

Second Periodic Review

Tonasket School District Facility/Site ID #: 77985367 Cleanup Site ID #: 6671 33 Highway 20 Tonasket, Washington 98855

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Washington State Department of Ecology
Central Regional Office
Toxics Cleanup Program

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1.0 INTRODUCTION

This document is the Department of Ecology's second periodic review of post-cleanup site conditions to assure that human health and the environment are being protected at the Tonasket School District 404 site (Site). The cleanup at this Site was implemented under the Model Toxics Control Act (MTCA), Chapter 173-340 of the Washington Administrative Code (WAC). The first periodic review for this Site was completed in February 2009. This periodic review will evaluate the period from 2009 through 2014.

Cleanup activities at this Site were completed under the Voluntary Cleanup Program. The cleanup actions resulted in concentrations of petroleum hydrocarbons (TPH) that exceed MTCA Method A cleanup levels for soil established under WAC 173-340-740(2). As a result of residual contamination, institutional controls were required for the Site to be eligible for a no further action (NFA) determination. WAC 173-340-420(2) requires that Ecology conduct a periodic review of a site every five years under the following conditions:

- (a) Whenever the department conducts a cleanup action
- (b) Whenever the department approves a cleanup action under an order, agreed order or consent decree
- (c) Or, as resources permit, whenever the department issues a no further action opinion
- (d) And one of the following conditions exists:
 - 1. Institutional controls or financial assurance are required as part of the cleanup
 - 2. Where the cleanup level is based on a practical quantitation limit
 - 3. Where, in the department's judgment, modifications to the default equations or assumptions using site-specific information would significantly increase the concentration of hazardous substances remaining at the site after cleanup or the uncertainty in the ecological evaluation or the reliability of the cleanup action is such that additional review is necessary to assure long-term protection of human health and the environment.

When evaluating whether human health and the environment are being protected, the factors the department shall consider include [WAC 173-340-420(4)]:

- (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 Tonasket School District 404 (TSD) property is located in the City of Tonasket in Okanogan County, Washington. The Site is located approximately 1/2 mile east of downtown Tonasket on the north side of Highway 20. The school property is a campus that contains an elementary school, middle school, high school and administrative buildings. During remedial activities, the Tonasket School campus was undergoing major renovation.

A vicinity map is available as Appendix 6.1 and Site plans are available as Appendix 6.2 and 6.3.

2.2 Cleanup Levels and Point of Compliance

WAC 173-340-704 states that MTCA Method A may be used to establish cleanup levels at sites that have few hazardous substances, are undergoing a routine cleanup action, and where numerical standards are available for all indicator hazardous substances in the media for which the Method A cleanup level is being used.

MTCA Method A cleanup levels for unrestricted land use were determined to be appropriate for contaminants at this Site. The cleanup actions conducted at the Site were determined to be 'routine', few hazardous substances were found at the Site, and numerical standards were available in the MTCA Method A table for each hazardous substance.

At the time of the remedial action, the MTCA Method A cleanup level for both TPH-D and TPH-O in soil was 200 parts per million (ppm). In 2001, Ecology changed the MTCA Method A cleanup level for both TPH-D and TPH-O in soil to 2,000 ppm. The new higher cleanup levels are applicable to the Site; however, the remedial actions taken at the Site are not impacted by this change.

For soil, the point of compliance is the area where the soil cleanup levels must be attained. Standard points of compliance are used for the Site. The standard point of compliance for soil is defined as the area throughout the Site affected by petroleum hydrocarbons in soil above MTCA Method A cleanup levels, regardless of depth, to protect groundwater.

2.3 Site Investigations and Remedial Activities

In May 1995, four underground storage tanks (USTs) were removed at the TSD campus. These tanks included one 10,000-gallon fuel oil UST (UST #1), one 300-gallon fuel oil UST (UST #2), one 500-gallon gasoline UST (UST #3), and one 1,000-gallon gasoline UST (UST #4). Site maps are available as Appendix 6.2 and 6.3.

Results of analyses collected during UST removal indicated that UST #1, UST #2, and UST #4 leaked. Additional excavation was performed in an attempt to remediate impacted soil at all three release sites. Excavation was stopped when it became apparent that the integrity of nearby

building structures was threatened if excavation continued. Results of samples obtained at the limit of over-excavation boundaries indicated that remediation was incomplete.

On June 21, 1995, Bison Environmental installed two soil borings to determine the vertical limit of hydrocarbon contamination. One of the soil borings was installed at the location of deepest documented contamination at the UST #1 and UST #2 site. This soil boring was installed to 34 ft below ground surface (bgs). The other soil boring was installed at the former location of the UST #4 leak, and was completed to 44 feet bgs. Both soil borings were installed to 15ft beyond the deepest interval of contamination as determined though field analysis of soil samples. Groundwater was not encountered in either soil boring.

