APPENDIX C

Select Site Investigation Reports (Provided on CD)

Appendix B

Health & Safety Plans

B.1 *Weirs, Water Sampling & BMPs*. October 2006.

B.2 *Weirs, Water Sampling, BMPs, & Trail Maintenance.* April 2007

B.2 *Western Hillslope Sampling Activities*. April 2010.

Appendix B.1

Weirs, Water Sampling & BMPs.

October 2006.

Health & Safety Plan

Vashon Island Landfill & Transfer Station Hillslope Weirs, Water Sampling, & BMPs

October 05, 2006

FINAL

King County

Department of Natural Resources and Parks
Water and Land Resources Division
Science Section
King Street Center, KSC-NR-0600
201 South Jackson Street, Suite 600
Seattle, WA 98104
206-296-6519 TTY Relay: 711
dnr.metrokc.gov/wlr

Health & Safety Plan:
Vashon Island Landfill & Transfer Station Hillslope

Weirs, Water Sampling, and BMPs

Prepared for:

Engineering Services
Solid Waste Division
King County Department of Natural Resources and Parks

Submitted by:

Groundwater Group
Water & Land Resources Division
King County Department of Natural Resources and Parks

King County
Department of Natural Resources and Parks
Water and Land Resources Division
201 S Jackson St. Ste 600
Seattle, WA 98104
(206) 296-6519

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1.0. PROJECT INFORMATION

SITE: **Vashon Landfill / Transfer Station Hillslope**

DATE: September 19, 2006 **PREPARED BY:** Sevin Bilir

LOCATION: West of landfill (18910 Westside Hwy SW) **PROJECT NUMBER:** G13580

Vashon Island, WA **PROJECT MANAGER:** Laura Belt, SWD

PROJECT OBJECTIVES:	Conduct hydrologic and hydrogeologic field investigations on the hillslope.
SCOPE OF WORK:	**Install weirs and surface water samplers; measure flow from weirs; implement BMPS for stream pollutants; and sample water from weirs and samplers. <u>This HSP does not cover drilling activities.</u>**
START DATE: September 18, 2006	**COMPLETION DATE:** September 1, 2007

Note: This Health & Safety Plan must be re-evaluated and updated annually or when site conditions or scope of work changes.

2.0. FACILITY DESCRIPTION & BACKGROUND

TYPE OF FACILITY: Undeveloped land, west of an inactive municipal solid waste landfill.

SIZE: Approximately 140 acres. **BUILDINGS/STRUCTURES:** none

ACCESS: Trail, maintained annually.

TOPOGRAPHY:	Steep to gradual highly vegetated terrain ranging from about 180 to 400 feet above mean sea level.
GENERAL GEOLOGIC/HYDROLOGIC SETTING:	Site soils consist of glacially derived sediments; sand and gravel, silt, and clay. Groundwater occurs as perched saturated zones seeping out of the hillside. Waterways emanate from these seepage areas and flow to the west.
SITE STATUS:	Investigatory.
PREVIOUS HAZARDOUS MATERIAL/WASTE STORAGE AND DISPOSAL METHOD(S):	N/A
SITE HISTORY:	Hillslope appears to have had illegal dumping of garbage near the road in past. Site investigations by KC SWD on the hillslope have been ongoing for about 5 years. A trail was constructed in recent years to improve access to sampling weirs.
SPECIAL CONDITIONS/COMMENTS:	None.

3.0. WASTE TYPE (S) / CHARACTERISTICS

ARE HAZARDOUS SUBSTANCES KNOWN TO HAVE BEEN STORED/SPILLED ON SITE? ☐ YES ☒ NO

SOURCE(S) OF INFORMATION: 1996 Annual Groundwater Data Evaluation Report, February 1997; Landfill Monitoring Test Results, March 5, 1998. (UES, 2003).

COMPOUNDS POSING HEALTH CONCERN:

	Maximum concentration Encountered or Anticipated			Depth
Element/Compound	Leachate (ppb)	Water (ppb)	Landfill Gas (%)	(ft below grade)
Arsenic		300 (dissolved)		
Methane			36 (in waste)	
Vinyl Chloride		35		150

SPECIAL CONSIDERATIONS/COMMENTS:

- Site groundwater and leachate contains arsenic in concentrations exceeding primary drinking water standards.
- Landfill gas contains methane, posing an explosion hazard. Landfill gas will be considered a potential explosion hazard during drilling activities in the subsurface.
- Concentrations of volatile organic compounds in landfill gas are not known; therefore, landfill gas will be considered a potential inhalation hazard during drilling activities in the subsurface.
- Landfill gas contains carbon dioxide; therefore, all confined or potentially confined spaces will be considered asphyxiation hazards.

4.0. HAZARD EVALUATION

CHEMICAL:

- Ingestion of arsenic can cause chronic and acute illness.
- Inhalation of landfill gas can cause nausea, acute and chronic illness.
- Oxygen deficiency can cause asphyxiation.
- Vinyl chloride is a class A carcinogen, pathways are absorption, inhalation, and ingestion. Effects can be acute and chronic. Inhalation can cause immediate dizziness and/or nausea.

PHYSICAL:

- Slip, trip, and fall hazards associated with construction sites and working on undeveloped terrain are potential hazards.
- All confined or potentially confined spaces will be considered asphyxiation hazards.
- Monitor for heat stress when ambient temperatures exceed 75 degrees Fahrenheit.
- Workers are responsible for being aware of all physical hazards associated with the worker's typical duties.

OTHER:

- Be aware of traffic on County roads.
- Check work areas for transient inhabitants.
- Buddy system is preferred. If working alone, worker should report to project personnel (Sevin Bilir or Laura Belt) of planned activities. In addition, when leaving the site, that worker should call in to project contact to report that they are no longer on the hillslope.

5.0. OPERATIONS PLAN

VICINITY MAP / EMERGENCY ROUTE / ROUTE TO HOSPITAL: See Appendix C

SITE SKETCH: See Appendix D

UNDERGROUND UTILITY CLEARANCE PERFORMED ON: Not performed due to undeveloped land.

FIELD METHOD(S): Installation of weirs, surface water samplers, and BMPs involve use of shovels, moving of wet soil and rock. Use of small battery operated tools may be used. Sampling of water from weirs and samplers and measuring of flow at weirs will follow procedures in the SWD QAPP. (KC SWD, 2006)

COMMENTS: NO CONFINED SPACE ENTRY SHALL BE PERMITTED UNDER THIS SAFETY PLAN.

6.0. SAFETY & EQUIPMENT PROCEDURES

INITIAL LEVEL OF PROTECTION: ☐ C ☒ D

REQUIRED PERSONAL PROTECTIVE EQUIPMENT: Standard Level D safety equipment. Protective clothing should be used as applicable per activity. Protective gloves should be worn when conducting invasive work into the subsurface or streams. For activities contracted to non-SWD personnel, their proper work and safety procedures should be followed for the duties they typically perform.
AIR MONITORING EQUIPMENT AND PROCEDURES: No air monitoring will be conducted, unless field work involves drilling into the subsurface. This activity is covered under another HSP specific for drilling on the hillslope.
ACTION LEVELS: N/A
COMMUNICATIONS: Immediately communicate questionable site conditions to project managers and the SWD Safety Officer at earliest reasonable opportunity.
DECONTAMINATION PROCEDURES: Wash face and hands before eating or leaving site.

7.0. KEY PROJECT PERSONNEL

SITE WORK TEAM (name/responsibility)		1.	Sevin Bilir; KC WLRD Hydrogeologist
2.	King County WLRD personnel	3.	King County SWD personnel
4.	King County Health Dept. personnel	5.	State of WA Dept. of Ecology personnel
6.	King County DOT personnel	7.	

ENTRY BRIEFING DATE: DRAFT Sept 18, 2006 LOCATION: KSC, WLRD office

SPECIAL CONDITIONS (e.g., work schedule or limitations): Work is to be conducted during daylight hours. Personnel need to be off the hillslope by 4:30 pm.

8.0. EMERGENCY PROCEDURES

ACUTE EXPOSURE SYMPTOMS(S):	FIRST AID:
Eyes – slight to severe irritation.	Flush with water for 15 minutes.
Skin – irritation, redness, edema, drying.	Wash with soap and water.
Respiratory – dizziness, irritation of eyes, nose, throat vomiting, bluish skin, CNS effects.	Remove to fresh air.
Ingestion.	Call physician.

NEAREST HOSPITAL / EMERGENCY MEDICAL CENTER (see attached map & Table 1)

Highline Community Hospital; 16251 Sylvester Rd. S.W., Burien, WA. 98166

EMERGENCY ROUTE: (see attached map in Appendix C)

From the landfill travel north on Westside HWY:

- Turn right onto Thorsen Rd SW.
- Turn left onto Vashon HWY SW. Continue north to the ferry terminal. Proceed on to the Ferry going to Fauntleroy.
- Turn right onto Fauntleroy Way SW.
- Turn left onto SW Wildwood Pl.
- Turn left at SW Brace Point Dr. Continue on California Ave SW.
- Turn right at SW Barton St.
- Turn Right at 35th Ave SW.
- Turn left at SW Roxbury St.
- Turn right at 16th Ave SW. Bear left at Ambaum Blvd SW; continue on Ambaum Blvd SW.
- Turn right at 4th Ave SW. Bear right at Sylvester Rd SW. The hospital is on the right.

EMERGENCY PHONE NUMBERS (See Table 1)

Ambulance, Police, Fire	911
Hospital (HCH)	206-244-9970
Emergency Dept. at Hospital (HCH) --(messages checked immediately)	206-431-5314
Fire Department	911

9.0. REFERENCES

King County Solid Waste Division (KC SWD). 1999 (Revised 2005). Quality Assurance Project Plan for Environmental Monitoring for King County Solid Waste Facilities. Prepared by Engineering Services Section. Draft.

Udaloy Environmental Services (UES). 2003. Site Safety Operations Plan (SWD Project Number A25-003.01). Prepared by Anne Udaloy. July 9.

Table 1. List of Emergency Contacts

CONTACT	NAME	TELEPHONE WORK	CELL (C)
Ambulance	Emergency	911	
	Island Emergency Care Inc. (Non-emergency Vashon Ambulance Service)	206-463-9673	206-463-9673 (C)
Hospital	Highline Community Hospital - Burien	206-244-9970	
Vashon Health Center		206-463-3671	
Poison Control Center		800-732-6985	
Police	King County Sheriff	911	
Fire Department	King County	911	
National Response Center		800-424-8802	
King County Department of Natural Resources and Parks, Solid Waste Division	Laura Belt (PM) Ann Holmes Tom Theno Jim Scarr (Safety Officer)	206-296-8485 206-296-4424 206-296-8483 206-296-0497	206-683-5591(C) 206-999-5789(C)
King County Department of Natural Resources and Parks, Water & Land Division	Sevin Bilir (Site Hydrogeologist) Dan T Smith (Stream Gager) Dave Funke (Smith's Supervisor) Eric Ferguson (Hydrogeologist) Kyle Comanor (Hydrologist) Jim Simmonds (Bilir's Supervisor) Reception Desk 6th Floor	206-296-8029 206-296-8007 206-296-8066 206-263-6512 206-684-1272 206-296-1986 206-296-0192	206-437-8616 206-291-7173

Appendix A

GENERAL SAFE WORK PRACTICES

Field operations for this project shall be conducted in accordance with the minimum safety practices described below required for KC employees.

SAFETY PRACTICES FOR FIELD PERSONNEL

1. Eating, drinking, chewing gum or tobacco, smoking, or any practice that increases the probability of hand-to-mouth transfer and ingestion of materials is prohibited in any area where the possibility of contamination exists.
2. Hands must be thoroughly washed when leaving a contaminated or suspected contaminated area before eating, drinking, or any other activities.
3. Contaminated protective equipment shall not be removed from the work area until it has been properly decontaminated or containerized on site.
4. Avoid activities which may cause dust. Removal of materials from protective clothing or equipment by blowing, shaking, or any means which may disperse materials into the air is prohibited.
5. Emergency communications shall be prearranged in case unexpected situations arise. Team members should stay close enough to assist each other in the event of any emergency.
6. Personnel should be cautioned to inform each other of subjective symptoms of chemical exposure such as headache, dizziness, nausea, and irritation of the respiratory tract.
7. At sites with known or suspected contamination, appropriate work areas for field personnel support, contaminant reduction, and exclusion will be designated and maintained.
8. KC field personnel are to be thoroughly briefed on the anticipated hazards, equipment requirements, safety practices, emergency procedures, and communications methods.
9. All KC field vehicles shall contain a first aid kit and multipurpose portable fire extinguisher.
10. Field personnel are specifically prohibited from entering into excavations, trenches, or other confined spaces deeper than 4 feet. Unattended boreholes must be properly covered or otherwise protected.

Appendix B

HEALTH AND SAFETY EQUIPMENT CHECKLIST

✧ THE FOLLOWING SAFETY EQUIPMENT IS REQUIRED ON YOUR JOB SITE ✧

☐	Photoionization Detector or Flame Ionization Detector : (If drilling)	
☐	Combustible Gas Detector : (If drilling)	Gas-Tech NP-304
☐	Oxygen Indicator : (If drilling)	Gas-Tech NP-304
☐	Draeger/Sensidyne Pump and Detector tubes : (If drilling)	
☐	Respirator : (If drilling)	Half-face with organic vapor cartridges.
☒	Protective Clothing :	Coveralls, if desired.
☒	Chemical Protective Gloves :	Nitrile, minimum 4-mil.
☒	Decontamination Equipment :	*Hand soap, water, paper towels.*
☒	Steel-toed Boots :	use when appropriate
☐	Disposable Boot Covers	
☒	Hearing Protection :	use when appropriate
☒	Safety Glasses :	use when appropriate
☒	Hard Hat :	use when appropriate
☐	Caution Tape, Traffic Cones, or Barriers	
☐	Emergency Eye Wash Fountain	
☒	Fist Aid Kit :	located in KC field vehicle
☒	Fire Extinguisher :	located in KC field vehicle
☒	Drinking Water	
☒	Rain Gear	use when appropriate
☐		

PLAN APPROVALS

	Signature	Date
Field Geologist – Sevin Bilir		10/7/06
SWD Safety Officer – Jim Scarr		10/5/06
Project Manager –Laura Belt		10/9/06

Appendix C

HIGHLINE MEDICAL GROUP

10030
SW 210th Street
Vashon, WA
98070

Vashon Health Center

206.463.3671

Hours & Appointments

For urgent Care

- Welcome to VHC
- *In an Emergency- call 911*
- Hours & Appointments
- Provider Profiles
- A History of VHC
- Sunrise Ridge

VHC's Regular Hours of Operation are:
Monday: 8:30 a.m.--5:00 p.m.
Tuesday: 8:30 a.m.--5:00 p.m.
Wednesday: 8:30 a.m.--7:00 p.m.
Thursday: 8:30 a.m.--5:00 p.m.
Friday: 8:30 a.m.--5:00 p.m.
Saturday: 8:30 a.m.--12:00 a.m., 1:00 p.m.--4:00 p.m.
Sunday: Closed

During Regular Hours
Call 463-3671 to make an appointment.

After Regular Hours
Call 463-3671. Listen to the full recording to hear all your options. There are two consulting nurses, one for Group Health patients, and one for all other patients. You will need to speak with the appropriate consulting nurse for advice.

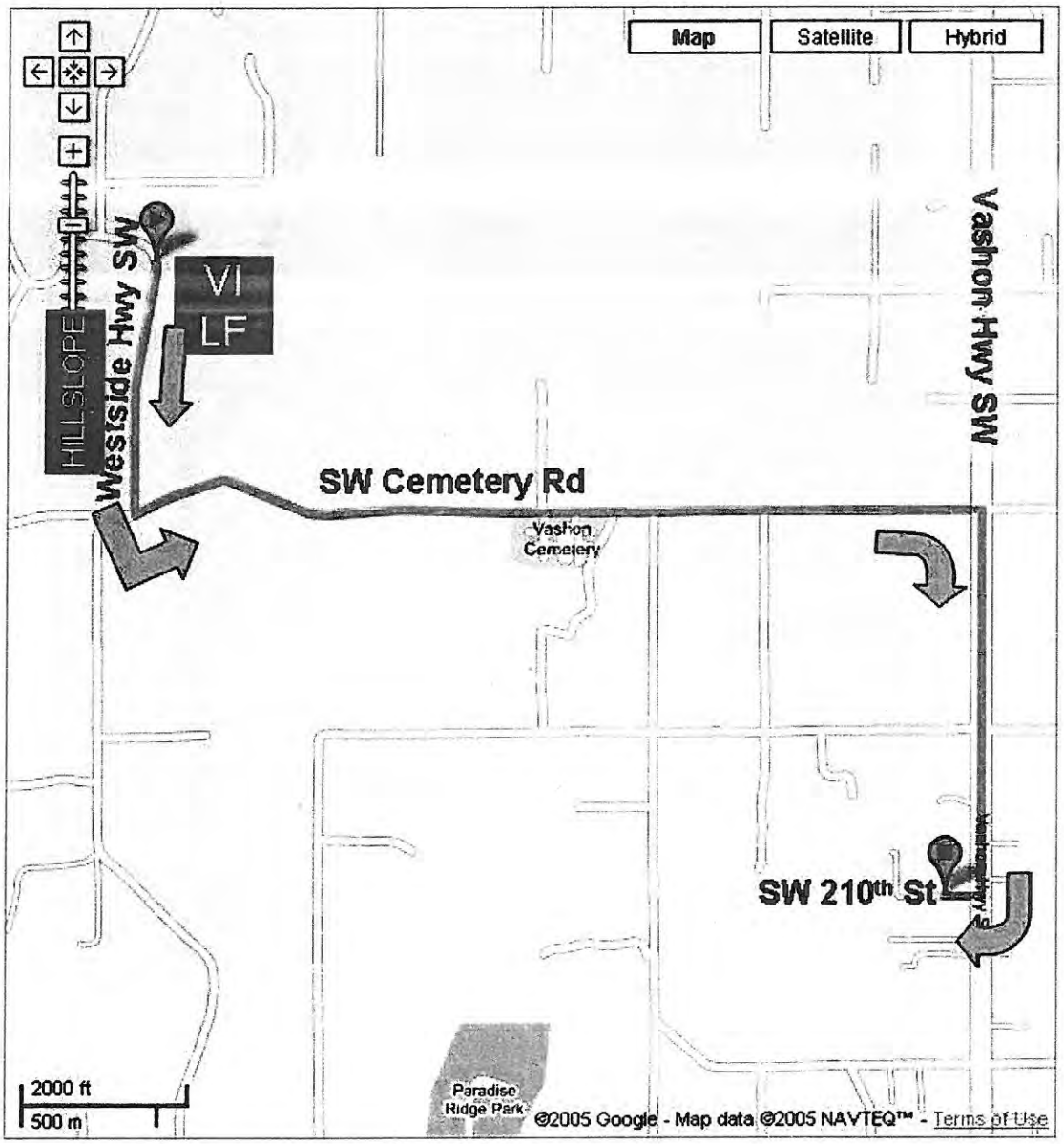
Urgent Care
Call 463-3671. Listen to the full recording to hear all your options. There are two consulting nurses, one for Group Health patients, and one for all other patients. You will need to speak with the appropriate consulting nurse for advice.

