United States Environmental Protection Agency
Region X
POLLUTION REPORT

Date: Thursday, October 28, 2004
From: Daniel Heister

Subject: Initial Response to Scene
Cow Creek Train Derailment
Cow Creek, Riddle, OR
Latitude: 42.8772000
Longitude: -123.5658000

POLREP No.:	1	**Site #:**	FPN E05001
Reporting Period:	10/26/2004 to 10/27/2004	**D.O. #:**	
Start Date:	10/27/2004	**Response Authority:**	OPA
Mob Date:	10/27/2004	**Response Type:**	
Demob Date:		**NPL Status:**	
Completion Date:		**Incident Category:**	Removal Action
CERCLIS ID #:		**Contract #**	
RCRIS ID #:		**Reimbursable Account #**	2005 HR 10N0XAN 302D91C Z0AN
FPN#	E05001		

Site Description

On Tuesday, October 26, at approximately 1615 hours, a catastrophic failure occurred on the Central Oregon & Pacific Rail Line (CO&P) along Cow Creek, near Riddle, Oregon. Cow Creek is a tributary to the South Fork of the Umpqua River which is a tributary to the Umpqua River. The Umpqua River flows into the Pacific Ocean at Reedsport, 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 soaked into the aggregate (porous) base rock rail bed and is discharing 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 lost 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 200 gallons to 3,500 gallons.

Current Activities

START and EPA arrived at the CO&P office in Roseburg, Oregon, at 0700 hours on October 27, 2004, to be escorted to the site by rail line personnel. CO&P has contracted with Hulcher Services to rebuild the line and with First Strike Environmental (FSE) to address the environmental concerns. FSE had arrived at the site at approximately 1900 hours on October, 26, 2004.

The spill site is located approximately 20 miles east of I-5 on Cow Creek Road (Exit 103), which runs adjacent to Cow Creek. Access to the site is obtained by traveling across the Union Creek bridge and then walking 0.75 miles east along the rail line (no road access).

On October 27, EPA and START walked to the spill site where 10 cars had derailed with several flat bed cars carrying lumber down the embankment and in the creek. Staining was apparent at two locations where the diesel tanks on two of the three locomotives had been breached. The first locomotive's tank appeared to be undamaged. Additional staining was not observed along the steep 50 foot slope between the two spill sites and the creek. The fuel appeared to be discharging at the toe of the embankment near the water's edge where the red-dyed diesel is observed floating on the water. Attempts by the cleanup contractor to contain the diesel with 100 feet of hard boom and sorbent pads near the shore appear to be only marginally effective as fuel is escaping the containment. Additional boom is needed to create a successful booming strategy. FSE has another 100 feet of hard boom that they plan to deploy further

downstream this afternoon.

The RP has not calculated the amount of fuel that has been released from the tanks but representatives with OC&P have estimated between 2,000 and 3,500 gallons. The initial estimated release reported to the Oregon Emergency Response System (OERS) the previous evening was 200 gallons. The RP planned to have a better estimate by this afternoon.

EPA has indicated to the RP that they need additional resources (more hard boom, etc.) to contain the release of the diesel and prevent the migration of the fuel further downstream.

At approximately 1400 hours on October 27, two representatives of the Oregon DEQ arrived on-site as well as a habitat biologist with the Oregon Department of Fish & Wildlife (ODFW). ODFW indicated that the spill site was at the spawning beds for Chinook Salmon "redds". At this time of year, the salmon travel upstream to lay their eggs which will remain buried and developing for a few months. Coho salmon are expected to begin spawning in Cow Creek within a week as well.

ODEQ agreed with EPA that additional supplies and personnel would be needed to contain the release. At EPA's request, START has mobilized the EPA Mobile Command Post (MCP) to the site to provide meeting facilities and power at this remote location.

Planned Removal Actions

On the evening of October 27th, the RP agreed to hire an additional cleanup contractor (NRC Environmental Services) to augment the removal effort and facilitate the Incident Command System at the site. NRC is expected at the site Thursday morning, October 28.

FSE will provide Shoreline Cleanup Assessment Team (SCAT) surveys and remove diesel with sorbent pads where it is observed by personnel. They also plan to have approximately 30 personnel at the site the morning of October 28.

Additional boom has been ordered by FSE and will be brought by NRC. The present deployment of 200 feet of hard boom is inadeqate to contain the release. EPA and DEQ documented with photographs "streamers" of petroleum on the surface of the river at least 5 miles down stream from the spill site.

The RP has tasked Hulcher services to remove the derailed cars as soon as possible so that crews can begin to address the contaminated soil at the site. This will involve the temporary rebuilding of the track so that the cars can be pulled away.

Next Steps

A sampling plan must be developed by the RP consultants (and approved by the Incident Command) which will involve downstream and upstream water samples, soil samples, and possibly benthic and invertebrate sampling.

A documented accounting for the ammount of fuel lost from the locomotives must be provided. Until such document is provided, the maximum ammount of 8,000 gallons will be assumed to have been released.

Key Issues

Incident Command must be fully implemented by early October 28th. This includes an Incident Action Plan (IAP) which details completed and proposed activities within a daily operational period, a health and safety plan, a traffic plan, etc. The first meeting is to be held Thurs, Oct 28 at 1000 hours (planning meeting).

EPA and DEQ have stated to the RP that resources for this cleanup have been inadequate to this point. The RP has responded by contracting an additional firm to address the fuel that is being releassed downstream.

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