

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

Date: Wednesday, November 14, 2007
From: Jeffry Rodin, OSC

Subject: Site Preparation for Soil Tackifier
Swift Creek
Everson, WA
Latitude: 48.919035
Longitude: -122.303865

POLREP No.:	2	Site #:	10EG
Reporting Period:	11/12/2007 - 11/14/2007	D.O. #:	
Start Date:	11/8/2007	Response Authority:	CERCLA
Mob Date:	11/7/2007	Response Type:	Time-Critical
Completion Date:		NPL Status:	
CERCLIS ID #:	WAN001002688	Incident Category:	Removal Action
RCRIS ID #:		Contract #	

Site Description

A large landslide in the upper watershed of Sumas Mountain is a significant source of sediment in Swift Creek. The landslide material contains naturally occurring asbestos and elevated levels of metals.

Dredging has been used to maintain the Swift Creek channel to prevent flooding. Dredged material has historically been stockpiled on either side of the creek and offered to the public and others as free fill with a variety of uses. Off-site use of dredged material from the banks of Swift Creek is now prohibited due to human health concerns about asbestos in the sediments.

The Whatcom County Health Department asked EPA to evaluate potential risks to human health from the stockpiled material. EPA coordinated this evaluation with the Washington Department of Ecology, Washington Department of Health, Agency for Toxic Substances and Disease Registry, and Whatcom County. EPA's sampling demonstrated that asbestos fibers in the dredge piles can get into a person's breathing zone during routine activities, such as raking and shoveling.

Because of potential health risks from exposure to asbestos, EPA recommended that people should no longer remove dredged materials from the site without protective gear, and that dredged materials should not be taken to other locations where people may be exposed to it. The County has taken measures to restrict public access to the stockpiled material.

EPA has encouraged a multi-agency approach to assist the County with how to manage dredged sediments from Swift Creek. There is no single agency with the authority and resources needed

to address this complex situation.

In October 2007, the Whatcom County Public Works Department asked the EPA to help contain the asbestos contaminated dredged material on site. EPA plans to reconfigure the existing stockpiles of asbestos contaminated materials and apply a soil tackifier (dust suppressant) on the material to reduce inhalation exposure to asbestos. The use of a tackifier will help stabilize the dredging piles to minimize the amount of wind blown asbestos from potentially affecting the surrounding area.

Current Activities

- Saturday 11/10/07; Reconfiguration of dredged material in preparation for application of soil tackifier continued. Movement of material to build up the eroded berms was also conducted. As of COB Saturday 11/10/07 0.54 miles of approximately 1 mile of material on the South bank of Swift Creek has been reconfigured.
- Sunday 11/11/07; Site operations were shut down for the day. This would not impact the overall schedule, since rock and soil tackifier deliveries would not be occurring until later in the week.
- One (1) EPA On-Scene Coordinator (OSC), one (1) START and seven (7) ERRS mobilized to the site on Monday 11/12/2007, to complete work reconfiguring the stockpiled dredge materials in preparation for the arrival of the dust suppressant on Thursday 11/15/2007. Current activities performed from Monday 11/12/2007 through Wednesday 11/14/2007 include the following:

* ERRS had an additional larger bulldozer delivered to the site on Monday morning to expedite the reconfiguration of stockpiled and dredged materials along Swift Creek. This larger bulldozer was used to grade and level all stockpiled materials and fill low spots in the berms along either side of the creek.

* ERRS began receiving truckloads of rip rap material and positioning the large rocks in the stream channel as an erosion control measure at vulnerable areas of the site. This work continued throughout the week along the entire upstream area from the bridge at Oat Coals Road.

* OSC Rodin visited the final property owner to get a signed access agreement following a verbal authorization to access their property and continue site work. There were no issues or questions raised by this property owner during the meeting.

* EPA OSC met with another property owner in the afternoon on Monday 11/12/2007 who was visiting the site to assess progress and discuss concerns around his property. He reviewed

the work that had been conducted thus far.

* On Tuesday 11/13/2007, the START conducted air monitoring in conjunction with asbestos air sampling on all heavy equipment operating on the site throughout the day. Based upon the readings, and presumably due to the frequent precipitation, there were low levels (less than 3 times the background readings) of particulates with a sub-micron size range.

* EPA, START, ERRS, and Paul Pittman, a representative of the Whatcom County Public Works Department, conducted a site walk with two property owners and discussed the plan for the remaining erosion control measures to be installed and for the application of the soil tackifier/dust suppressant.

* ERRS continued the final grading and erosion control measure installation along the entire north shoreline of Swift Creek on Wednesday 11/14/2007. The final installation of erosion control will be completed along the entire length of the southern shoreline of the creek on Thursday morning as the dust suppressant is applied to the north berm along the creek.