For urgent Care

Directions to Vashon Health Center from VILF/Transfer Station

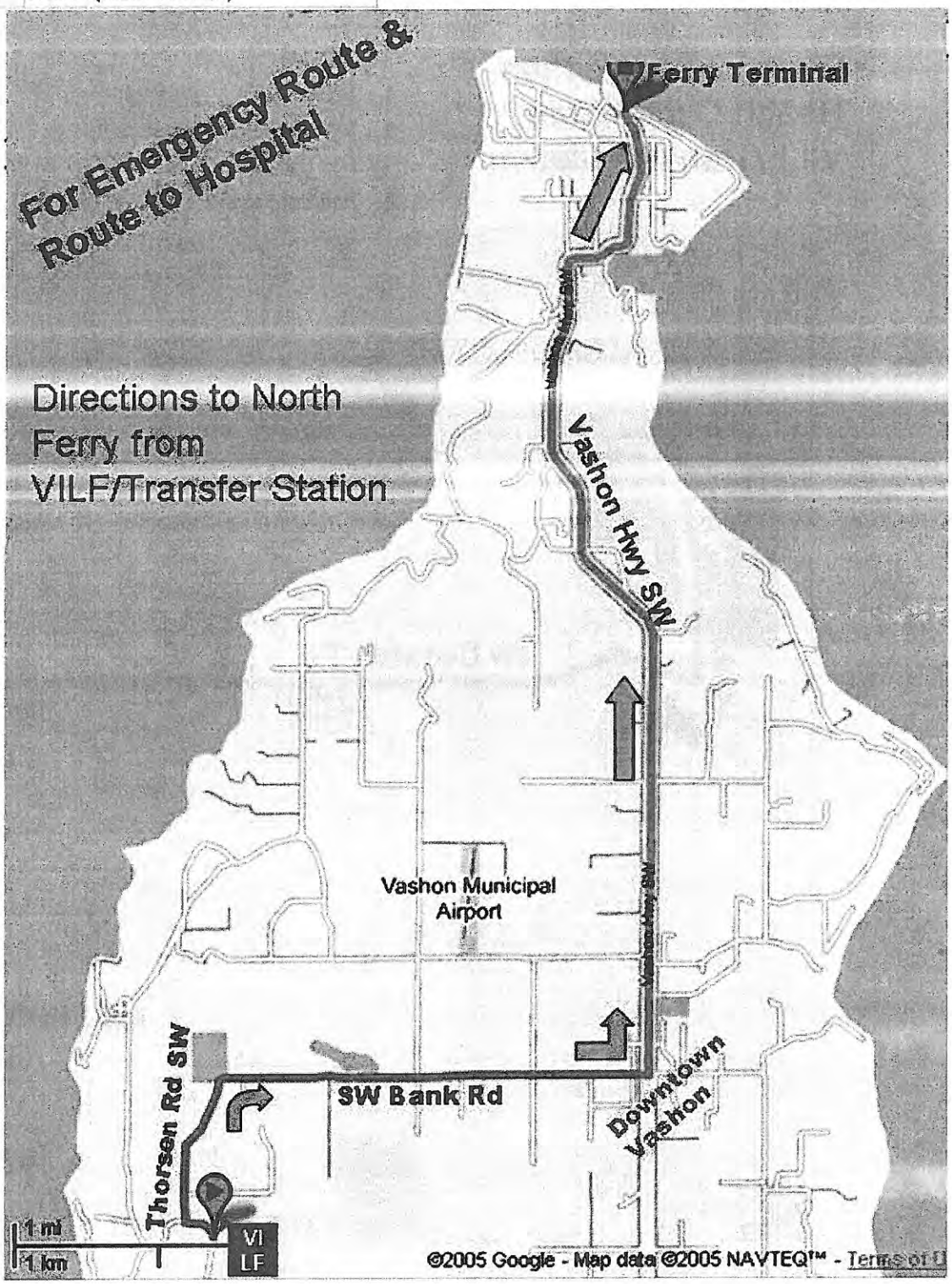
Start address:	18910 Westside Hwy SW, Vashon, WA 98070
End address:	10030 SW 210th St Vashon, WA 98070
Distance:	3.5 mi (about 9 mins)

1. **Go south on Westside Hwy SW** - go **0.6 mi**
2. Turn **left** at **SW Cemetery Rd** - go **2.0 mi**
3. Turn **right** at **Vashon Hwy SW** - go **0.9 mi**
4. Turn **right** at **SW 210th St** - go **0.1 mi**



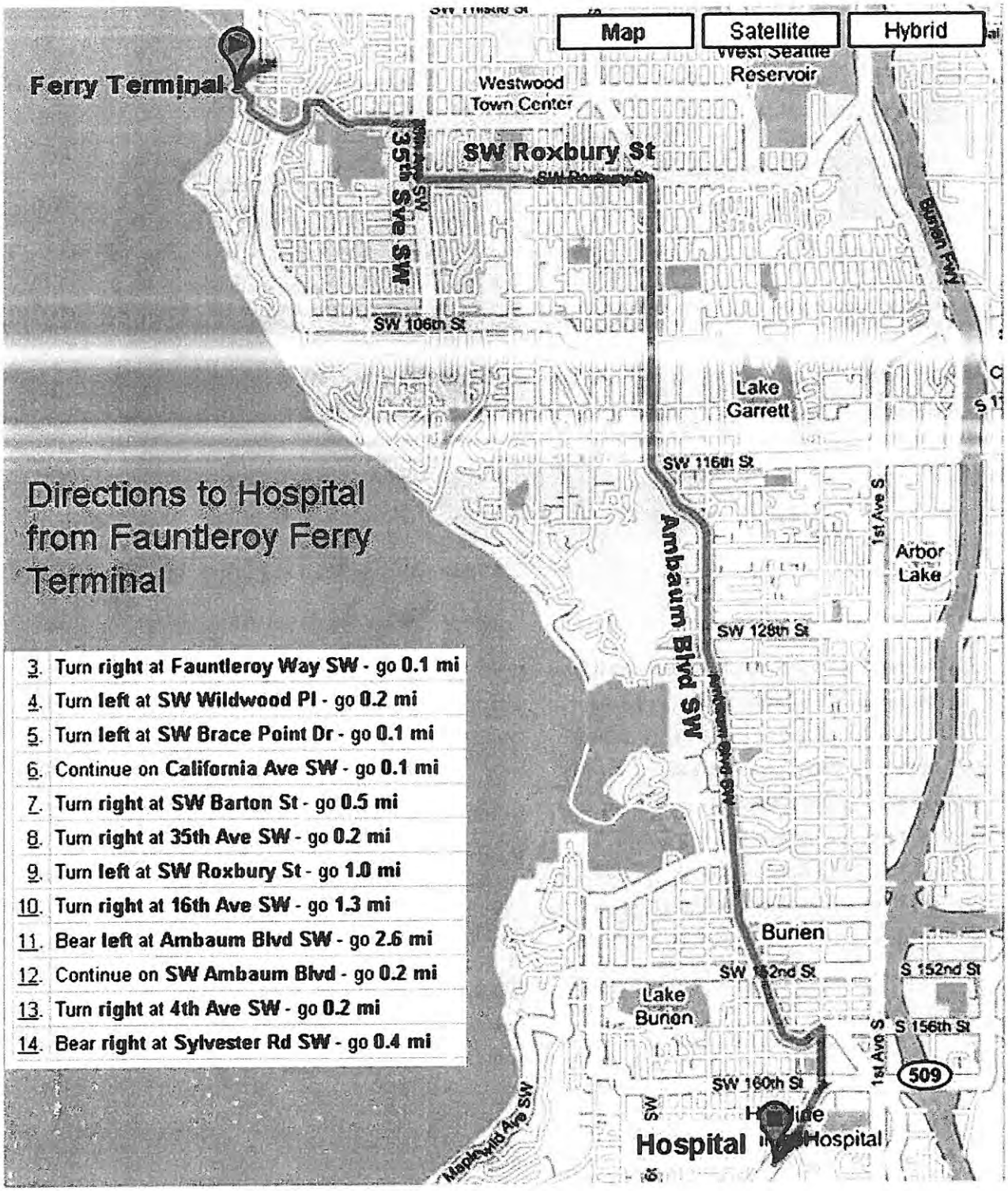
Start address:	18910 Westside Hwy SW Vashon, WA 98070
End address:	SW Bunker Trl & Vashon Hwy SW, Vashon, WA 98070
Distance:	7.2 mi (about 15 mins)

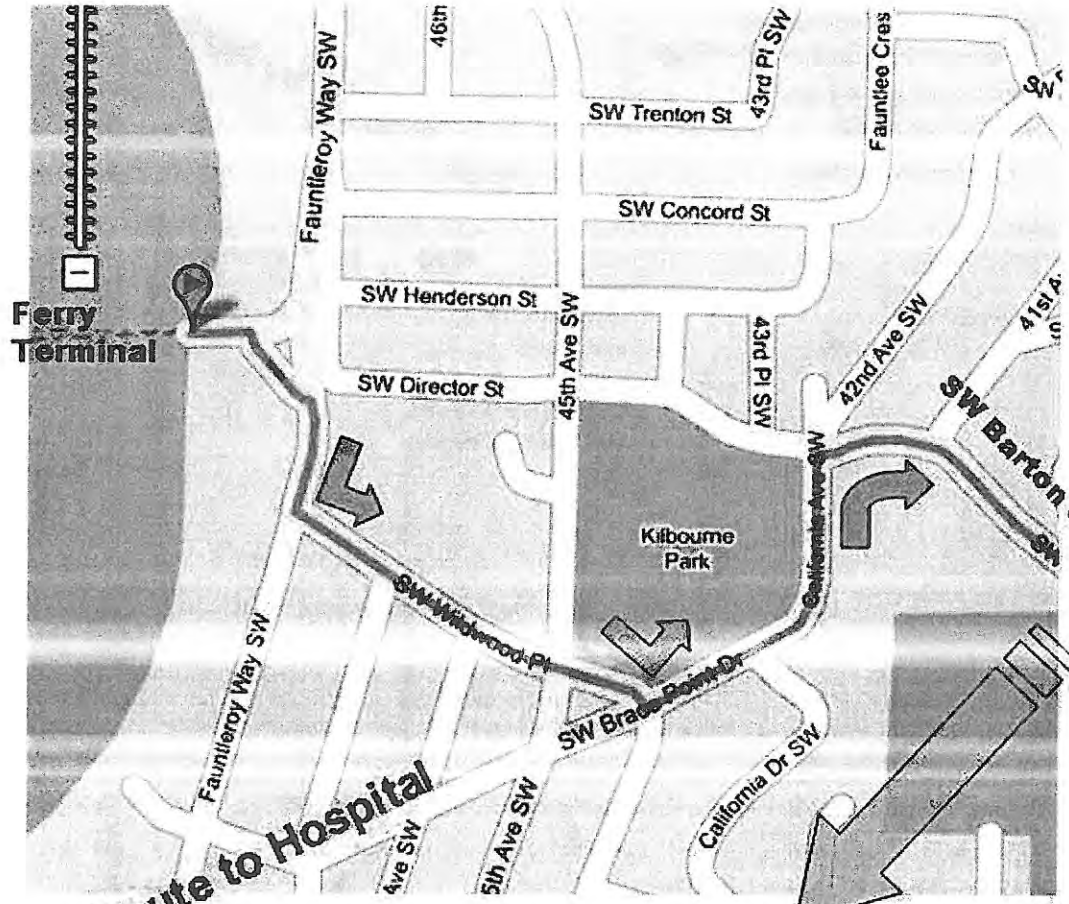
1. **Go north on Westside Hwy SW** - go **0.2 mi**
2. Turn **right** at **Thorsen Rd SW** - go **0.6 mi**
3. Continue on **SW Bank Rd** - go **1.9 mi**
4. Turn **left** at **Vashon Hwy SW** - go **4.5 mi**

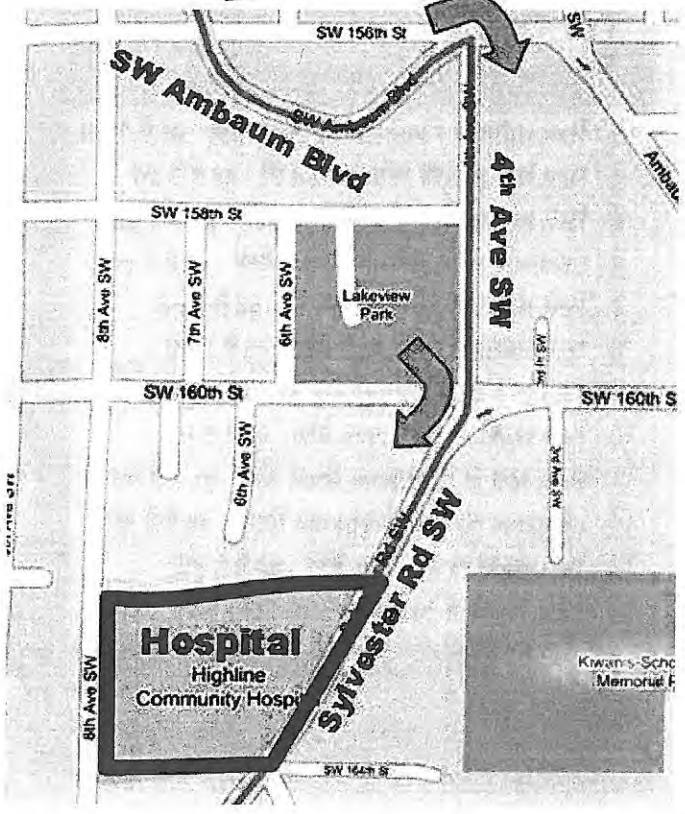


For Route to Hospital

Start address:	SW Barton St & Fauntleroy- Southworth Fry, Seattle, WA 98136
End address:	16521 Sylvester Rd SW Seattle, WA 98166
Distance:	7.1 mi (about 15 mins)

