1 Incident Category

The Site is a fund lead time critical removal action to address threats posed by asbestos containing roof tiles.

1.1.2 Site Description

The Wrigley Charcoal Plant Site includes seven distinct areas affected by various industrial activities. The U.S. Environmental Protection Agency (EPA) placed the Site on the National Priorities List (NPL) in 1989 because of contaminated debris, ground water and soil resulting from facility operations dating back to the 1880's.

In 1995, Industrial Plastics Recycling started operating a small-scale recycling facility on the southern portion of the Site. Industrial Plastics Recycling conducted metals and plastics recycling, storage of waste products and other related activities on the southern portion of the Wrigley Charcoal Plant NPL Site. Industrial Plastics Recycling utilized approximately 15 acres of the NPL Site and consisted of a large warehouse, a large processing building and approximately five acres of outside/uncovered storage of processed and unprocessed acrylic, poly-carbonate, ABS, polyethylene, polypropylene, styrene, PVC and PETG plastics in totes and piles. The Site is surrounded by residential communities and directly adjacent to the North Fork of Mill Creek.

On December 18, 2013, the Industrial Plastics Recycling facility caught fire. Approximately five acres of plastics and surrounding buildings were involved and on fire. A large smoke plume ensued that extended for miles downwind. Numerous homes and business were impacted by the smoke plume. State and local officials implemented a 1½-mile evacuation zone in all directions. The EPA responded under emergency authority and assisted with extinguishing the fire. The fire resulted in significant damage to the buildings and structures at the Site, and Industrial Plastics Recycling ceased operating at the Site. For additional information regarding the Industrial Plastics incident, please visit the following website: http://epaosc.org/industrialplasticscofire

The fire, time, and weather events have impacted the roofing tiles on the old buildings. The majority of the tiles have fallen onto the ground. Testing by TDEC and EPA verified the tiles contain asbestos. A time critical removal action will be conducted by EPA to address the asbestos tiles and any soil areas impacted

by the asbestos.

1.1.2.1 Location

The Site address is 8526 Plant Road, Lyles, Hickman County, Tennessee. The Site is located northwest of Highway 100, about 45 miles southwest of Nashville. The Site is surrounded by residential communities and directly adjacent to the North Fork of Mill Creek.

1.1.2.2 Description of Threat

On April 20, 2015, the EPA and Tetra Tech collected 66 bulk samples from suspect asbestos-containing materials associated with the site buildings and site building debris. Analysis of the bulk samples indicated 10 of the 66 samples contained asbestos concentrations greater than one percent. The concentration of asbestos in the roof material ranged from 10 to 60 percent. On April 21, 2015, the EPA and Tetra Tech collected composite soil samples from 25 delineated surface soil areas outside of the building and structures. These samples were collected to determine if surface soils located further away from the building exterior walls contained asbestos. Five of the 25 samples contained concentrations of asbestos ranging from 0.30 to 0.60.

The disease and pathology associated with the inhalation of asbestos fibers is well documented in the medical literature. Congress has found that "*medical science has established that no minimal exposure to asbestos fibers which is considered safe to exposed persons*." (20 U.S.C. § 3601(a)(3). If inhaled, asbestos fibers can increase the risk of developing lung cancer, mesothelioma, pleural fibrosis and asbestosis.

In addition to potential exposure to nearby residents, the EPA SRSEB plans to undertake extensive sampling and remedial action as part of the NPL process; therefore, human exposure is likely under current Site conditions. Site conditions are consistent with criteria outlined in the September 2008 EPA OSWER Directive 9200.0-68 "Framework for Investigating Asbestos-Contaminated Superfund Sites", which supports a removal action when human exposure is likely. An action is warranted to prevent exposure to workers who will be operating at or near the area of contamination, future tenants and nearby residents.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

In December 2013, the TDEC Division of Air Pollution Control collected samples from the Site. Sample results verified that asbestos-containing material (chrysotile) was present at the Site.

