



## **PERIODIC REVIEW**

**Turnbull Landfill  
Facility Site ID#: 51658363**

**12001 NE Fourth Plain Boulevard  
Orchards, WA 98682**

**Southwest Region Office**

**TOXICS CLEANUP PROGRAM**

**December 2013**

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## 1.0 INTRODUCTION

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

Cleanup activities at this Site were conducted under the Voluntary Cleanup Program (VCP). The cleanup actions resulted in municipal landfill solid waste and concentrations of dissolved manganese in groundwater exceeding MTCA Method B cleanup levels remaining at the Site. The MTCA Method B cleanup levels for groundwater are established under WAC 173-340-720(4). WAC 173-340-420 (2) requires that Ecology conduct a periodic review of a Site every five years under the following conditions:

- Whenever the department conducts a cleanup action.
- Whenever the department approves a cleanup action under an order, agreed order, or consent decree.
- Or, as resources permit, whenever the department issues a no further action (NFA) opinion.
- And one of the following conditions exists:
  - (a) Institutional controls or financial assurance are required as part of the cleanup.
  - (b) Where the cleanup level is based on a practical quantitation limit.
  - (c) 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)]:

- 1) The effectiveness of ongoing or completed cleanup actions, including the effectiveness of engineered controls and institutional controls in limiting exposure to hazardous substances remaining at the Site.
- 2) New scientific information for individual hazardous substances or mixtures present at the Site.
- 3) New applicable state and federal laws for hazardous substances present at the Site.
- 4) Current and projected Site use.
- 5) Availability and practicability of higher preference technologies.
- 6) 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.

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## **2.0 SUMMARY OF SITE CONDITIONS**

### **2.1 Site History**

The former Turnbull Landfill property is located at 12001 NE Fourth Plain Boulevard in Orchards (Clark County), Washington. The Site is approximately 6.5 acres and is located at the southeast corner of the intersection of State Route 500 and NE Fourth Plain Boulevard. The Site is bounded by NE Fourth Plain Boulevard to the north, commercial and light industrial facilities to the south, State Route 500 to the west, and NE 121st Avenue and an auto supply and repair shop to the east. A vicinity map is available as Appendix 6.1 and a Site plan is available as Appendix 6.2.

The subject Site was used as a gravel quarry from the early 1900s to the mid-1960s. From approximately 1970 to 1974, the Site was used as a solid waste disposal facility. The Site reportedly received municipal solid waste, construction debris, and demolition debris. In 1973, the Southwest Washington Health District (SWHD) revoked the solid waste disposal permit. Disposal at the landfill reportedly continued through 1974. From 1974 to mid-1998 the Site was apparently vacant and essentially unused.

In mid-1998, the Site was cleared of brush in preparation for the early stages of development. The Site was then filled and compacted with granular fill material. The resulting surface was graded to reduce infiltration of stormwater. These Site activities were completed in September 1998.

### **2.2 Site Investigations**

#### **2.2.1 1983 - NORTHWEST GEOTECHNICAL CONSULTANTS, INC**

Northwest Geotechnical Consultants, Inc. (NGC) completed a geotechnical investigation of the Site on behalf of Pacific Northwest Life in May 1983. The investigation included 18 test pit excavations throughout the Site to depths between 15 and 25 feet below ground surface (bgs). The test pit investigation revealed the presence of uncontrolled fill consisting primarily of refuse (including household waste, scrap metal, concrete debris, lumber, and appliances) to depths of up to 22 feet bgs. Groundwater was encountered at depths of between 15 and 20 feet bgs. NGC recommended evaluating the economic feasibility of removing the uncontrolled fill and evaluating groundwater beneath the Site for potential impacts.

#### **2.2.2 1991 – NORTHWEST ENVIROCON, INC.**

Northwest Envirocon, Inc. (NEI) completed an environmental investigation of the Site in March 1991. The environmental investigation included advancing four soil borings at the Site to depths of up to 15.0 feet bgs. Three soil samples collected from one of the soil borings advanced near the western boundary of the Site were submitted to an analytical laboratory for chemical analysis of lead and total petroleum hydrocarbons (TPHs). The soil samples were collected from depths between 3.0 and 15.0 feet bgs. Lead was detected in each soil sample analyzed at concentrations between 3.5 and 79 milligrams per kilogram (mg/Kg). TPH was detected in each soil sample analyzed at concentrations between 12 and 770 mg/Kg. Two groundwater samples collected

from two of the soil borings were submitted to an analytical laboratory for analysis of total dissolved solids (TDS) and total organic carbon (TOC). TDS were detected at concentrations between 322 and 1,070 mg/Kg. TOC was detected at concentrations between 1.7 and 19.2 mg/Kg. According to NEI, the detected concentrations of TDS and TOC in groundwater "warranted further analysis." The NEI report also indicated that the volume of buried refuse at the Site was considerably less than the volume of refuse indicated by NGC in 1983.

