State of Washington
Department of Ecology

In the Matter of Remedial Action by:
Burlington Environmental, LLC
Agreed Order
No. DE 23641

To: Burlington Environmental, LLC
20245 77th Avenue South
Kent, Washington 98032

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1. Introduction

The mutual objective of the State of Washington, Department of Ecology (Ecology) and Burlington Environmental, LLC, a Clean Earth Environmental Solutions, Inc. company under this Agreed Order (Order) is to provide for remedial action at a facility where there has been a release or threatened release of hazardous substances. This Order requires Burlington Environmental, LLC (Burlington Environmental) to implement the Cleanup Action Plan. Ecology believes the actions required by this Order are in the public interest.

2. Jurisdiction

This Order is issued pursuant to the Model Toxics Control Act (MTCA), RCW 70A.305.050(1).

3. Parties Bound

This Agreed Order shall apply to and be binding upon the Parties to this Order, their successors and assigns. The undersigned representative of each Party hereby certifies that he or she is fully authorized to enter into this Order and to execute and legally bind such Party to comply with this Order. Burlington Environmental agrees to undertake all actions required by the terms and conditions of this Order. No change in ownership or corporate status shall alter Burlington Environmental's responsibility under this Order. Burlington Environmental shall provide a copy of this Order to all agents, contractors, and subcontractors retained to perform work required by this Order and shall ensure that all work undertaken by such agents, contractors, and subcontractors complies with this Order.

4. Definitions

Unless otherwise specified herein, the definitions set forth in RCW 70A.305 and WAC 173-340 shall control the meanings of the terms in this Order.

4.1 Agreed Order or Order

Refers to this Order and each of the exhibits to this Order. All exhibits are integral and enforceable parts of this Order.

4.2 Area of Concern (AOC)

Refers to any area of the Facility where a release of dangerous constituents (including dangerous waste and hazardous substances) has occurred, is occurring, is suspected to have occurred, or threatens to occur.

4.3 Cleanup Action Plan (CAP)

Refers to the document issued by Ecology under WAC 173-340-380 that selects Facility-specific corrective measures and specifies cleanup standards (cleanup levels, points of compliance, and other requirements for the corrective measures).

4.4 Cleanup Standards

Refers to the standards promulgated under RCW 70A.305.030(2)(e) and include (1) hazardous substance concentrations (cleanup levels) that protect human health and the environment, (2) the location at the Facility where those cleanup levels must be attained (points of compliance), and (3) additional regulatory requirements that apply to a cleanup because of the type of action and/or the location of the Facility.

4.5 Corrective Action

Refers to any activities including investigations, studies, characterizations, and corrective measures, including actions taken pursuant to RCW 70A.305 and WAC 173-340, undertaken in whole or in part to fulfill the requirements of WAC 173-303-64620.

4.6 Corrective Measure

Refers to any measure or action to control, prevent, or mitigate release(s) and/or potential release(s) of dangerous constituents (including dangerous waste and hazardous substances) reviewed and approved by Ecology for the Facility and set forth in a Facility-specific CAP prepared in compliance with the requirements of WAC 173-340, including WAC 173-340-360. Corrective measures may include interim actions as defined by WAC 173-340. Interim actions will not necessarily be set forth in a Facility specific CAP.

4.7 Dangerous Constituent or Dangerous Waste Constituent

Refers to any constituent identified in WAC 173-303-9905 or 40 C.F.R. part 264, appendix IX; any constituent that caused a waste to be listed or designated as dangerous under the provisions of WAC 173-303; and any constituent defined as a hazardous substance under RCW 70A.305.020(13).

4.8 Dangerous Waste

Refers to any solid waste designated in WAC 173-303-070 through -100 as dangerous or extremely hazardous or mixed waste. Dangerous wastes are considered hazardous substances under RCW 70A.305.020(13).

4.9 Dangerous Waste Management Facility

Used interchangeably in this document with the term “Facility.”

4.10 Dangerous Waste Management Unit (DWMU)

Refers to a contiguous area of land on or in which dangerous waste is placed, or the largest area in which there is a significant likelihood of mixing dangerous waste constituents in the same area, as defined in WAC 173-303-040.

4.11 Facility

Refers to the DWMU owned by Burlington Environmental located at 20245 77th Avenue South, Kent, Washington; all property contiguous to the DWMU also owned by Burlington Environmental; and all property, regardless of control, affected by release(s) or threatened release(s) of hazardous substances, including dangerous wastes and dangerous constituents, at and from these areas. "Facility" also includes the definition found in RCW 70A.305.020(8). The Facility is generally depicted in the diagram attached as Exhibit A to this Order.

