

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

Date: Saturday, January 17, 2004

From: Daniel Heister

Subject: Initiation of Action
The Dalles Transformer Oil Spill
The Dalles Dam Project, The Dalles, OR

POLREP No.:	1	Site #:	626
Reporting Period:	1/15/2004 through 1/17/2004	D.O. #:	
Start Date:	1/16/2004	Response Authority:	OPA
Mob Date:	1/16/2004	Response Type:	Emergency
Demob Date:		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 (USCOE). 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 oil-filled vessels set over 3 separate containment pits. Each vessel was cooled with a closed-loop water pipe network, 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 FOOSC"), and the reports appeared to have been "guesstimates" that could be significantly incorrect.

Current Activities

Thursday, January 15, 2004

Response activities were initiated by USCOE following the oil alarm. USCOE notified the National Response Center (NRC) of the incident, which subsequently notified agencies with jurisdiction over the area, including USEPA, Washington Department of Ecology (hereafter referred to as Ecology), and Oregon Department of Environmental Quality (hereafter referred to as DEQ).

USCOE contracted NRC Environmental (formerly Foss Environmental; hereafter referred to as NRC) to respond with vacuum trucks, sorbent pads, hard and soft containment boom, and recovery skiffs. Progress was made in identifying some oil in the river, and oil in the gate locks (structures into which gates can be lowered to shut off water flow to the generating turbines). NRC began recovery of identified spills, and decontamination of the transformer secondary containment.

Friday January 16, 2004

USEPA's FOSC was mobilized to the site Friday morning, 01/16/2004. The FOSC examined the scene of the incident and interviewed USCOE personnel in an attempt to further refine the estimated release quantity. Additionally, a USEPA TSCA (Toxic Substances Control Act) inspector accompanied the FOSC to inspect transformers at The Dalles Dam.

Helicopter overflights were initiated by Ecology, and estimated that free product slicks had migrated approximately 80 miles downstream of the site. Ecology continues to conduct aerial surveys of the Columbia River between the Dalles Dam and Bonneville Dam.

Based on the amount of free product observed in the river, and the apparent larger than reported release, USEPA's FOSC mobilized two USEPA contracted Superfund Technical Assessment and Response Team (hereafter referred to as START) responders from Portland, Oregon, and two United States Coast Guard Pacific Strike Team (hereafter referred to as PST) responders to assist with the assessment of the site.

START responded at approximately 1530 hours, and proceeded with the response truck to The Dalles Dam. START arrived in The Dalles at approximately 1730 and proceeded to the Command Post. Following security clearance processing, START demobed from the site at approximately 1830 hours for the evening, and proceeded to develop START's site safety plan.

Saturday, January 17, 2004

USEPA's FOSC, START, the State of Washington's SOSC (hereafter referred to as WASOSC), the State of Oregon's SOSC (hereafter referred to as OSOSC), PST, and NRC met onsite at 0630 hours. At 0720, the FOSC, START, and PST were escorted to the incident scene to observe the transformer, gate wells, broken cooling pipes, and deployed sorbents and boom.

At 0800, a site briefing was conducted by the WASOSC for all ICS personnel. Safety and incident objectives were covered, and a decision was made to keep the command post at the Dam, and not relocate it further downstream.

Following the 0800 meeting, the environmental section assembled four shoreline cleanup and assessment teams (SCAT). Each team proceeded to one of four defined areas of the Columbia River between The Dalles Dam and Bonneville Dam to evaluate the presence of oil along the river bank, and to determine possible impacts to wildlife.

One START member conducted a detailed inspection of the area around the transformer with Ecology and USCOE. After careful inspection of the secondary containment, coolant piping, oil transfer piping, and the equipment galleries within the dam, several routes of discharge were identified for the transformer oil. The apparent primary routes were expansion cracks in the concrete structure of the dam. The expansion cracks, which are at their widest at the top of the dam near the transformer secondary containment, were conduits for oil in the secondary containment to the ice spillway and the gate wells. Additional discharge routes were identified through the damaged coolant piping, and through roof drains.

During the afternoon on 1/17/2004, one START member sampled floating product and sheen at the base of The Dalles Dam with NRC. The sample was collected to address concerns regarding construction-diver health and safety concerns. The sample will be turned over to Ecology for analysis.

Concurrent to the sampling, one START member accompanied an overflight of the Columbia River from The Dalles Dam to Hood River. Occasional silver sheen was observed near rocky islands several hundred yards downstream of The Dalles Dam, around The Dalles marina, and around Bingham marina.

Planned Removal Actions

Removal of oil pooled in the gate wells was mostly accomplished by NRC using vacuum trucks, until an un-collectible sheen remained. Sorbents remain in the gate wells to mop up remaining sheen.

Containment boom and sorbent materials will continue to be maintained as needed by NRC.

Additional deployment of sorbent and boom will occur as needed based on SCAT observations.

Oil will be drained from the three transformer tanks into a portable contaminant holding tank. The quantity of water mixed with this oil will be measured.

Collected oil will be held on site until mass calculation balances are finished. The calculation will be

finished after the oil and water mixture settles sufficiently.

Next Steps

Recovery and assessment teams will stand down after dark (1800 to 1900 hours) tonight (01/17/2004).

The next operational period will begin at 0700 on 01/18/2004. The planning meeting tonight will determine the objectives for this next operation period.

Demobilization of resources may be determined at the planning meeting tonight (01/17/2004).

Key Issues

Determine amount of oil discharged into the Columbia River.

Determine impacts to shoreline.

Determine impacts to wildlife.

Determine cleanup levels that must be met.

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