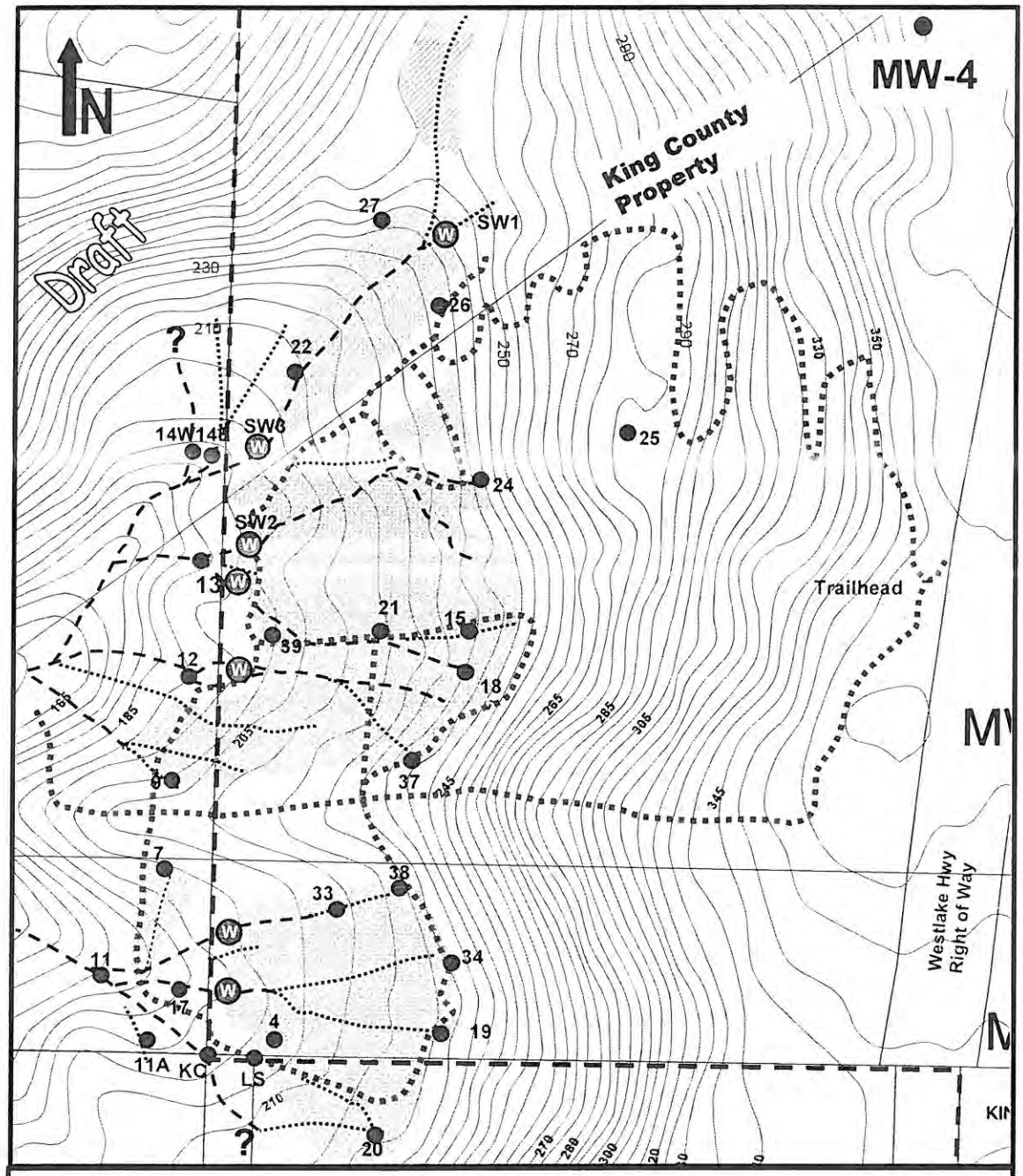






3.	Turn **right** at **Fauntleroy Way SW** - go **0.1 mi**
4.	Turn **left** at **SW Wildwood Pl** - go **0.2 mi**
5.	Turn **left** at **SW Brace Point Dr** - go **0.1 mi**
6.	Continue on **California Ave SW** - go **0.1 mi**
7.	Turn **right** at **SW Barton St** - go **0.5 mi**
8.	Turn **right** at **35th Ave SW** - go **0.2 mi**
9.	Turn **left** at **SW Roxbury St** - go **1.0 mi**
10.	Turn **right** at **16th Ave SW** - go **1.3 mi**
11.	Bear **left** at **Ambaum Blvd SW** - go **2.6 mi**
12.	Continue on **SW Ambaum Blvd** - go **0.2 mi**
13.	Turn **right** at **4th Ave SW** - go **0.2 mi**
14.	Bear **right** at **Sylvester Rd SW** - go **0.4 mi**

Appendix D


N
Draft
MW-4
King County Property
Trailhead
Westlake Hwy Right of Way
SW1
SW2
SW6
14W14E
11A
KC
LS
Vashon Island Landfill/Transfer Station Hillslope : Site Sketch
Dated 10/5/06
Wet area
Data location
Trail
30 0 30 60 Feet
KC Property line
Intermittent Streams
Weir
Monitoring well

Appendix E

SIGNATURE PAGE

SITE: Vashon Island Landfill / Transfer Station Hillslope	**PROJECT NUMBER:** G13580

NOTE: All KC personnel are to understand and comply with specific practices and guidelines as described in the Health & Safety Policy Manual regarding field safety and health hazards. This Health & Safety Plan has been developed for the use of KC personnel only. KC makes this plan available for review by other personnel on a work site; however, this plan does not cover the employees of any other employer on the work site. Nor does this cover the hazards from typical activities carried out by KC personnel in their regular job description.

SIGN-OFF: I have read and understand the attached Health & Safety Plan and attached General Safe Work Practices (Appendix A), and agree to comply with the requirements described within:

NAME	TITLE	DATE

Appendix E

(continued)

NAME	TITLE	DATE

Appendix B.2

***Weirs, Water Sampling, BMPs, & Trail Maintenance*. April 2007**

Health & Safety Plan

Vashon Island Landfill & Transfer Station Hillslope

Weirs, Water Sampling, BMPs & Trail Maintenance

April 12, 2007

FINAL

Version2

King County

Department of Natural Resources and Parks
Water and Land Resources Division
Science Section
King Street Center, KSC-NR-0600
201 South Jackson Street, Suite 600
Seattle, WA 98104
206-296-6519 TTY Relay: 711
dnr.metrokc.gov/wlr

Health & Safety Plan:
Vashon Island Landfill & Transfer Station Hillslope

Weirs, Water Sampling, BMPs &Trail Maintenance

Prepared for:

Engineering Services
Solid Waste Division
King County Department of Natural Resources and Parks

Submitted by:

Groundwater Group
Water & Land Resources Division
King County Department of Natural Resources and Parks

King County
Department of Natural Resources and Parks
Water and Land Resources Division
201 S Jackson St. Ste 600
Seattle, WA 98104
(206) 296-6519

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Appendices

1.0. PROJECT INFORMATION

SITE: **Vashon Landfill / Transfer Station Hillslope**

DATE: Original September 19, 2006
Current Version2 April 12, 2007

PREPARED BY: Sevin Bilir

LOCATION: West of landfill (18910 Westside Hwy SW)
Vashon Island, WA

PROJECT NUMBER: G13580

PROJECT MANAGER: Laura Belt, SWD

PROJECT OBJECTIVES:	Conduct hydrologic and hydrogeologic field investigations on the hillslope.
SCOPE OF WORK:	**Install weirs and surface water samplers; measure flow from weirs; implement BMPS for stream pollutants; conduct trail maintenance and sample water from weirs and samplers. This HSP does not cover drilling activities.**

ORIGINAL START DATE:	September 18, 2006	**COMPLETION DATE:**	September 1, 2007
CURRENT VERSION START DATE	April 12, 2007	**COMPLETION DATE:**	September 1, 2007

Note: This Health & Safety Plan must be re-evaluated and updated annually or when site conditions or scope of work changes.

2.0. FACILITY DESCRIPTION & BACKGROUND

TYPE OF FACILITY: Undeveloped land, west of an inactive municipal solid waste landfill.

SIZE: Approximately 140 acres. **BUILDINGS/STRUCTURES:** none

ACCESS: Trail, maintained annually.

TOPOGRAPHY: Steep to gradual highly vegetated terrain ranging from about 180 to 400 feet above mean sea level.
GENERAL GEOLOGIC/HYDROLOGIC SETTING: Site soils consist of glacially derived sediments; sand and gravel, silt, and clay. Groundwater occurs as perched saturated zones seeping out of the hillside. Waterways emanate from these seepage areas and flow to the west.
SITE STATUS: Investigatory.
PREVIOUS HAZARDOUS MATERIAL/WASTE STORAGE AND DISPOSAL METHOD(S): N/A
SITE HISTORY: Hillslope appears to have had illegal dumping of garbage near the road in past. Site investigations by KC SWD on the hillslope have been ongoing for about 5 years. A trail was constructed in recent years to improve access to sampling weirs.
SPECIAL CONDITIONS/COMMENTS: None.

3.0. WASTE TYPE (S) / CHARACTERISTICS

ARE HAZARDOUS SUBSTANCES KNOWN TO HAVE BEEN STORED/SPILLED ON SITE? ☐ YES ☒ NO

SOURCE(S) OF INFORMATION: 1996 Annual Groundwater Data Evaluation Report, February 1997; Landfill Monitoring Test Results, March 5, 1998. (UES, 2003).

COMPOUNDS POSING HEALTH CONCERN:

	Maximum concentration Encountered or Anticipated			Depth
Element/Compound	Leachate (ppb)	Groundwater (ppb)	Landfill Gas (%)	(ft below grade)
Arsenic		300 (dissolved)		
Methane			36 (in waste)	
Vinyl Chloride		35		150

Note: Recent data shows surface water concentrations of vinyl chloride to be 0.002 ppb (near detection limit).

SPECIAL CONSIDERATIONS/COMMENTS:

- Site groundwater and leachate contains arsenic in concentrations exceeding primary drinking water standards.
- Landfill gas contains methane, posing an explosion hazard. Landfill gas will be considered a potential explosion hazard during drilling activities in the subsurface.
- Concentrations of volatile organic compounds in landfill gas are not known; therefore, landfill gas will be considered a potential inhalation hazard during drilling activities in the subsurface.
- Landfill gas contains carbon dioxide; therefore, all confined or potentially confined spaces will be considered asphyxiation hazards.

4.0. HAZARD EVALUATION

CHEMICAL:

- Ingestion of arsenic can cause chronic and acute illness.
- Inhalation of landfill gas can cause nausea, acute and chronic illness.
- Oxygen deficiency can cause asphyxiation.
- Vinyl chloride is a class A carcinogen, pathways are absorption, inhalation, and ingestion. Effects can be acute and chronic. Inhalation can cause immediate dizziness and/or nausea.

PHYSICAL:

- Slip, trip, and fall hazards associated with construction sites and working on undeveloped terrain are potential hazards.
- All confined or potentially confined spaces will be considered asphyxiation hazards.
- Monitor for heat stress when ambient temperatures exceed 75 degrees Fahrenheit.
- Workers are responsible for being aware of all physical hazards associated with the worker's typical duties.

OTHER:

- Be aware of traffic on County roads.
- Check work areas for transient inhabitants.
- Buddy system is preferred. If working alone, worker should report to project personnel (Sevin Bilir or Laura Belt) of planned activities. In addition, when leaving the site, that worker should call in to project contact to report that they are no longer on the hillslope.

5.0. OPERATIONS PLAN

VICINITY MAP / EMERGENCY ROUTE / ROUTE TO HOSPITAL:	See Appendix C
SITE SKETCH:	See Appendix D
UNDERGROUND UTILITY CLEARANCE PERFORMED ON:	Not performed due to undeveloped land.

FIELD METHOD(S): Installation of weirs, surface water samplers, BMPs and conducting trail maintenance involve use of shovels, moving of wet soil, fallen tree debris, and rock. Use of small battery or gas-operated tools may be used. Sampling of water from weirs and samplers and measuring of flow at weirs will follow procedures in the SWD QAPP. (KC SWD, 2006)

COMMENTS: NO CONFINED SPACE ENTRY SHALL BE PERMITTED UNDER THIS SAFETY PLAN.

6.0. SAFETY & EQUIPMENT PROCEDURES

INITIAL LEVEL OF PROTECTION: ☐ C ☒ D

REQUIRED PERSONAL PROTECTIVE EQUIPMENT: Standard Level D safety equipment. Protective clothing should be used as applicable per activity. Protective gloves should be worn when conducting invasive work into the subsurface or streams. For activities contracted to non-SWD personnel, their proper work and safety procedures should be followed for the duties they typically perform.
AIR MONITORING EQUIPMENT AND PROCEDURES: No air monitoring will be conducted, unless field work involves drilling into the subsurface. This activity is covered under another HSP specific for drilling on the hillslope.
ACTION LEVELS: N/A
COMMUNICATIONS: Immediately communicate questionable site conditions to project managers and the SWD Safety Officer at earliest reasonable opportunity.
DECONTAMINATION PROCEDURES: Wash face and hands before eating or leaving site.

7.0. KEY PROJECT PERSONNEL

SITE WORK TEAM (name/responsibility)		1. Sevin Bilir; KC WLRD Hydrogeologist	
2. King County WLRD personnel		3. King County SWD personnel	
4. King County Health Dept. personnel		5. State of WA Dept. of Ecology personnel	
6. King County DOT personnel		7. WCC Crew personnel	
INITIAL ENTRY BRIEFING DATE:	DRAFT Sept 18, 2006	LOCATION:	KSC, WLRD office
CURRENT VERSION BRIEFING DATE:	Start of work, daily.	LOCATION:	Field Site

SPECIAL CONDITIONS (e.g., work schedule or limitations): Work is to be conducted during daylight hours. Personnel need to be off the hillslope by 4:30 pm.

8.0. EMERGENCY PROCEDURES

ACUTE EXPOSURE SYMPTOMS(S):	FIRST AID:
Eyes – slight to severe irritation.	Flush with water for 15 minutes.
Skin – irritation, redness, edema, drying.	Wash with soap and water.
Respiratory – dizziness, irritation of eyes, nose, throat vomiting, bluish skin, CNS effects.	Remove to fresh air.
Ingestion.	Call physician.

NEAREST HOSPITAL / EMERGENCY MEDICAL CENTER (see attached map & Table 1)

Highline Medical Center (HMC); 16251 Sylvester Rd. S.W., Burien, WA. 98166

EMERGENCY ROUTE: (see attached map in Appendix C)

From the landfill travel north on Westside HWY:

- Turn right onto Thorsen Rd SW.
- Turn left onto Vashon HWY SW. Continue north to the ferry terminal. Proceed on to the Ferry going to Fauntleroy.
- Turn right onto Fauntleroy Way SW.
- Turn left onto SW Wildwood Pl.
- Turn left at SW Brace Point Dr. Continue on California Ave SW.
- Turn right at SW Barton St.
- Turn Right at 35th Ave SW.
- Turn left at SW Roxbury St.
- Turn right at 16th Ave SW. Bear left at Ambaum Blvd SW; continue on Ambaum Blvd SW.
- Turn right at 4th Ave SW. Bear right at Sylvester Rd SW. The hospital is on the right.

EMERGENCY PHONE NUMBERS (See Table 1)

Ambulance, Police, Fire	911
Hospital (HMC)	206-244-9970
Emergency Dept. at Hospital (HMC) --(messages checked immediately)	206-431-5314
Fire Department	911

9.0. REFERENCES

King County Solid Waste Division (KC SWD). 1999 (Revised 2005). Quality Assurance Project Plan for Environmental Monitoring for King County Solid Waste Facilities. Prepared by Engineering Services Section. Draft.

Udaloy Environmental Services (UES). 2003. Site Safety Operations Plan (SWD Project Number A25-003.01). Prepared by Anne Udaloy. July 9.

Table 1. List of Emergency Contacts

CONTACT	NAME	TELEPHONE WORK	CELL (C)
Ambulance	Emergency	911	
	Island Emergency Care Inc. (Non-emergency Vashon Ambulance Service)	206-463-9673	206-463-9673 (C)
Hospital	Highline Medical Center - Burien	206-244-9970	
Vashon Health Center		206-463-3671	
Poison Control Center		800-732-6985	
Police	King County Sheriff	911	
Fire Department	King County	911	
National Response Center		800-424-8802	
King County Department of Natural Resources and Parks, Solid Waste Division	Laura Belt (PM)	206-296-8485	206-683-5591(C)
	Ann Holmes	206-296-4424	206-999-5789(C)
	Tom Theno	206-296-8483	
	Jim Scarr (Safety Officer)	206-296-0497	
King County Department of Natural Resources and Parks, Water & Land Division	Sevin Bilir (Site Hydrogeologist)	206-296-8029	206-437-8616
	Dan T Smith (Stream Gager)	206-296-8007	206-291-7173
	Dave Funke (Smith's Supervisor)	206-296-8066	
	Eric Ferguson (Hydrogeologist)	206-263-6512	
	Kyle Comanor (Hydrologist)	206-684-1272	
	Jim Simmonds (Bilir's Supervisor)	206-296-1986	
	Reception Desk 6th Floor	206-296-0192	
	Paul Adler (WLRD WCC Contact)	206-296-8396	206-423-3626
	Justin Zarzezney (WCC Supervisor)		206-914-9445

Appendix A

GENERAL SAFE WORK PRACTICES

Field operations for this project shall be conducted in accordance with the minimum safety practices described below required for KC employees.

SAFETY PRACTICES FOR FIELD PERSONNEL

1. Eating, drinking, chewing gum or tobacco, smoking, or any practice that increases the probability of hand-to-mouth transfer and ingestion of materials is prohibited in any area where the possibility of contamination exists.
2. Hands must be thoroughly washed when leaving a contaminated or suspected contaminated area before eating, drinking, or any other activities.
3. Contaminated protective equipment shall not be removed from the work area until it has been properly decontaminated or containerized on site.
4. Avoid activities which may cause dust. Removal of materials from protective clothing or equipment by blowing, shaking, or any means which may disperse materials into the air is prohibited.
5. Emergency communications shall be prearranged in case unexpected situations arise. Team members should stay close enough to assist each other in the event of any emergency.
6. Personnel should be cautioned to inform each other of subjective symptoms of chemical exposure such as headache, dizziness, nausea, and irritation of the respiratory tract.
7. At sites with known or suspected contamination, appropriate work areas for field personnel support, contaminant reduction, and exclusion will be designated and maintained.
8. KC field personnel are to be thoroughly briefed on the anticipated hazards, equipment requirements, safety practices, emergency procedures, and communications methods.
9. All KC field vehicles shall contain a first aid kit and multipurpose portable fire extinguisher.
10. Field personnel are specifically prohibited from entering into excavations, trenches, or other confined spaces deeper than 4 feet. Unattended boreholes must be properly covered or otherwise protected.

