United States Environmental Protection Agency
Region X
POLLUTION REPORT

Date: Monday, January 19, 2004
From: Daniel Heister

To: Dan Heister, EPA
David Rees, EPA
Ryan Whitchurch, E&E

Subject: Recovery Phase
The Dalles Transformer Oil Spill
The Dalles Dam Project, The Dalles, OR

POLREP No.:	2	**Site #:**	626
Reporting Period:	1/18/2004 through 1/19/2004	**D.O. #:**	
Start Date:	1/16/2004	**Response Authority:**	OPA
Mob Date:	1/16/2004	**Response Type:**	Emergency
Demob Date:	1/19/2004	**NPL Status:**	Non NPL
Completion Date:		**Incident Category:**	Removal Action
CERCLIS ID #:	NA	**Contract #**	68-S0-01-01 (E&E)
RCRIS ID #:	NONE	**Reimbursable Account #**	
FPN#	710633		

Site Description
The Dalles Dam Transformer Spill site hereafter referred to as the "Site" or "the dam" is located in The Dalles, Oregon north of Interstate 84, at Mile Post (MP) 88 (also exit 88) on the eastern edge of the city of The Dalles, Oregon. The Dalles Dam also corresponds to Columbia River mile 183.

The Dalles Dam Project is operated by the United States Army Corps of Engineers (USACE). The facility is access-restricted, and entry is guarded by an officer at all hours.

At approximately 0700 on Thursday, 01/15/2004, an alarm alerted personnel at the Dalles Dam that oil was ponding inside the dam structure below a 3 phase transformer. The spaces in the dam structure where the ponding occurred housed the Breaker Gallery and Pump Gallery (apx Elevations 111 and 129 feet). The transformer consisted of 3 separate 6,000-gallon vessels (the working volume of the tranformer oil is approximated at 5,500-gallons per vessel by USACE)set over 3 separate containment areas. Each vessel was internally cooled with a closed-loop water pipe network (heat exchanger), and cooling water was obtained from the Columbia River on the upstream side of the dam.

The transformer oil was reported by USCOE to consist of mineral oil, with 8 ppm PCBs as residual.

Initially, up to 75 gallons of oil spilled downstream of the dam, was reported by USCOE. However, USCOE revisions up to 250 gallons were subsequently reported to USEPA Federal On-scene-coordinator Daniel Heister (hereafter referred to as “the FOSC”) , and the reports appeared to have been "guesstimates" that could be significantly incorrect.

Current Activities
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The ICS Environmental Unit completed the SCAT report, compiled from on-water and overflight observations made during prior operational periods. The SCAT report determined that two to three miles of shoreline were lightly impacted. The report recommended continuation of oiled debris, sheen, and emulsified oil removal from impacted areas: Bingen Marina, Dalles Marina, and several coves downstream from The Dalles Dam. The Environmental Unit expects that the clean up will take days rather than weeks. SCAT between Stevenson and Wind River was not accomplished on the water due to adverse river/wave conditions. SCAT in this area is expected to be accomplished via road access or on foot. The determination of "How clean is clean?", the final clean up goals, will be made in consultation with Unified

Command.

River impact assessment has been shifted from SCAT to wildlife. Wildlife specialists are looking for stress activities such as unusual bird preening cycles or unusual predator/prey activities. Steve Pribyl of the Oregon Division of Fish and Wildlife (ODFW) reported that thousands of birds have been observed with no abnormal activities noted. Mobile wildlife care equipment and personnel are on stand-by and are expect to maintain readiness.

Columbia Riverkeepers (a citizens group) expressed concerns and requested a briefing. UC offered a phone briefing, and furthermore, offered one place as an observer on a wildlife assessment boat during an on-water survey. Riverkeepers accepted the phone briefing and declined the observer offer.

There was an update received from Bonneville Dam. Oil was reported among debris in permanent boom designed to protect Bonneville Dam. This oil will be cleaned up by NRC. Also, minimal broken sheen was reported upstream of lock gates. This sheen was determined to be unrecoverable.