### **2.2.3 1991 - NORTHWEST ENVIROCON, INC.**

NEI completed a test pit investigation in June 1991 to verify the volume of refuse present at the Site. The investigation included 20 test pit excavations to depths between 5.0 and 13.0 feet bgs. Each test pit was reportedly excavated until visual indications of refuse were no longer present. NEI concluded, based on the results of the June 1991 investigation, that the volume of refuse present at the landfill was significantly less than previous volume estimates.

### **2.2.4 1992 - EMCON NORTHWEST, INC.**

In 1992, EMCON Northwest, Inc. installed 27 soil gas probes and three groundwater monitoring wells at the Site. The soil gas probes were installed to determine if landfill gases were present in the upper 4 feet of soil along the Site perimeter. Landfill gases were not detected in any of the 27 soil gas probes installed by EMCON Northwest along the perimeter of the Site.

In May 1992, three groundwater monitoring wells (MW-1 through MW-3) were installed on the northern and western portions of the property, in the general area of the former landfill. The purpose of the groundwater monitoring wells was to evaluate potential groundwater contamination beneath the landfill. Groundwater samples collected from each of the monitoring wells were analyzed for select dissolved metals, conventional chemistry parameters, and common cat-ions and anions. The analytical results were compared to primary and secondary drinking water standards. Dissolved manganese was detected at concentrations up to 3.15 milligrams per liter (mg/L), greater than the MTCA Method B cleanup level of 2.2 mg/L. Total coliform bacteria was detected in each of the groundwater samples analyzed at concentrations greater than primary drinking water standards. No other compounds were detected at concentrations greater than primary or secondary drinking water standards.

### **2.2.5 1997 – STOCKTON AND ASSOCIATES, INC.**

Stockton and Associates, Inc. conducted a subsurface investigation of the Site in November 1997 that included collecting grab groundwater samples from six direct-push soil borings advanced near the northeastern corner of the property. The groundwater samples were analyzed for total metals, polynuclear aromatic hydrocarbons (PAHs), and volatile organic compounds (VOCs). Selected metals were reportedly detected in some of the groundwater samples at concentrations above MTCA cleanup levels; however, PAHs and VOCs were not detected. Based on the information generated in the Stockton and Associates study and other previous studies, approximately 39,000 cubic feet of solid waste remains on Site.

### **2.2.6 1998 - PNG ENVIRONMENTAL**

PNG Environmental (PNG) installed two additional groundwater monitoring wells (MW-3A and MW-4) and initiated quarterly groundwater monitoring activities on December 10, 1998. The

results of quarterly groundwater monitoring indicated that, with the exception of elevated levels of manganese in groundwater in the vicinity of well MW-1 (at concentrations up to 8.95 mg/L), contaminants were not present in groundwater samples at concentrations greater than MTCA cleanup levels.

### **2.2.7 2000 – PNG ENVIRONMENTAL**

PNG completed an investigation of dissolved manganese in groundwater in the area of MW-1. Groundwater samples were collected on February 9, 2000 from monitoring well (MW-1) and five direct-push borings. The groundwater samples were analyzed for dissolved manganese by EPA 6010/7000 series. The following results were obtained:

- Dissolved manganese was detected in each sample ranging between 0.095 to 9.07 mg/L. The highest concentrations were found in the samples collected in close proximity to MW-1 (GP-1 through GP-3 and MW-1), while the lowest concentrations were found near the property boundaries and downgradient of monitoring well MW-1 (GP-4 and GP-6).
- Water level data indicates that groundwater flow is generally towards the east with a slight component to the southeast. A flow direction generally to the east is consistent when compared to historic data from prior quarterly sampling events.

