

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

Date: Friday, October 29, 2004

From: Daniel Heister

Subject: Continuing Removal Actions
Cow Creek Train Derailment
Cow Creek, Riddle, OR
Latitude: 42.8772000
Longitude: -123.5658000

POLREP No.:	2	Site #:	FPN E05001
Reporting Period:	10/28/2004-10/29/2004	D.O. #:	
Start Date:		Response Authority:	OPA
Mob Date:	8/27/2004	Response Type:	
Demob Date:		NPL Status:	
Completion Date:		Incident Category:	Removal Action
CERCLIS ID #:		Contract #	
RCRIS ID #:		Reimbursable Account #	
FPN#			

Site Description

On Tuesday, October 26, at approximately 1615 hours, a catastrophic failure occurred on the Cetral Oregon & Pacific Rail Line (CO&P) along Cow Creek, near Riddle, Oregon. As a result of the failure of the line, two diesel fuel tanks were ruptured on two separate locomotives (with a total capacity of 8,000 gallons). The cause of the incident is under investigation. The fuel released from the tanks was absorbed by the aggregate (porous) base rail bed and discharged into Cow Creek, approximately 50 feet lower in elevation and adjacent to the line. The rail line mobilized a cleanup contractor to the site that evening. The remaining fuel in the second locomotive was pumped into the unharmed tank of the first locomotive and into five 55-gallon drums. Most of the fuel from the third locomotive was released before the cleanup contractor could either plug the breach or pump it to another tank. Initial estimates by CO&P for fuel released from the tanks ranged from 1,800 gallons to 3,500 gallons.

Current Activities

The initial meeting with NRC Environmental Services, ODEQ, EPA, START, BLM, ODFW, and other entities is conducted the morning of October 28, 2004. NRC has begun to deploy additional hard boom at multiple locations between the spill site and the nearest downstream municipal water intake in Riddle, Oregon. The Incident Command structure is being instituted and NRC has assigned a Planning Section Chief, Operational Section Chief, and Logistics Section Chief. The Environmental Unil will be chaired by ODEQ with input from START, BLM, and Berguson Boese & Associates (representing the RP).

NRC and FSE plan to reinforce existing hard boom with sorbent boom and monitor and maintain all of the boom deployed thus far. An additional 500 feet of hard boom is being placed at the point of entry of the diesel (at the toe of the embankment where the spill occurred). This will slow the flow of the creek at the spill site and prevent much of the entrainment that is presently occuring with the existing 100 feet of hard boom.

Hulcher services is continuing to rebuild the rail line to remove the derailed cars from the site. The ten derailed cars still remain at the site but the locomotives involved with the release of diesel fuel are pulled off by the undamaged locomotive the afternoon of October 28. They expect to have the cars cleared by the evening of October 30, 2004.

Fuel has been observed floating on the surface of the creek at distances in excess of 5 miles from the site and the town of Riddle, Oregon, has shut down their intake from the creek as a precautionary action. A noticeable odor and taste has been reported by residents of Riddle. The water department has sampled the intake and submitted samples for hydrocarbon analysis. Preliminary results indicate no detectable levels of hydrocarbons.

A sampling plan has been developed and approved by the IC for implementation immediately beginning

October 28, 2004. Water samples will be collected upstream, at the spill site, downstream, and immediately upstream of the Riddle, Oregon, water intake. Samples are transported to a laboratory for analysis on October 29. Analyses are to include volatile petroleum components (BTEX), PAHs, and NWTPH-Dx (diesel range organics).

On October 29, 2004, the sampling team continues to sample downstream locations. These water samples are collected from the locations sampled on October 28 (up to 1700 meters downstream from the spill site and the Riddle, Oregon intake) and at several additional downstream locations to the confluence of Cow Creek with the South Umpqua River (approximately 20 miles downstream).

Shoreline Cleanup Assessment Team (SCAT) crews are assessing the condition of the salmon spawning beds and noting the locations of sheen and emulsified diesel fuel.

Planned Removal Actions

Several SCAT crews will continue to be employed on October 30 to assess the condition of the spawning beds and determine whether diesel (oil constituents) are present and will take actions to remove the fuel from the water and fauna. NRDA surveys will continue to be conducted with the SCAT surveys to document the current conditions on the biological activity downstream from the site.

NRC and FSE plan to reduce the number of hard boom deployments to three locations including the spill site, approximately 1.5 miles downstream where a triple-boom with sorbent is deployed, and around the Riddle, Oregon, water intake (approximately 16 miles downstream from the spill site).

The Environmental Unit will propose that several locations are excavated along the rail line where the two diesel fuel tanks were breached to assess whether pooling of product has occurred on the base rock (about 3-4 feet beneath the fine soils and aggregate material under the rail line). This is to be accomplished after the rail line has removed the railcars which are presently at the site. Diesel-contaminated soil will be loaded into open top box cars and transported to CO&P property for treatment.

Next Steps

After the excavation of soils at the spill site, a plan will be developed by the Environmental Unit and approved by the Incident Command for implementation to remediate the diesel contamination in the upland soils.

Downstream sampling and subsequent analysis will continue to provide quantitative information on the impact of the spill site on receptors.

Key Issues

The hard boom at all locations must be continuously monitored and maintained to ensure that all of the fuel is captured and sorbents are replaced when saturated.

Analytical results from all downstream locations will be scrutinized to determine if any potential receptors are at risk. Thus far, analytical data has indicated levels of contamination are low (or not detectable) at downstream municipal water intakes.

A comprehensive plan for the upland soil contamination must be approved by the IC and implemented in a conservative fashion to prevent additional releases of fuel while remediating the source contamination.

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