During drilling, soil samples were collected at five foot intervals in both soil borings. Soil samples were submitted for laboratory analysis for hydrocarbons. Results were compared to MTCA Method A soil cleanup levels. Results indicate that approximately 17.5 cubic yards of impacted soil remains below the former UST #1 and UST #2 site between 19 ft and 23 ft below the ground surface. In addition, approximately 9.5 cubic yards remain below the former UST #4 site between 8.5 and 17 ft below the ground surface.

Both impacted areas present a low threat to human health and the environment given the non-volatile nature of the contaminants, depth of the contaminants, and depth to groundwater in the vicinity. It was determined that both impacted areas would be managed in-place with the use of institutional controls.

2.4 Restrictive Covenant

Because contamination remained at the Site at concentrations exceeding MTCA Method A Cleanup levels, institutional controls were required for the Site to be eligible for a NFA determination. Institutional controls in the form of a restrictive covenant were recorded for the Site in March 1999 and a NFA determination was issued for the Site. The conditions of the restrictive covenant are listed below:

1. Two portions of the Property contain residual concentrations of diesel and oil-range total petroleum hydrocarbons which exceed the Model Taxies Control Act Method A Residential Cleanup Level for soil. Area 1 is located beneath the administrative wing of the new Tonasket High School building. This area is beneath the former UST #1 and UST #2 area as described within the report *Leaking Underground Storage Tank Site Characterization Report, Tonasket Public School District #404, July 1995* as prepared by Bison Environmental Consulting, Inc. At Area 1, approximately 17.5 cubic yards of contaminated soil is present between 19 and 23 ft bgs. Area 2 is located at the Tonasket School District Bus Maintenance Facility, beneath asphalt located between the facility's north and south maintenance garages. This area is beneath the former UST #4 area as described within the report *Leaking Underground Storage Tank Site Characterization Report, Tonasket Public School District #404, July 1995* as prepared by Bison Environmental Consulting, Inc. Approximately 9.5 cubic yards of soil above the cleanup level are located between 8.5 and 17 ft below ground surface (bgs) at Area 2. Areas of contaminated soil left in-place are presented in Attachment B, Figures 2 and 3.

Any activity on the Property that may result in the release or exposure to the environment of the contaminated soil that was contained as part of the Remedial Action, or create a new exposure pathway, is prohibited without prior written approval from Ecology. At Area 1, the Owner shall not alter, modify, or remove the existing Tonasket High School administrative wing structure in any manner that may result in the release or exposure to the environment of that contaminated soil or create a new exposure pathway without prior written approval from Ecology. Contaminated soil at Area 2 is located beneath an asphalt pad that was constructed in part to minimize infiltration of precipitation into contaminated soils. Owner activities that are prohibited at Area 2 include: drilling, digging, placement of any objects or use of any equipment which deforms or stresses the surface beyond its load bearing capability, piercing the surface with a rod, spike or similar item, bulldozing or earthwork. Any other work near Area 2 that may result in the release or exposure to the environment of that contaminated soil or create a new exposure pathway shall not occur without prior written approval from Ecology.

- 2. Any activity on the Property that may interfere with the integrity of the Remedial Action and continued protection of human health and the environment is prohibited.
- 3. The Owner of the property must give thirty (30) day advance written notice to Ecology of the Owner's intent to convey any interest in the Property. No conveyance of title, easement, lease, or other interest in the Property shall be consummated by the Owner without adequate and complete provision for continued monitoring, operation, and maintenance of the Remedial Action.
- 4. The Owner must restrict leases to uses and activities consistent with the Restrictive Covenant and notify all lessees of the restrictions on the use of the Property.
- 5. The Owner must notify and obtain approval from Ecology prior to any use of the Property that is inconsistent with the terms of this Restrictive Covenant. Ecology may approve any inconsistent use only after public notice and comment.
- 6. The Owner shall allow authorized representatives of Ecology the right to enter the Property at reasonable times for the purpose of evaluating the Remedial Action; to take samples, to inspect remedial actions conducted at the property, and to inspect records that are related to the Remedial Action.
- 7. The Owner of the Property reserves the right under WAC 173-340-440 to record an instrument that provides that this Restrictive Covenant shall no longer limit use of the Property or be of any further force or effect. However, such an instrument may be recorded only if Ecology, after public notice and opportunity for comment, concurs.

A copy of the restrictive covenant is available as Appendix 6.4.