MW-1 exhibited a manganese concentration of approximately 2 mg/L, which is consistent with the historic concentration range at the well of approximately 2.5 to 9 mg/L. Manganese has been undetected at MW-4, which is located further to the southeast relative to MW-1.

Two samples (GP-4 and GP-6) were collected in the downgradient direction from the area of MW-1, GP-1, and GP-2. Samples from GP-4 and GP-6 indicated a dramatic decrease in the concentration of manganese (in the range of one to two orders of magnitude) as groundwater moves downgradient. Dissolved manganese concentrations at GP-4 and GP-6 were approximately 0.1 and 0.2 mg/L, respectively, well below the MTCA Method B cleanup level for manganese of 2.2 mg/L.

Data from this sampling event is available in Table 1 below.

**Table 1**

**Former Turnbull Landfill  
 Groundwater Dissolved Metals Results  
 (mg/L-ppm)**

Location #	Date Sampled	Iron	Manganese	Zinc
MW-1	12/10/98	0.041	3.043	0.010U
	3/16/99	0.048	2.520	0.010U
	6/8/99	0.02U	4.790	0.010U
	9/14/99	0.044	8.950	0.010U
	2/9/00	NA	2.010	NA
MW-2	12/10/98	0.022	0.016	0.010U
	3/16/99	0.02U	0.012	0.010U
	6/8/99	0.02U	0.005U	0.010U
	9/14/99	0.02U	0.011	0.010U
MW-3R	12/10/98	0.026	0.005U	0.010U
	3/16/99	0.053	0.005U	0.010U
	6/8/99	0.02U	0.005	0.010U
	9/14/99	0.041	0.014	0.010U
MW-4	12/11/98	0.034	0.005U	0.010U
	3/16/99	0.033	0.005U	0.010U
	6/8/99	0.02U	0.005U	0.010U
	9/14/99	0.031	0.005U	0.010U
GP-1	2/9/00	NA	7.17	NA
GP-2	2/9/00	NA	9.07	NA
GP-3	2/9/00	NA	5.26	NA
GP-4	2/9/00	NA	0.218	NA
GP-6	2/9/00	NA	0.095	NA

U = Not detected at method reporting limit shown  
 NA = Not analyzed

**2.2.8 2006 - GEODESIGN, INC.**

On August 9 and 10, 2006, a representative from GeoDesign observed the completion of 11 test pits at the Site to depths of between 9.0 and 20.5 feet bgs. The protective cap material consisted of a 12- to 36-inch-thick layer of dense, brown sand with some gravel underlain by black, silty sand with some gravel to depths between 3 and 8 feet bgs. From below the cap to between 8 to 18 feet bgs, the sand contained variable amounts of refuse (e.g., concrete, lumber, and domestic refuse). In general, the refuse was highly degraded and densely compacted. Native sand and gravel deposits were present below the refuse.

## 2.3 Remedial Actions

Sometime in mid 1998, surficial landfill refuse and debris were removed from the Site and 3 to 12 feet of clean, compacted construction-grade fill was placed over the remaining debris. The fill was intended to limit the infiltration of storm water through buried waste and into the groundwater. Roadways and associated utilities were installed at this time. Monitoring well MW-3 was reportedly damaged during Site grading and road construction activities, and was replaced with MW-3a.

## 2.4 Cleanup Levels

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 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 except manganese.

A MTCA Method A standard is not available for manganese, the primary contaminant of concern at the Site. The MTCA Method B standard formula value for manganese in groundwater is 2.2 mg/L.

## 2.5 Restrictive Covenant

It was determined that the Site would be eligible for a NFA determination if institutional controls were implemented in the form of a Restrictive Covenant (RC). An RC would serve to notify future property owners of municipal solid waste remaining at the Site and prevent disturbance and exposure of soils potentially containing hazardous materials that remain contained at the Site. An RC was recorded for the Site in August 2000, and a second RC was recorded in September 2000. The second Covenant was recorded to clarify ownership of the property, and it imposes the following limitations:

- 1)
  - a) No groundwater may be taken for any use from the Property.
  - b) A portion of the Property contains solid waste beneath a soil cover. Solid waste is located on Parcel 1 in the areas depicted on Exhibit B, attached hereto. These areas have been capped with 3 to 12 feet of clean soil. The Owner shall not alter, modify, or remove the existing structure(s) or the soil cover in any manner that may result in the release or exposure to the environment of the contained refuse or create a new exposure pathway without prior written approval from Ecology.