Appendix B

Health & Safety Plan : Weirs, Water Sampling, BMPs, and Trail Maintenance
Dated April 12, 2007

HEALTH AND SAFETY EQUIPMENT CHECKLIST

✧ *THE FOLLOWING SAFETY EQUIPMENT IS REQUIRED ON YOUR JOB SITE* ✧

☐	Photoionization Detector or Flame Ionization Detector : (If drilling)	
☐	Combustible Gas Detector : (If drilling)	Gas-Tech NP-304
☐	Oxygen Indicator : (If drilling)	Gas-Tech NP-304
☐	Draeger/Sensidyne Pump and Detector tubes : (If drilling)	
☐	Respirator : (If drilling)	Half-face with organic vapor cartridges.
☒	Protective Clothing :	Coveralls, if desired.
☒	Chemical Protective Gloves :	Nitrile, minimum 4-mil.
☒	Decontamination Equipment :	*Hand soap, water, paper towels.*
☒	Steel-toed Boots :	use when appropriate
☐	Disposable Boot Covers	
☒	Hearing Protection :	use when appropriate
☒	Safety Glasses :	use when appropriate
☒	Hard Hat :	use when appropriate
☐	Caution Tape, Traffic Cones, or Barriers	
☐	Emergency Eye Wash Fountain	
☒	Fist Aid Kit :	located in KC field vehicle
☒	Fire Extinguisher :	located in KC field vehicle
☒	Drinking Water	
☒	Rain Gear	use when appropriate
☐		

PLAN APPROVALS

Field Geologist – Sevin Bilir		4/12/07
SWD Safety Officer – Jim Scarr		04/12/07
Project Manager –Laura Belt		4/12/07
	Signature	**Date**

Appendix C

Vashon Health Center

206.463.3671

HIGHLINE
MEDICAL
GROUP

10030
SW 210th Street
Vashon, WA
98070

Hours & Appointments

For urgent Care

- Welcome to VHC
- ***In an Emergency- call 911***
- Hours & Appointments
- Provider Profiles
- A History of VHC
- Sunrise Ridge

VHC's Regular Hours of Operation are:
Monday: 8:30 a.m.--5:00 p.m.
Tuesday: 8:30 a.m.--5:00 p.m.
Wednesday: 8:30 a.m.--7:00 p.m.
Thursday: 8:30 a.m.--5:00 p.m.
Friday: 8:30 a.m.--5:00 p.m.
Saturday: 8:30 a.m.--12:00 a.m., 1:00 p.m.--4:00 p.m.
Sunday: Closed

During Regular Hours
Call 463-3671 to make an appointment.

After Regular Hours
Call 463-3671. Listen to the full recording to hear all your options. There are two consulting nurses, one for Group Health patients, and one for all other patients. You will need to speak with the appropriate consulting nurse for advice.

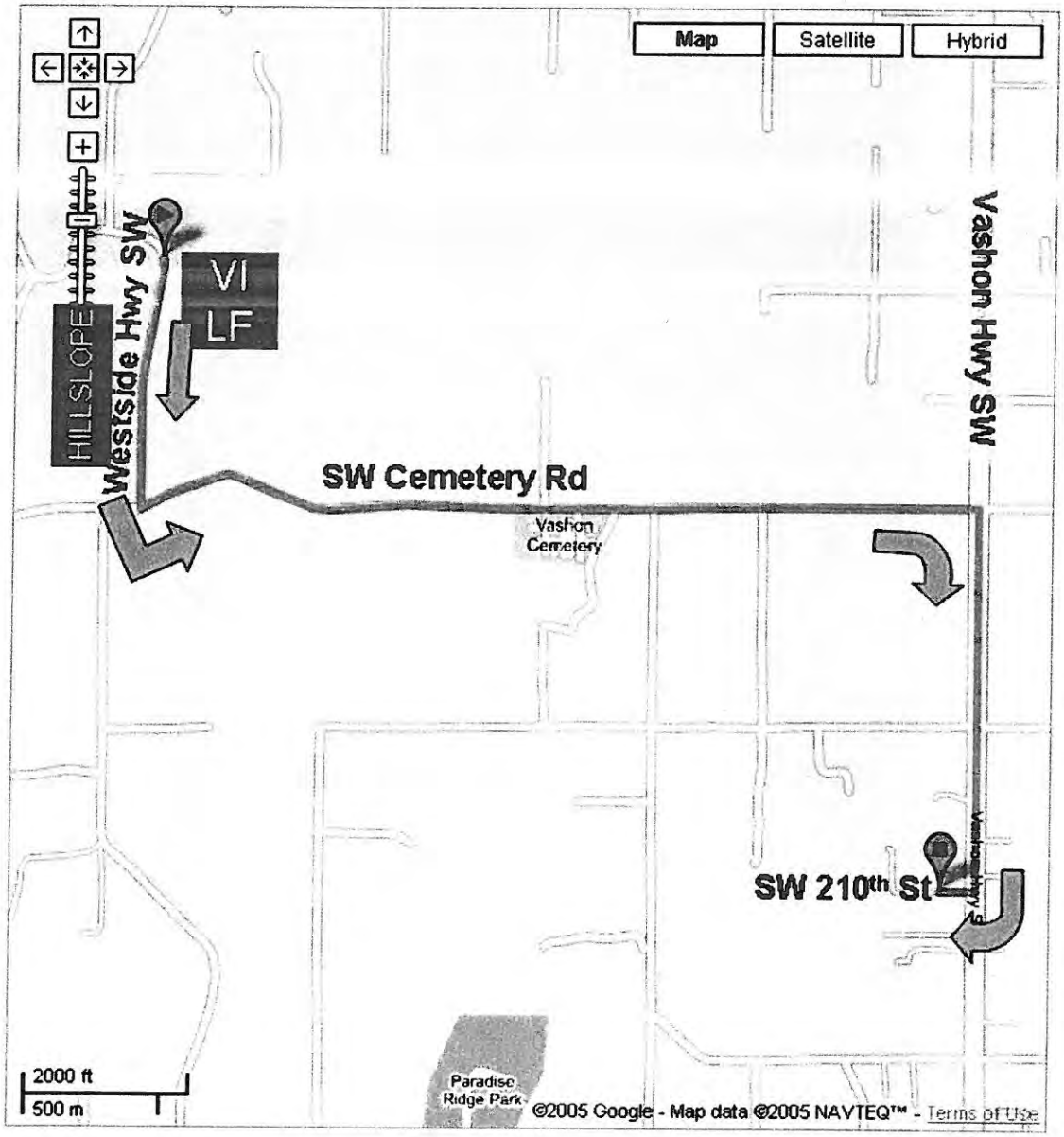
Urgent Care
Call 463-3671. Listen to the full recording to hear all your options. There are two consulting nurses, one for Group Health patients, and one for all other patients. You will need to speak with the appropriate consulting nurse for advice.

For urgent Care

Directions to Vashon Health Center from VILF/Transfer Station

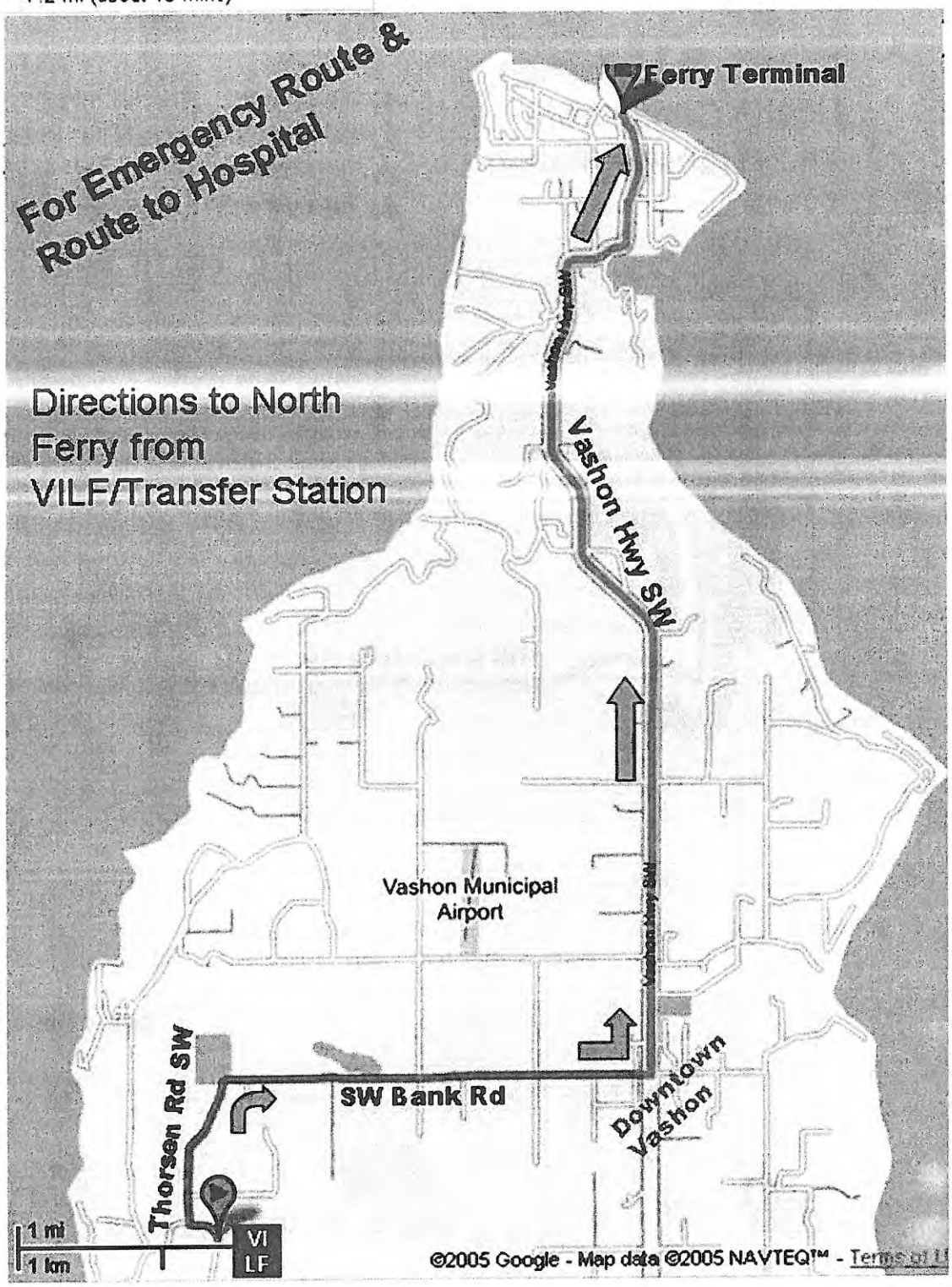
Start address:	18910 Westside Hwy SW, Vashon, WA 98070
End address:	10030 SW 210th St Vashon, WA 98070
Distance:	3.5 mi (about 9 mins)

1. **Go south on Westside Hwy SW** - go **0.6 mi**
2. Turn **left** at **SW Cemetery Rd** - go **2.0 mi**
3. Turn **right** at **Vashon Hwy SW** - go **0.9 mi**
4. Turn **right** at **SW 210th St** - go **0.1 mi**



Start address:	18910 Westside Hwy SW Vashon, WA 98070
End address:	SW Bunker Trl & Vashon Hwy SW, Vashon, WA 98070
Distance:	7.2 mi (about 15 mins)

1. **Go north on Westside Hwy SW** - go **0.2 mi**
2. Turn **right** at **Thorsen Rd SW** - go **0.6 mi**
3. Continue on **SW Bank Rd** - go **1.9 mi**
4. Turn **left** at **Vashon Hwy SW** - go **4.5 mi**

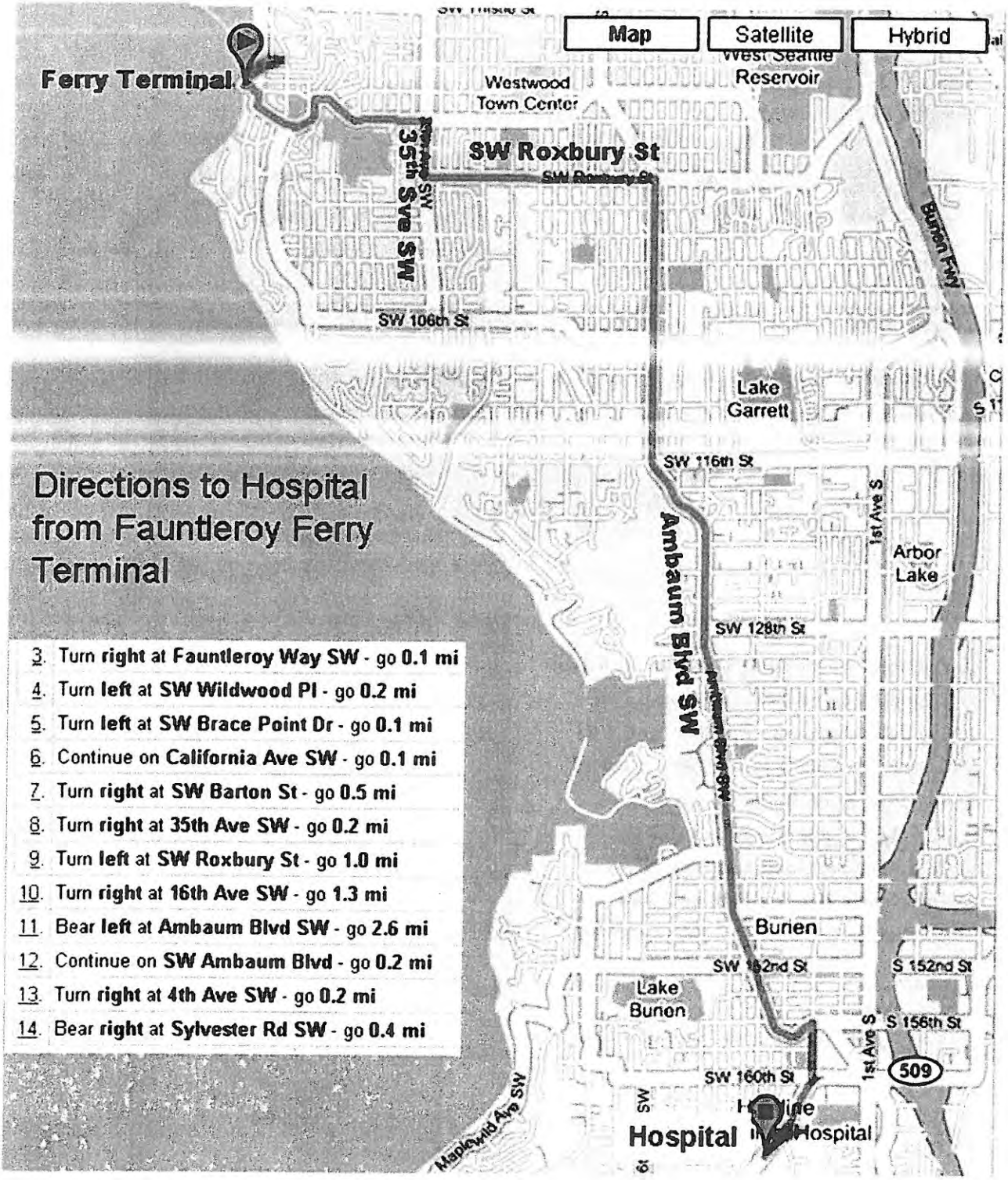


Start address: SW Barton St & Fauntleroy-
Southworth Fry, Seattle, WA 98136

End address: 16521 Sylvester Rd SW
Seattle, WA 98166

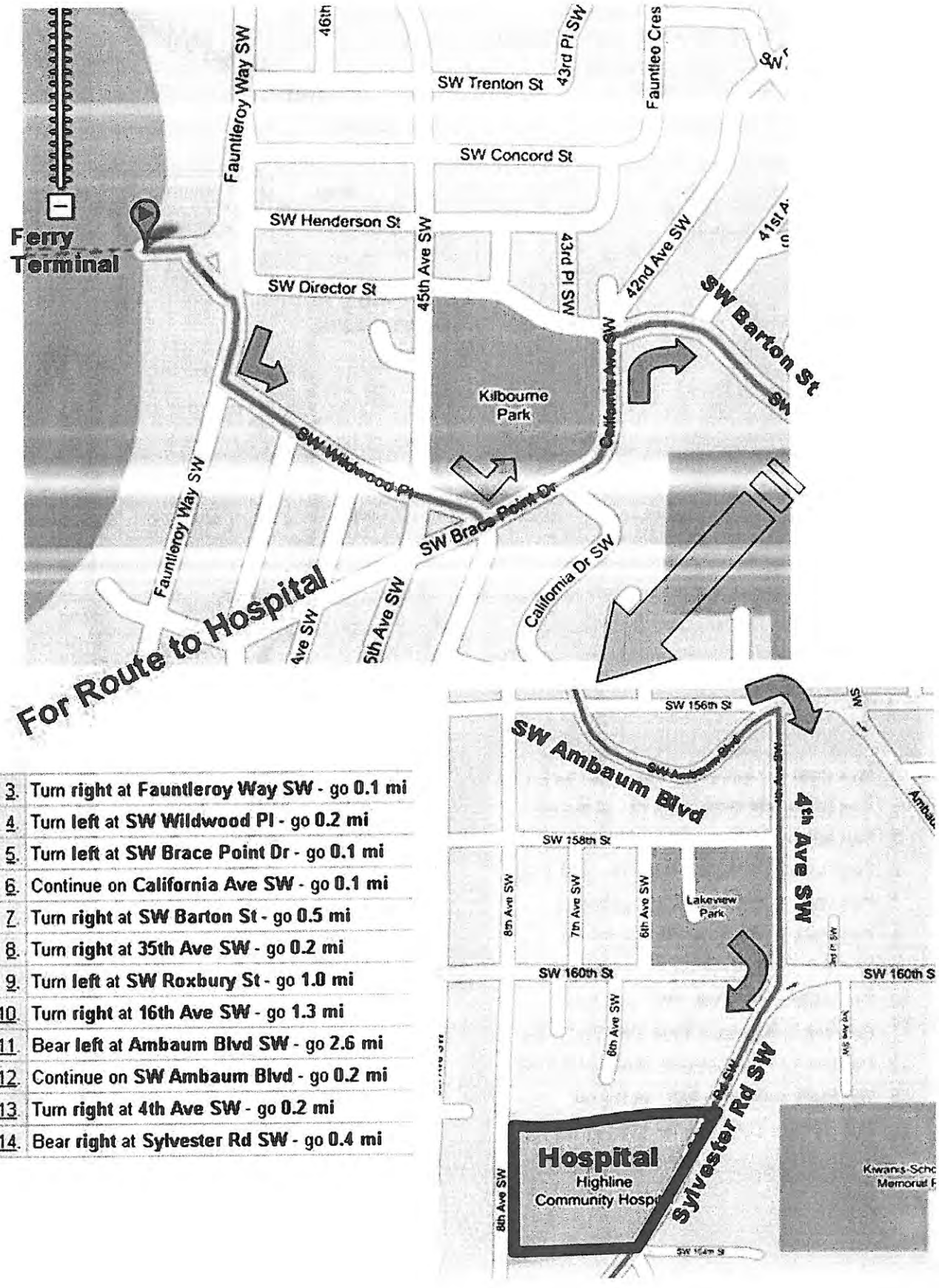
Distance: 7.1 mi (about 15 mins)

