U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Bennett Landfill Fire - Removal Polrep

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV

Subject:	**POLREP #5** **Burned Area Initial Cap Installation** **Bennett Landfill Fire** **B44Y** **Chester, SC** **Latitude: 34.7874300 Longitude: -81.4502500**
To:	James Webster, USEPA R4 ERRB Paul Lee, DHEC Ken Taylor, SCDHEC
From:	Perry Gaughan, OSC
Date:	6/12/2015
Reporting Period:	6/5/2015 - 6/12/2015

1. Introduction

1.1 Background

Site Number:	B44Y	**Contract Number:**	EP-S4-07-02
D.O. Number:	0134	**Action Memo Date:**	4/30/2015
Response Authority:	CERCLA	**Response Type:**	Time-Critical
Response Lead:	EPA	**Incident Category:**	Removal Action
NPL Status:	Non NPL	**Operable Unit:**	
Mobilization Date:	5/26/2015	**Start Date:**	5/26/2015
Demob Date:		**Completion Date:**	
CERCLIS ID:	SCN000402727	**RCRIS ID:**	
ERNS No.:	1100014	**State Notification:**	11/2/2014
FPN#:		**Reimbursable Account #:**	

1.1.1 Incident Category
Time-critical removal action.

1.1.2 Site Description
The Bennett Landfill Fire Site is a former construction debris and nonhazardous industrial waste landfill (defined by state regulations as a Class II landfill) that was additionally permitted to accept certain types of asbestos waste.

The landfill ceased accepting waste in 2014. On November 2, 2014, the landfill was found to be on fire and was believed to have been extinguished by November 7th. Due to increasing smoke concentrations in January 2015, SCDHEC requested that the EPA conduct a Removal Site Evaluation (RSE). EPA signed an Action Memorandum on April 30, 2015 to conduct a Time-Critical Removal Evaluation and mobilized to the Site to begin removal activities on May 26.

Additional information for this section is available in POLREP #4 from 6/5/2015.

1.1.2.1 Location
The Site is located at 4399 Pinkney Road, Chester, Chester County, South Carolina. The geographic coordinates of the Site are 34.7874300 degrees north and 81.4502500 degrees west.

Additional information for this section is available in POLREP #4 from 6/5/2015.

1.1.2.2 Description of Threat
The fire at the Bennett Industrial Landfill is actively releasing chemical compounds into the air, including benzene and formaldehyde, which are measured near the fire at concentrations exceeding industrial RMLs for air and concentrations within the surrounding community that are greater than three times the residential RSL. Conditions at the Site, if not addressed, will continue to deteriorate over time and resulting in increasing quantities of exposed asbestos which are susceptible to transport by wind and other weather conditions to the nearby population.

Additional information for this section is available in POLREP #4 from 6/5/2015.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

Additional information for this section is available in POLREP #4 from 6/5/2015.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

During the week of June 8st, ERRs contractors continued consolidating construction and fiberglass debris into the newly established grade of the landfill. No additional hot or smoldering zones have been observed since Wednesday, June 3rd and no smoke has been observed coming from the landfill. The 40 foot drop face along the southern edge of the landfill continues to be graded to a 4 to 1 slope and contractors continued adding and grading soil to the landfill slope in one foot lifts. A two foot clay cover is planned later during Phase 1. Currently, ERRs contractors are using soil from a borrow area immediately adjacent to the operation area which appears to have a high sand content.

Media interest remains high during removal operations. Channel 9 WSOC from Rock Hill South Carolina conducted an interview with the OSC on Monday, June 8th and a newspaper reporter from The State newspaper, Columbia, SC conducted an interview on Thursday June 11th. Mayor Eileen Ashe of Lockhart requested and was given a tour of the Site on Monday, June 8th. Region 4 Superfund Director Franklin Hill and South Carolina Dept Health and Environmental Control Land and Waste Management Bureau Chief Daphne Neel conducted a site visit on Wednesday, June 10th. Ms. Neel expressed her gratitude for the expeditious efforts by EPA and ERRs contractors in stopping the landfill fire.

OSC Kevin Eichinger was also on site this week to review site safety protocols. Some minor issues were noted and immediately addressed by the OSC and ERRs contractors.

START contractors continue air monitoring and providing technical assistance. No significant smoke, air or technical issues have been encountered to date. On Thursday, June 11th, a conference call was held between the OSCs, START contractors and landfill design engineers to discuss technical issues related to the design plans in an effort to solidify final plans. Six borrow soil and clay areas on site were sampled by START contractors for geophysical and suitability studies as cover material.

The OSC continues to coordinate site activities with local and county officials as well as South Carolina Dept Health and Environmental Control.

2.1.2 Response Actions to Date

- May 25-29: ERRS mobilization, site preparation (access roads, entrance, trailer, work zones)
- June 1-2: Grading and wetting burned area
- June 3: No morning smoke observed
- June 3-5: Continue grading and wetting burned area. Moved cover soils from borrow area to burned area
- June 5-12: Continue grading and covering operations.

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

Information for this section is available in POLREP #4 from 6/5/2015.

