U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Mike Davidson Enterprises LLC Site - Removal Polrep

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region III

Subject: **POLREP #4**
Final Polrep
Mike Davidson Enterprises LLC Site

Camden Wyoming, DE
Latitude: 39.0446000 Longitude: -75.6954000

To:
From: Dominic Ventura, On Scene Coordinator
Date: 8/18/2014
Reporting Period:

1. Introduction

1.1 Background

Site Number:		**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:	2/21/2014	**Start Date:**	
Demob Date:	4/17/2014	**Completion Date:**	8/18/2014
CERCLIS ID:		**RCRIS ID:**	
ERNS No.:		**State Notification:**	
FPN#:		**Reimbursable Account #:**	

1.1.1 Incident Category

Emergency Removal Action

1.1.2 Site Description

The Mike Davidson Enterprises LLC Site (Site) is located at 3051 Willow Grove Road in Camden Wyoming, Kent County, Delaware. The Site is a commercial industrial facility located in a rural residential area. The facility was a permitted solid waste handling facility at one time, but its permit was revoked in 2013. Large piles of various types of debris are located on the Site.

1.1.3 Background

On February 15, 2014, the Delaware Department of Natural Resources and Environmental Control (DNREC) requested technical assistance from EPA regarding a response to a debris fire at the Site. DNREC reported that an ongoing fire was located within the interior of a debris pile which appeared to contain shredded construction and demolition debris, possibly from response activities related to Hurricane Sandy. DNREC reported that a sizable pocket of hydrogen sulfide (H2S) was released during their response efforts which involved digging into the face of the pile and then dousing burning debris with water. Initial assessment activities conducted by the OSC revealed that the pile contained demolition debris including plastic, rubber, and metal which could generate noxious fumes when burned. The OSC noted a H2S smell at the fence line of the property. Residential properties are located adjacent to the site.

On February 20, 2014 the OSC initiated an emergency removal action at the site. The OSC and EPA contractors mobilized to the site on February 21 and assumed responsibility for response activities at the site associated with extinguishing the debris fire. Initial EPA activities included dousing burning debris with water and using heavy equipment to tear apart the burning area of the pile. Air monitoring confirmed that H2S was being emitted from the pile. On February 22, the OSC and DNREC agreed that the fire had been extinguished. EPA contractors were directed to begin backfilling and packing the excavated area of the pile to cut off oxygen and to grade the slope of the pile to achieve stability. All site personnel and equipment were mobilized off site by February 28, 2014.

For additional background information see previous Polreps.

2. Current Activities

2.1 Operations Section

2.1.1 Response Activities

On April 16 and 17, 2014 EPA and EPA contractors conducted sampling and assessment activities at the Site. EPA is coordinating this sampling effort with more comprehensive assessment activities that are being conducted by DNREC's Solid Waste Program to determine environmental impacts as a result of the broader waste disposal activity across the site and on adjacent parcels. EPA sampling was primarily related to the large debris pile where the fire had occurred to determine what, if any, releases may have occurred as a result of the fire and three containers that are located outside of buildings.

Air sampling was conducted to determine concentrations of hazardous/flammable gases that are being emitted from the large debris pile where the fire had occurred. A total of eight air samples were collected. Three soil gas samples were collected from soil cores advanced into the debris pile, two samples were collected from emission capture device on top of the debris pile, two samples were collected from ambient air downwind of the pile and one sample was collected upwind of the pile. Air samples were analyzed for volatile organic compounds (VOCs), ammonia, sulfur compounds, and fixed gases (oxygen, nitrogen, carbon monoxide, methane, carbon dioxide, and ethane). Ambient air samples were compared to EPA Regional Screening Levels (RSLs) for industrial air with an excess cancer risk of 1E-4 for carcinogenic compounds and a hazard quotient of 3 for non-carcinogenic compounds.

Hydrogen Sulfide (H2S) was detected at elevated concentrations in all three soil gas samples. H2S concentrations in soil gas samples ranged from 240 parts per million by volume (ppmv) to 7,100 ppmv. H2S was not detected in emission samples or in downwind ambient air samples. Toluene was detected in soil gas samples at concentrations up to 3,600 micrograms per cubic meter (ugm3) and benzene was detected at concentrations up to 450 ugm3. Neither toluene or benzene was detected in emission or ambient air samples at concentrations exceeding EPA RSLs. No other chemical compounds that were analyzed for were detected in air samples at levels exceeding EPA RSLs during this sampling event. No sign of additional fire within the debris pile was observed during the assessment. Based on sampling results at this time, Hydrogen Sulfide and other flammable gases are clearly being generated inside the debris pile but are not currently being emitted at levels that threaten neighboring residences. However, due to elevated concentrations of flammable gases in soil gas samples collected from the pile there is a risk of future fires in the pile.

A total of ten soils samples were collected from the site. Seven surface soil samples were collected from drainage pathways surrounding the debris pile. An additional three samples were collected from test pits that were dug nearby the pile. All soil samples were analyzed for VOCs, SVOCs, pesticides/PCBs, and metals. Sample results were compared to RSLs for industrial soil with an excess cancer risk of 1E-4 for carcinogenic compounds and a hazard quotient of 3 for non-carcinogenic compounds No soil samples contained concentrations of chemical compounds exceeding EPA RSLs for parameters that were analyzed. It is important to note that DNREC's more comprehensive assessment may reveal constituents of concern that warrant remedial action.

Samples were collected of liquids in two 55-gallon drums and one 275 gallon tote. Hazardous characterization tests (HAZCAT) were performed on samples. Samples were then analyzed using an Ahura First Defender. HAZCAT results and results from the First Defender indicated that all three containers contained diesel fuel. The containers appear to be in decent condition and there does not appear to be a navigable water way that is close enough to the containers to be threatened by a discharge. However, if there was a discharge, it would be a reportable quantity under Delaware statute and also have the potential to impact groundwater.

2.2 Planning Section

2.2.1 Next Steps

The Removal Action at the site was initiated to extinguish the fire in the debris pile and assess if there was a continuing threat of air emissions and/or a threat of hazardous substances migrating from the pile that could pose an immediate threat to human health and the environment. The OSC has determined that objectives of the Removal Action have been met and that the current Removal Action is complete. DNREC is continuing to conduct assessment activities at the site and is evaluating options for possible cleanup activities at the site. EPA will continue to coordinate with DNREC and may assist with future assessment and/or potential removal activities at the site.

2.3 Logistics Section

Nothing to report.

2.4 Finance Section

No information available at this time.

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.