4.12 Feasibility Study

Refers to the investigation and evaluation of potential corrective measures performed in accordance with the FS requirements of WAC 173-340-350, which includes the substantive requirements for a Resource Conservation and Recovery Act Corrective Measures Study, and which is undertaken in whole or in part to fulfill the corrective action requirements of WAC 173-303-64620.

4.13 Parties

Refers to the State of Washington, Department of Ecology and Burlington Environmental.

4.14 Potentially Liable Person (PLP)

Refers to Burlington Environmental.

4.15 Permit or Permitting Requirement

Unless otherwise specified, refers to the requirements of WAC 173-303 for applying for, obtaining, maintaining, modifying, and terminating Dangerous Waste Management Facility permits.

4.16 RCRA

Refers to the Resource Conservation and Recovery Act, 42 U.S.C. §§ 6901–6992k.

4.17 RCRA Facility Assessment (RFA)

Refers to the United Stated Environmental Protection Agency (EPA) conducted investigation of release(s) and potential release(s) at the Dangerous Waste Management Facility and the information contained in the report entitled the Science Applications International Corporation (SAIC), 1996, RCRA Facility Assessment, Preliminary Review/VSI Report, Burlington Environmental, Inc., Kent, Washington (RFA Report). The RFA Report is incorporated into this Order by this reference as if fully set forth herein.

4.18 Release

Refers to any intentional or unintentional spilling, leaking, pouring, emitting, emptying, discharging, injecting, pumping, escaping, leaching, dumping, or disposing of dangerous waste or dangerous constituents into the environment. It also includes the abandonment or discarding of barrels, containers, and other receptacles containing dangerous waste or dangerous constituents, and includes the definition of "release" in RCW 70A.305.020(32).

4.19 Remedial Investigation (RI)

Refers to a facility-wide investigation and characterization performed in accordance with the requirements of WAC 173-340, which includes the substantive requirements for a RCRA facility investigation, undertaken in whole or in part to fulfill the corrective action requirements of WAC 173-303-64620.

4.20 Solid Waste Management Unit (SWMU)

Refers to any discernible location at the Dangerous Waste Management Facility where solid wastes have been placed at any time, irrespective of whether the location was intended for the management of solid or dangerous waste. Such locations include any area at the Dangerous Waste Management Facility at which solid wastes, including spills, have been routinely and systematically released, and include regulated units as defined by WAC 173-303.

5. Findings of Fact

Ecology makes the following findings of fact, without any express or implied admissions of such facts by Burlington Environmental:

5.1

The Burlington Environmental Facility (Facility) is located within King County, in the South East ¼ of Section 1, Township 22 North, Range 4 East. The Facility is in the Green River Valley, roughly 2 miles north of downtown Kent and 4 miles south of the City of Renton. The Facility and surrounding area are zoned for general industrial land use by the City of Kent (City of Kent, 2002). The Facility is located on a 6.25-acre parcel of land that can be divided into two areas, the waste management facility on the eastern 3 acres of the Facility, and the 10-day hazardous waste transfer yard on the western 3.25 acres of the Facility.

5.2

Prior to 1980, the operations at the Facility were primarily agricultural. The Facility was developed in 1980 by Crosby and Overton, Inc. for the purpose of storing oily wastewater and began hazardous waste management activities. The Facility was

acquired by Chemical Processors Inc. in October of 1989. Chemical Processors Inc. (Chempro), a majority owned subsidiary of Burlington Resources, Inc., acquired the Kent facility from Crosby and Overton, Inc., in October 1989. Chempro continued to operate the Kent facility as a storage and treatment facility for hazardous wastes. In January 1992, Chempro changed its name to Burlington Environmental, Inc. (BEI). In December 1993, Philip Environmental Inc., a Canadian company, purchased BEI. In August 1997, Philip Environmental merged with two other publicly traded companies to form Philip Services Corp. In 1999, Philip Services Corp. reorganized under Chapter 11 bankruptcy and emerged from the financial restructuring in 2000 as Philip Services Corporation. Philip Services Corporation filed Chapter 11 bankruptcy on June 2, 2003, in Houston, Texas. Philip Services Corporation emerged from the financial restructuring on December 31, 2003. The ownership of the Kent Facility did not change in any of the corporate acquisitions, mergers, or reorganization of the Philip parent company. BEI continued to be the legal owner of the facility and a wholly owned subsidiary of Philip Services Corporation. In April 2014, Stericycle Environmental Solutions acquired PSC Environmental Services, LLC and its subsidiaries. In April 2020, Stericycle, Inc. sold its subsidiary Stericycle Environmental Solutions, Inc. to CEI Holding LLC, a wholly-owned indirect subsidiary of Harsco Corporation (HSC).

