



PERIODIC REVIEW

**Town Pump Station
F/SID #: 403**

**521 East Jewett Boulevard
White Salmon, WA 98672**

**TOXICS CLEANUP PROGRAM
Central Regional Office**

September 16, 2008

1.0	INTRODUCTION.....	1
2.0	SUMMARY OF SITE CONDITIONS.....	2
2.1	Site History	2
2.2	Remedial Actions.....	2
2.3	Cleanup Levels.....	3
2.4	Restrictive Covenant.....	3
3.0	FIVE-YEAR REVIEW.....	4
3.1	Effectiveness of completed cleanup actions	4
3.2	New scientific information for individual hazardous substances for mixtures present at the Site	4
3.3	New applicable state and federal laws for hazardous substances present at the Site	4
3.4	Current and projected site use.....	5
3.5	Availability and practicability of higher preference technologies	5
3.6	Availability of improved analytical techniques to evaluate compliance with cleanup levels	5
4.0	CONCLUSIONS	6
4.1	Next Review.....	6
5.0	REFERENCES.....	7
6.0	APPENDICES	8
6.1	Vicinity Map	9
6.2	Site Plan	10
6.3	Photo log	11

1.0 INTRODUCTION

This document is a review by the Washington State Department of Ecology (Ecology) of post-cleanup site conditions and monitoring data to assure that human health and the environment are being protected at the Town Pump Station facility (Site). Cleanup at this Site was implemented under the Model Toxics Control Act (MTCA), Chapter 173-340 WAC.

Cleanup activities at this Site were completed under Enforcement Order number DE 94TC-C161, issued on March 16, 1994. The cleanup actions resulted in residual concentrations of total petroleum hydrocarbons (TPH) exceeding MTCA Method A cleanup levels for soil established under WAC 173-340-740(2). WAC 173-340-420 (1) requires that “if the department selects or approves a cleanup action that results in hazardous substances remaining at a site at concentrations which exceed Method A or Method B cleanup levels established under WAC 173-340-700 through 173-340-760 or if conditional points of compliance have been established, the department shall review the cleanup action no less frequently than every five years after the initiation of such cleanup action to ensure that human health and the environment are being protected”.

When evaluating whether human health and the environment are being protected, the factors the department shall consider include [WAC 173-340-420(2)]:

- (a) The effectiveness of ongoing or completed cleanup actions;
- (b) New scientific information for individual hazardous substances of mixtures present at the Site;
- (c) New applicable state and federal laws for hazardous substances present at the Site;
- (d) Current and projected Site use;
- (e) Availability and practicability of higher preference technologies; and
- (f) The availability of improved analytical techniques to evaluate compliance with cleanup levels.

The department shall publish a notice of all periodic reviews in the Site Register and provide an opportunity for public comment.

2.0 SUMMARY OF SITE CONDITIONS

2.1 Site History

The Town Pump Station facility is located in the City of White Salmon in Klickitat County, Washington (Vicinity Map - Appendix 6.1). Site cleanup conducted under a Prospective Purchaser Consent Decree, filed in December 1994.

The Site served as an operating automotive service station until 1992. A single underground storage tank (UST) was located at the west end of the building and was decommissioned by removal in 1992. Four other USTs were located on the north side of East Jewitt Avenue and supplied gasoline to the site by gravity feed lines.

2.2 Remedial Actions

Petroleum hydrocarbon contaminated soils (PCS) have been documented at the Site since 1989, when gasoline contaminated water was observed seeping into the trailer park located directly south and downgradient of the Site. In 1992, the single UST on the property was removed and evidence of petroleum hydrocarbon (TPH) contamination was observed in soils surrounding the UST excavation. As a result of these observations, Ecology negotiated an Agreed Order in 1994 requiring the cleanup of PCS and a Site Characterization to be performed at the Site.