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2. Current Activities

2.1 Operations Section

2.1.1 Narrative

On July 13, 2015, EPA mobilized equipment and personnel to the Site to began a time critical removal action to address threats from asbestos roofing tiles. The scope of the removal involves the physical removal of the tiles that remain attached to the roof, and the tiles that have fallen inside and outside the building. Project duration is estimated at six weeks.

2.1.2 Response Actions to Date

July 20 to July 25, 2015

- The ERRS contractor conducted site preparation activities to include removal and recycling of scrap metal, installation of barrier marking work zone, and building of decontamination unit.
- The ERRS contractor conducted removal activities to include the following:
  - Demolition of the small office located near the southeast corner of the north building.
  - Removal of asbestos-contaminated debris from inside and around the outside of the north building.
  - Removal of fire damaged equipment and metal from the inside and around the outside of the north building.
  - Water trucks were used for dust suppression during demolition and removal activities and to wash metal recovered for recycling.
- Tetra Tech START conducted initial background and perimeter air sampling and soil sampling of two locations not sampled during the previous site assessment.
- Background perimeter air sampling was conducted at one onsite location and at three residential locations prior to removal activities. The result for the onsite location was 0.0017 f/cc and the results for the residential locations ranged from 0.0010 f/cc to 0.0017 f/cc. Samples were identified and analyzed via transmission electron microscopy to be reported in a PCM-equivalent. Results from the TEM analysis were not yet received.
- Area perimeter air sampling was conducted at one onsite location and at three residential locations during removal activities. Results for the onsite location ranged from 0.0020 to 0.0033 f/cc and the results for the residential locations ranged from 0.0014 f/cc to 0.0022 f/cc. Samples were identified and analyzed via transmission electron microscopy to be reported in a PCM-equivalent. Results from the TEM analysis were not yet received.
- Seven loads of metal have been sent of site for recycling this week for a total of approximately 76

tons.

- Nine 20 cubic yard roll offs of asbestos-contaminated debris were transported from the site to a State of Tennessee approved asbestos landfill for disposal during this time period.

July 27 to August 1, 2015

- The ERRS contractor conducted removal activities to include the following:
  - Conducted a surface soil scrape of the area north of the north building to stage brick demolition debris.
  - Conducted demolition of the north building. Demolition debris was visually inspected by a State of Tennessee accredited asbestos project monitor. Debris that appeared to be mixed with asbestos-containing roofing material was loaded into roll off boxes lined with two layers of 6-mil plastic sheeting for disposal at a State of Tennessee approved asbestos landfill. Debris that did not appear to be mixed with asbestos-containing roofing material was staged in the area north of the north building.
  - Scraped and washed the concreted deck inside the north building prior to demolition of the north, northeast, and northwest brick walls to ensure the brick was not contaminated by asbestos debris and could be staged at the area north of the north building.
  - Conducted surface scraping of gross asbestos-contaminated debris inside the south building.
  - Removed, washed, staged, and recycled structural steel and other metal retrieved during demolition of the north building.
  - Water trucks were used for dust suppression during demolition, removal, and recycling activities.
- The START contractor conducted area perimeter air sampling at one onsite location and at three residential locations during removal activities. Results for the onsite location ranged from 0.0018 to 0.0043 f/cc and the results for the residential locations ranged from 0.0010 f/cc to 0.0037 f/cc. TEM results for two background locations sampled on 7/20/15 indicated there were no asbestos fibers detected and the asbestos fiber concentrations were less than the limit of detection.
- Four loads of metal totaling approximately 27 tons have been sent off site for recycling this week. To date, a total of 11 loads of metal have been recycled for a total of approximately 103 tons.
- Seventeen 20 cubic yard roll offs of asbestos-contaminated debris were transported from the site to a State of Tennessee approved asbestos landfill for disposal during this time period. To date, a total of 26, 20 cubic yard roll offs have been transported to the landfill for disposal.