5.3

The Facility has an office, a process containment building, container storage areas, a tank farm (aboveground storage tanks), and a treatment and solidification building.

5.4

Burlington Environmental owned the Clean Earth Kent facility as a Dangerous Waste Management Facility on or after November 19, 1980, the date which subjects facilities to RCRA permitting requirements, including interim status requirements pursuant to RCRA, 42 U.S.C. § 6925, and implementing regulations thereunder, and including authorized state regulations promulgated in WAC 173-303.

5.5

On March 16, 2021, Burlington Environmental notified Ecology of its dangerous waste management activities. In the notification, Burlington Environmental identified itself as managing dangerous wastes at Burlington Environmental. Pursuant to the 1988 notification, Burlington Environmental was issued identification number WAD 9912 81767 by EPA.

5.6

On March 16, 2021, Burlington Environmental submitted to Ecology Part A of the RCRA permit application. Burlington Environmental manages dangerous wastes: that includes the following DOT Hazard Classes: Compressed Gases (2.1, 2.2 & 2.3), Flammables (3, 4.1

& 4.2), Dangerous When Wet (4.3), Oxidizers/Organic Peroxides (5.1 & 5.2), Poisons/Toxics (6.1), Corrosives – Acids and Bases (8), and Class 9 – Miscellaneous (9). The DW is treated and stored in tanks and in containers at the Kent Facility. See Exhibit E (Permit, WAD 9912 81767, for the Storage and Treatment of Dangerous Waste, Section D, Process Information) for details on the wastes, the storage capacities, and management units.

5.7

Burlington Environmental updated the Part A on March 16, 2021 for their Permit, WAD 9912 81767, for the Storage and Treatment of Dangerous Waste.

5.8

Between 1993 and 1996, EPA performed an RFA at the Dangerous Waste Management Facility. The purpose of an RFA is to identify those areas at the Dangerous Waste Management Facility where release(s) of hazardous substances, as defined in RCW 70A.305.020(13), may have occurred or may be occurring.

5.9

A final dangerous waste management facility permit was issued in accordance with the applicable provisions of the Hazardous Waste Management Act, Chapter 70A.300 Revised Code of Washington (RCW), and the regulations promulgated there under in Chapter 173-303 Washington Administrative Code (WAC) to Burlington Environmental, LLC (PSC) Kent facility. This permit went into effect on June 25, 2012. This permit, No. WAD 991 281 767, is for the storage and treatment of dangerous waste.

5.10

As required by the State Dangerous Waste Permit, Stericycle Burlington Environmental completed an Agency Review Draft Remedial Investigation Report and Feasibility Study. After public notice, Ecology approved the RI and FS as final. Final Remedial Investigation (FRI) Report prepared by PSC Kent Facility, Geomatrix Consultants, Inc., in December, 2007, and a Final Feasibility Study (FFS) prepared by Dalton, Olmstead, & Fuglevand, in June, 2017. The Permit also requires that Burlington Environmental submit an agency review draft a Cleanup Action Plan that satisfies the requirements of WAC 173-340-400 (Cleanup Actions) and to concurrently satisfy the corrective action requirements of WAC 173-303-646.

5.11

Ecology has identified the following SWMUs and AOCs at the Dangerous Waste Management Facility. The dangerous waste and dangerous constituents from SWMUs and AOCs at the Dangerous Waste Management Facility are documented in the RI Report and summarized herein.

5.11.1 AOC-1: Former Underground Storage Tanks (USTs). AOC-1 is the area where three USTs (16,000-gallon gasoline, 10,000-gallon diesel, and 5,000-gallon gasoline) were located between the current north and south container storage pads. In 1989, investigations were conducted at AOC-1 to evaluate the soil conditions adjacent to the USTs. Three soil borings subsequently converted to monitoring wells, were completed in this area. The USTs were removed in January 1991. After removal of the 5,000-gallon UST, petroleum contamination was noted on the groundwater surface approximately 10 feet below ground surface (bgs). Following the excavation of approximately 705 cubic yards of contaminated soil, confirmation samples were collected from the sidewalls and bottom of the excavation.

