

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Pike County Tunnel Fire - Removal Polrep
Initial and Final Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV

Subject: POLREP #1
Initial and Final POLREP
Pike County Tunnel Fire
B43K
Robinson Creek, KY
Latitude: 37.3804662 Longitude: -82.5452090

To:
From: Matthew Huyser, FOSC
Date: 5/15/2014
Reporting Period: 4/28/2014 - 5/5/2014

1. Introduction

1.1 Background

Site Number:	B43K	Contract Number:	
D.O. Number:		Action Memo Date:	
Response Authority:	CERCLA	Response Type:	
Response Lead:	PRP	Incident Category:	
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	4/28/2014	Start Date:	4/28/2014
Demob Date:	5/5/2014	Completion Date:	5/5/2014
CERCLIS ID:	KYN000400861	RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

Emergency Response

1.1.2 Site Description

At approximately 2230 on 4/26/2012, a 750ft railroad tunnel operated by CSX began burning near Robinson Creek in Pike County, Kentucky. The rail line is active with a traffic frequency of 15-20 trains per month from two coal mines. The tunnel is reportedly constructed with a timber frame support structure. By 4/27 the entire length of the tunnel had ignited and smoke from the fire caused the cancellation of classes at both nearby elementary and high school on 4/28.

1.1.2.1 Location

CSX Railroad Milepost 6, Robinson Creek, Pike County, Kentucky

1.1.2.2 Description of Threat

The tunnel fire burned creosote-treated timber throughout the structure and smoke impacted nearby residences and populated areas. Creosote contains several Polycyclic Aromatic Hydrocarbons and Dioxins that could be released during the fire. Within 1/2 mile of the Site, across Highway 23 and downwind of the Site are: an elementary school, a day care, a fire station, two retirement & nursing home facilities, a clinic, a public housing neighborhood, and a high school. Also nearby are several dozen residences, a church, and several businesses.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

EPA remained in communication with KYDEP on 4/27, but by 4/28 both Pike County EMA and KYDEP requested EPA assistance with air monitoring in the nearby communities.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

EPA OSC Huyser arrived on-scene by 1730 on 4/28 and began coordinating with KYDEP, Pike County EMA, and CSX's Environmental services. EPA and START contractor, Tetra Tech, established remote air monitoring stations at the tunnel high elevation entrance and at the nearby elementary school. Based on recommended air monitoring parameters from ERT, it was decided that exposure levels for PAHs and other chemical constituents that may have been emitted were likely to be significantly low due to dispersion and limited exposure time - the greatest response information would be gathered from particulate monitoring. Particulate concentrations were compared to site specific parameters which were primarily develop from a

July 2008 document: "Wildfire Smoke: A Guide for Public Health Officials" (this document has been used frequently in EPA R4 emergency response operations for particulate monitoring around fire events). Particulate levels through the night of 4/29 were consistently at or slightly above a "moderate" AQI rating, even with regular interference from high humidity, heavy rainfall, and dense fog (the fog is common for the area). Information on nighttime readings were communicated to Pike County EMA. Schools reopened on Tuesday morning.

EPA's 12-hour continuous air monitoring during the night of 4/28 with two monitoring stations measured particulate levels that were slightly elevated (avg 50 ug/m³) with a peak during daybreak hours, but below general health risk concerns for emergency response. A 6-hour continuous monitoring run during the day of 4/29 with four monitoring stations showed that particulate levels dropped significantly (<10 ug/m³) to what can be considered background or "normal" concentrations.

During the day on 4/29, three EBAM particulate monitors from EPA ERT arrived and were deployed. The EBAM provides a higher data quality level by eliminating most interferences such as moisture. Another 13-hour monitoring run during the night of 4/29 with four monitoring stations confirmed that the background or "normal" concentrations were steady throughout the night and into the morning.

Based on positive air monitoring data, EPA planned to keep air monitoring stations running remotely and return when CSX planned to reopen the tunnel on 5/5/2014. On 4/30, a CSX train derailed in Lynchburg, VA resulting in a release of crude oil and subsequent fire. EPA Region 3 requested assistance from EPA Region 4 for air monitoring support; OSC Huyser demobilized equipment from Pike County Tunnel Fire to temporarily support the response in Lynchburg, VA. OSC Huyser returned to the Pike County Tunnel Fire Site on 5/2/2014 with EPA warehouse contractor QSI and reestablished three air monitoring stations that would remain running through the weekend until the reopening planned for 5/5/2014. However, the reopening was rescheduled for 5/8/2014 and likely to be 5/12/2014 or even later. OSC Huyser discussed the change with KYDEP and determined that the delay to 5/12/2014 would meet the initial desire of EPA and KYDEP that the tunnel be kept closed for a period in excess of 10 days and EPA air monitoring would likely not be needed. OSC Huyser returned on 5/5/2014 to remove the air monitoring stations and demobilize from the Site.

2.1.2 Response Actions to Date

By approximately 1400-1600hrs on 4/28, heavy equipment was on-site at both sides of the tunnel moving soil to "plug" the entrance and exit. Flames and smoke from the fire had subsided but the smoke plume was still visible for several miles. Soil was supplied to the south entrance by dump trucks traveling on "high rail" systems while was supplied to the north side from a borrow pit that was dug near the opening.

CSX completed plugging both ends of the tunnel by early morning on 4/29 but a thin stream of smoke continued to escape at the south opening. Crews resumed working through 4/29 and successfully sealed the tunnel with only slight pockets of smoke escaping by early afternoon. Tunnel emergency specialists arrived on-scene by 4/29 to develop response and engineering plans for further actions. Pump trucks and tanks were mobilized by CSX on 4/29 to capture discolored water that was discharging from the low elevation side of the tunnel.

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

OSC Huyser issued a notice of federal interest to CSX. An acknowledgement of receipt form was signed and returned to OSC Huyser.

2.1.4 Progress Metrics

n/a

2.2 Planning Section

2.2.1 Anticipated Activities

CSX hired contractors to prepare reentry plans including waste management, water management, air monitoring, safety, firefighting, and disposal plans as well as applying for disposal and treatment permits from the State of Kentucky. CSX has also hired a specialty tunnel and fire-fighting company. KYDEP will review relevant plans and will be present for the reentry.

2.2.1.1 Planned Response Activities

See section 2.1.2.1.

KYDEP will contact EPA if assistance is needed in the future.

2.2.1.2 Next Steps

See section 2.1.2.1.

KYDEP will contact EPA if assistance is needed in the future.

2.2.2 Issues

n/a

2.3 Logistics Section

n/a

2.4 Finance Section

No information available at this time.

2.5 Other Command Staff

2.5.1 Safety Officer

n/a

2.5.2 Liaison Officer

n/a

2.5.3 Information Officer

n/a

3. Participating Entities

3.1 Unified Command

CSX

Pike County EMA

3.2 Cooperating Agencies

EPA

KYDEP

4. Personnel On Site

CSX and Contractors (+30)

KYDEP (2)

Pike County EMA (+3)

EPA (1)

EPA START (3)

EPA QSI (1)

Other (+10)

5. Definition of Terms

n/a

6. Additional sources of information

6.1 Internet location of additional information/report

n/a

6.2 Reporting Schedule

n/a

7. Situational Reference Materials

n/a