

**United States Environmental Protection Agency**  
**Region IV**  
**POLLUTION REPORT**

**Date:** Wednesday, January 17, 2007

**From:** Art Smith

**Subject:** Emergency Response Phase Continues

CSX Derailment - Brooks, KY

State Highway 1020 & Huber Station Road, Brooks, KY

Latitude: 38.0589000

Longitude: -85.7100000

<b>POLREP No.:</b>	2	<b>Site #:</b>	A4NW
<b>Reporting Period:</b>	01/16/2007-01/17/2007	<b>D.O. #:</b>	
<b>Start Date:</b>	1/16/2007	<b>Response Authority:</b>	CERCLA
<b>Mob Date:</b>	1/16/2007	<b>Response Type:</b>	Emergency
<b>Demob Date:</b>		<b>NPL Status:</b>	
<b>Completion Date:</b>		<b>Incident Category:</b>	
<b>CERCLIS ID #:</b>		<b>Contract #</b>	
<b>RCRIS ID #:</b>			

#### **Site Description**

A CSX train derailment involving 12 tanker/hopper cars resulted in a product release and fire-explosion in the city of Brooks, Bullitt County, Kentucky approximately 25 miles south of Louisville, KY. The product cars contained a variety of flammable liquids, gases, and accelerant compounds. The incident location is also a few miles west of Interstate 65 and a stretch of the interstate has been shut down because of the eastward movement of the smoke plume. A one-mile radius from the fire has been evacuated including Brooks Elementary School. EPA Region 4, EPA-ERT and support contractors responded to the incident.

#### **Current Activities**

[January 16 - January 17, 2007 (1600hrs)]

EPA OSC Art Smith responded to the train derailment on Tuesday morning, January 16, 2007, and is serving as the US EPA Incident Commander. Unified Command has been established, which includes the Zoneton KY FD, KY Division of Emergency Management, CSX Railroad, and EPA. The Unified Command is operating out of the Zoneton Fire Department Station #1 in Brooks, Kentucky. EPA personnel & contractors are also working out of two mobile command post provided by the EPA National Decontamination Team (NDT) and the EPA Environmental Response Team (ERT). The EPA Incident Command has staffed an Operations Section with four Task Forces. Two Task Forces assigned to conduct surveillance air monitoring and two Task Forces staffed by CSX Railroad dedicated to engineering and managing the derailment. Additionally, a Planning Section is operating to provide data management. A Situation Unit, Information Officer, and a Strike Team (staffed by a USCG Gulf Strike Team Safety Officer) assigned to site safety. A Technical Specialist, staffed by ATSDR, is assigned to provide toxicological information to the IC and public.

CSX and the KY Fire Marshal's Office identified the derailed cars containing butadiene, palletized chlorine, methyl ethyl ketone (MEK), cyclohexane and paper. All of the cyclohexane and MEK were consumed in the fire, as well as the contents of a single tanker car containing butadiene. Potential compounds of concern were particulate, maleic anhydride, butadiene, chlorine, methyl ethyl ketone (MEK), and cyclohexane. US EPA began initial air monitoring with START and CST at 1300 on 01/16/07. Two teams conducted air monitoring with Area Raes and PIDs at northern and southern edges of plume along Interstate 65. A third team conducted air monitoring and reconnaissance in Ruhl Acres neighborhood and areas around Shepardsville using a PID, a chlorine single point monitor, a data ram and a Drager multi-warn. PM10 readings obtained by CSX's contractor CTEH were consistent with dilute smoke concentrations downwind of the burning rail cars, but at levels below threshold where protective actions would be warranted. No measurable levels of chlorine or VOCs were detected. The EPA ASPECT airplane was on-site and taking air readings at ~1300 hrs. on 01/16. They had trace detection's of butadiene and maleic anhydride at less than 0.1 parts per millions (ppm) in the plume. US EPA Emergency Response Team (ERT) and two Region 5 OSCs arrived on scene at 1600 to support air

monitoring. Four Region 4 OSCs arrived on site on 01/16-01/17.

Rail cars of cyclohexane, plastics, and paper continued to burn through out the night, while the local fire service attacked the fire with foam and water. Kentucky Department of Environmental Protection (KDEP) reported evidence of polymerized product in surface water within a few miles down gradient of the site. KDEP is the lead agency for oversight of CSX's actions to manage the impacts of the response to surface water. By morning, all fires had been extinguished except for the cyclohexane and paper and the size of the fire was at about 25% of it's peak size from the previous day. It has been determined that three of the fully loaded butadiene railcars were not breached, and the one which was breached has burned out.

#### Planned Removal Actions

- Continue air monitoring to support decision-making regarding evacuations and other protective actions.
- Initiate controlled burn ["flare-off method"] of remaining butadiene products on 01/17.

#### Next Steps

The Regional Response Team (RRT) will teleconference on January 18, 2007 on or about 1430hrs (EST).

#### Key Issues

Estimated time to complete butadiene transfer/burn operations is approximately 12-18 hrs. once the process begins. The schedule of the burn may be modified to accomodate peak air traffic times associated with the Louisville International Airport.

#### Estimated Costs \*

	Budgeted	Total To Date	Remaining	% Remaining
<b>Extramural Costs</b>				
USCG GST	\$15,000.00	\$0.00	\$15,000.00	100.00%
RST/START	\$50,000.00	\$0.00	\$50,000.00	100.00%
REAC	\$10,000.00	\$0.00	\$10,000.00	100.00%
<b>Intramural Costs</b>				
<b>Total Site Costs</b>	<b>\$75,000.00</b>	<b>\$0.00</b>	<b>\$75,000.00</b>	<b>100.00%</b>

\* 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.

[response.epa.gov/CSX\\_BrooksKY](http://response.epa.gov/CSX_BrooksKY)

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