Periodic Review

Hansville Landfill Site
7791 NE Ecology Road
Kingston, WA

Facility Site ID#: 2605
Cleanup Site ID#: 695

Prepared by:
Northwest Region Office
Toxics Cleanup Program

May 2017

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 human health and the environment are being protected at the Hansville 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 completed under Consent Decree No.:95 2 03005 1, State of Washington, Department of Ecology v. Kitsap County and Kitsap County Sanitary Landfill Inc. that was recorded in October of 1995. The cleanup actions resulted in concentrations of arsenic, bis (2-ethylexyl) phthalate, cooper, lead, manganese, nickel, nitrate, silver, zinc, and vinyl chloride remaining at the Site that exceed MTCA cleanup levels. The MTCA cleanup levels for soil are established under WAC 173-340-740. The MTCA cleanup levels for groundwater are established under WAC 173-340-720. WAC 173-340-420(2) requires Ecology to conduct a periodic review of a Site every five years under the following conditions:

1. Whenever the department conducts a cleanup action
2. Whenever the department approves a cleanup action under an order, agreed order or consent decree
3. Or, as resources permit, whenever the department issues a no further action opinion,
4. and one of the following conditions exists at the site:

    (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; or
    (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 Ecology shall consider include [WAC 173-340-420(4)]:

(a) 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.
(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.

Ecology 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

Site History

The Hansville Landfill operated as a municipal landfill serving the northern portion of Kitsap County from about 1962 to 1989. The landfill is divided into three separate areas, the remaining landfill property consists of access roads, a soil borrow area, and wooded land.

The Site subject to the Remedial Action and subject to the monitoring contains the Landfill, the Landfill Property, and a portion of land owned by the Port Gamble S'Klallam Tribe. The closed Hansville Landfill is located on an approximately 73-acre parcel within the northeast quarter of Section 9, Township 27 North, Range 2 East of the Willamette Meridian, in Kitsap County, Washington. It consists of three separate, inactive, disposal areas. These include the following:

• 13-acre municipal solid waste disposal cell situated within the central portion of the property;
• 4-acre demolition disposal cell situated on the northeast corner of the property, which accepted construction, demolition, and land clearing wastes (CDL); and
• 1/3-acre septage lagoon located immediately southwest of the demolition disposal area, which accepted residential septic tank waste until 1982. A second septage disposal area was also reportedly located near the northeast corner of the demolition disposal area.

The County owns the Landfill Property and currently operates a drop box, known as a recycling and garbage facility in Kitsap County, on the eastern end. This portion of the property has been used for solid waste transfer and/or recycling operations since the landfill ceased accepting refuse in 1989. Prior to development of the landfill, the property was undeveloped forested land.

The property is bordered to the south and west by lands owned by the Port Gamble S'Klallam Tribe. Tribal lands in the immediate vicinity of the Landfill Property principally consist of woodland and recreational land, with scattered commercial (a tribal casino) and rural residential development further to the south and southwest. Surrounding areas to the north and east of the Landfill Property are zoned low-density residential, rural woodland, or light industrial, and are sparsely developed. The area directly east of the Landfill Property has been recently cleared and is reportedly under development for light industrial use.

The Site lies approximately five miles south of the unincorporated community of Hansville on the northernmost reach of the Kitsap Peninsula and is situated on the upper portions of several west sloping drainages with perennial creeks that ultimately discharge into Port Gamble Bay. The topography ranges between 310 and 390 feet above mean sea level (msl).

The regional near-surface geology in the vicinity of the Hansville Landfill is dominated by glacio-fluvial and glacio-lacustrine deposits associated with the Vashon glaciation. The stratigraphic units at the Site, from ground surface in descending order are:

- Sand - This unit was reported in all the investigative borings from the ground surface to depths ranging from 62 to 142 feet below ground surface (bgs). The sand deposit consists primarily of poorly graded, fine- and medium-grained sand with trace amounts of silt and gravel. The material is dark yellowish brown to dark gray in color, dense to very dense, and dry to saturated. The RI references the sand unit as the upper aquifer. This unit has been interpreted as outwash associated within the Vashon Drift.
- Transition Zone - This zone was reported at three boring locations (MW-8, MW-9, and MW-14) and is approximately 15 feet thick. It consists of interbedded layers of sand, silty sand, and silt and does not appear to be areally extensive.
- Silt - This unit was reported in all the soil borings advanced through the upper aquifer. It occurred at depths ranging from approximately 66 feet bgs (at MW-9) to 163 feet bgs (at MW-14). The silt is dark gray, slightly too moderately plastic, very dense, and dry. This unit has been interpreted to be the Kitsap Formation.