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- c) No new structures shall be constructed on areas of the Property where solid wastes have been deposited without the written approval of Ecology and approval by the local agency(s) of jurisdiction.
  - d) Any activity on the Property that may result in the release or exposure to the environment of the solid waste that was contained as part of the Remedial Action, or create a new exposure pathway, is prohibited without first obtaining written approval from Ecology. Absent obtaining prior written approval from Ecology, some examples of activities that are prohibited in the capped areas 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.
  - 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) Any activity on the Property that may result in the release or exposure to the environment of a hazardous substance that remains on the Property as part of the Remedial Action, or create a new exposure pathway, is prohibited without prior written approval from Ecology.
  - 4) 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.
  - 5) The Owner must restrict leases to uses and activities consistent with the RC and notify all lessees of the restrictions on the use of the Property.
  - 6) The Owner must notify and obtain approval from Ecology prior to any use of the Property that is inconsistent with the terms of this RC. Ecology may approve any inconsistent use only after public notice and comment.
  - 7) 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 or inspect records that are related to the Remedial Action.
  - 8) The Owner of the Property reserves the right under WAC 173-340-440 to record an instrument that provides that this RC 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.

The RC is available as Appendix 6.3.

## **3.0 PERIODIC REVIEW**

### **3.1 Effectiveness of completed cleanup actions**

Based upon the Site visit conducted on June 4, 2013, the Site is vacant and has been developed for future commercial development. The Site contains a paved road; stormwater drainage; electrical, water and sanitary sewer utilities. Unpaved portions of the Site remain roughly graded. There is visual evidence of refuse in several locations, though the majority of the Site is covered with compacted soil and gravel. A photo log is available as Appendix 6.4.

The property owner recorded a RC for the Site in 2000, and it remains active. This RC prohibits activities that will result in the release of contaminants contained as part of the cleanup without approval from Ecology.

#### **3.1.1 Groundwater**

Following an NFA request in 1998, the proposed property developer reached an agreement with Ecology and the SWHD to conduct four quarterly groundwater sampling events to demonstrate stability in groundwater chemistry at the Site. The agreement included the understanding that Hawkins would again request an NFA at the conclusion of the fourth sampling event. Sampling continued on a quarterly basis through the fall of 1999.

The final sampling event was completed in September 1999. It was determined that an additional limited investigation was necessary to fully characterize manganese contamination in groundwater. The purpose of this investigation was to determine the concentrations of dissolved manganese in groundwater near MW-1, where manganese concentrations remained above MTCA cleanup levels, and to evaluate the potential for manganese to be migrating off Site. This investigation by PNG included collecting a sample from MW-1 and collecting groundwater samples from five direct-push borings in the vicinity of MW-1. This investigation was completed in February 2000, and demonstrated that manganese was not migrating off Site above MTCA levels.

It was determined that groundwater contamination no longer posed a threat to human health and the environment for the following reasons:

- Arsenic, chromium, and lead were not detected in Site monitoring wells.
- No volatile organic compounds were detected in Site monitoring wells.
- Traditional indicators of landfill impacts to groundwater have not been detected, or have only been detected sporadically.
- Manganese was detected at 2.0 mg/L in MW-1, and at concentrations up to 9.07 mg/L in other borings. The two downgradient borings contained manganese at concentrations below 0.2 mg/L, and demonstrate that manganese is not migrating off Site at, or above, the MTCA Method B cleanup level of 2.2 mg/L.

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- Beneficial use of shallow groundwater within 0.5 miles of the Site is limited due to availability of city water. Based on the well inventory, no use of groundwater from depths of less than 50 feet have been identified.
  - There are no nearby surface water bodies where groundwater discharges.
  - Pre-development filling and grading activities limit the infiltration of stormwater through buried waste and into groundwater.
  - Future development of the property will essentially eliminate infiltration to groundwater. This will be accomplished through capping by construction of buildings, parking areas, and stormwater controls. Site development plans are detailed in the following section.

