United States Environmental Protection Agency
Region X
POLLUTION REPORT

Date: Monday, November 20, 2006
From: Jeffry Rodin

To: Jeff Fowlow, Ecology & Environment, Inc. Steven Merritt, Ecology & Environment, Inc.

Subject: Sampling Continues
PSE Crystal Mountain Diesel Spill
Crystal Mountain, WA
Latitude: 46.9430000
Longitude: -121.4740000

POLREP No.:	5	**Site #:**	Z0BR
Reporting Period:		**D.O. #:**	
Start Date:	11/4/2006	**Response Authority:**	OPA
Mob Date:	11/4/2006	**Response Type:**	Emergency
Demob Date:	12/31/2006	**NPL Status:**	Non NPL
Completion Date:	2/28/2007	**Incident Category:**	Removal Action
CERCLIS ID #:		**Contract #**	
RCRIS ID #:		**Reimbursable Account #**	
FPN#	E07001		

Site Description
On November 3rd, 2006, a Puget Sound Energy (PSE) generator above ground storage tank (AST) was overfilled when automatic shutoff valves failed. The storage tank is filled by three 12,000 gallon underground storage tanks (UST's). It is estimated that 18,000 gallons of diesel fuel spilled onto the generator pad and drained downhill into a drainage ditch which flows under Crystal Mountain Drive to Silver Creek and the diesel fuel spilled down an access road close to ¼ of a mile in distance. The fuel spilled at a rate of approximately 18 gallons per minute.

Temporary containment measures were implemented in an attempt to minimize fuel moving offsite towards Silver Creek. Containment measures include a series of trenches, use of absorbent materials, and construction of an underflow dam with PVC pipes and earth. Additional interceptor trenches have been excavated to collect product seeping down gradient of the generator site.

Current Activities
Friday, November 17, 2006
- On-Scene Coordinator Jeff Rodin, US EPA, was rotated off of the incident and replaced by OSC Mike Sibley, US EPA.
- A sediment sampling plan was outlined to assess the impacts of the fuel release to Silver Creek, including the stream channel and adjacent banks. Sediment assessment areas will include the areas of Silver Creek adjacent to the Seep Area, the Horse Camp sand flats and wetlands, and the area above the anadromous fish barrier approximately 3 miles downstream of the release site. A walk-though assessment will be conducted to determine the appropriate sample spacing.
- An exploration trench was excavated approximately 50 feet north of the intersection of the Powerline Access Road and PSE Generator Station Road. Free product was visible on the surface of the water that had entered the trench. Recovery of the water and fuel is planned for Saturday morning when a vacuum truck is available.
- A new road alignment is being constructed adjacent (west) of the current Powerline Access Road alignment to allow excavation of the fuel-impacted soils beneath the roadway. Tree removal and grading is underway.
- Soil boring and well installation continued, with borings placed at 100-foot intervals along the Powerline Access Road, and in locations between Crystal Mountain Boulevard and Powerline Access Road. A 22 soil borings have been installed, and 17 monitoring wells have been installed to date throughout this investigation.
- A shallow drainage ditch was cut on the south side of the Silver Creek Access Road to direct water from the culvert under Crystal Mountain Boulevard. Sorbant booms and pads were placed in the ditch to capture fuel and visible surface sheen. An underflow dam was built where the road curves north and the ditch flows toward Silver Creek.

• Approximately 500 gallons of product was recovered with a vacuum truck from the interceptor trench at the Seep Area. Plans are pending to enlarge the recovery trench to approximately 150 feet to capture product along the seep area.
• Product and surface sheen recovery with sorbant pads and booms continued in the springs and feeder stream channels at the Seep Area, the ditch along the Silver Creek Access Road, and the stream flowing around the PSE Generator Station. Plans are pending to divert uncontaminated surface water around the PSE Generator Station.

Saturday, November 18, 2006

• Plans were developed for an approximately 150-foot long by 10-foot wide rock-filled product recovery trench. The trench will extend along the toe of the slope from the initial Seep Area trench southwest to the Silver Creek Access Road. The trench will be excavated down to bedrock which is expected to be at 6 to 7 feet. Improvements to the Silver Creek Access Road and tree cutting to accommodate the trench began. Approximately 12 feet of the northern end of Seep Area recovery trench was excavated.

• Contaminated water from the exploration trench near the Powerline Access Road/PSE Generator Station Road intersection was pumped out with a vacuum truck and backfilled.

• One monitoring well and three soil borings were installed along the Powerline Access Road and up-slope of Crystal Mountain Boulevard. A total of 18 wells and 25 soil borings have been completed to date.

• A draft haul truck traffic plan was prepared to mitigate the traffic issues arising from contaminated soil removal and importing rock and aggregate.

• A summary of drinking water, surface water, and ground water sampling results is being finalized by PSE, and will be ready tomorrow morning.

Sunday, November 19, 2006

• Borings were installed on Powerline Access Road, southeast of the PSE Generator Station, northeast of the PSE Generator Station, and south of Silver Creek Access Road on east side of Crystal Mountain Boulevard. Additional borings are planned in the vicinity of the power transformer northeast of the PSE Generator Station.
• PSE excavated a shallow trench and placed an 8-inch ABS pipe to re-direct uncontaminated surface water around from the southern end of the PSE Generator Station to the ditch north of the Generator Station.
• A layer of base rock was placed on approximately three-fourths of the re-routed Powerline Access Road. Geotextile filter fabric and road base aggregate will be placed over the base rock to finish the road.
• Product and surface sheen recovery with sorbant pads and booms continued in the springs at the Seep Area, the ditch along the Silver Creek Access Road, the stream north of the PSE Generator Station, and the Powerline road alignment. Very little product was recovered over the last 24-hours (>10 gallons est.).
• Assessment data that was distributed today included a well and boring location map, a groundwater contour map, and excavation layout. Soil sample results from Borings #1 through #12 and #14 collected November 9 through 15, surface water, and drinking water sampling results also were provided by PSE.

Planned Removal Actions

• PSE will finish the re-routed Powerline Access Road, and begin excavating diesel-impacted soils along the original Powerline Access Road alignment. Excavated soils will be hauled off site for disposal, and clean fill imported to restore original site contours.
• PSE will finish the Silver Creek Access Road, and begin constructing a product recovery trench in the Seep Area. Water discharge limits and treatment requirements are currently being investigated.
• PSE will install additional soil boring(s) near the step-down transformer.
• PSE will continue to maintain surface water product recovery efforts and maintain all spill control measures.
• PSE will continue daily drinking water and surface water sampling.

Next Steps

• Same as Planned Removal Actions.

Key Issues

• Awaiting results of geophysical site investigation in hopes of identifying contaminant transportation pathway.
• PSE needs to develop a long term scope of work for the excavation around the generator site.
• PSE will identify the surface water discharge limits and treatment requirements for the water discharged from the product recovery trench.

- PSE needs to develop a transportation and disposal plan that will consider transportation of up to 12,000 cubic yards of contaminated soil and import fill on the only roadway into Crystal Mountain Ski Resort.
- PSE needs to develop a removal action plan for the operating generator power station. The plan must consider the need for back up power provided by the generator station.
- An acceptable removal action level for diesel contaminated soil needs to be determined by the UC.

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