The USACE in consultation with Ecology is developing an oil mass balance to determine the amount spilled and the amount released into the Columbia River. USACE is expected to provide preliminary mass balance figures tomorrow (1/19/2004).

NRC activities included: placement of boom and sweep at Wyeth boat ramp (100 feet of hard boom), 12 sweep (a type of sorbent) placed at Bingen Marina, boom maintenance at Dalles Marina, and 1,000 feet of hard boom was placed to protect the industrial divers working on The Dalles Dam spillway. An additional total of 2,400 feet of hard boom was placed between Bonneville Dam and Wind River to address 6 GRP strategy locations identified by the Environmental Unit in Lower Bonneville Pool.

Ecology developed an Incident Sampling Plan approved by the Unified Command.

An Incident Action Plan (IAP) was also developed, and was approved by the Unified Command. The IAP will be implemented by USACE, who will maintain communication with the Unified Command staff following site demobilization. Site demobilization of command staff is planned to occur on 01/19/2004.

One START member conducted a reconnaissance of the Ice and Trash Sluiceway for oil and oiled debris, after Unified Command received reports that only small amounts of sheen were present in the sluiceway. Previous reports indicated possibly recoverable quantities in the sluiceway. NRC indicated during the reconnaissance to START that oily debris and product were being recovered. Skiff outboard engines are being used to direct floating product and sheen into fixed sorbent materials. This recovery will continue through tomorrow (01/19/2004). However, skiffs must be removed from the sluiceway overnight to comply with USACE safety rules.

One START member also accompanied an Ecology sampler to the oil holding tank staged in The Dalles Dam "boneyard" (an equipment storage yard). A sample was recovered for PCB concentration confirmation. The sample is scheduled to be delivered by START to North Creek Analytical Laboratory (NCA) on 01/19/04, and results will be reported back to NRC's Tim Archer. NRC is requesting that North Creek Analytical perform rush analysis of the sample (24hr requested).

Helicopter operations were suspended today because of fog between the helicopter's base airport and The Dalles airport. Fixed-wing aircraft operations were considered, but were not conducted because low-hovering capability was required for aerial reconnaissance objectives.

NRC crews are removing oil-covered-rock from the powerhouse roof, and loading it into 10 yard lined drop-boxes. The boxes are being staged at the "boneyard" pending oil quantity estimation, and eventual disposal. Removal of the rock is expected to continue through tomorrow morning (01/19/2004).

SOSC Renz, SOSC Layman, and most of the command staff demobed from the site at 1800 hours. Unified Command will remain in close contact with USACE Jim Dennis by telephone throughout the remainder of the response and kept abreast of any significant developments.

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USEPA FOSC Heister and START member Murphy reconnoitered the top of The Dalles Dam around transformer 2, and observed oil recovery operations in the ice and trash sluiceway.

NRC continues to clean up sheen and oil in the ice and trash sluiceway, and to tend to GRP-strategy booms that have already been deployed. NRC also continues to remove oiled rock from the roof of The

Dalles Dam powerhouse.

NRC will also conduct SCAT surveys today of the shoreline from The Dalles Dam to Bonneville Dam using two boats and crew.

NRC expects to conclude removal operations at The Dalles Dam today. NRC plans to move resources to Bonneville Dam tomorrow (1/20/2004) to address oil that has collected in Bonneville's debris boom. NRC will use sorbent material to collect pockets of oil, sheen, and emulsified oil floating amongst the debris inside the boom. NRC will then remove contaminated debris using a clamshell bucket. The contaminated debris will be loaded into lined drop-boxes pending disposal. NRC plans to maintain one boat and crew at The Dalles Dam to address any residual oil that may be flushed out by rain.

USEPA and START anticipate deomobilization from the The Dalles Dam at approximately 1200 noon today (01/19/2004).