### **3.1.2 Future Site Remedial Actions and Development**

In February 2007, GeoDesign submitted a Summary Report to Ecology. The purpose of the Summary Report was to seek an opinion from Ecology as to the adequacy of remedial and construction activities associated with future Site development. The Summary Report included the following proposed development plans:

- Dynamic Deep Compaction. Dynamic deep compaction would be conducted by dropping a 10-ton weight from a height of 50 feet throughout the footprint area of each proposed building. The dynamic deep compaction would increase the density of the existing cap and minimize surface water infiltration into groundwater.
- Grading. Following dynamic deep compaction, extensive grading and surface compaction would be conducted to level the Site and further increase the density of the cap material.
- Cement Amendment. After the fill materials had been graded and compacted, the upper 12 inches of the building areas would be amended with 6 percent cement and compacted in place.
- Soil Gas Barriers. Although methane was not detected during the soil gas survey completed in 1992, the proposed development design would incorporate, as appropriate, impermeable membranes or other engineering controls for methane mitigation.
- Excavation Requirements. While significant excavation of the existing cap material or buried debris is not anticipated, some trenching may be required during installation of planned utilities. If excavation of the existing cap material or buried debris is required during Site development, the existing cap material present in the excavation area will be segregated and stockpiled so that it can be replaced following completion of the excavation. Refuse and debris removed from the excavation will be transported off Site for disposal at a permitted solid waste landfill.
- Final Review. Final construction documents are not yet available. However, based on a review of the conceptual Site plans provided by Apex, it appears that at least 85 percent of the Site will be covered with structures, paved parking areas, or paved sidewalk/common areas when development is complete. When finalized, construction plans will be forwarded to Ecology for review and approval.

Ecology reviewed this proposed work plan and issued an opinion on February 28, 2007 stating that the proposed remedial action is likely to be sufficient to meet the specific substantive requirements contained in MTCA.

However, subsequently the property ownership has been changed. Based on September 25, 2013 meeting with the current property owner, it was decided that any deviations from the above approved property development plans must be reviewed and approved by Ecology prior to starting of the construction.

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

Cleanup levels at the Site were based on regulatory standards rather than calculated risk for chemicals and/or media. These standards were sufficient to be protective of Site-specific conditions.

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

MTCA Method B cleanup levels for manganese have not changed since the NFA determination was issued for the Site in 2000. Cleanup levels for other contaminants of concern may have changed in the 2001 edition of MTCA; however, none of the other contaminants were detected in the groundwater. In addition, initial cleanup at the Site was governed by Chapter 173-340 WAC (1996 ed.). Current WAC 173-340-702(12) (c) 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.”

Cleanup levels applicable at the time the NFA determination was issued in 2000 were used to determine whether the remedy remains protective of human health and environment.

### **3.4 Current and projected Site use**

The property owner still projects commercial development for the Site. Remedial actions associated with future development are described Section 3.1.2. Projected Site uses are not expected to pose a threat to human health or the environment.

### **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 actions were capable of detection below cleanup levels for contaminants of concern at the Site. The presence of improved analytical techniques would not affect decisions or recommendations made for the Site.

## 4.0 CONCLUSIONS

- The cleanup actions completed at the Site appear to be protective of human health.
- Manganese in groundwater at concentrations above MTCA Method B cleanup levels and municipal solid waste remain at the Site; however, under WAC 173-340-740(6) (d), the cleanup action is determined to comply with cleanup standards, since the long-term integrity of the containment system is ensured and the requirements for containment technologies in WAC 173-340-360(8) have been met.
- The groundwater is not being used for drinking purposes in the area since the availability of city water drinking water supply.
- Manganese concentrations in monitoring well MW-1 have decreased significantly. The results of February 2000 groundwater monitoring showed a manganese concentration of 2.00 mg/L, which was below MTCA Method B cleanup level of 2.2 mg/L. In addition, investigations showed that the manganese is not migrating off Site.
- The RC for the property is in place and will be effective in protecting public health from exposure to hazardous substances and protecting the integrity of the cleanup action.

Based on the periodic review, Ecology has determined that the remedial actions conducted at the Site continue to be protective of human health and the environment. The requirements of the RC are being satisfactorily met. No additional remedial actions are required at the Site at this time. It is the property owner's responsibility to continue to inspect the Site to assure that the integrity of the surface cover 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**

Saltbush Environmental Services, Inc. *Phase II Environmental Site Assessment*. July 3, 2002.

Ecology. *Restrictive Covenant*. October 7, 2003.