In May through June 1994, PCS was removed by Williams and Taylor Construction. Contaminated soil was encountered north, east, and south of the Town Pump Station building. After excavation, PCS with concentrations exceeding MTCA Method A cleanup levels remained beneath the building, along the perimeter of the building, along the retaining wall on the south side of the property, beneath East Jewitt Avenue, and in the front yard of the residence to the west of the Site. Contamination was left in these areas to avoid compromising the structural integrity of either buildings or roads.

The excavated PCS came from several distinct plumes including:

1. Waste oil from a broken drain line coming from the garage below the hydraulic lift.
2. Gasoline contamination from the fill pipes which entered the property from the tanks on the north side of East Jewitt Avenue.
3. Gasoline and diesel contamination between the station and the residence to the west.
4. Gasoline contamination extending around the south side of the station toward the trailer park and retaining wall.

Groundwater was not observed during the excavation of PCS. Excavation was conducted to a maximum depth of approximately 11 feet below ground surface (bgs).

Confirmation samples were collected from the limits of the excavation and from test pits on the adjacent trailer park property. PCS was detected at the limits of the excavation up to 2400 parts per million (ppm) of gasoline-range petroleum hydrocarbons (TPH-G) at 8.5 feet bgs, 5500 ppm

of diesel-range petroleum hydrocarbons (TPH-D) at 7.5 feet bgs, and 1800 ppm of heavy oil-range petroleum hydrocarbons (TPH-O) at 4 feet bgs. TPH-G was detected in three of six test pits advanced on the trailer park property up to 7600 ppm.

In 1996, the four USTs located on the north side of East Jewitt Avenue were decommissioned by removal. The tanks consisted of four 4,000-gallon USTs. Confirmation soil samples were collected from the sidewalls and base of the UST excavation. Sample analysis did not detect TPH at concentrations exceeding MTCA Method A cleanup levels in any of the samples.

2.3 Cleanup Levels

The Agreed Order stated that all activities shall be conducted in accordance with Washington Administrative Code 173-340, which dictates the use of standard MTCA Method A cleanup levels for the Site. The table below indicates the changes between 1991 and 2001 MTCA Method A cleanup levels relative to the Site:

Analyte	1991 MTCA Soil Cleanup Level (ppm)	2001 MTCA Method A Soil Cleanup Level (ppm)	1991 MTCA Method A Groundwater Cleanup level (ppb)	2001 MTCA Method A Groundwater Cleanup Level (ppb)
TPH	NL	NL	1000	NL
TPH-Gas	100	100/30	NL	1000/800
TPH-Diesel	200	2000	NL	500
TPH-Oil	200	2000	NL	500
NL = None listed				

2.4 Restrictive Covenant

A Restrictive Covenant has **not** been recorded for the site. The Agreed Order does not require a Restrictive Covenant, but the presence of residual contamination in soil exceeding MTCA Method A cleanup levels suggests a Restrictive Covenant should be recorded for the Site to prevent exposure of hazardous materials and to receive a No Further Action determination.

A Restrictive Covenant for the site should include the following restrictions, at a minimum:

1. Any activity that would threaten the containment of hazardous materials is prohibited.
2. The owner must give written notice to Ecology if the owner intends to convey interest in the property.
3. The owner must obtain Ecology's approval for any use of the property that is not consistent with the Restrictive Covenant.
4. The owner shall let Ecology access the property as necessary.
5. The owner may rescind the Restrictive Covenant with Ecology's consent.

3.0 FIVE-YEAR REVIEW

3.1 Effectiveness of completed cleanup actions

Cleanup actions at the site were intended to eliminate human exposure to contaminated soils and groundwater at the Site. The exposure pathway to contaminated soils (ingestion, direct contact) has been reduced by the presence of asphalt surface and buildings on the Site, as well as the tank removals and excavation conducted during the initial cleanup. Property restrictions imposed by a Restrictive Covenant are needed to close this pathway.

During the site visit conducted on September 4, 2008, new construction was observed to the south of the former Town Pump Station building in the vicinity of the former trailer park. Early stages of residential development were apparent. A new street was graded and paved, underground utilities were in place, and lots were marked for new single family residential housing.