3.0 PERIODIC REVIEW

3.1 Effectiveness of completed cleanup actions

3.1.1 Direct Contact Pathway

The Tonasket School District continues to occupy the Site. Asphalt, building structures, landscaping and play fields continue to serve as a surface cover to prevent exposure by ingestion or direct contact to contaminated soils. Use of the Site as a primary and secondary school facility is not likely to expose contaminated soils, and is a compatible land use as long as the surface cover is maintained. Based upon the Site visit conducted on April 22, 2014, no repair, maintenance or contingency actions have been required. A photo log is available as Appendix 6.5.

As a result of changes to MTCA Method A cleanup levels for TPH-D and TPH-O in 2001, several of the confirmation samples collected from the Site are no longer above MTCA Method A cleanup levels.

3.1.2 Institutional Controls

The Restrictive Covenant for the Site was recorded and is in place. Appendix 6.4 is a copy of the Restrictive Covenant for the Site. This Restrictive Covenant prohibits activities that will result in the release of contaminants contained as part of the cleanup without Ecology's approval, and prohibits any use of the property that is inconsistent with the Covenant. This Restrictive Covenant serves to assure the long term integrity of the cap.

Soils with TPH-D and TPH-O concentrations higher than MTCA Method A cleanup levels are still present at the Site. However, the surface covers and land use prevents human exposure to this contamination by ingestion and direct contact with soils. The Restrictive Covenant for the property will ensure that the integrity of the surface cover will be protected through maintaining the current use of the Site and prevent activities that will expose contaminated soils.

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

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

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

The cleanup at the Site was governed by Chapter 173-340 WAC (1996 ed.). 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."

Though cleanup levels changed for contaminants of concern at the Site, contamination remains at the Site above applicable 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 used as primary and secondary public school campus. There have been no changes in current or projected future Site or resource uses.

3.5 Availability and practicability of higher preference technologies

The remedy implemented included containment of contaminated soils, 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 well 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

- The cleanup actions completed at the Site are protective of human health and the environment.
- Soil cleanup levels have not been met at the Site; however, the cleanup action for the Property is determined to comply with cleanup standards under WAC 173-340-740(6)(f), since the long-term integrity of the containment system is ensured and the requirements for containment technologies have been met.
- The Restrictive Covenant for the property is in place and will be effective in protecting public health and the environment from exposure to hazardous substances and protecting the integrity of the cleanup action.

Based on this periodic review, the Department of Ecology has determined that the requirements of the Restrictive Covenant are being satisfactorily followed. No additional remedial actions are required by the property owner. It is the property owner's responsibility to continue to inspect the Site to assure that the integrity of the cap is maintained.

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

Bison Environmental Resources, Inc. *Leaking Underground Storage Tank Site Characterization Report*. July 1995.

Ecology. No Further Action Determination Letter. March 1999.

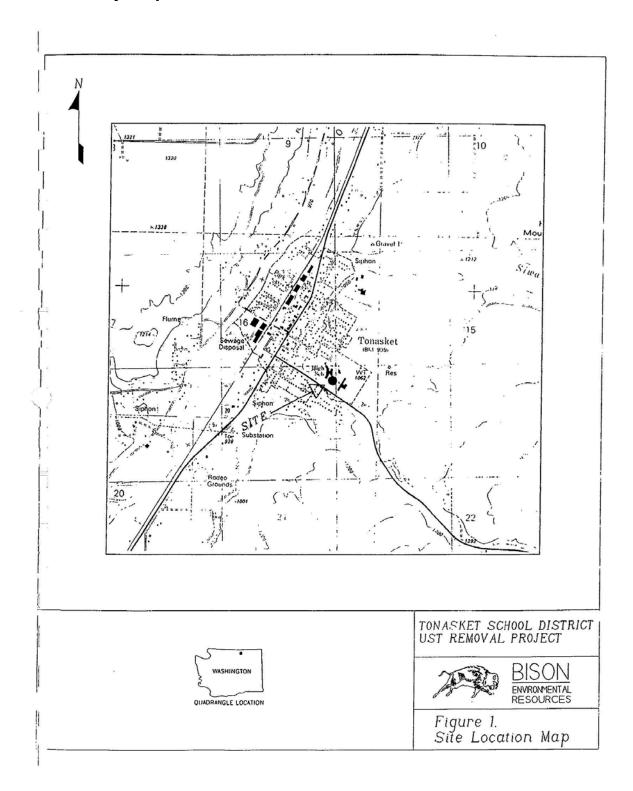
Ecology. Restrictive Covenant. March 1999.

Ecology. Periodic Review. February 2009.