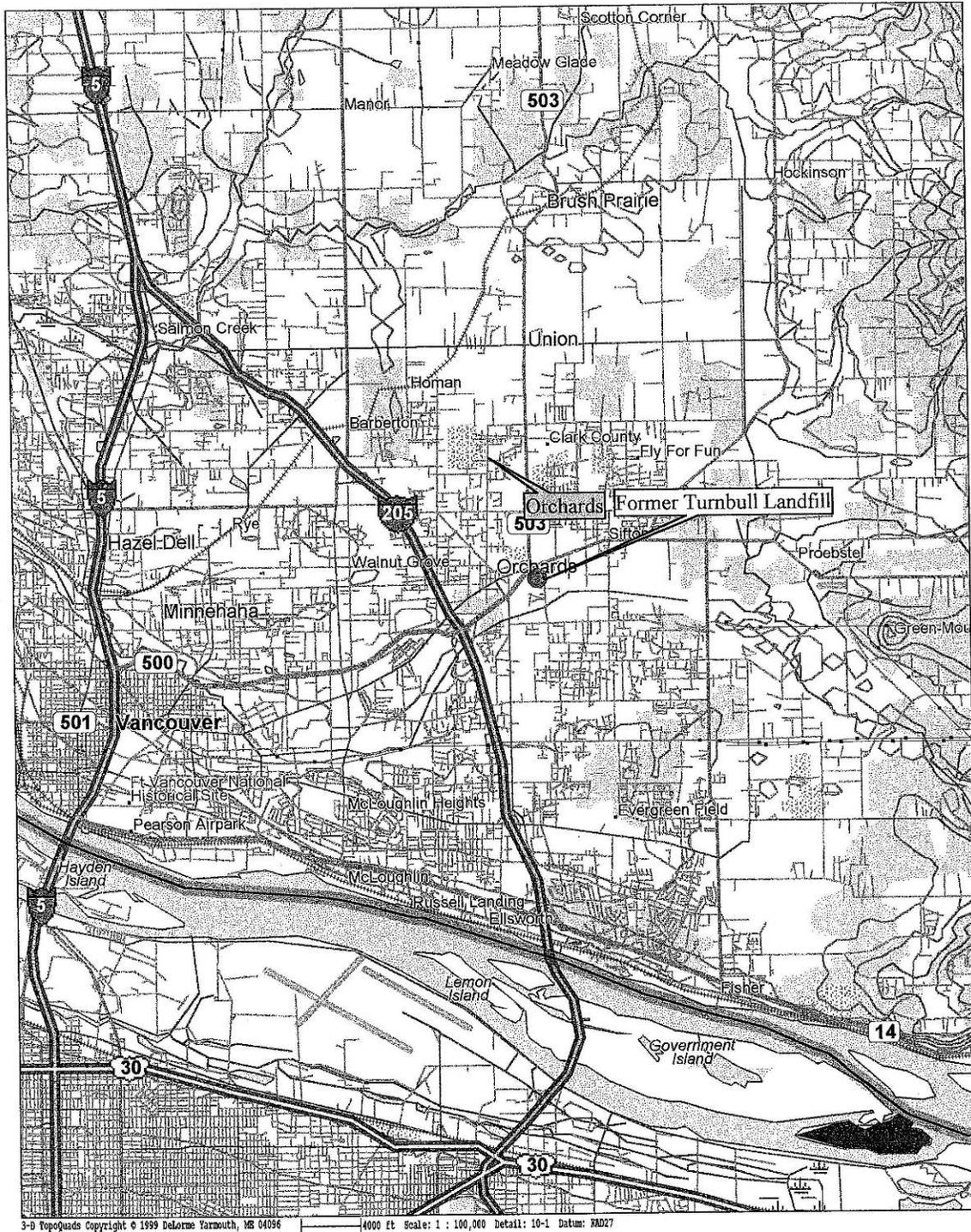
Ecology. *No Further Action Determination Letter*. November 4, 2003.

GeoEngineers. *Coski Landfill Document Review Summary*. January 4, 2007.