Groundwater in the immediate vicinity of the landfill has been reported to occur within the upper aquifer at depths ranging between 41 feet bgs (at MW-1) to 104 feet bgs (at MW-5). The water table beneath the landfill was reported to range between 251 and 271 feet above msl. To the west (downgradient) of the landfill, groundwater within the upper aquifer reportedly occurred between 7 feet bgs (at MW-12I) and 45 feet bgs (at MW-8). The corresponding water table elevations recorded in these wells has historically ranged from approximately 238 to 260 feet above msl.

Groundwater flow in the upper aquifer in the vicinity of the Hansville Landfill has been consistently reported to be towards the west-southwest. The 2007 RI noted that groundwater from the upper aquifer discharges into the headwaters of several perennial creeks west (downgradient) of the landfill. These creeks reportedly include Little Boston Creek, Creek A, Creek B, Creek C, and Middle Creek. Within the deeper hydrologic unit, the dense silts reported for the Kitsap Formation have a relatively low hydraulic conductivity, restricting vertical movement of groundwater through the formation.

Site Investigations

In 1991, the Washington Department of Ecology (Ecology) performed a Site Hazard Assessment (SHA) under the Model Toxics Control Act (MTCA) Regulations which resulted in an initial ranking of 3. This ranking was subsequently changed to a 1 (the highest rank on a scale of 1 to 5) in 1992, based on changes in the state ranking model.

In October 1995, Ecology signed a consent decree with the County and KCSL to conduct a Remedial Investigation/Feasibility Study (RI/FS) for the Site. The RI was completed in 2007 and the FS was completed in 2009. The RI/FS identified arsenic and vinyl chloride in groundwater (and in seepage to surface water) as the primary contaminants of concern (COCs) related to the landfill. The highest concentrations of these COCs generally occur adjacent to the waste disposal areas with decreasing concentrations at increasing distances from the landfill.

Groundwater monitoring was initiated at the site in 1982 with the installation of three groundwater monitoring wells (MW-1 through MW-3). Three additional groundwater

monitoring wells (MW-4 though MW-6) were added to the monitoring program in 1988. Beginning in 1996, more groundwater wells were installed as part of a phased RI including wells MW-7 through MW-12 during Phase I, and five additional wells (MW-8D, MW-12I, MW-13S, MW-13D, and MW-14) during Phase II.

Monitoring of surface water commenced in 1991 at two locations on Middle Creek (SW-1 and SW-2). Two additional locations (SW-SB and SW-3) were added in 1992 and 1994, respectively. Seven new surface water sampling locations (SW-4, SW-5, SW-6, SW-7, SW-8, SW-9, and SW-10) were subsequently established during the 1996 RI.

Four comprehensive quarterly RI sampling events for groundwater and surface water were conducted between August 1996 and June 1997. Ecology-directed quarterly monitoring was initiated in March 1998 using a subset of the groundwater and surface water locations established during the RI. In the first quarter of 2000, Ecology approved further streamlining of the monitoring program, which remained largely unchanged through the third quarter of 2011.

Beginning with the fourth quarter 2011 sampling event, the water quality monitoring program was further modified to comply with the final Cleanup Action Plan developed for the site. As detailed in Section 2.4, the CAP-defined water quality monitoring program includes quarterly monitoring of six (6) groundwater compliance wells and four (4) surface water sampling stations.