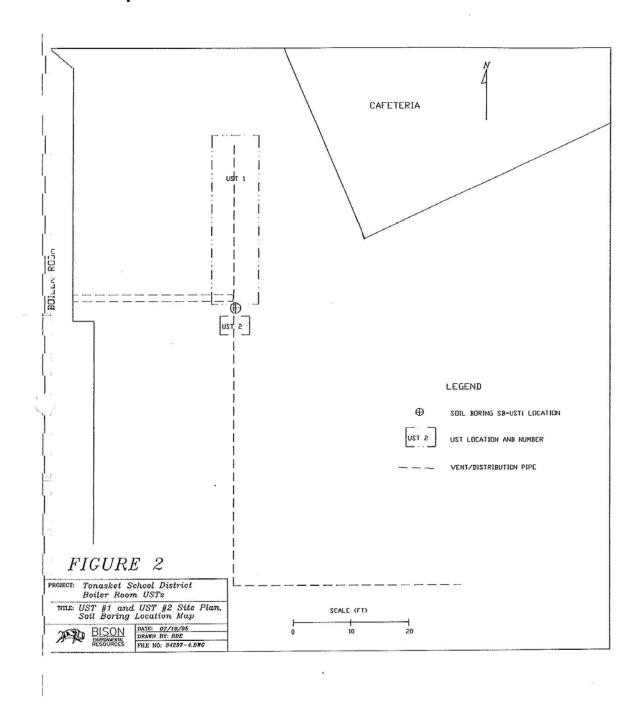
Ecology. Site Visit. April 23, 2014.

6.0 APPENDICES

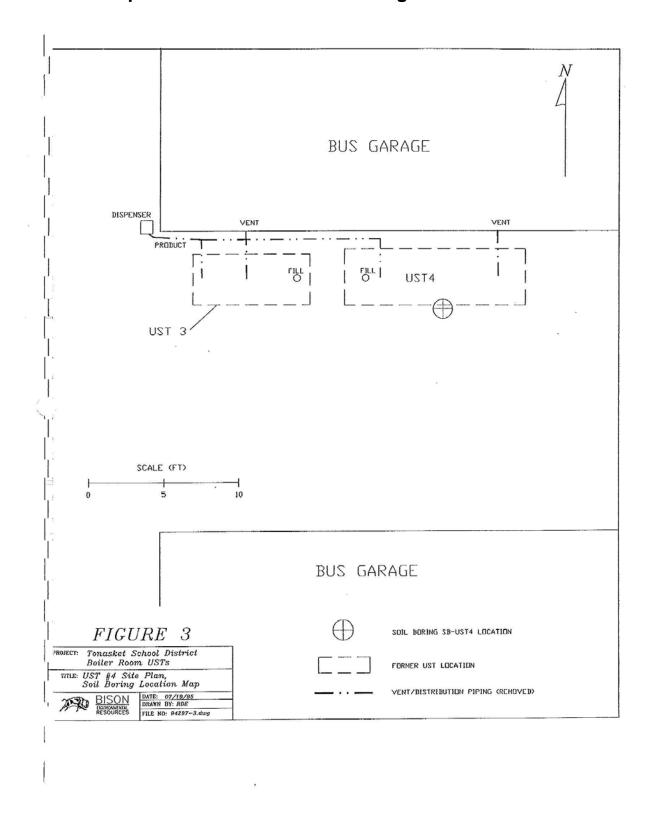
6.1 Vicinity Map



6.2 Site Map for Boiler Room USTs



6.3 Site Map for Bus Maintenance Building USTs



6.4 Restrictive Covenant





RESTRICTIVE COVENANT

Tonasket School District #404

Bus Garage and High School UST Sites

This Declaration of Restrictive Covenant is made pursuant to RCW 70.105D.030 (1)(f) and (g) and WAC 173-340-440 by Tonasket School District #404, its successors and assigns, and the State of Washington Department of Ecology, its successors and assigns (hereafter "Ecology").

An independent remedial action (hereafter "Remedial Action") occurred at the property that is the subject of this Restrictive Covenant. The Remedial Action conducted at the property is described in the following document[s]: UST Removal Report, Tonasket Public School District #404, June 1995, and Leaking Underground Storage Tank Site Characterization Report, Tonasket Public School District #404, July 1995, both by Bison Environmental Resources, Inc. These documents are on file at Ecology's Central Regional Office in Yakima, Washington.

This Restrictive Covenant is required because the Remedial Action resulted in residual concentrations of diesel and oil range total petroleum hydrocarbons which exceed the Model Toxics Control Act Method A Residential Cleanup Level for soil established under WAC 173-340-740.