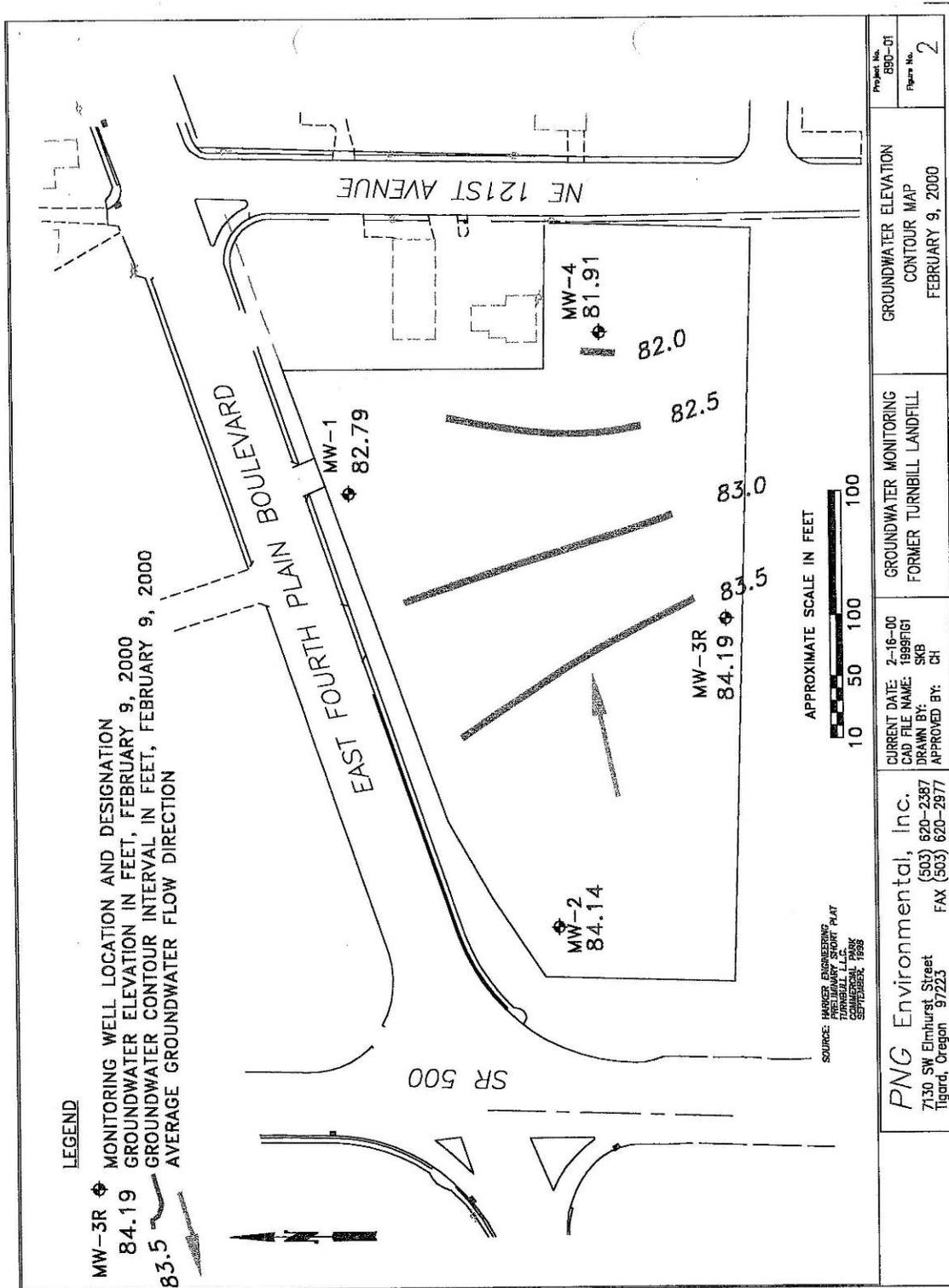
Ecology. *Site Visit*. June 4, 2013.

## **6.0 APPENDICES**

## 6.1 Vicinity Map



## 6.2 Site Plan



### 6.3 Restrictive Covenant



When Recorded, Return To:  
Eva Hawkins-Herrerias  
8965 Valley Ford Road  
Petaluma, CA 94952

DOCUMENT TITLE: Restrictive Covenant

GRANTOR: Eva Hawkins-Herrerias

GRANTEE: State of Washington  
Department of Ecology

REFERENCE NUMBER(S) OF  
RELATED DOCUMENTS:  
Auditor File No. F 81387  
Auditor File No. F 52832  
Auditor File No. G 405046  
Auditor File No. G 413233  
Auditor File No. G 338297  
Auditor File No. G-413233  
Restrictive Covenant dated 7/28/00  
Recorded 8/18/00 #3243979

LEGAL DESCRIPTION: That portion of the John Bird Donation  
Land Claim No. 61 in Township 2 North,  
Range 2 East of the Willamette Meridian  
in Clark County, Washington, described  
as attached Exhibit A.