For Route to Hospital



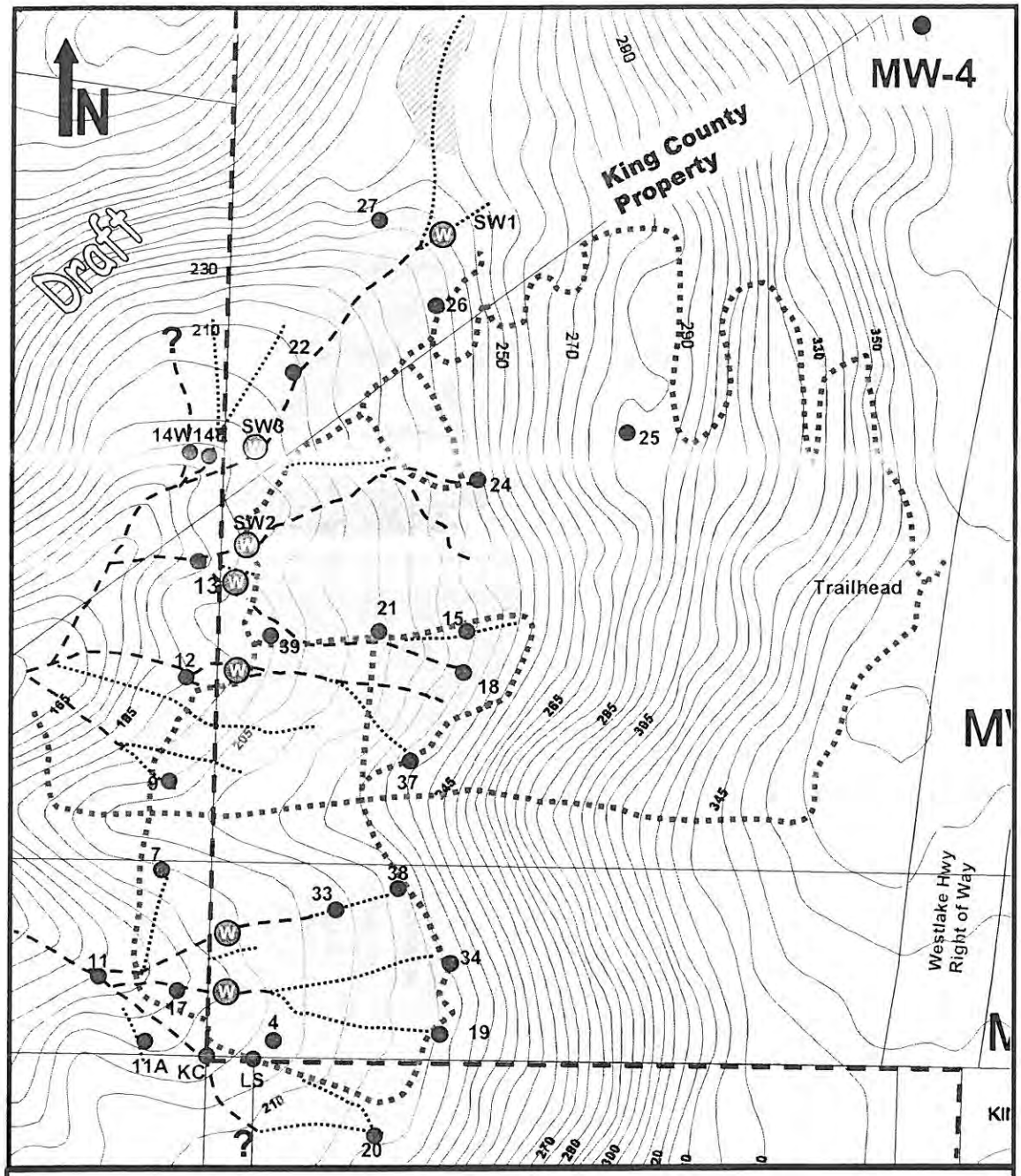
Directions to Hospital from Fauntleroy Ferry Terminal

3. Turn **right** at **Fauntleroy Way SW** - go **0.1 mi**
4. Turn **left** at **SW Wildwood Pl** - go **0.2 mi**
5. Turn **left** at **SW Brace Point Dr** - go **0.1 mi**
6. Continue on **California Ave SW** - go **0.1 mi**
7. Turn **right** at **SW Barton St** - go **0.5 mi**
8. Turn **right** at **35th Ave SW** - go **0.2 mi**
9. Turn **left** at **SW Roxbury St** - go **1.0 mi**
10. Turn **right** at **16th Ave SW** - go **1.3 mi**
11. Bear **left** at **Ambaum Blvd SW** - go **2.6 mi**
12. Continue on **SW Ambaum Blvd** - go **0.2 mi**
13. Turn **right** at **4th Ave SW** - go **0.2 mi**
14. Bear **right** at **Sylvester Rd SW** - go **0.4 mi**



3.	Turn **right** at **Fauntleroy Way SW** - go **0.1 mi**
4.	Turn **left** at **SW Wildwood Pl** - go **0.2 mi**
5.	Turn **left** at **SW Brace Point Dr** - go **0.1 mi**
6.	Continue on **California Ave SW** - go **0.1 mi**
7.	Turn **right** at **SW Barton St** - go **0.5 mi**
8.	Turn **right** at **35th Ave SW** - go **0.2 mi**
9.	Turn **left** at **SW Roxbury St** - go **1.0 mi**
10.	Turn **right** at **16th Ave SW** - go **1.3 mi**
11.	Bear **left** at **Ambaum Blvd SW** - go **2.6 mi**
12.	Continue on **SW Ambaum Blvd** - go **0.2 mi**
13.	Turn **right** at **4th Ave SW** - go **0.2 mi**
14.	Bear **right** at **Sylvester Rd SW** - go **0.4 mi**

Appendix D


N
Draft
MW-4
King County Property
Trailhead
Westlake Hwy Right of Way
SW1
SW2
SW6
14W
14E
27
26
25
24
22
21
15
39
13
12
18
37
38
33
34
19
11
17
7
4
11A
KC
LS
20
Wet area
Data location
Trail
KC Property line
Intermittent Streams
Weir
Monitoring well
30 0 30 60 Feet
Vashon Island Landfill/Transfer Station Hillslope : Site Sketch
Dated 10/5/06

Appendix E

Health & Safety Plan : Weirs, Water Sampling, BMPs, and Trail Maintenance
Dated April 12, 2007

SIGNATURE PAGE

SITE: Vashon Island Landfill / Transfer Station Hillslope	**PROJECT NUMBER:** G13580

NOTE: All KC and WCC personnel are to understand and comply with specific practices and guidelines as described in the Health & Safety Policy Manual regarding field safety and health hazards. This Health & Safety Plan has been developed for the use of KC and WCC personnel only. KC makes this plan available for review by other personnel on a work site; however, this plan does not cover the employees of any other employer on the work site. Nor does this cover the hazards from typical activities carried out by KC personnel in their regular job description.

SIGN-OFF: I have read and understand the attached Health & Safety Plan and attached General Safe Work Practices (Appendix A), and agree to comply with the requirements described within:

NAME	TITLE	DATE

Signatures on File

Appendix E

Health & Safety Plan : Weirs, Water Sampling, BMPs, and Trail Maintenance
Dated April 12, 2007

(continued)

NAME	TITLE	DATE

Appendix B.3

Western Hillslope Sampling Activities. April 2010.

HEALTH & SAFETY PLAN

West Hillslope Sampling Activities

Vashon Island Transfer Station & Closed Landfill

April 2010

FINAL

King County

Department of Natural Resources and Parks
Water and Land Resources Division
Science and Technical Support Section
King Street Center, KSC-NR-0600
201 South Jackson Street, Suite 600
Seattle, WA 98104
http://www.kingcounty.gov/environment/wl

Health & Safety Plan:

West Hillslope Sampling Activities

Vashon Island Transfer Station & Closed Landfill

Prepared for:

Landfill and Environmental Monitoring
Engineering Services
Solid Waste Division
King County Department of Natural Resources and Parks

Submitted by:

Hydrologic Services
Water Quality and Quantity Unit
Scientific and Technical Support Section
Water and Land Resources Division
King County Department of Natural Resources and Parks

King County

Department of Natural Resources and Parks
Water and Land Resources Division
201 S. Jackson St., Ste. 600
Seattle, WA 98104
(206) 296-6519

Table of Contents

Tables

Appendices

1.0. PROJECT INFORMATION

SITE:	Vashon Island Transfer Station & Closed Landfill: West Hillslope		
DATE:	April 2010	PREPARED BY:	Sevin Bilir
LOCATION:	West of landfill (18910 Westside Hwy SW)	PROJECT NUMBER:	G13580
	Vashon Island, WA	PROJECT MANAGER:	Dan, Swope, SWD

PROJECT OBJECTIVES:	Conduct hydrogeologic field investigations on the west hillslope.
SCOPE OF WORK:	**Sample water from weirs, 2-inch monitoring wells, and seep samplers on the west hillslope. This includes all related activities to the sampling events.** THIS DOCUMENT DOES NOT COVER ANY INTRUSIVE ACTIVITIES, CONFINED SPACE ACTIVITIES OR USE OF PASSIVE AND/OR ACTIVE AIR PURIFYING OR SUPPLYING EQUIPMENT.
START DATE: April 2010	COMPLETION DATE: May 1, 2011

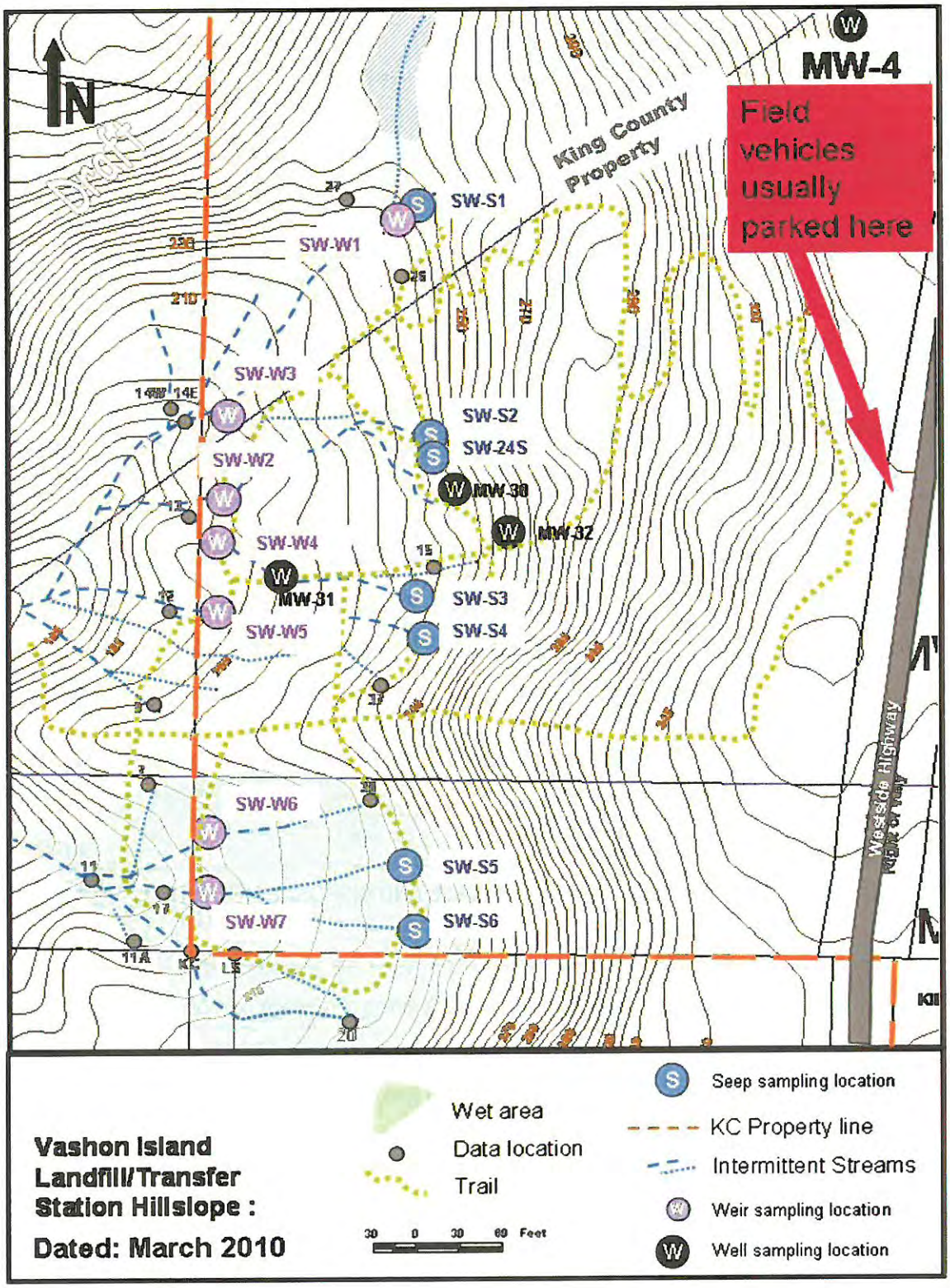
Note: This Health & Safety Plan (HSP) must be re-evaluated and updated annually. In the event of a change in site conditions or scope of work, the HSP will be updated regardless of the annual update.

2.0. FACILITY DESCRIPTION & BACKGROUND

TYPE OF FACILITY:	Undeveloped land, west of a closed municipal solid waste landfill.		
SIZE:	~ 140 acres.	**BUILDINGS / STRUCTURES:**	Weirs, wells, seep samplers, & wood walkways
ACCESS:	Trail, maintained occasionally..		

TOPOGRAPHY:	Steep to gradual, highly vegetated terrain ranging from about 180 to 400 feet above mean sea level.
GENERAL GEOLOGIC/HYDROLOGIC SETTING:	Site soils consist of glacially derived sediments; sand and gravel, silt, and clay. Groundwater occurs as perched saturated zones seeping out of the hillside. Water seeps from these seepage areas and flow downhill to the west.
SITE STATUS:	Investigatory.
PREVIOUS HAZARDOUS MATERIALWASTE STORAGE AND DISPOSAL METHOD(S):	N/A
SITE HISTORY:	Hillslope appears to have had illegal dumping of garbage (lots of glass debris) near the road. Site investigations by KC SWD on the hillslope have been ongoing for about 10 years. Trails were marked in to improve access to sampling points. Trail walkways, seepage samplers, wells and weirs recently installed in the last 5 years.
SPECIAL CONDITIONS / COMMENTS:	None.

Figure 1: Sampling Locations



3.0. WASTE TYPE (S) / CHARACTERISTICS

ARE HAZARDOUS SUBSTANCES KNOWN TO HAVE BEEN STORED / SPILLED ON SITE? ☐ YES ☒ NO

SOURCE(S) OF INFORMATION:

- 2006 Annual Groundwater Data Evaluation Report (KC SWD 2007)
- Landfill Monitoring Test Results, March 5, 1998. (UES, 2003).
- SWD Database (SWD, February 2008)

COMPOUNDS POSING HEALTH CONCERN:

	Maximum concentration Encountered or Anticipated in Cc2 and Cc3 Sands			Surface Water
Element/ Compound	Depth (feet below grade)	Groundwater (ppb)	Landfill Gas (%)	(ppb)
Arsenic	126	110 *2 (dissolved)		6.1*3
Methane			36 (in waste)	
Vinyl Chloride	126	13*2		2.8*1

Note: *1 SW-S4 highest result in 2007. *2 MW-5D highest result in 2007. *3 SW-S3 highest result in 2007.

SPECIAL CONSIDERATIONS / COMMENTS:

- Site groundwater contains arsenic in concentrations exceeding primary drinking water standards.
- Landfill gas contains methane, posing an explosion hazard. Landfill gas will be considered a potential explosion hazard during intrusive activities in the subsurface, such as digging.
- Concentrations of volatile organic compounds in landfill gas are not known; therefore, landfill gas will be considered a potential inhalation hazard during intrusive activities in the subsurface, such as digging.
- Landfill gas contains carbon dioxide; therefore, all confined or potentially confined spaces will be considered asphyxiation hazards. This document does not cover confined space entry. This document does not cover use of any active and/or air purifying or supplying equipment.