The undersigned, Tonasket School District #404, is the fee owner of real property (hereafter "Property") in the County of Okanogan, State of Washington, that is subject to this

Restrictive covenant 9/22/98



Restrictive Covenant. The Property is legally described in Attachment A of this Restrictive Covenant and made a part hereof by reference.

Tonasket School District makes the following declaration as to limitations, restrictions, and uses to which the Property may be put and specifies that such declarations shall constitute covenants to run with the land, as provided by law and shall be binding on all parties and all persons claiming under them, including all current and future owners of any portion of or interest in the Property (hereafter "Owner").

Section 1.

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Restrictive covenant 9/22/98



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Restrictive covenant 9/22/98



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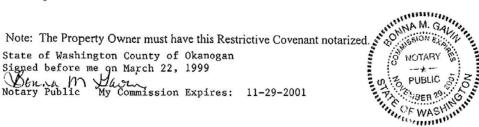
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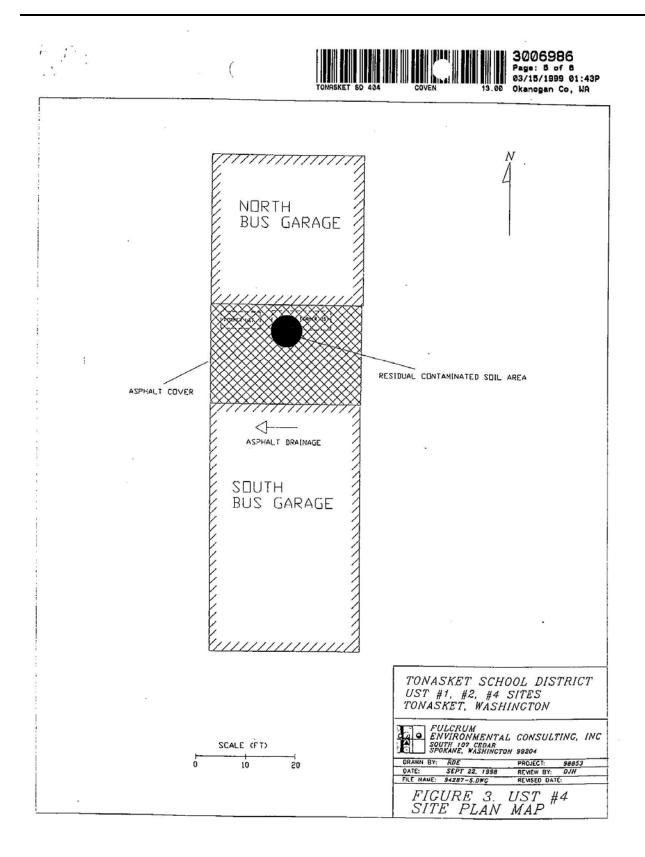
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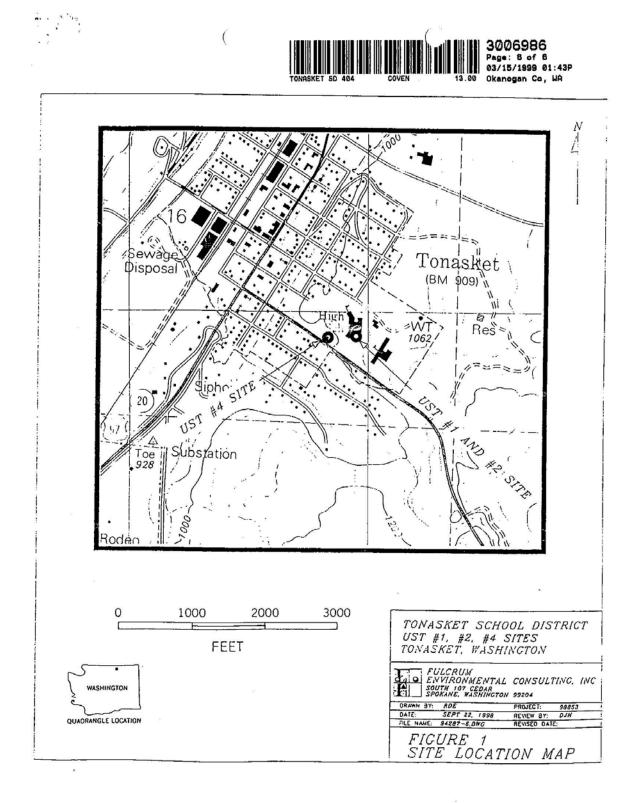
Tonasket School District #404

Signed before me on March 22, 1999

Otrica My Commission Expires: 11-29-2001







6.5 Photo log







Photo 3: Bus Garage Tank Locations - from the northwest