August 3 to August 8, 2015

- The ERRS contractor conducted removal activities to include the following:
  - Finished demolition of the north building. Demolition debris was visually inspected by a State of Tennessee accredited asbestos project monitor. Debris that appeared to be mixed with asbestos-containing roofing material was loaded into roll off boxes lined with two layers of 6-mil plastic sheeting for disposal at a State of Tennessee approved asbestos landfill. Debris that did not appear to be mixed with asbestos-containing roofing material was staged in the area north of the north building.
  - Scraped and washed the concreted deck inside the north building prior to demolition of the south and southeast brick walls to ensure the brick was not contaminated by asbestos debris and could be staged at the area north of the north building.
  - Conducted surface scraping of gross asbestos-contaminated debris inside the south building.
  - Scraped and washed the concreted deck outside the south building prior to demolition of the north and northeast brick walls to ensure the brick was not contaminated by asbestos debris and could be staged at the area north of the north building.
  - Removal of asbestos containing roof shingles from the east roof of the south building.
  - Removed, washed, staged, and recycled structural steel and other metal retrieved during demolition of the north and south buildings.
  - Water trucks were used for dust suppression during demolition, removal, and recycling activities.
- The START contractor conducted area perimeter air sampling at one onsite location and at three residential locations during removal activities. Results for the onsite location ranged from 0.0014 to 0.0089 f/cc (08/03/15 to 08/05/15) and the results for the residential locations ranged from <0.00082 f/cc (below limit of detection) to 0.0014 f/cc (08/03/15 to 08/05/15). TEM results for samples collected on 7/30/15, indicated there were no asbestos fibers detected and the asbestos fiber concentrations were less than the limit of detection.
- Six loads of metal have been sent off site for recycling this week. As of now we only have the weight of the first 3 loads of metal, which add up for a total of approximately 24 tons. To date, a total of 17 loads of metal have been recycled for a total of approximately 127 tons (excluding the weight of the last 4 loads).
- Thirty-two 20 cubic yard roll offs of asbestos-contaminated debris were transported from the site to a State of Tennessee approved asbestos landfill for disposal during this time period. To date, a total of 58, 20 cubic yard roll offs have been transported to the landfill for disposal.

August 10 to August 15, 2015

- The ERRS contractor conducted removal activities to include the following:
  - Debris that appeared to be mixed with asbestos-containing roofing material was loaded into roll off boxes lined with two layers of 6-mil plastic sheeting for disposal at a State of Tennessee approved asbestos landfill. Brick that did not appear to be mixed with asbestos-containing roofing material was staged in the area north of the north building or used to fill in the small ditch area outside the southeast side of the south building.

- Conducted surface scraping of asbestos-contaminated debris inside the south building.
- Scraped and washed the concreted deck outside the south building prior to demolition of the north brick wall to ensure the brick was not contaminated by asbestos debris and could be staged at the area north of the north building.
- Removal of metal roof shingles from the east roof of the south building.
- Scraped top layer of soil and washed the concreted deck outside the south building prior to demolition of the east/southeast brick wall to ensure the brick would not fall onto asbestos debris outside of the south building during demolition of the east/southeast wall.
- Used clean brick from south and east/southeast walls of the south building to fill in the loading dock depression area outside the southeast side of the south building.
- Demolished the west, northwest and southwest walls of the south building and loaded debris into roll off boxes lined with two layers of 6-mil plastic sheeting for disposal at a State of Tennessee approved asbestos landfill.
- Torched notches in the 2 rows of columns to weaken and aid the demolition of the entire frame.
- Pulled down the entire frame of the south building using 2 excavators with cables attached.
- Removed, washed, staged, and recycled structural steel and other metal retrieved during demolition of the south building.
- A water truck was used for dust suppression during demolition, removal, and recycling activities.