4.0. HAZARD EVALUATION

CHEMICAL:

- ***Ingestion of arsenic can cause chronic and acute illness.***
- Inhalation of landfill gas can cause nausea, acute and chronic illness. *(not expected in non-intrusive activities).*
- Methane gas mixed oxygen can cause explosion hazards. *(not expected in non-intrusive activities).*
- ***Vinyl chloride is a class A carcinogen; pathways are absorption***, inhalation, ***and ingestion***. ***Effects can be acute and chronic.*** Inhalation can cause immediate dizziness and/or nausea. *(Inhalation of vinyl chloride not expected during non-intrusive activities.)*
- Oxygen deficiency can cause asphyxiation. *(not expected in non-intrusive or non-confined spaces)*

PHYSICAL:

- ***Slip, trip, and fall hazards*** associated with construction sites and working on undeveloped terrain are potential hazards.
- ***Moving parts on the sampling pump equipment can be hazardous***; workers shall not operate equipment they are not trained to use.
- Workers are responsible for being aware of all hazards associated with the worker's typical duties.
- All confined or potentially confined spaces will be considered asphyxiation hazards. This document does not cover confined space entry. This document does not cover use of any active and/or air purifying or supplying equipment.
- ***Monitor for cold or heat stress when ambient temperatures are below 50 degrees or exceed 75 degrees Fahrenheit, respectively.*** Due to the expected timing of the job in the winter, cold stress is more likely the issue. A vehicle will be provided as a heat source, if necessary.
- When sampling wells, ***be careful to not splash sample water onto exposed skin.***

OTHER:

- ***Be aware of traffic on County roads.***
- Check work areas for transient inhabitants.
- Buddy system is preferred. If working alone, worker should report to project personnel of planned activities and when leaving the site, worker should call in to report they are no longer on the hillslope.

5.0. OPERATIONS PLAN

VICINITY MAP / EMERGENCY ROUTE / ROUTE TO HOSPITAL: See Appendices B and C

SITE SKETCH: See Figure 1

UNDERGROUND UTILITY CLEARANCE NOT PERFORMED (undeveloped land)

FIELD METHOD(S): Sampling of weirs, seepage samplers, and wells will follow as close as possible to procedures in the SWD QAPP (KC SWD, 2006). Seeps are sampled similarly to wells.

SPECIAL CONDITIONS: Special care with regards to transporting sampling equipment to and from locations, including lifting and moving ice chests of sample bottles and backpacks with samples, should be taken to ensure worker safety. The steepness of the terrain and the soft and/or slippery nature of the soils should be taken into consideration when carrying equipment and navigating at the site.

COMMENTS: NO CONFINED SPACE ENTRY SHALL BE PERMITTED UNDER THIS DOCUMENT. NO ACTIVITES REQUIRING USE OF ACTIVE AND/OR AIR PURIFYING OR SUPPLYING EQUIPMENT SHALL BE PERMITTED UNDER THIS DOCUMENT.

6.0. SAFETY & EQUIPMENT PROCEDURES

INITIAL LEVEL OF PROTECTION: ☐ C ☒ D

REQUIRED PERSONAL PROTECTIVE EQUIPMENT: Standard Level D safety equipment. Protective clothing should be used as applicable per activity. Appendix A for the "Health and Safety Equipment Checklist". Appropriate clothing should be used for weather conditions. Appendix A contains information for the King County Heat-Related Illness Prevention Program; Worker Safety Tips – Heat Stress; Protective tips for cold environment workers; and the Cold Stress Card. For activities contracted to non-KC personnel, their proper work and safety procedures contained in their Health & Safety Plan should be followed for the duties they typically perform.
AIR MONITORING EQUIPMENT AND PROCEDURES: No activities require use of air monitoring activities.
ACTION LEVELS: If unusual and unexpected odors are encountered during sampling activities, the area will be evacuated and work discontinued pending review and improvement of safety controls by the SWD Safety Officer.
COMMUNICATIONS: Immediately communicate any unusual or unexpected odors to the site supervisor; communicate questionable site conditions to project managers and the SWD Safety Officer at earliest reasonable opportunity.
DECONTAMINATION PROCEDURES: Rinse face and hands upon leaving site and wash hands prior to eating.

7.0. KEY PROJECT PERSONNEL

SITE WORK TEAM (name / responsibility)

1.	Sevin Bilir; KC WLRD Hydrogeologist	2.	State of WA, Department of Ecology personnel
3.	King County DNRP WLRD personnel	4.	King County SWD personnel
5.	Seattle/King County Health Dept. personnel	6.	
7.		8.	

ENTRY BRIEFING DATE: See Appendix E LOCATION: Site

SPECIAL CONDITIONS (e.g., work schedule or limitations): Work is to be conducted during daylight hours. Personnel need to be off the hillslope by 4:30 pm. During the longer daylight hours in the summer, departure times that are later than 4:30 pm should be approved of with site manager.

Restroom facilities are at the road elevation, about a 5-15 minute walk uphill from the borehole sites.

8.0. EMERGENCY PROCEDURES

ACUTE EXPOSURE SYMPTOMS(S):	FIRST AID:
Eyes – slight to severe irritation.	Flush with water for 15 minutes.
Skin – irritation, redness, edema, drying.	Wash with soap and water.
Respiratory – dizziness, irritation of eyes, nose, throat vomiting, bluish skin, CNS effects.	Remove to fresh air.
Ingestion.	Call physician.

NEAREST HOSPITAL / EMERGENCY MEDICAL CENTER (see Appendices B and C maps & Table 1)

Highline Medical Center; 16251 Sylvester Rd. S.W., Burien, WA. 98166

EMERGENCY ROUTE: (see attached map in Appendix C)

From the landfill travel north on Westside HWY:

- Turn right onto Thorsen Rd SW.
- Turn left onto Vashon HWY SW. Continue north to ferry terminal. Get onto Ferry to Fauntleroy.
- Turn right onto Fauntleroy Way SW.
- Turn left onto SW Wildwood Pl.
- Turn left at SW Brace Point Dr. Continue on California Ave SW.
- Turn right at SW Barton St.
- Turn Right at 35th Ave SW.
- Turn left at SW Roxbury St.
- Turn right at 16th Ave SW. Bear left at Ambaum Blvd SW; continue on Ambaum Blvd SW.
- Turn right at 4th Ave SW. Bear right at Sylvester Rd SW. The hospital is on the right.

EMERGENCY PHONE NUMBERS (See Table 1 for more numbers)

Ambulance, Police, Fire	911
Hospital (HMC)	206-244-9970
Emergency Dept. at Hospital (HMC) -- (messages checked immediately)	206-431-5314
Fire Department	911

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Table 1. List of Emergency Contacts

CONTACT	NAME	TELEPHONE WORK	CELL (C) OFFICE (O) PAGER (P))
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Vashon Health Center		206-463-3671	
Poison Control Center		800-222-1222	
Police	King County Sheriff	911	
Fire Department	King County	911	
National Response Center		800-424-8802	
King County Department of Natural Resources and Parks, Solid Waste Division	Dan Swope (PM) Ann Holmes Jim Scarr (Safety Officer)	206-296-8456 206-296-4424 206-296-0497	206-296-4411 (O) 206-999-5789 (C) 206-396-5595 (C) 206-559-5457 (P)
King County Department of Natural Resources and Parks, Water & Land Division	Sevin Bilir (Site Hydrogeologist) Eric Ferguson (Hydrogeologist) Jim Simmonds (Bilir's Supervisor) Reception Desk 6th Floor	206-296-8029 206-263-6512 206-296-1986 206-296-0192	206-437-8616 (C)

Appendix A

GENERAL SAFE WORK PRACTICES FOR FIELD PERSONNEL

Field operations for this project shall be conducted in accordance with the minimum safety practices described below required for KC employees.

1. Eating, drinking, chewing gum or tobacco, smoking, or ***any practice that increases the probability of hand-to-mouth transfer and ingestion of materials is prohibited*** in any area where the possibility of contamination exists.

2. ***Hands must be thoroughly washed when leaving a contaminated or suspected contaminated area*** before eating, drinking, or any other activities.

3. Contaminated protective equipment shall not be removed from the site until it has been properly decontaminated or containerized on site.

4. Avoid activities which may cause dust. Removal of materials from protective clothing or equipment by blowing, shaking, or any means which may disperse materials into the air is prohibited.

5. ***Communications between members must be maintained at all times.*** Emergency communications shall be prearranged in case unexpected situations arise. Team members should stay close enough to assist each other in the event of any emergency.

6. ***Personnel should be cautioned to inform each other of subjective symptoms*** of chemical exposure such as headache, dizziness, nausea, and irritation of the respiratory tract.

7. At sites with known or suspected contamination, appropriate work areas for field personnel support, contaminant reduction, and exclusion will be designated and maintained.

8. All KC field vehicles shall contain a first aid kit and multipurpose portable fire extinguisher.

9. Field personnel are specifically prohibited from entering into excavations, trenches, or other confined spaces deeper than 4 feet.

HEALTH & SAFETY EQUIPMENT CHECKLIST

✧ THE FOLLOWING SAFETY EQUIPMENT IS REQUIRED ON THIS JOB SITE ✧

☒	Protective Clothing :	Coveralls, if desired.
☒	Chemical Protective Gloves :	Nitrile, minimum 4-mil.
☒	Decontamination Equipment :	Water, paper towels.
☒	Safety Glasses :	use when appropriate
☒	First Aid Kit :	located in KC field vehicle
☒	Fire Extinguisher :	located in KC field vehicle
☒	Drinking Water	located in KC field vehicle

King County

Department of
Natural Resources and Parks
Solid Waste Division

Heat-Related Illness Prevention Program

WAC 296-62-095

The requirements of WAC 296-62-095, Heat-Related Illness in the Outdoor Environment, requires employers to create a written Heat-Related Illness (HRI) Prevention Program.

The following Heat-Related Illness Prevention Program contains at least the **minimal** program elements required under WAC 296-62-095; **additional** elements have been added to protect workers in their specific work situations.

Program Elements ***see page***

POLICY STATEMENT

King County
Department of Natural Resources and Parks
Solid Waste Division

Effective June 5, 2007

Heat-Related Illness Policy:

It is the policy of The King County Solid Waste Division (SWD) that all affected employees are required to comply with this Heat-Related Illness policy and are encouraged to actively participate in identifying ways to reduce the risk of experiencing heat-related illness in the work place.

Supervisors and Leads are responsible for the safety of their employees and as a part of their daily duties must check the workplace for unsafe conditions, monitor the health and safety of their employees, and take prompt action in response to any identified Heat-Related Illness hazards.

Management will initiate and maintain this Heat-Related Illness program.

HAZARD EVALUATION

The Safety Officer for the Solid Waste Division has identified the following HRI environmental hazards at roofing worksites:

- High Heat and elevated humidity may occur during the hot months of June, July, August, and September;
- Lack of access to shade while working outside performing routine tasks;
- Heavy clothing including coveralls, hard hats, boots and gloves, and additional PPE, depending on job duties, to protect workers from various work related hazards, and to protect skin from excessive UV sun exposure; and
- Body harnesses for fall protection, which may restrict air circulation in clothing for cooling.

METHODS OF EVALUATION

The Supervisor and Lead, use the following methods on a day-to-day basis to evaluate each day's heat risks:

- Monitor weather reports for forecasts about expected temperature and humidity;
- Add 10-15º F. to the ambient reported temperature, when workers are routinely working in direct sunlight and wearing required PPE.
- Realize when work levels are typically moderate to heavy and may require additional protection for workers against the potential for heat related illness.

Further, the Supervisor consults the NOAA Heat Stress Index attached to this document and notifies the crew lead when a workday calls for additional awareness about HRI hazards, or for planned hot weather modifications to work activities and/or work schedules.

The heat index for the landfill area can be found at the following NOAA Web Site.

http://www.wrh.noaa.gov/forecast/MapClick.php?site=SEW&lon=-122.918747&rlon=-121.191247&tlat=48.389584&blat=46.662084&smap=1&mp=0&map.x=116&map.y=127

Or the heat Index can be calculated if the temperature and relative humidity is known by using the NOAA Weather Calculator found at the link below.

http://www.erh.noaa.gov/er/box/calculate2.html

EXPOSURE DETERMINATION

The following list shows job classes or duties and work locations or tasks where Division employees are exposed to heat-related illness hazards:

Job Class or Job Duties	***Work locations or Tasks***
Utility Workers	Various outdoor locations and tasks
Utility Worker Assistants	Various outdoor locations and tasks
Carpenters	Various outdoor locations and tasks
Mechanics	When working on heavy equipment on the landfill
Landfill Gas Technicians	Various outdoor locations and tasks
Waste Water Technicians	Various outdoor locations and tasks
Field Engineers	Various outdoor locations and tasks
Any SWD Employee	If working outdoors for a period of time exceeding sixty (60) minutes

PREVENTION ACTIONS

When heat-related illness hazards are present, the Supervisor will notify Lead at the beginning of the workday which of the following prevention actions they need to take with their crews that day, with consideration for the Heat index table below:

Heat Index	General Effect of Heat Index on People in Higher Risk Groups
80-89 *Caution*	Fatigue possible with prolonged exposure and physical activity.
90-104 *Extreme Caution*	Sunstroke, heat cramps, and heat exhaustion possible.
105-129 *Danger*	Sunstroke, heat cramps, and heat exhaustion likely, and heat stroke possible.
130 or higher *Extreme Danger*	Heat stroke highly likely with continued exposure.

1) As a general safety rule, workers will work in shaded areas when the **heat index** is greater that 85°F.
    - Lead will ensure that work to be completed in open (un-shaded) areas will take place in early morning hours.
2) Any new employees starting work on a hot day
    - Will limit their time at moderate to heavy work to 50% of a routine task on that day, and after that day will increase their time at moderate to heavy work by only 10% each day for the next 5 days, assuming the HRI hazards continue during that time.
3) Regular crew members returning to work on a hot day and who have been off work for 2 weeks or more:
    - Will limit their time at moderate to heavy work to 50% of a routine task on that day, and after that day will increase their time at moderate to heavy work by only 10% each day for the next 5 days, assuming the HRI hazards continue during that time.

4) The Lead will use a positive means for the prevention of heat related illness:
    - Each employee will be issued a spray water bottle to carry with them as they work, to use to help cool the worker as needed.
    - One or more five (5) gallon water container(s) will be provided.
        (a) Enough water must be provided so that there are 2.5 gallons of water for each employee for a 10 hour shift. Shorter shifts require less water, at a rate of 1 quart per person per hour.
        (b) Ice may be added to the water if needed.
        (c) Frequent work breaks will occur and workers encouraged to drink at least a cup (8 oz) of water per break.
            1. Frequencies of breaks will be adjusted upon the various environmental factors at the time. These include, temperature, humidity, job tasks, and level or types of PPE in use.
            2. Lead will notify the crew of the need for the water break.
            3. Frequency is dependant upon the task and location, the crew should decide upon the timing of the breaks with discussion and approval of the Lead or Supervisor.

5) At the start of the day, the Supervisor or Lead will ensure the crew obtains or has available the following heat related illness prevention equipment:
    - Water cooler and spray bottles
    - Sunscreen lotion (available at stores)
    - A 10'X10' shade canopy is available for utility workers and can be set up and used for shade if needed.
        (a) If it is determined that a shade canopy is needed for other workgroups, the supervisor, lead and safety officer will discuss the best options for that workgroup.
        (b) The crew is responsible to set up and take down the canopy.
    - Two (2) cooling gel packs for each worker (one to wear and one to swap out for re-cooling).

6) Leads will add at least one additional rest break during the first and second halves of the work shift, and will instruct workers to rest sitting or lying down in a shaded area or under the shade canopy, not standing up or walking around and not in the sun.

7) If temperatures are forecast to be 90° or higher, The Supervisor and Leads will instruct workers to use the buddy system to watch out for each other. Buddy groups can be two or three people. At the start of the day, Leads will review what to look for in themselves and each other to spot heat-illness symptoms.

The Solid Waste Division maintains the following equipment and makes it available to crews according to weather conditions, work site locations, and the work being done:

- A shade canopy
- Spray water bottles
- Cooling gel packs
- Extra water coolers
- Hand-held radios or cell phones are provided at remote sites when needed.

- **If the work site has reliable cell phone coverage**, a cell phone will be assigned to the lead or crew so they can check with a supervisor or call for help directly. Per the SWD emergency response plan, employees should also contact the Cedar Hills Front desk by radio or cell phone when any emergency occurs.
- **If a work site lacks reliable cell phone coverage**, crew members will use 800 MHz radios to stay in touch with supervisors and each other. Per the SWD emergency response plan, employees should also contact the Cedar Hills Front desk by radio or cell phone when any emergency occurs.
- The supervisor, lead, or Cedar Hills Front Desk can call 911 immediately if needed.

Training

All affected Solid Waste Division employees and supervisors will be trained about recognizing and responding to heat-related illness before being exposed to HRI hazards. They will also receive refresher training annually after that. Completion of training will be documented.

Employees are encouraged to review the Training Guide for Heat-Related Illness Helpful Tool provided by DOSH (see the link below). This Helpful Tool provides some of the required training components. Site-specific information will be provided to employees before being exposed to HRI hazards.

http://www.lni.wa.gov/Safety/Topics/AtoZ/HeatStress/files/TrainingHRI.pdf

First Aid Awareness and Actions

The Solid Waste Division will make the following information available on laminated cards and/or posters at each job site when heat-illness hazards are present. Emergency 911 information including job site location and nearest medical facility will be posted at each job site or in the transport vehicle.