Planned Removal Actions

Complete removal of oiled rock from The Dalles Dam powerhouse roof.

Complete removal of oil and sheen from the ice and trash sluiceway. Oil will be captured with sorbents.

Oil pumped off of Transformer 2 (Phase A, B, and C) is currently stored in a portable tank located in the "boneyard" at The Dalles Dam. No additional oil is planned to be removed from the transformers at the site.

Oily sorbents deployed as part of GRP strategies continue to be recovered as change-outs are needed. These sorbents are being stored in lined drop-boxes. NRC will estimate volumes of oil contained in these sorbents to aid in the mass balance calculations.

NRC will begin removal of sheen, oil, and oiled debris from Bonneville Dam's debris boom tomorrow (1/20/2004).

Sheen on shorelines will be passively removed with sorbents offshore. Active removal on the shoreline is not planned in order to minimize physical damage of the shoreline.

Next Steps

Expect analytical results of oil sample collected by Ecology from temporary oil storage tank. Results will be used to determine disposal options.

Disposal of oily sorbents.

Disposal of oil.

Disposal of oiled rock.

Disposal of oiled debris.

Unified Command and "How Clean is Clean"-Agencies will reconvene next week and decide when shoreline cleanup operations can be terminated.

Key Issues

Determining "How Clean is Clean". Key agencies, including ODEQ, Ecology, USEPA, USFWS, ODFW, WDFW, and other stakeholders, will decide with USACE when environmental cleanup operations can be concluded.

Unified Command, NRC, and the ICS Environmental Unit are concerned that active cleanup measures on shorelines may cause more damage than allowing the sheens to naturally degrade by themselves. Passive sorbents deployed off-shore would assist in this process without causing damage.

Wildlife sometimes exhibit delayed symptoms of oil-exposure. ODFW and WDFW will continue to monitor wildlife populations, and wildlife recovery teams will remain available in the event that symptoms do occur in the next few days.

ATSDR has indicated to Unified Command that transformer oil with 8ppm PCBs does not pose an acute toxic risk to the public or environment. The primary threat remains the physical hazard of the mineral oil.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
RST/START	$18,500.00	$7,000.00	$11,500.00	62.16%
Intramural Costs				
Total Site Costs	$18,500.00	$7,000.00	$11,500.00	62.16%

* 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.

Disposition of Wastes

Recovered wastes are currently stored at collection points and in The Dalles Dam "boneyard". The method of storage is:

Pure-Phase Oil - Stored in a portable double-walled 21,000 gallon tank

Oiled Debris - Stored in lined drop-boxes

Oiled Sorbents - Stored in lined drop-boxes

Wastes will remain on-hold until sample results are received. Unified Command has signed a formal Waste Disposal Plan that will be implemented when results are received.

Waste Stream	Quantity	Manifest #	Disposal Facility
Mineral Oil containing 8ppm PCBs (Aroclor 1254) recovered from Transformer 2 Phase B at The Dalles Dam	3,050 U.S. gallons	TBD	TBD
Mineral Oil containing 9ppm PCBs (Aroclor 1260) recovered from Transformer 2 Phase C at The Dalles Dam	2,850 U.S. gallons	TBD	TBD
Mineral Oil with up to 9ppm PCBs (Aroclor 1254 and 1260) as oily sorbents and vacuum truck skimming - Quantity is oil only, excluding sorbent volume.	967 U.S. gallons	TBD	TBD
Mineral Oil with up to 9ppm PCBs (Aroclor 1254 and 1260) as drip residue and floor mop-up - Quantity is oil volume only.	600 U.S. gallons	TBD	TBD
Mineral oil with up to 9ppm PCBs (Arclor 1254 and 1260) mixed with cobble-size rocks.	TBD	TBD	TBD
Mineral Oil with up to 9ppm PCBs (Aroclor 1254 and 1260) mixed with debris (trash and logs).	TBD	TBD	TBD