Conclusions:

Soils with TPH concentrations higher than MTCA Method A cleanup levels are still present at the Site. Structures and asphalt surface prevent human exposure to soil contamination by ingestion and direct contact, but no restrictions exist to prevent excavation and future exposure of these soils. The remedy implemented for this Site has not been effective at completely eliminating human exposure or potential human exposure.

3.2 New scientific information for individual hazardous substances for mixtures present at the Site

There is no new scientific information for the petroleum contaminants related to the Site.

3.3 New applicable state and federal laws for hazardous substances present at the Site

This cleanup is governed by Chapter 173-340 WAC (1996 ed.). This regulation was amended in 2001. Although TPH cleanup levels changed as a result of this modification, site cleanup levels determined in the CAP will not change. WAC 173-340-702(12) (c) [2001 ed.] provides that,

“A release cleaned up under the cleanup levels determined in (a) or (b) of this subsection shall not be subject to further cleanup action due solely to subsequent amendments to the provision in this chapter on cleanup levels, unless the department determines, on a case-by-case basis, that the previous cleanup action is no longer sufficiently protective of human health and the environment.”

Although cleanup levels changed for gasoline, diesel, and volatile organic compounds as a result of modifications to MTCA in 2001, contamination remains at the site above MTCA Method A cleanup levels and the cleanup action is still protective of human health and the environment.

3.4 Current and projected Site use

The Site is currently unused. The former Town Pump Station building is unoccupied, and signs indicate that it is for sale and available for commercial development. The former trailer park is being redeveloped as residential housing.

3.5 Availability and practicability of higher preference technologies

The remedy implemented included containment of hazardous substances and it continues to be protective of human health and the environment. While higher preference cleanup technologies may be available, they are still not practicable at this Site.

3.6 Availability of improved analytical techniques to evaluate compliance with cleanup levels

The analytical methods used at the time of the remedial action were capable of detection below MTCA Method A cleanup levels. The presence of improved analytical techniques would not effect decisions or recommendations made for the site.

4.0 CONCLUSIONS

- Soil cleanup levels have not been met at the Site and a Restrictive Covenant has not been recorded for the property.
- The direct contact pathway to contaminated soils has been reduced.
- The cleanup actions completed at the Site do not appear to be protective of human health and the environment.

Based on this five-year periodic review, the Department of Ecology has determined that the remedy for the site is not protective of human health and the environment. Additional cleanup actions, monitoring, or placement of institutional controls may be required.

4.1 Next Review

The next review for the Site will be scheduled five years from the date of this periodic review. In the event that additional cleanup actions or institutional controls are required, the next periodic review will be scheduled five years from the completion of those activities.

5.0 REFERENCES

Northwest Construction. UST Decommissioning Summary/ Site Assessment. April 1992.

Williams and Taylor Construction. Remedial Investigation/Feasibility Study. April 1993.

Professional Service Industries. Work Plan for Interim Remedial Action. April 1994.

Professional Service Industries. Report of Findings: Contaminated Soil Removal /
Site Characterization. July 1994.