Heat-related illness	*Signs and Symptoms*	*First Aid*
Sunburn	- Red, hot skin - May Blister	- Move to shade, loosen clothing - Apply cool compresses or water
Heat Rash	- Red, itchy skin - Bumpy skin - Skin infection	- Apply cool water or compresses - Keep affected area dry - Control itching and infection with prescribed medication
Heat Cramps	- Muscle cramps or spasms - Grasping the affected area - Abnormal body posture	- Drink water or sport drinks - Rest, cool down - Massage affected muscle - Get medical evaluation if cramps persist
Heat Exhaustion	- High pulse rate - Extreme sweating - Pale face - Insecure gait - Headache - Clammy and moist skin -Weakness - Fatigue -Dizziness	- Move to shade and loosen clothing - Initiate rapid cooling - Lay flat and elevate feet - Monitor recovery - Drink small amounts of water - Evaluate metal status (ask who? where? when? questions) - If no improvement call 911
Heat Stroke	- Any of the above but more severe - Hot, dry skin (25-50% of cases - Altered mental status with confusion or agitation - Can progress to loss of consciousness and seizures. - Can be fatal	- **Call 911** - Immediately remove from work - Start rapid cooling - Lay flat and elevate feet - ***If conscious*** give **sips** of water - Monitor airway and breathing – administer CPR if needed

When heat-related illness hazards are present and work will be at a remote site, the Supervisor and Lead will make sure their crews always have open channels of communication, to request breaks, water, or help:

HEAT INDEX f° (c°)													
	RELATIVE HUMIDITY (%)												
Temp.	40	45	50	55	60	65	70	75	80	85	90	95	100
110 (47)	136 (58)												
108 (43)	130 (54)	137 (58)											
106 (41)	124 (51)	130 (54)	137 (58)										
104 (40)	119 (48)	124 (51)	131 (55)	137 (58)									
102 (39)	114 (46)	119 (48)	124 (51)	130 (54)	137 (58)								
100 (38)	109 (43)	114 (46)	118 (48)	124 (51)	129 (54)	136 (58)							
98 (37)	105 (41)	109 (43)	113 (45)	117 (47)	123 (51)	128 (53)	134 (57)						
96 (36)	101 (38)	104 (40)	108 (42)	112 (44)	116 (47)	121 (49)	126 (52)	132 (56)					
94 (34)	97 (36)	100 (38)	103 (39)	106 (41)	110 (43)	114 (46)	119 (48)	124 (51)	129 (54)	135 (57)			
92 (33)	94 (34)	96 (36)	99 (37)	101 (38)	105 (41)	108 (42)	112 (44)	116 (47)	121 (49)	126 (52)	131 (55)		
90 (32)	91 (33)	93 (34)	95 (35)	97 (36)	100 (38)	103 (39)	106 (41)	109 (43)	113 (45)	117 (47)	122 (50)	127 (53)	132 (56)
88 (31)	88 (31)	89 (32)	91 (33)	93 (34)	95 (35)	98 (37)	100 (38)	103 (39)	106 (41)	110 (43)	113 (45)	117 (47)	121 (49)
86 (30)	85 (29)	87 (31)	88 (31)	89 (32)	91 (33)	93 (34)	95 (35)	97 (36)	100 (38)	102 (39)	105 (41)	108 (42)	112 (44)
84 (29)	83 (28)	84 (29)	85 (29)	86 (30)	88 (31)	89 (32)	90 (32)	92 (33)	94 (34)	96 (36)	98 (37)	100 (38)	103 (39)
82 (28)	81 (27)	82 (28)	83 (28)	84 (29)	84 (29)	85 (29)	86 (30)	88 (31)	89 (32)	90 (32)	91 (33)	93 (34)	95 (35)
80 (27)	80 (27)	80 (27)	81 (27)	81 (27)	82 (28)	82 (28)	83 (28)	84 (29)	84 (29)	85 (29)	86 (30)	86 (30)	87 (31)

WORKER SAFETY TIPS

Protect Yourself

Heat Stress

When the body is unable to cool itself by sweating, several heat-induced illnesses such as heat stress or heat exhaustion and the more severe heat stroke can occur, and can result in death.

Factors Leading to Heat Stress

High temperature and humidity; direct sun or heat; limited air movement; physical exertion; poor physical condition; some medicines; and inadequate tolerance for hot workplaces.

Symptoms of Heat Exhaustion

- Headaches, dizziness, lightheadedness or fainting.
- Weakness and moist skin.
- Mood changes such as irritability or confusion.
- Upset stomach or vomiting.

Symptoms of Heat Stroke

- Dry, hot skin with no sweating.
- Mental confusion or losing consciousness.
- Seizures or fits.

Preventing Heat Stress

- Know signs/symptoms of heat-related illnesses; monitor yourself and coworkers.
- Block out direct sun or other heat sources.
- Use cooling fans/air-conditioning; rest regularly.
- Drink lots of water; about 1 cup every 15 minutes.
- Wear lightweight, light colored, loose-fitting clothes.
- Avoid alcohol, caffeinated drinks, or heavy meals.

What to Do for Heat-Related Illness

- Call 911 (or local emergency number) at once.

While waiting for help to arrive:

- Move the worker to a cool, shaded area.
- Loosen or remove heavy clothing.
- Provide cool drinking water.
- Fan and mist the person with water.

Department of LABOR AND INDUSTRIES

For more complete information:
www.lni.wa.gov/safety
(800) 423-7233

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Department of LABOR AND INDUSTRIES

For more complete information:
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(800) 423-7233

Protective tips for cold environment workers

Issue: *What precautions do you take when you work outside and you need to take from the elements? Also, what can your employer do to protect cold weather workers from these potentially deadly working conditions?*

Answer: Employers are required under the Occupational Safety and Health Act to furnish to each of its employees a place of employment that is free from recognized hazards that are causing or are likely to cause death or serious physical harm to its employees. This includes cold weather working environments. Two serious hazards that employees face from the cold are hypothermia and frost bite.

The Occupational Safety and Health Administration (OSHA) has recognized these hazards and developed a "Cold Stress" card that provides recommendations which can prevent many cold-related injuries and illnesses. OSHA suggests that employers can help protect workers by following these tips:

- Recognize the environmental and workplace conditions that lead to potential cold-induced illnesses and injuries;
- Learn the signs and symptoms of cold-induced illnesses / injuries and what to do to help workers;
- Train workers about cold-induced illnesses and injuries;
- Encourage workers to wear proper clothing for cold, wet and windy conditions. Layer clothing to adjust to changing environmental temperatures. Wear a hat and gloves, in addition to underwear that will keep water away from the skin (polypropylene);
- Be sure that workers take frequent short breaks in warm dry shelters to allow the body to warm up;
- Try to schedule work for the warmest part of the day;
- Avoid exhaustion or fatigue because energy is needed to keep muscles warm;
- Use the buddy system — work in pairs so that one worker can recognize danger signs;
- Drink warm, sweet beverages (sugar water, sports-type drinks) and avoid drinks with caffeine (coffee, tea, sodas or hot chocolate) or alcohol;
- Eat warm, high-calorie foods such as hot pasta dishes; and
- Remember workers face increased risks when they take certain medications, are in poor physical condition, or suffer from illnesses such as diabetes, hypertension or cardiovascular disease.

If an employer takes these recommendations and applies them to work in cold environments, it should make for safe and healthy working conditions.

For previous helpful issues and answers, go to the new home for all of your safety needs at **safety.cch.com**. Check often for the latest safety news, updates, tools and materials that affect the safety professional.

FROSTBITE

What happens to the body:

Freezing in deep layers of skin and tissue; pale, waxy-white skin color; skin becomes hard and numb; usually affects fingers, hands, toes, feet, ears, and nose.

What to do: (land temperatures)

- Move the person to a warm, dry area. Don't leave the person alone.
- Remove wet or tight clothing that may cut off blood flow to the affected area.
- **Do not** rub the affected area because rubbing damages the skin and tissue.
- Gently place the affected area in a warm water bath (105°) and monitor the water temperature to **slowly** warm the tissue. Don't pour warm water directly on the affected area because it will warm the tissue too fast, causing tissue damage. Warming takes 25-40 minutes.
- After the affected area has been warmed, it may become puffy and blister. The affected area may have a burning feeling or numbness. When normal feeling, movement, and skin color have returned, the affected area should be dried and wrapped to keep it warm.
  Note: If there is a chance the affected area may get cold again, do not warm the skin. If the skin is warmed and then becomes cold again, it will cause severe tissue damage.
- Seek medical attention as soon as possible.

HYPOTHERMIA - (Medical Emergency)

What happens to the body:

Normal body temperature (98.6°F/37°C) drops to or below 95°F/35°C; fatigue or drowsiness; uncontrolled shivering; cool, bluish skin; slurred speech; clumsy movements; irritable, irrational, or confused behavior.

What to do: (land temperatures)

- Call for emergency help (ambulance or 911).
- Move the person to a warm, dry area. Don't leave the person alone.
- Remove wet clothing and replace with warm, dry clothing or wrap the person in blankets.
- Have the person drink warm, sweet drinks (sugar water or sports-type drinks) if he is alert. **Avoid drinks with caffeine** (coffee, tea, or hot chocolate) **or alcohol.**
- Have the person move his arms and legs to create muscle heat. If he is unable to do this, place warm bottles or hot packs in the armpits, groin, neck, and head areas. **Do not** rub the person's body or place him in a warm water bath. This may stop his heart.

What to do: (water temperatures)

- Call for emergency help (ambulance or 911). Body heat is lost up to 25 times faster in water.
- **Do not** remove any clothing. Button, buckle, zip, and tighten any collars, cuffs, shoes, and hoods because the layer of trapped water closest to the body provides a layer of insulation that slows the loss of heat. Keep the head out of the water and put on a hat or hood.
- Get out of the water as quickly as possible or climb on anything floating. **Do not** attempt to swim unless a floating object or another person can be reached because swimming or other physical activity uses body heat and reduces survival time by about 50 percent.
- If getting out of the water is not possible, wait quietly and conserve body heat by folding arms across the chest, keeping thighs together, bending knees, and crossing ankles. If another person is in the water, huddle together with chests held close.

WINDCHILL TABLE

If you're unprepared for the cold, temperature and wind can put you at risk for hypothermia and frostbite. The table below shows the risk of frostbite on unprotected skin.

Wind (mph)	Temperature (°F)																		
	Calm	40	35	30	25	20	15	10	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45
5	36	31	25	19	13	7	1	-5	-11	-16								-57	-63
10	34	27	21	15	9	3	-4	-10	-16						-47	-53	-59	-66	-72
15	32	25	19	13	6	0	-7	-13						-45	-51	-58	-64	-71	-77
20	30	24	17	11	4	-2	-9	-15					-42	-48	-55	-61	-68	-74	-81
25	29	23	16	9	3	-4	-11	-17				-37	-44	-51	-58	-64	-71	-78	-84
30	28	22	15	8	1	-5	-12					-39	-46	-53	-60	-67	-73	-80	-87
35	28	21	14	7	0	-7	-14				-34	-41	-48	-55	-62	-69	-76	-82	-89
40	27	20	13	6	-1	-8	-15				-36	-43	-50	-57	-64	-71	-78	-84	-91
45	26	19	12	5	-2	-9	-16				-37	-44	-51	-58	-65	-72	-79	-86	-93
50	26	19	12	4	-3	-10	-17				-38	-45	-52	-60	-67	-74	-81	-88	-95
55	25	18	11	4	-3	-11				2	-39	-46	-54	-61	-68	-75	-82	-89	-97
60	25	17	10	3	-4	-11				-33	-40	-48	-55	-62	-69	-76	-84	-91	-98

Frostbite: 30 minutes | 10 minutes | 5 minutes

Oregon Occupational Safety & Health Division
440-3336E-S (1/06)

Appendix B

DIRECTIONS TO URGENT CARE ON ISLAND

Vashon Health Center

206.463.3671

HIGHLINE MEDICAL GROUP

10030 SW 210th Street Vashon, WA 98070

Hours & Appointments

For urgent Care

VHC's Regular Hours of Operation are:
Monday: 8:30 a.m.--5:00 p.m.
Tuesday: 8:30 a.m.--5:00 p.m.
Wednesday: 8:30 a.m.--7:00 p.m.
Thursday: 8:30 a.m.--5:00 p.m.
Friday: 8:30 a.m.--5:00 p.m.
Saturday: 8:30 a.m.--12:00 a.m., 1:00 p.m.--4:00 p.m.
Sunday: Closed

Welcome to VHC

In an Emergency- call 911

During Regular Hours
Call 463-3671 to make an appointment.

Hours & Appointments

After Regular Hours
Call 463-3671. Listen to the full recording to hear all your options. There are two consulting nurses, one for Group Health patients, and one for all other patients. You will need to speak with the appropriate consulting nurse for advice.

Provider Profiles

A History of VHC

Urgent Care
Call 463-3671. Listen to the full recording to hear all your options. There are two consulting nurses, one for Group Health patients, and one for all other patients. You will need to speak with the appropriate consulting nurse for advice.

Sunrise Ridge

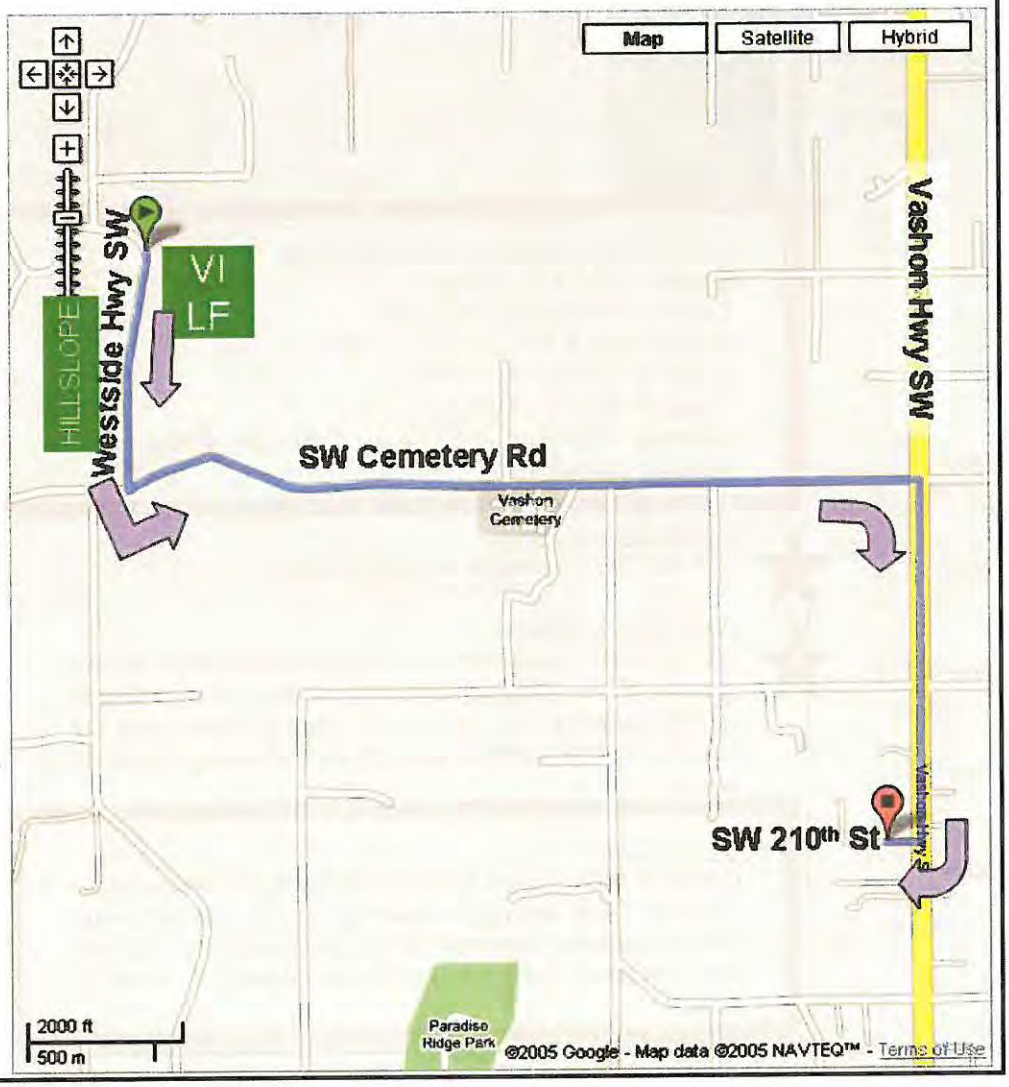
Appendix B (continued)

For urgent Care

Start address:	18910 Westside Hwy SW, Vashon, WA 98070
End address:	10030 SW 210th St Vashon, WA 98070
Distance:	3.5 mi (about 9 mins)

Directions to Vashon Health Center from VILF/Transfer Station

1. **Go south on Westside Hwy SW** - go **0.6 mi**
2. Turn **left** at **SW Cemetery Rd** - go **2.0 mi**
3. Turn **right** at **Vashon Hwy SW** - go **0.9 mi**
4. Turn **right** at **SW 210th St** - go **0.1 mi**

