

United States Environmental Protection Agency
Region X
POLLUTION REPORT

Date: Monday, June 18, 2007

From: Kathy Parker

Subject: Final POLREP

Pettit Oil Hwy8 MP10 Tanker Truck Rollover

Highway 8, milepost 10, McCleary, WA

Latitude: 47.0534750

Longitude: -123.2094210

POLREP No.: 3 **Site #:**
Reporting Period: 6/12/2007 **D.O. #:**
Start Date: 6/9/2007 **Response Authority:** OPA
Mob Date: 6/9/2007 **Response Type:** Emergency
Demob Date: **NPL Status:**
Completion Date: **Incident Category:** Removal Action
CERCLIS ID #: **Contract #**
RCRIS ID #: **Reimbursable Account #** 2007HR10N0XBW302D91CZ0BW
FPN# E07006

Site Description

The Pettit Oil spill site is located at Highway 8, mile post 10, near the city of McCleary, Washington. On 6/9/2007 at approximately 05:50 hours, a Pettit Oil truck lost control and struck a rock outcrop on the north side of the highway, and then crashed into the median of Highway 8. The vehicle contained 7000 gallons of gasoline cargo, 3300 gallons of diesel cargo, and 150 gallons of diesel in the vehicle's saddle tanks. The wrecked vehicle and spilled cargo ignited, prompting Grays Harbor Fire and Rescue to respond. The National Response Center was notified about the spill and US EPA FOSC Kathy Parker was dispatched to assess the response.

Current Activities

On Tuesday 6/12/2007, 2 FOSCs (Parker and Terada) and 2 START responded to the scene with the EPA Mobile Command Post (to provide a noise and dust-free work space and internet access).

OSC Parker contacted Jeff Nelson of Grays Harbor County Health District who stated he would visit the site on 6/13/07 to assess any drinking water health concerns.

START developed a not-to-scale conceptual site map for use in soil and groundwater assessment discussions.

OSC Parker contacted Gary Shigenaka of NOAA Emergency Response Division who stated that the US NOAA Fisheries manager approves of the Washington State Department of Fish and Wildlife guiding the operations in the wetlands.

Brian MacDonald of Washington State Department of Fish and Wildlife stated that he does not believe a biological opinion need be written on the wetlands clean-up.

At the 1400 tactical meeting, plans were made to address each of the three areas of concern.

Aspect Consulting stated they will write a brief monitoring and restoration plan before starting work on the wetlands cleanup, which is expected to start on Friday, June 15, 2007.

WDOE stated they will conduct the long term monitoring of contamination from the spill.

Approximately 90 cubic yards of contaminated soil have been removed from the median spill area. Aspect Consulting stated that this is 85-90% of the soil that needs to be removed from the approximate area stated below. To date, 120,000 gallons of contaminated water and 10 truck and pup combination loads of contaminated soil have been transported for off-site disposal.

START determined that the approximate extent of burned areas based on pacing are:

North Side: 14m x 6m

Median: 29m x 16m

Wetland: 28m x 24m

The wetland scientist working for Federated Insurance, Greg Challenger, indicated he would use the following formula to calculate the amount of fuel that was burned: (2.85 L x square meters x minutes of burn) with corrections for the time when vegetation but not fuel was burning.

Planned Removal Actions

Removal of contaminated soil in median and wetland.

To be conducted by RP with state oversight.

Key Issues

Contaminant Receptors and Risks:

The spill released liquid gasoline and diesel fuel to surface water, surface soil, subsurface soil, and groundwater. In addition, fuel vapors and particulates were released to the atmosphere due to volatilization and combustion. The exact quantity of fuel released to the environment is presently unknown because an unknown amount of fuel burned following the accident.

Fuel that was released to surface water is being controlled and recovered using sorbent strips and containment booms. The creek's velocity near the spill site is low. Fuel floating on the water's surface secondarily contaminates subsurface water through dissolution or emulsification. Subsurface water is being monitored for contamination by collection of subsurface water samples downstream of the last boom where sheen is observed on the water's surface. The samples are analyzed with an on-site mobile lab for BTEX.

Receptors in the surface and subsurface water have been identified to date as Cutthroat Trout, Steelhead Salmon, Lamprey Eel, Beaver, response personnel, and recreational users.