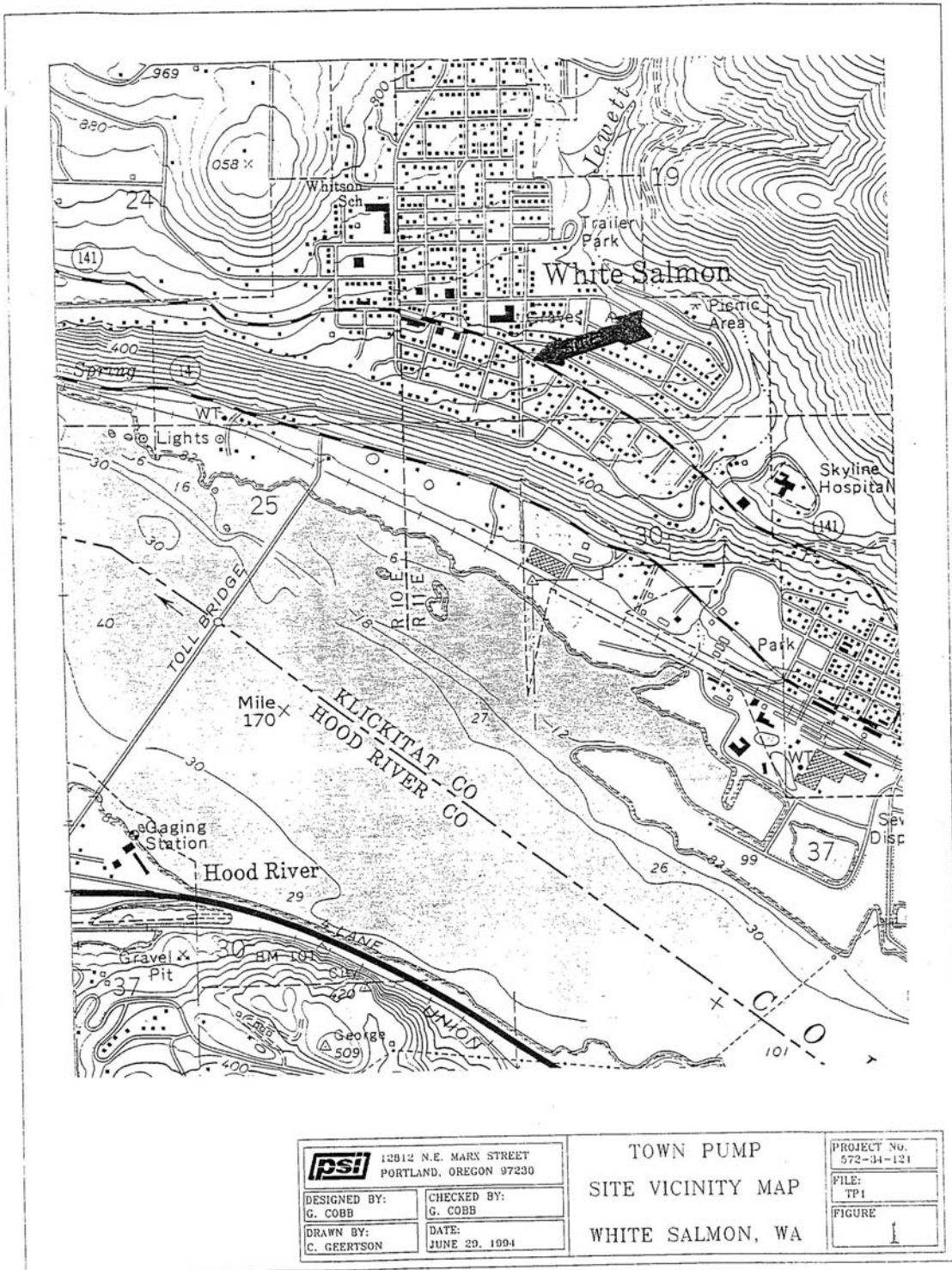
ESU, Inc. Decommissioning Report for Four Underground Storage Tanks. February 1997.