Annual Monitoring During 2016

Low, but detectable concentrations of arsenic and manganese were consistently reported at the majority of the surface water monitoring stations during the monitoring year. Arsenic concentrations in surface water ranged between 0.0008 mg/L (SW-1 in April) to 0.00713 mg/L (SW-6 in July). Manganese concentrations ranged between < 0.001 mg/L (SW-1 during all four quarters) to 0.24 mg/L (SW-6 in July). The July manganese result was higher than typically observed at this location, and is likely related to the previously discussed non-representative grab sample.

The largest number of parameter exceedances (arsenic, manganese and vinyl chloride) reported at the Hansville Landfill during 2016 continue to be associated with groundwater well MW-14, which is situated on the downgradient (southwest) edge of the solid waste landfill. As noted in past monitoring years, concentrations of site COCs generally decrease with increasing distance from the landfill.

The geochemical indicator parameter results reported during 2016 continue to suggest that reductive groundwater conditions occur immediately beneath and downgradient of the Hansville landfill. It should also be noted that landfill leachate indicator parameter results showing relatively low, but higher than background, levels of ammonia, chloride and nitrate/nitrite, support the conclusion that the landfill continues to locally affect groundwater quality.

During 2016, the LFG collection system, including the interior wells and trenches and the blower/flare facility, were monitored on a quarterly basis. Performance parameters include methane, oxygen, carbon dioxide, static pressure, and temperature. Operational checks of the LFG system, and system tuning as required, were also conducted on an approximately monthly schedule. The LFG collection system operated normally throughout the reporting year.

Cleanup Levels and Points of Compliance

Beginning with the fourth quarter of 2011, the compliance monitoring program for the Hansville Landfill Site transitioned to that outlined in the final CAP. The CAP identified arsenic and vinyl chloride in groundwater and surface water as the primary COCs. Manganese was also identified as an additional COC. The table below summarizes the final site specific cleanup levels that have been established for the site.

FINAL SITE CLEANUP LEVELS – HANSVILLE LANDFILL REMEDY [1]

Chemical	Media	Site Cleanup Level (µg/L)	Origin of Cleanup Level
Vinyl chloride	Groundwater	0.025	EPA Human Health, 2004
Arsenic		5	Background
Manganese		2,240	Method B Formula Value
Vinyl chloride	Surface Water	0.025	EPA Human Health, 2004
Arsenic		5	Background

[1] As referenced in Section 5.3 in the June 2011 Cleanup Action Plan.

Under the final CAP, water quality parameters to be analyzed quarterly for both groundwater and surface water include: arsenic, manganese, chloride, ammonia, nitrate, nitrite, bicarbonate, carbonate, alkalinity, sulfate, TOC, orthophosphate, and vinyl chloride (by SIM). A full EPA method 8260 scan for VOCs is also conducted annually. Landfill gas field measurements include methane gas, oxygen gas, and carbon dioxide gas (by percent volume), as well as gas pressure and gas temperature.

Remedial Actions

There were seven different cleanup alternatives that were considered to meet state cleanup standards which were:

1. No action alterative
2. Natural Attenuation of Groundwater with Enhanced Monitoring and Enhanced Institutional Controls
3. Gas Extraction system enhancement
4. Air sparging
5. Groundwater pump and treat at landfill boundary
6. Groundwater pump and treat downgradient from the landfill boundary
7. Waste evacuation and off-site disposal

The proposed alternatives were then subjected to a cost benefit comparison. The selected cleanup alternative was Alternative 2, Natural Attenuation of Groundwater with Enhanced Monitoring and Enhanced Institutional Controls.

The closure consisted of final site grading, surface capping (including the installation of a high-density polyethylene [HDPE] liner over three distinct disposal areas), and the installation of surface water controls. A passive LFG collection system, including horizontal piping installed beneath the HDPE liner and a flaring station, was also constructed at this time. In 1991, an active LFG extraction and flaring system was installed within the municipal solid waste and demolition landfill units to better control methane migration and to enhance the removal of volatile organic compounds (VOCs) from subsurface soil and groundwater. Additional modifications to the LFG system were completed in 1994 to separate the perimeter LFG extraction well flow from the in-refuse LFG extraction well and trench flow. The perimeter LFG extraction system ceased operation in 1995 (Parametrix, 2011).