No specific affected vegetation was identified, however the Washington Department of Fish and Wildlife stated that peat layers along the creek shoreline should be preserved to the extent possible with the understanding that some residual fuel contamination may remain in or under the peat. The specific level of residual contamination that will be accepted by WDOE remains to be determined.

Risk to surface and subsurface water receptors in the vicinity of the spill is elevated. An area of roughly 29 meters by 16 meters south of State Road 8 along the outfall and creek have been heavily burned and sheen is visible on the water's surface. Once the median removal has been completed, cleanup efforts will proceed in this area to remove as much contamination as possible. Below the first containment boom, no sheen is visible, and subsurface water results have steadily decreased during the response to undetectable levels. Downstream surface and subsurface water receptors are therefore likely at low risk.

Fuel spilled to surface soil in the median and on the north shoulder of State Road 8 either infiltrated the near surface or soil subsurface or was transported by surface runoff, as discussed above, through the storm drain system to Mox Chehalis Creek. The RP's consultants - NRC Corporation and Aspect Consulting - began excavating petroleum contaminated soil (PCS) following the accident. Groundwater at the site is shallow. Groundwater seepage and stormwater runoff into the excavation has hindered progress and will most likely affect confirmation soil sample results. Some fuel that infiltrated the subsurface soil migrated to groundwater, which was observed seeping into the excavation. Surface soil receptors include site workers, emergency and agency personnel, and the public. Subsurface soil receptors include site workers and agency personnel. No specific wildlife or plant receptors for surface or subsurface soil have been identified. The risk to site workers and personnel is elevated, due to potential direct contact with petroleum contaminated water or soil or inhalation of vapors. Countermeasures include PID air monitoring, personal protective equipment (PPE) and site controls.

Fuel contamination to groundwater occurs through infiltration from subsurface soil or through migration from water in the creek or in the floor submerged floor of the excavation. No direct conduits to groundwater (such as wells) were observed near the spill site. Groundwater receptors include a domestic drinking water well and a small public drinking water supply well at the ORV Park. The risk of contamination to the ORV Park well appears very low because it is located upstream and upgradient of the spill site. The Park indicated they would step up their normal sampling regimen. The risk of contamination to the Davidson well appears low. It has been sampled already and the results were non-

detect for BTEX. It is located on the opposite side of Mox Chehalis Creek from the spill and appears to be upgradient of the creek. However, the elevation difference is small and the Aspect Consulting has agreed to survey the groundwater elevation at the Davidson well and the surface water elevation in the creek to determine the groundwater gradient between the well and the creek. If the gradient from the well down to the creek is high, then the risk of contamination can be considered to be very low. If the gradient is very low or if there is no difference in water elevation, then the risk of contamination to the well would be a concern. An additional protective measure is offered by the RP through periodic sampling of the subsurface water in Mox Chehalis Creek upstream of the Davidson well. A detection of 5 ug/L or higher of Benzene in the subsurface water sample would be a trigger for additional sampling of the Davidson well.

No information has been made available regarding contaminants released to air while the fuel was burning or during the initial stages of the emergency response. Presently the risk is assumed low because most of the volatiles have either already dissipated or are absorbed in soil or dissolved in water. In addition, PID readings collected by NRC Corporation on 6/11/07 and 6/12/07 indicate volatile organic compounds were undetectable in the air over the contaminated soil. Potential receptors include site workers, agency personnel, emergency first responders, wildlife, and the public.

This brief evaluation of risk is not intended as a substitute for a formal Ecological or Human Health Risk Assessment, which should be created as part of the long term monitoring effort. This evaluation also relies on information collected during the emergency response phase of this incident, and may require additional information gathering (such as species or well surveys).

Disposition of Wastes

Aspect Consulting and National Response Corporation are generating, managing, and arranging for disposal of wastes under contract for the Responsible Party, Pettit Oil. The State On-Scene Coordinator from the Washington Department of Ecology is overseeing these activities. Final identification, volume, and disposition of waste is to be determined.

Waste Stream	Quantity	Manifest #	Disposal Facility
Petroleum Contaminated Soil	120 Cubic Yards	TBD	TBD
Petroleum Contaminated Water (Skimming and dewatering operations)	120,000 gallons	TBD	TBD
Petroleum Contaminated Sorbents and Personal Protective Equipment.	TBD	TBD	TBD

www.epaossc.org/Pettit_Oil_Hwy8_MP10_Tanker_Truck_Rollover