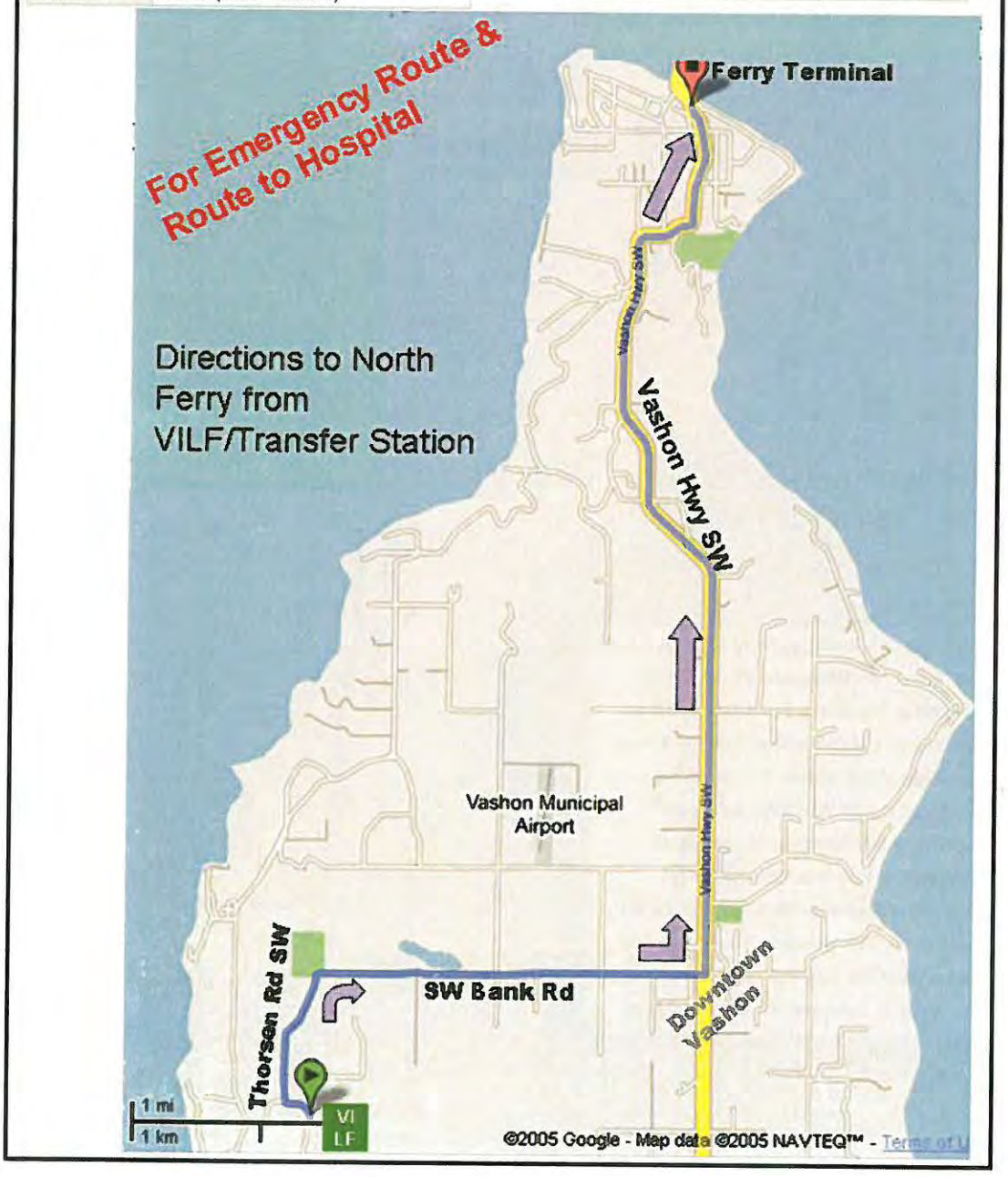


Appendix C

DIRECTIONS TO EMERGENCY CARE OFF ISLAND (following the ambulance)

Start address:	18910 Westside Hwy SW Vashon, WA 98070
End address:	SW Bunker Trl & Vashon Hwy SW, Vashon, WA 98070
Distance:	7.2 mi (about 15 mins)

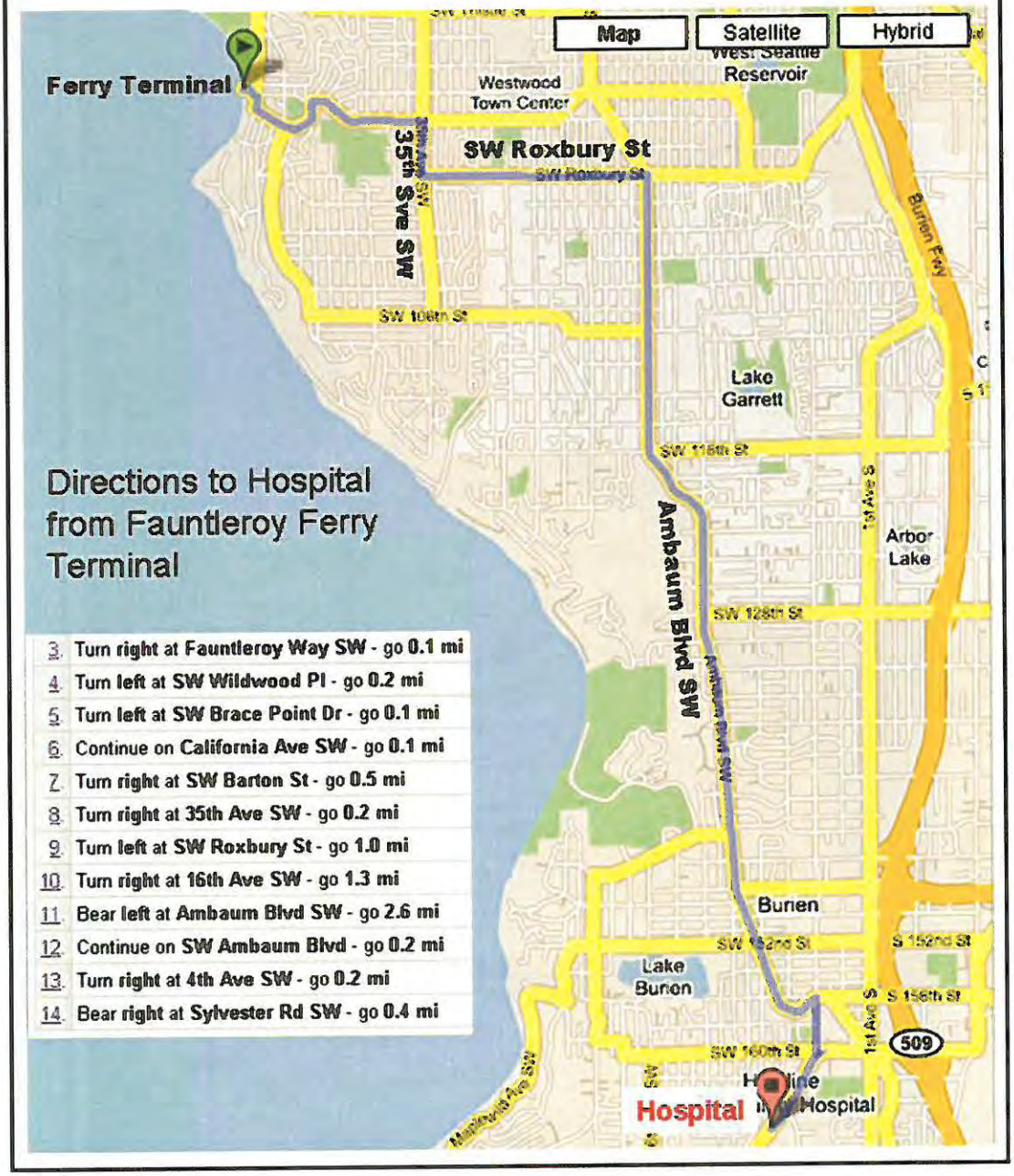
1. **Go north on** **Westside Hwy SW** - go **0.2 mi**
2. Turn **right** at **Thorsen Rd SW** - go **0.6 mi**
3. Continue on **SW Bank Rd** - go **1.9 mi**
4. Turn **left** at **Vashon Hwy SW** - go **4.5 mi**



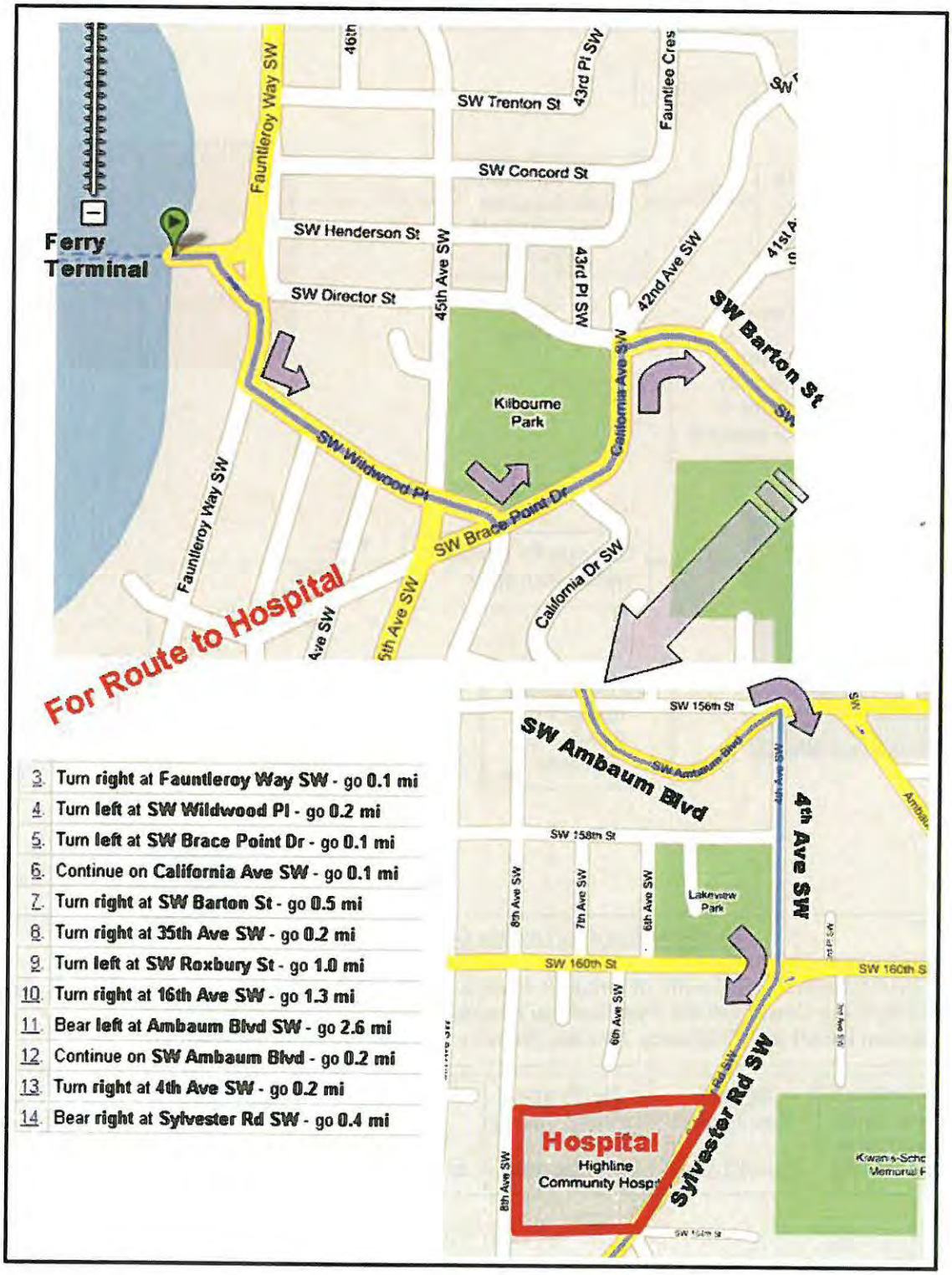
Appendix C (continued)

Start address:	SW Barton St & Fauntleroy-Southworth Fry, Seattle, WA 98136
End address:	16521 Sylvester Rd SW Seattle, WA 98166
Distance:	7.1 mi (about 15 mins)

For Route to Hospital



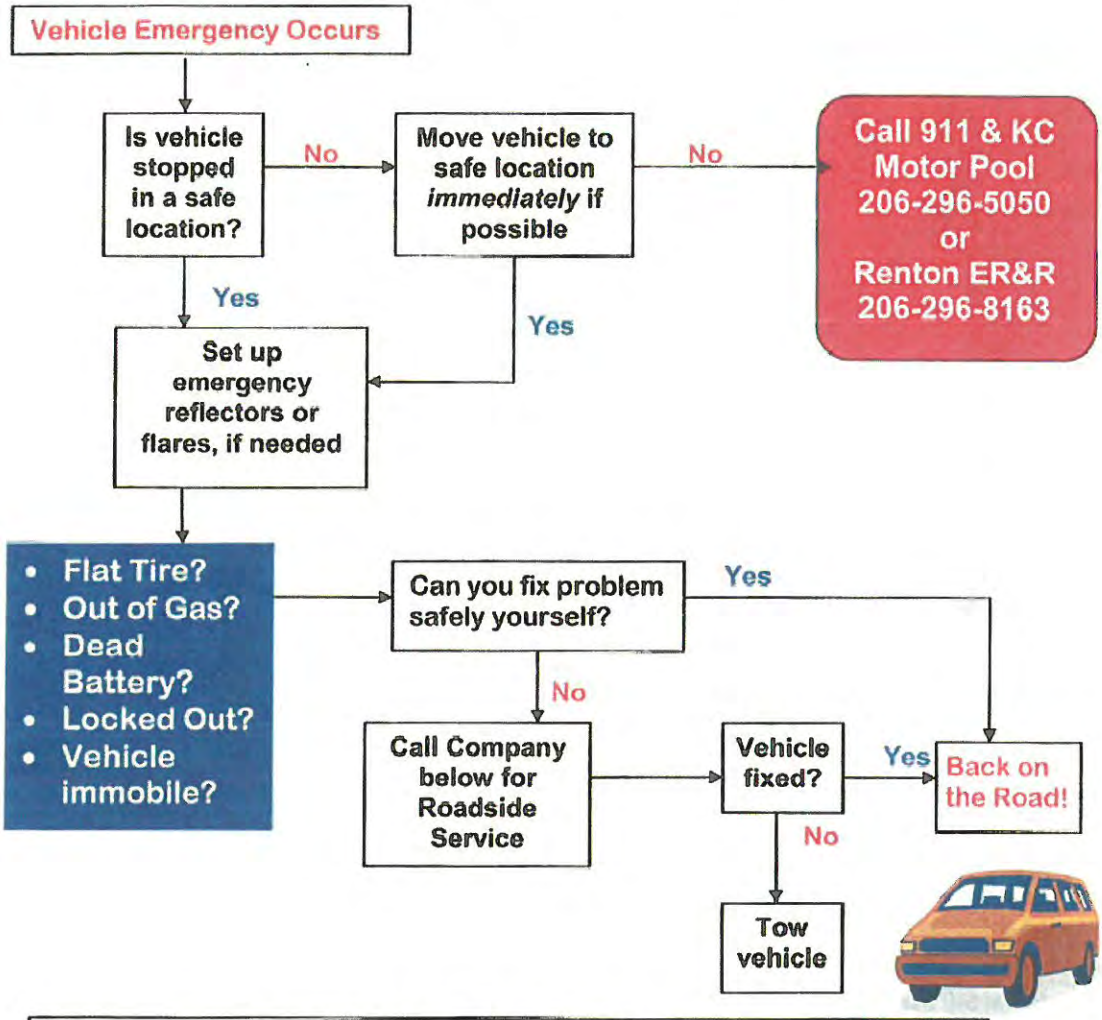
Appendix C (continued)



3. Turn **right** at **Fauntleroy Way SW** - go **0.1 mi**
4. Turn **left** at **SW Wildwood Pl** - go **0.2 mi**
5. Turn **left** at **SW Brace Point Dr** - go **0.1 mi**
6. Continue on **California Ave SW** - go **0.1 mi**
7. Turn **right** at **SW Barton St** - go **0.5 mi**
8. Turn **right** at **35th Ave SW** - go **0.2 mi**
9. Turn **left** at **SW Roxbury St** - go **1.0 mi**
10. Turn **right** at **16th Ave SW** - go **1.3 mi**
11. Bear **left** at **Ambaum Blvd SW** - go **2.6 mi**
12. Continue on **SW Ambaum Blvd** - go **0.2 mi**
13. Turn **right** at **4th Ave SW** - go **0.2 mi**
14. Bear **right** at **Sylvester Rd SW** - go **0.4 mi**

Appendix D

KING COUNTY VEHICLE EMERGENCY PLAN



Roadside Service/Towing Companies

If required, tow vehicle to:
5915 Padilla Place South, at Orcas & Padilla Seattle, WA 98104
Notify King County Motor Pool Garage to expect vehicle: 206-296-5050 or Renton RE&R at 155 Monroe Ave NE, Renton, WA 98056: 206-296-8163

Personal insurance coverage (i.e., AAA)	Seattle Mac Towing 424-822-2800	North end Lincoln Towing 206-364-2000	Eastside Skyway 425-226-8050	South end Pro Tow 425-432-8196

August 14, 2009

Appendix E

PLAN APPROVAL AND SIGNATURE PAGE

HSP PLAN APPROVALS		
Field Geologist – Sevin Bilir		3/26/2010
SWD Safety Officer – Jim Scarr		3/26/2010
Project Manager –Dan Swope		4/1/2010
	Signature	Date

SITE WORKER SIGNATURES	
SITE:	Vashon Island Closed Landfill & Transfer Station: West Hillslope
All KC personnel are to understand and comply with specific practices and guidelines as described in the Health & Safety Policy Manual regarding field safety and health hazards. This Health & Safety Plan has been developed for the use of KC personnel only. KC makes this plan available for review by other personnel on a work site; however, this plan does not cover the employees of any other employer on the work site. Nor does this cover the hazards from typical activities carried out by KC personnel in their regular job description.	
SIGN-OFF:	I have read and understand the attached Health & Safety Plan and attached General Safe Work Practices (Appendix A), and agree to comply with the requirements described within:

Print NAME / Initial	Employer / Title	DATE