Environmental Covenant

Based on the surface cover and cleanup levels, it was determined that the Site was eligible for a 'No Further Action' determination if an environmental covenant was recorded for the property. A Covenant was recorded with Kitsap County for the Site in August 22, 2011 that imposed the following limitations:

1. No groundwater any be taken from the property for domestic, agricultural, or industrial use except for collection of samples from monitoring wells or maintenance activities of as otherwise provided for the in the Consent Decree and Cleanup Action Plan. The Property contains three former landfill units with caps. The Owner shall not alter, modify, or remove any existing cap in a manner that may result in the release or exposure to the environment contamination or create a new exposure pathway without prior 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. 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) days advanced written notice to Ecology of the Owner's intent to convey an 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 of uses and activities consistent with the Covenant and notify all lessees of the restriction 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 the Covenant. 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, determine compliance with this Covenant, and to 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 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.

The Covenant is available as Appendix 6.3.

3.0 PERIODIC REVIEW

Effectiveness of completed cleanup actions

The Covenant for the Site was recorded and is in place. This Covenant prohibits activities that will result in the release of contaminants at the Site without Ecology's approval, and prohibits any use of the property that is inconsistent with the Covenant. This Covenant serves to ensure the long term integrity of the remedy.

Based upon the Site visit conducted on September 26, 2016, the surface cap and institutional controls at the Site continue to eliminate exposure to contaminated soils by ingestion and contact. The asphalt appears in satisfactory condition and no repair, maintenance, or contingency actions have been required. The Site is still operating as a [insert current activity]. A photo log is available as Appendix 6.5.

Soils and groundwater with Arsenic, Manganese, and vinyl chloride concentrations higher than MTCA cleanup levels are still present at the Site. However, the remedy prevents human exposure to this contamination by ingestion and direct contact with soils. The Covenant for the property will ensure that the contamination remaining is contained and controlled.

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

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

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

The cleanup at the Site was governed by [insert appropriate edition, like: 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."

Although cleanup levels changed for petroleum hydrocarbon compounds as a result of modifications to MTCA in 2001, contamination remains at the Site above the new MTCA Method A and B cleanup levels. Even so, the cleanup action is still protective of human health and the environment. A table comparing MTCA cleanup levels from 1991 to 2001 is available below.

Example CUL Comparison Table

Analyte	1991 MTCA Method A 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)
Cadmium	2	2	5	5
Lead	250	250	5	15
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

MTCA = Model Toxics Control Act
NL = None listed
ppb = parts per billion
ppm = parts per million
TPH = total petroleum hydrocarbons

Current and projected Site use

The Site is currently a restricted access open field. There have been no changes in current or projected future Site or resource uses.

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.

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 selected Site cleanup levels. 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 and the environment.

- Soils cleanup levels have not been met at the standard point of compliance for the Site; however, the cleanup action has been determined to comply with cleanup standards since the long-term integrity of the containment system is ensured, and the requirements for containment technologies are being met.

- Institutional controls in the form of a restrictive covenant and performance monitoring of groundwater are in place at the Site 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, Ecology has determined that the requirements of the Covenant are being followed. No additional cleanup 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 remedy is maintained.

Next Review

The next review for the Site will be scheduled five years from the date of the site visit for 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

Parametrix. *Hansville Landfill Remedial Investigation/Feasibility Study*, September 22, 2006.

Parametrix. *Environmental Monitoring Report – 2010 Annual Report, Hansville Landfill.* March 2011.

Kitsap County and Kitsap County Sanitary Landfill Inc. *Environmental Covenant*. August 22, 2011

SCS Engineers, *Compliance Monitoring Plan, Remedial Action at the Hansville Landfill*, September 15, 2011.