* START conducted air monitoring and air sampling at the site throughout the dredged material reconfiguration process. The highest particulate levels recorded at the site were at or below 30 ug/m³ of respirable material with an average particle size of 0.6 microns. This level is compared to a background of approximately 10 ug/m³ at this size range, or approximately 3 times the ambient levels of particulate. The recent precipitation and winds have been key to keeping particulate levels low at the site.

Planned Removal Actions

No material will be removed from the site, but the EPA will proceed with the planned site stabilization efforts and continue to keep all stakeholders apprised of the situation during the entire process.

Next Steps

Planned activities to be completed before Thanksgiving include the following next steps:

* Finalize the configuration of all stockpiled material along both sides of Swift Creek in preparation for the soil tackifier application.

* Armoring eroded creek banks and installing erosion control measures along the creek using stockpiled material and imported rock.

* Application of soil tackifier to the stockpiled material to reduce the risk of exposure to wind-blown asbestos. This process will begin with the northern side of Swift Creek, proceeding from west to east, and then on the southern side, proceeding from east to west until completed.

Key Issues

Of primary concern at this site while site stabilization is underway are the following key areas:

* Containment of asbestos-contaminated sediment and dredged materials on the site by maintaining contamination control lines and rapidly stabilizing the site.

* Testing and perfecting appropriate methods for the application of the soil tackifier. The maneuverability of wheeled vehicles is limited on the wet dredge material and a traffic plan for the multiple passes has been established. ERRS will use two water trucks and several trips to cover the entire site with the soil tackifier.

* Community relations and public involvement are of the utmost priority throughout this process. Stakeholders have been encouraged to participate in the process at the site and are maintaining a presence at every step of the project.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	\$215,000.00	\$101,890.00	\$113,110.00	52.61%
RST/START	\$28,000.00	\$9,000.00	\$19,000.00	67.86%
Intramural Costs				
USEPA - Direct (Region, HQ)	\$23,000.00	\$3,000.00	\$20,000.00	86.96%
Total Site Costs				
	\$266,000.00	\$113,890.00	\$152,110.00	57.18%

* 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.

www.epaosc.net/swiftcreek

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

Date: Saturday, November 17, 2007

From: Jeffrey Rodin, OSC

Subject: Final: Application of Soil Tackifier/Demobe
Swift Creek
Everson, WA
Latitude: 48.919035
Longitude: -122.303865

POLREP No.:	3	Site #:	10EG
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Start Date:	11/8/2007	Response Authority:	CERCLA
Mob Date:	11/7/2007	Response Type:	Time-Critical
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Current Activities

- Thursday 11/15/2007
- The soil tackifier/dust suppressant arrived as ERRS completed the remaining grading and leveling on the south side of the creek. ERRS created a temporary land bridge across the creek allowing water trucks access to apply the dust suppressant on the north side of the creek. ERRS used two water trucks to complete application on the entire length of berm on the north side of the creek.

- Prior to the application of the dust suppressant, the START conducted co-located air sampling and air monitoring near the stream crossing and at the west end of the northern berm to monitor pre-treated conditions related to particulates and airborne asbestos.

- Friday 11/16/2007
- ERRS completed grading and leveling on the entire length of the south berm and began bringing in crushed rock on the eastern side of the site to create an erosion barrier on that portion of the site should it be used occasionally for traffic to access the stream crossing.

- ERRS also continued application of the soil suppressant along the southern berm from the west side of the site to the stream crossing. There were some minor delays on the second day of application due to the product congealing inside the water trucks. The trucks were flushed and the product was filtered prior to mixing to prevent future problems.

- Saturday 11/17/2007
- ERRS finished the application of the soil tackifier along the southern berm. START monitored airborne particulates for worker health and safety during application of the soil suppressant.

- ERRS Began shut down access to the site and began decontamination of equipment.

- Sunday 11/18/2007
- ERRS completed decontamination of the equipment.

- START demobilized from the site.

- Monday 11/19/2007; ERRS demobilized all equipment and personnel from the site.

Planned Removal Actions

There are currently no more planned EPA removal activities for the site.

Next Steps

EPA has completed the planned site stabilization efforts.

Key Issues

Whatcom County Public Works representative Paul Pittman praised EPA's work on site stabilization and commented that the efforts have greatly contributed to reducing the threat of breaching or flooding onto adjacent properties during the upcoming rainy season.

The county representative also noted that the erosion control and shoreline armoring features installed in the river during this initiative would be sufficient to maintain the current channel and may reduce overall sediment deposition.

Property owners expressed appreciation for the EPA's efforts, and commented that the regrading of the piles in preparation for the soil tackifier has contributed to making the stream banks more aesthetically pleasing.

Following the application of the soil stabilization and dust suppressant, the EPA offered the bulk product containers to the property owners for reuse. One of the local residents made arrangements with other property owners to accept all containers and expressed gratitude to the EPA for offering these containers instead of disposing them. This effort reduced overall disposal and transportation costs for the project.

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