5.11.2 AOC-2: Tank Farm Area. AOC-2 is located in the northeastern corner of the site and consists of aboveground storage tank (AST) units containing petroleum products, various solvents, caustics, and treatment operations. The ASTs are located within containment structures. Investigations were conducted in the tank farm area in June 1989 and March 1990. Multiple soil and groundwater samples have been collected during the various phases of the RI to evaluate the extent of constituents of potential concern (COPCs) in this area. Additional soil sampling was conducted in October 2015, after three ASTs were removed as a part of capital improvements at the facility in 2016. Stericycle excavated approximately two to four feet of soil from beneath these tank footprints prior to their replacement. Another tank was removed in 2017 where similar methods were used for sampling soil underneath once the tank was removed and excavating underlying soil to three to five feet below ground surface. Sampling results and excavation documentation information were presented to Ecology in June 2016 and April 2017 (Dalton, Olmstead, & Fuglevand technical memorandums).

5.11.3 AOC-3: Stabilization Area. AOC-3, the stabilization area, is located south of AOC-2 and consists of a concrete-lined pit. The area also includes three aboveground storage tanks. The initial investigation in the stabilization area consisted of a hand auger boring outside of the stabilization building (ADL, 1989). Two monitoring wells were completed near the building in 1989, and soil samples were collected for analysis (SEE, 1989). Two borings (HA-2 and HA-3) were completed in July 2000 as part of the RI to determine whether sumps associated with the stabilization pit had leaked (PSC, 2000a through c; PSC, 2001a). Additional sampling was conducted in 2010 as part of a data gaps investigation, after a secondary containment failure was documented in this area. In 2013, soil samples were collected under Tank 5307 as part of the closure process. One single boring was advanced below the base of the pit liner, and two soil samples were collected from the boring.

5.11.4 AOC-4: Stormwater Drainage System. AOC-4 includes the Facility's stormwater drainage system, the associated catch basins and sumps, underground piping, and the formerly exposed ditch on the north side of the site. In January 1999, an abandoned pipeline was encountered. The abandoned pipeline released approximately 10 to 15 gallons of a diesel and water mixture (PSC, 1999). Confirmation soil samples were collected following the removal of petroleum-affected soils. In February 1999, Stericycle personnel found another deteriorating pipeline beneath the main driveway. In March 1999, the deteriorating pipeline was removed, visibly contaminated soil was excavated, and confirmation soil samples were collected (PSC, 2000 a through c; PSC, 2001a). In May 2002, during replacement of the stormwater pipelines just south and east of the process containment building, soil surrounding the pipelines was excavated. Confirmation soil samples were collected from the excavations prior to backfilling the excavations with clean fill. In 2000, soil samples were also collected near catch basins that are part of the stormwater management system to evaluate the potential for releases.

5.11.5 AOC-5: Process and Storage Area. AOC-5 consists of the current and former process and storage areas, including the current can crush area, the north container loading/unloading pad, the process containment building, the indoor lab pack area, the north and south container storage pads, the check-in pad, and assorted storage areas.

5.11.6 RCRA 10-day hazardous waste transfer yard: The transfer yard is a 3.25-acre parcel that comprises the transfer yard was created in 2001 on an undeveloped area on the west side of the property. Multiple soil and groundwater samples have been collected in the transfer yard, including three new groundwater monitoring wells installed as part of the data gaps investigation.

5.11.7 On-site room reserved for continued TSCA-related waste and mixed TSCA/ Dangerous waste processing. Other operations that were regulated under WAC 173-303 were discontinued in 2017, and remaining practices are regulated by the Washington Solid Waste Code (non-federal Hazardous or State dangerous wastes and Household hazardous waste). The on-site processing room is permitted and regulated by the Washington Solid Waste Code (as non-federal Hazardous or State dangerous wastes and Household hazardous waste).

5.12

Release(s) and/or potential release(s) of hazardous substances include, but are not limited to, the following.

5.12.1 The primary source of released contaminants at the Facility are from tanks and piping and constituents spilled at the Site, impacting the soil and groundwater. Contaminants may migrate and cause impacts to offsite groundwater, and indoor air of buildings close in proximity. There is evidence that volatile compounds may migrate from soil gas form to outdoor air during excavation work. Constituents in the groundwater are at risk of migrating to surface water from the drainage ditch at the northern border of the Facility. The tank farm may be the primary source for release of contaminants into the soil and groundwater based on historical data.