Ecology, 1994, Agreed Order

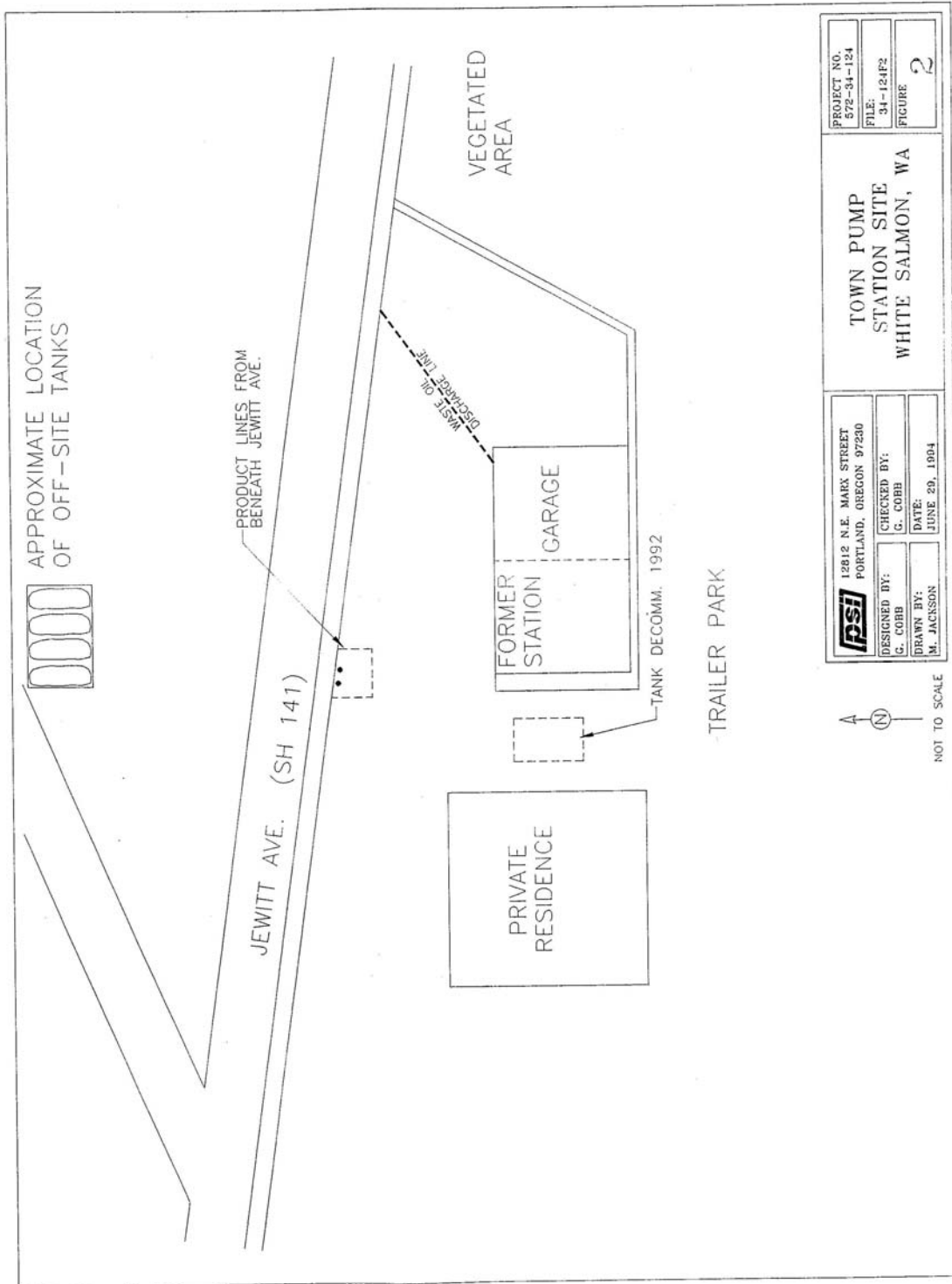
Ecology, 2008, Site Visit

6.0 APPENDICIES

6.1 Vicinity Map



6.2 Site Plan



PROJECT NO. 572-34-124	TOWN PUMP STATION SITE WHITE SALMON, WA
FILE: 34-124F2	
FIGURE 2	
12812 N.E. MARK STREET PORTLAND, OREGON 97230 psj	
DESIGNED BY: C. COBB	CHECKED BY: C. COBB
DRAWN BY: M. JACKSON	DATE: JUNE 29, 1994

NOT TO SCALE

6.3 Photo log

Photo 1: Former Tank Location Across Jewitt Boulevard - from the northwest



Photo 2: Former Town Pump Station - from the southeast



Photo 3: Embankment Below Former Station – from the southeast



Photo 4: Space Between Former Station and Residence – from the east