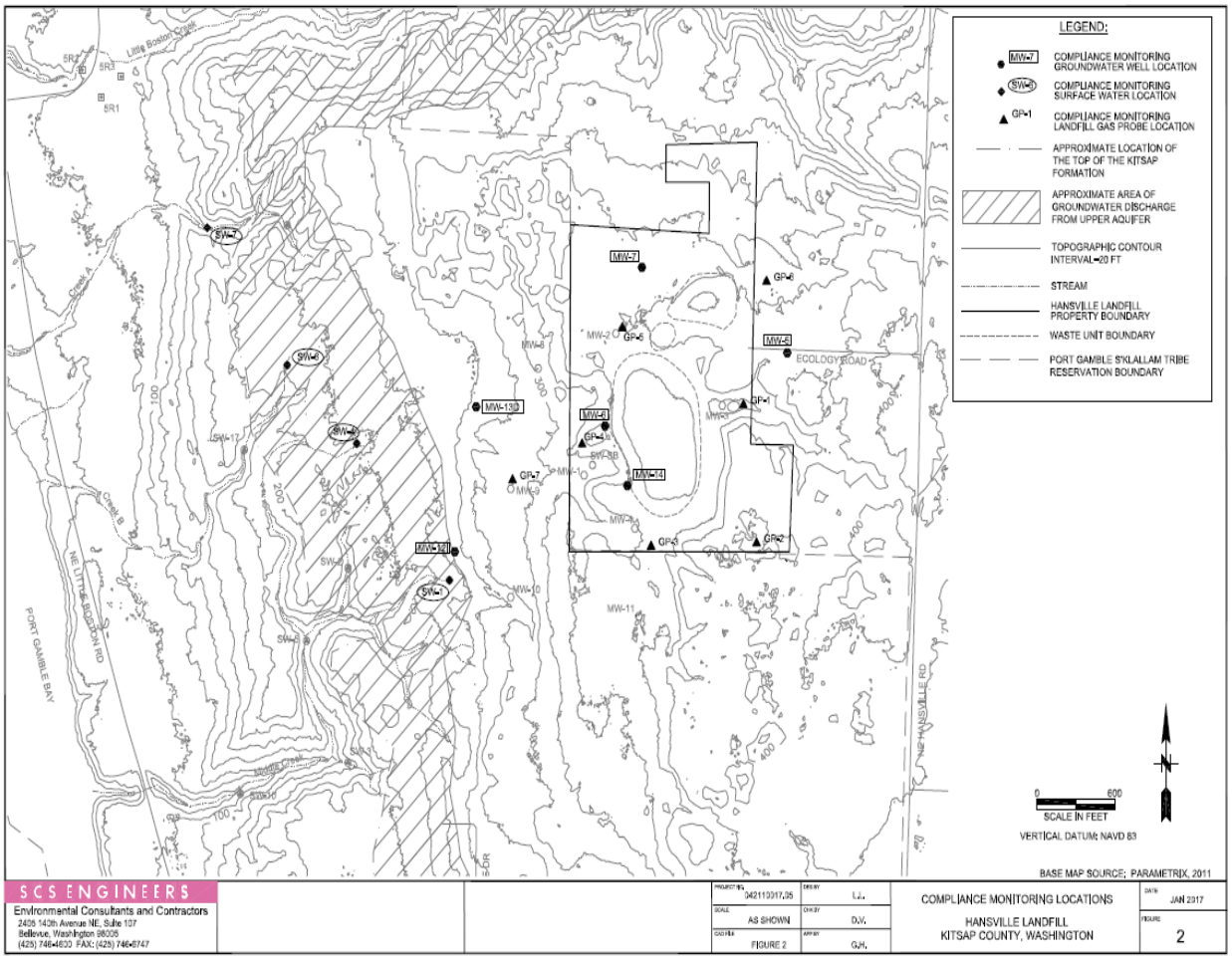
Ecology. *Site Visit*. September 26, 2016

SCS Engineers, *2016 Annual Monitoring Report: Remedial Action at the Hansville Landfill*, February 7, 2017.