5.12.2 There is evidence of vinyl chloride in the groundwater with declining concentrations and there is evidence of biodegradation. There is one well where vinyl chloride has been detected in the last five years (MW-120-1). Arsenic levels in the groundwater have remained constant. Iron concentrations have remained constant.

5.12.3 The asphalt surface cover minimizes leeching into the soil and groundwater, but COCs in the soils that have direct contact with groundwater could contaminate the groundwater.

5.12.4 Chlorinated ethenes have been detected in the groundwater. Vinyl chloride has been detected in the groundwater above the CUL in areas AOC-2 and AOC-3. AOC-2 is the location of the historically highest concentrations of arsenic. In AOC-2 there was an arsenic measurement of 60 micrograms per liter in 2018 from well MW-123-S. In wells MW-102-I, MW-117-I2, and MW-126-I have consistently shown arsenic levels of 20 micrograms per liter, with an upward trend in MW-117-I2.

5.12.5 Benzne, benzo(b)fluorathene, chrysene, arsenic, cyanide, and TPH (likely TPH-G, TPH-D, and TPH-O) have been found in the soil. There are higher concentrations of petroleum constituents in near surface-soil than in deeper soil in areas impacted by petroleum. This suggests a surficial release.

5.13

Hazardous substances have been and may continue to be released from the Dangerous Waste Management Facility into the environment including surface water drainage areas; groundwater beneath and beyond the Dangerous Waste Management Facility; air; human work areas; and floral and faunal habitats.

6. Ecology Determinations

Ecology makes the following determinations, without any express or implied admissions of such determinations (and underlying facts) by Burlington Environmental.

6.1

Burlington Environmental is a person within the meaning of RCW 70A.305.020(24).

6.2

Burlington Environmental is the owner of a Dangerous Waste Management Facility that has operated, is operating, or should have been operating under interim status or a final facility permit, subject to RCRA, 42 U.S.C. §§ 6924 and 6925, and regulations promulgated thereunder, including authorized state regulations in WAC 173-303. Burlington Environmental is also an "owner or operator" as defined by RCW 70A.305.020(22) of a "facility" as defined by RCW 70A.305.020(8).

6.3

Certain waste and constituents found at the Facility are dangerous wastes and/or dangerous constituents as defined by WAC 173-303 and in Section IV (Definitions) of this Order.

6.4

These dangerous wastes and dangerous constituents are considered hazardous substances within the meaning of RCW 70A.305.020(13).

6.5

Based on the Findings of Fact and the administrative record, Ecology has determined that release(s) and potential release(s) of hazardous substances at and/or from the Facility present a threat or potential threat to human health and the environment.

6.6

Based upon credible evidence, Ecology issued a PLP status letter to Burlington Environmental dated August 12, 2024, pursuant to RCW 70A.305.040, .020(26), and WAC 173-340-500. After providing for notice and opportunity for comment, reviewing any comments submitted, and concluding that credible evidence supported a finding of potential liability, Ecology issued a determination that Burlington Environmental, LLC (a Clean Earth Environmental Solutions Inc. Company) is a PLP under RCW 70A.305.040 and notified Burlington Environmental, LLC of this determination by letter dated August 12, 2024.

6.7

Pursuant to RCW 70A.305.030(1), .050(1), Ecology may require PLPs to investigate or conduct other remedial actions with respect to any release or threatened release of

hazardous substances, whenever it believes such action to be in the public interest. Based on the foregoing facts, Ecology believes the remedial actions required by this Order are in the public interest.

6.8

Under WAC 173-340-430, an interim action is a remedial action that is technically necessary to reduce a threat to human health or the environment by eliminating or substantially reducing one or more pathways for exposure to a hazardous substance, that corrects a problem that may become substantially worse or cost substantially more to address if the remedial action is delayed, or that is needed to provide for completion of a Facility hazard assessment, remedial investigation/feasibility study, or design of a cleanup action plan. Either party may propose an interim action under this Order. If the Parties are in agreement concerning the interim action, the Parties will follow the process in Section VII.E. If the Parties are not in agreement, Ecology reserves its authority to require interim action(s) under a separate order or other enforcement action under RCW 70A.305, or to undertake the interim action itself.