ASSESSOR'S PROPERTY TAX/  
ACCOUNT NUMBER: 158347-000

This document is recorded as an accommoda-  
tion by Chicago Title Insurance and maintains  
no responsibility as to the validity of provisions  
of this document.



This document is being recorded in order to correct "Fee Ownership" in the Restrictive Covenant dated July 28, 2000 and Recorded August 18, 2000, Clark County Recorder's Number 3243979.

RESTRICTIVE COVENANT

EVA HAWKINS-HERRERIAS - FORMER TURNBULL LANDFILL SITE

This Declaration of Restrictive Covenant is made pursuant to RCW 70.105D.030(1)(f) and (g) and WAC 173-340-440 by Eva Hawkins-Herrerias, her 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: Turnbull Property NFA Request, Former Turnbull Landfill, Orchards, Washington, prepared by PNG Environmental, dated April 19, 2000. This document is on file at Ecology's Southwest Regional Office (SWRO).

This Restrictive Covenant is required because the Remedial Action resulted in residual concentrations of manganese which exceed the Model Toxics Control Act Method B Cleanup Level for groundwater established under WAC 173-340-720. In addition, certain portions of the property are underlain with solid waste which may contain hazardous substances in concentrations which exceed the Model Toxics Control Act Method A or B Cleanup Levels for soil established under WAC 173-340-740.

The undersigned, Eva Hawkins-Herrerias, is the fee owner of real property (hereafter "Property") in the County of Clark, State of Washington, that is subject to this Restrictive Covenant. The Property is legally described in Attachment A of this Restrictive Covenant and made a part hereof by reference.



Eva Hawkins-Herrerias 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.
- a. No groundwater may be taken for any use from the Property.
  - b. A portion of the Property contains solid waste beneath a soil cover. Solid Waste is located on Parcel 1 in the areas depicted on Exhibit B, attached hereto. These areas have been capped with three to 12 feet of clean soil. The Owner shall not alter, modify, or remove the existing structure(s) or the soil cover in any manner that may result in the release or exposure to the environment of the contained refuse or create a new exposure pathway without prior written approval from Ecology.
  - c. No new structures shall be constructed on areas of the Property where solid wastes have been deposited without the written approval of Ecology and approval by the local agency(s) of jurisdiction.
  - d. Any activity on the Property that may result in the release or exposure to the environment of the solid waste that was contained as part of the Remedial Action, or create a new exposure pathway, is prohibited without first obtaining written approval from Ecology. Absent obtaining prior written approval from Ecology, some examples of activities that are prohibited in the capped areas 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.

Section 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.

Section 3. Any activity on the Property that may result in the release or exposure to the environment of a hazardous substance that remains on the Property as part of the Remedial Action, or create a new exposure pathway, is prohibited without prior written approval from Ecology.

Section 4. 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.

Section 5. 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.

Section 6. 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.

Section 7. 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.



Section 8. 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.

Signed this date:

September 6, 2000

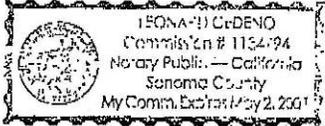
Eva Hawkins-Herrerias, Owner

STATE OF CALIFORNIA )  
COUNTY OF SONOMA )

I certify that I know or have satisfactory evidence that Eva Hawkins-Herrerias is the person who appeared before me, and said person acknowledged that he/she signed this instrument, on oath stated the he/she was authorized to execute the instrument and acknowledged it as the Owner of the property to be the free and voluntary act of such party for the uses and purposes mentioned in the instrument.

DATED: 6/Sept., 2000

Notary Public:   
Print Name: Leonard Codeno  
My commission expires: 2 MAY 2001



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## 6.4 Photo log

**Photo 1: MW-1 on north side of property – from the west**



**Photo 2: Typical Unpaved Site Surface – from the west**



**Photo 3: MW-4 and East Side of Property – from the west**



**Photo 4: West Side of Property Adjacent to SR500 – from the east**