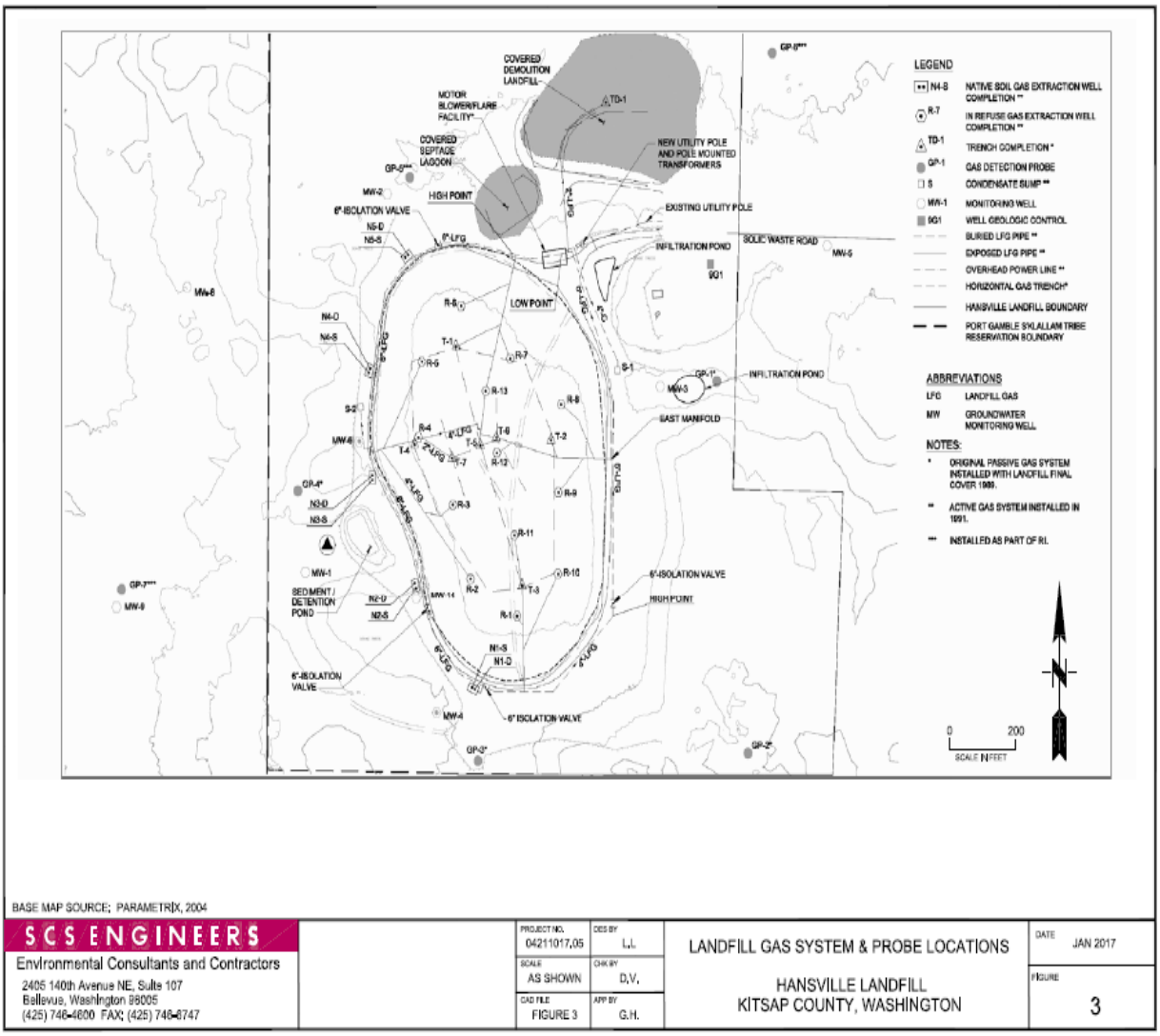
6.0 APPENDICES

Vicinity Map

Site Plan


LEGEND:
MW-7 COMPLIANCE MONITORING GROUNDWATER WELL LOCATION
SW-4 COMPLIANCE MONITORING SURFACE WATER LOCATION
GP-1 COMPLIANCE MONITORING LANDFILL GAS PROBE LOCATION
APPROXIMATE LOCATION OF THE TOP OF THE KITSAP FORMATION
APPROXIMATE AREA OF GROUNDWATER DISCHARGE FROM UPPER AQUIFER
TOPOGRAPHIC CONTOUR INTERVAL=20 FT
STREAM
HANSVILLE LANDFILL PROPERTY BOUNDARY
WASTE UNIT BOUNDARY
PORT GAMBLE S'KLALLAM TRIBE RESERVATION BOUNDARY
ECOLOGY ROAD
NE HANSVILLE RD
NE LITTLE BOSTON RD
PORT GAMBLE BAY
Little Boston Creek
Creek B
Creek A
0 600
SCALE IN FEET
VERTICAL DATUM: NAVD 83
BASE MAP SOURCE: PARAMETRIX, 2011
SCS ENGINEERS
Environmental Consultants and Contractors
2405 140th Avenue NE, Suite 107
Bellevue, Washington 98005
(425) 746-4600 FAX: (425) 746-6747
PROJECT NO. 04211017.05
DESIGN L.J.
SCALE AS SHOWN
CHECK D.W.
DATUM FIGURE 2
APPR. G.H.
COMPLIANCE MONITORING LOCATIONS
HANSVILLE LANDFILL
KITSAP COUNTY, WASHINGTON
DATE JAN 2017
FIGURE 2

Concentration Map



Environmental Covenant

After Recording Return to:
John Keeling
Department of Ecology
Northwest Regional Office
3190 160th SE, Bellevue WA

PUBLIC WORKS KITSAP COUNTY 201108220304
Covenants Rec Fee: $ 69.00 Page: 1 of 8
08/22/2011 03:04 PM
Walter Washington, Kitsap Co Auditor

Restrictive (Environmental) Covenant

Grantor: Kitsap County
Grantee: State of Washington, Department of Ecology
Legal:
Section 09 Township 27N Range 2E
E1/2 NE1/4 NW1/4 NE1/4 & NW1/4 NE1/4 NW1/4 NE1/4 & S1/2 NW1/4 NE1/4 & N1/2 SW1/4 NE1/4 & SW1/4 NE1/4 EXC N1/2 & W1/2 SW1/4 SE1/4 NE1/4 PER VOL 149/423
Tax Parcel Nos.: 092702-1-005-2007