2.1.4 Progress Metrics

Waste Stream	*Medium*	*Quantity*	*Start Date*	*Treatment*	*Est. % Complete*
Burning Area	Debris	Approx 0.5 acres	6/1/2015	Cover	50% soil cover has been completed
Asbestos Cell	Debris	Approx 19,500 CY	n/a	Regrade & Cover	n/a

2.2 Planning Section

2.2.1 Anticipated Activities

The first priority of the removal action will be to address the burning debris pile by installing a soil cover. Isolation of the burning material and reduction of oxygen supply will significantly reduce emissions from the smoldering fire. The second priority of the removal action will be to address the eroding asbestos disposal cell by re-grading and covering the area.

Air sampling and monitoring activities will be conducted on-site for worker health and safety and continued site investigation purposes. Air monitoring for respirable particulate matter (PM2.5) will continue off-site outside the fenceline and in downtown Lockhart, SC for the duration of the action.

Soil for cover and encapsulation will be obtained from on-site sources to the greatest extent possible. The disturbed areas of the Site will be secured with vegetation to provide a stable erosion-resistant surface. Total project time is estimated at approximately 3 months.

2.2.1.1 Planned Response Activities

- Isolation of burning material by removal and relocation of available fuel path and installation of earthen

cover; ***(ONGOING)***
- Isolation of designated asbestos disposal cell through the installation of earthen cover;
- Re-grading waste materials and native soils for purpose of cover installation; ***(ONGOING)***
- Installation of temporary measures to prevent off-site migration of dust or contaminants as removal operations are conducted; and, ***(ONGOING)***
- Continue sampling and monitoring, as needed, for site safety purposes and to further delineate or identify contaminants. ***(ONGOING)***

2.2.1.2 Next Steps

- Continue landfill slope grading and cover operations
- Finalize landfill design plans
- Begin evaluating extent of asbestos cell for covering operations

2.3 Logistics Section

No pertinent information to report at this time.

2.4 Finance Section

2.4.1 Narrative

A ceiling increase action memorandum was signed on April 30, 2015. Funding was approved for EPA's ERRS and START contractors which have been mobilized to the Site. Funding is also available for additional EPA special resources and assisting federal agency resources if the need arises.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	$500,000.00	$175,000.00	$325,000.00	65.00%
TAT/START	$180,000.00	$25,000.00	$155,000.00	86.11%
Intramural Costs				
Total Site Costs	$680,000.00	$200,000.00	$480,000.00	70.59%

* 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

OSC Matthew Huyser
OSC Perry Gaughan

3. Participating Entities

SCDHEC continues to provide technical assistance and information regularly

South Carolina Forestry Commission has offered to provide assistance with tree removal, if necessary

Chester County EMA and Union County EMA will provide technical assistance and information, as needed

4. Personnel On Site

EPA (1)
SCDHEC (varies)
County EMA (varies)
ERRS (12)
START (2)

5. Definition of Terms

µg/m3	Micrograms per cubic meter (= 0.001 mg/m3)
AEGL	Acute Exposure Guideline Levels
AQI	Air Quality Index
C	Celsius
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
Conc	Concentration

ConcHR	Hourly (HR) average value recorded by an EBAM instrument
ConcRT	Real time (RT) concentration recorded by an EBAM instrument based on a rolling four-minute average
DHEC	South Carolina Department of Health and Environmental Control
EMA	Emergency Management Agency
EPA	U.S. Environmental Protection Agency
ERRS	Emergency and Rapid Response Services
mg/kg	Milligram per kilogram (= 1 ppm)
mg/L	Milligram per liter
mg/m3	Milligram per cubic meter (= 1000 µg/m3)
NAAQS	National Ambient Air Quality Standard (primary and secondary NAAQS for PM2.5 24-hour average is 35 µg/m3)
NPL	National Priorities List
OAQPS	EPA Office of Air Quality Planning and Standards
OSC	On-Scene Coordinator
PM2.5	Airborne particulate matter with particle diameters below 2.5 microns
ppb	Part per billion (cannot be used to describe a mass per volume unit such as µg/m3)
ppm	Part per million (cannot be used to describe a mass per volume unit such as mg/m3)
RML	Removal Management Level
RSL	Regional Screening Level
SCDHEC	South Carolina Department of Health and Environmental Control
START	Superfund Technical Assessment and Response Team
TWA	Time-weighted average

5.1 Regional Screening Levels (RSL) and Removal Management Levels (RML)
Regional Screening Levels (RSL) are conservative risk-based screening values developed by the U.S. EPA to help identify contaminants of potential concern. Contaminants that exceeded a RSL in at least one sample are then screened against industrial air Removal Management Levels (RML) that were calculated for this evaluation. RMLs are risk-based screening values developed by the U.S. EPA to determine whether sample concentrations are sufficiently elevated that they may warrant a removal action. Exceedance of a RML by itself does not require a removal action, nor does it imply that adverse health effects will occur.

6. Additional sources of information

6.1 Internet location of additional information/report
Site updates will be provided to the "Bulletins" section of epaosc.org/bennettlandfill

Documents, reports, and videos for public release will be posted to the "Documents" section of epaosc.org/bennettlandfill

Photos of site conditions and progress will be posted to the "Images" section of epaosc.org/bennettlandfill

6.2 Reporting Schedule
New POLREPS will be issued weekly on Fridays for the duration of on-site activities.

A data summary report was posted on 6/11/2015 to the documents section of the EPAOSC.org/benettlandfill webpage. This report contains EBAM PM2.5 validated data for Bennett Landfill Fire Removal Site Evaluation.

7. Situational Reference Materials

No pertinent information to report at this time.