· The START contractor conducted area perimeter air sampling at one onsite location and at three residential locations during removal activities. Results for the onsite location from the only day we have results from as of now were 0.0025(equal to the limit of detection) and 0.0010 f/cc (08/11/15) and the results for the residential locations ranged from <0.00085 f/cc (below limit of detection) to 0.00094 f/cc (08/11/15).

· Five loads of metal have been sent off site for recycling this week. To date, a total of 20 loads of metal have been recycled for a total of approximately 168 tons.

· Twenty-two 20 cubic yard roll offs of asbestos-contaminated debris were transported from the site to a State of Tennessee approved asbestos landfill for disposal during this time period. To date, a total of 81, 20 cubic yard roll offs have been transported to the landfill for disposal.

August 17, 2015 to August 22, 2015

- The ERRS contractor conducted removal activities to include the following:
  - Removed, staged, loaded, and recycled structural steel from the frame of the south building.
  - Removed asbestos-contaminated debris from on and around the footprint of the south building. The debris was staged for disposal.
  - Scraped asbestos-contaminated soil from identified areas south of the south building.
  - Conducted a surface scrape of the soil along the access road located on the east side of the site.
  - A water truck was used for dust suppression during demolition, removal, and recycling activities.
- The START contractor performed visual inspections of the soil scraped areas located at the southern end of the site and along the west side of the north building. Areas where asbestos-containing materials remained visible were identified to the ERRS contractor for additional scraping.
- The START contractor collected a composite soil sample from the grid area located between the west side of the north building and the silt fence. The soil was shipped to the laboratory and analyzed for asbestos.
- The START contractor conducted area perimeter air sampling at one onsite location and at three residential locations during removal activities. Results for those samples collected on 8/12/15 for the onsite location ranged from <0.0028 f/cc to <0.00085 f/cc and the results for the residential locations ranged from <0.00085 f/cc (below limit of detection) to 0.00110 f/cc. TEM results for samples collected on 7/29/15 and 7/31/15 indicated there were no asbestos fibers detected and the asbestos fiber concentrations were less than the limit of detection.
- Nine loads of metal have been sent off site for recycling this week. A total of 29 loads of metal have been recycled through 8/22/15 for a total of approximately 296 tons (tons recycled totaled through 8/21/15).
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Thirty, 20 cubic yard roll offs of asbestos-contaminated debris were transported from the site to a State of Tennessee approved asbestos landfill for disposal during this time period. To date, a total of 111, 20 cubic yard roll offs for an estimated 2,220 cubic yards of asbestos-contaminated waste have been transported to the landfill for disposal.

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

This is a fund lead time critical removal action.

2.1.4 Progress Metrics

Waste Stream	***Medium***	***Quantity***	***Manifest #***	***Treatment***	***Disposal***
			see waste		

asbestos	roof tile	111 rolloffs (20 cubic yards/rolloff)	tracking spreadsheet in Documents section of website	landfill	Waste Management-West Camden Sanitary landfill

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2.2 Planning Section

2.2.1 Anticipated Activities

The remaining task involve the scraping of the soil grids in the southwest portion of the grid areas. It is anticipated that the removal will be completed with 14 days. Perimeter and personal asbestos air sampling will continue as long as site operations involve potential disturbance of asbestos containing material..

2.2.1.1 Planned Response Activities

2.2.1.2 Next Steps

2.2.2 Issues

2.3 Logistics Section

No information available at this time.

2.4 Finance Section

2.4.1 Narrative

An additional $100,000 was added the the CMC task order. This funding will allow for the completion of the removal action.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	$450,000.00	$426,817.00	$23,183.00	5.15%
TAT/START	$150,000.00	$44,000.00	$106,000.00	70.67%
Intramural Costs				
Total Site Costs	$600,000.00	$470,817.00	$129,183.00	21.53%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

No information available at this time.

3. Participating Entities

No information available at this time.

4. Personnel On Site

No information available at this time.

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.