Grantor, Kitsap County, hereby binds Grantor, its successors and assigns to the land use restrictions identified herein and grants such other rights under this environmental covenant (hereafter "Covenant") made this 11th day of July 2011 in favour of the State of Washington Department of Ecology (Ecology). Ecology shall have full right of enforcement of the rights conveyed under this Covenant pursuant to the Model Toxics Control Act, RCW 70.105D.030(1)(g), and the Uniform Environmental Covenants Act, 2007 Wash. Laws ch. 104, sec. 12.

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

A remedial action (hereafter "Remedial Action") occurred at the property that is the subject of this Covenant. The Remedial Action conducted at the property is described in the following document:

Cleanup Action Plan Hansville Landfill Kitsap County, Washington, dated June, 2011. This document is on file at Ecology's Northwest Regional Office.

This Covenant is required because the Remedial Action resulted in residual concentrations of vinyl chloride which exceed the Model Toxics Control Act Method B Cleanup Level(s) for groundwater established under WAC 173-340-720(4) and the Site Cleanup Levels for arsenic and vinyl chloride specified in Consent Decree No. 95-2-3005-1 and because a conditional point of compliance has been established for groundwater

The undersigned, Kitsap County, is the fee owner of real property (hereafter "Property") in the County of Kitsap, State of Washington that is subject to this Covenant. The Property is legally described as follows:

Section 09 Township 27N Range 2E
E1/2 NE1/4 NW1/4 NE1/4 & NW1/4 NE1/4 NW1/4 NE1/4 & S1/2 NW1/4 NE1/4 & N1/2 SW1/4 NE1/4 & SW1/4 NE1/4 EXC N1/2 & W1/2 SW1/4 SE1/4 NE1/4 PER VOL 149/423

Kitsap County 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. No groundwater may be taken from the property for domestic, agricultural, or industrial use except for collection of samples from monitoring wells or maintenance activities or as otherwise provided for in the Consent Decree and Cleanup Action Plan.

The Property contains three former landfill units with engineered caps. The Owner shall not alter, modify, or remove any existing cap in any manner that may result in the release or exposure to the environment contamination or create a new exposure pathway without prior written approval from Ecology.

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 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 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, to determine compliance with this Covenant, 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 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.

BOARD OF COMMISSIONERS STATE OF WASHINGTON KITSAP COUNTY

BOARD OF COUNTY COMMISSIONERS
KITSAP COUNTY, WASHINGTON

CHARLOTTE GARRIDO, Chair

ROBERT GELDER, Commissioner

JOSH BROWN, Commissioner

ATTEST:

Dana Daniels, Clerk of the Board

Restrictive (Environmental) Covenant

Section 09 Township 27N Range 2E
E1/2 NE1/4 NW1/4 NE1/4 & NW1/4 NE1/4 NW1/4 NE1/4 & S1/2 NW1/4 NE1/4 & N1/2 SW1/4 NE1/4 & SW1/4 NE1/4 EXC N1/2 & W1/2 SW1/4 SE1/4 NE1/4 PER VOL 149/423
Tax Parcel Nos.: 092702-1-005-2007

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY GRANTEE

Robert Warren

Dated: 8/17/11

[INDIVIDUAL ACKMOWLEDGEMENT]

STATE OF Washington
COUNTY OF King

On this 17 day of August, 2011. I certify that Bob Warren personally appeared before me, and acknowledge that he is the individual described herein and who executed the within and foregoing instrument and signed the same as his free and voluntary act and deed for the used and purposes therein mentioned.

Nida Taylor

Expires: May 21, 2012

NIDA J. TAYLOR NOTARY PUBLIC STATE OF WASHINGTON COMMISSION EXPIRES MAY 21, 2012

[INDIVIDUAL ACKNOWLEDGMENT]

STATE OF _____
COUNTY OF _____

On this _____ day of _____, 20__, I certify that _____ personally appeared before me, and acknowledged that **he/she** is the individual described herein and who executed the within and foregoing instrument and signed the same at **his/her** free and voluntary act and deed for the uses and purposes therein mentioned.

_____
Notary Public in and for the State of Washington, residing at _____.
My appointment expires _____.

[CORPORATE ACKNOWLEDGMENT]

STATE OF Washington
COUNTY OF Kitsap

On this 11th day of July, 2011, I certify that the Kitsap County Board of Commissioners personally appeared before me, acknowledged that ~~he/she~~ they are the Commissioners of Commissioners the corporation that executed the within and foregoing instrument, and signed said instrument by free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that **he/she** was authorized to execute said instrument for said corporation.

DANA DANIELS NOTARY PUBLIC STATE OF WASHINGTON COMMISSION EXPIRES 12-15-13

Dana Daniels
Notary Public in and for the State of Washington, residing at Port Orchard
My appointment expires 12-15-2013.

[REPRESENTATIVE ACKNOWLEDGEMENT]

STATE OF _____
COUNTY OF _____

On this _____ day of _____, 20__, I certify that _____ _____ personally appeared before me, acknowledged that **he/she** signed this instrument, on oath stated that **he/she** was authorized to execute this instrument, and acknowledged it as the

_____ [type of authority] of _____ [name of party being represented] to be the free and voluntary act and deed of such party for the uses and purposes mentioned in the instrument.

_____
Notary Public in and for the State of Washington, residing at _____.
My appointment expires _____.

Exhibit A
Legal Description

Section 09 Township 27N Range 2E
E1/2 NE1/4 NW1/4 NE1/4 & NW1/4 NE1/4 NW1/4 NE1/4 & S1/2 NW1/4 NE1/4 & N1/2 SW1/4 NE1/4 & SW1/4 NE1/4 EXC N1/2 & W1/2 SW1/4 SE1/4 NE1/4 PER VOL 149/423

6.5 Photo log

Photo 1: Landfill Site, gas flare in the distance.

Photo 2: Performance Monitoring well MW-14

Photo 3:Performance Monitoring well MW-6

Photo 4: Landfill cap surface cover