7. Work to be Performed

Based on the Findings of Fact and Ecology Determinations, it is hereby ordered that Burlington Environmental take the following remedial actions at the Site. These remedial actions must be conducted in accordance with WAC 173-340:

7.1

Burlington Environmental will implement the Cleanup Action Plan for the Facility in accordance with the schedule and terms of the Schedule, Exhibit C, and all other requirements of this Order.

7.2

If Burlington Environmental learns of a significant change in conditions at the Facility, including but not limited to a statistically significant increase in contaminant and/or chemical concentrations in soil, groundwater, surface water, and/or air, Burlington Environmental, within seven (7) days of learning of the change in condition, shall notify Ecology in writing of said change and provide Ecology with any reports or records (including laboratory analyses, sampling results) relating to the change in conditions.

7.3

If Burlington Environmental learns of a significant change in conditions at the Site, including but not limited to a statistically significant increase in contaminant and/or chemical concentrations in any media, Burlington Environmental, within seven (7) days of learning of the change in condition, shall notify Ecology in writing of said change and

provide Ecology with any reports or records (including laboratory analyses, sampling results) relating to the change in conditions.

7.4

Burlington Environmental shall submit to Ecology written semiannual Progress Reports that describe the actions taken during the previous six months to implement the requirements of this Order. All Progress Reports shall be submitted by the tenth (10th) day of the month in which they are due after the effective date of this Order. Unless otherwise specified by Ecology, Progress Reports and any other documents submitted pursuant to this Order shall be sent by certified mail, return receipt requested including an electronic copy sent via email or a CD-ROM containing an electronic Acrobat PDF copy of the documents, to Ecology's project coordinator. The Progress Reports shall include the following:

7.4.1

A list of on site activities that have taken place during the reporting period [or since the last Progress Report].

7.4.2

Detailed description of any deviations from required tasks not otherwise documented in project plans or amendment requests.

7.4.3

Description of all deviations from the Schedule (Exhibit C) during the current 6 months and any planned deviations in the upcoming 6 months.

7.4.4

For any deviations in schedule, a plan for recovering lost time and maintaining compliance with the schedule.

7.4.5

All raw data (including laboratory analyses) received during the previous quarter (if not previously submitted to Ecology), together with a detailed description of the underlying samples collected.

7.4.6

A list of deliverables for the upcoming 6 months.

7.5 Financial Assurance

7.5.1

Financial assurance for corrective action is required by WAC 173-303-64620. Ecology's Financial Assurance Officer shall determine when Burlington Environmental's actions and submissions meet the requirements of WAC 173-303-64620.

7.5.2

Ecology's Financial Assurance Officer is:

Joanna Richards
Washington State Department of Ecology
P.O. Box 47600
Olympia, WA 98504-7600
Phone: 360-407-7220
Fax: 360-407-6715
Email: joar461@ecy.wa.gov

7.6

As detailed in the Cleanup Action Plan, institutional controls are required at the Site. Environmental (Restrictive) Covenants will be used to implement the institutional controls.

7.6.1

In consultation with Burlington Environmental, Ecology will prepare the Environmental (Restrictive) Covenants consistent with WAC 173-340-440, RCW 64.70, and any policies or procedures specified by Ecology. The Environmental (Restrictive) Covenants shall restrict future activities and uses of the Site as agreed to by Ecology and Burlington Environmental.

7.6.2

After approval by Ecology, Burlington Environmental shall record the Environmental (Restrictive) Covenant for affected properties it owns with the office of the King County Auditor as detailed in the Schedule (Exhibit C). Burlington Environmental shall provide Ecology with the original recorded Environmental (Restrictive) Covenants within thirty (30) days of the recording date.

7.7

All plans or other deliverables submitted by Burlington Environmental for Ecology's review and approval under the Schedule (Exhibit C) shall, upon Ecology's approval,

become integral and enforceable parts of this Order. Burlington Environmental shall take any action required by such deliverable.

7.8

Any Party may propose an additional interim action under this Order. If the Parties are in agreement concerning the additional interim action, Burlington Environmental shall prepare and submit to Ecology an Interim Action Work Plan, including a scope of work and schedule, by the date determined by Ecology. Ecology will provide public notice and opportunity to comment on the Interim Action Work Plan in accordance with WAC 173-340-600(16). Burlington Environmental shall not conduct the interim action until Ecology approves the Interim Action Work Plan. Upon approval by Ecology, the Interim Action Work Plan becomes an integral and enforceable part of this Order, and Burlington Environmental is required to conduct the interim action in accordance with the approved Interim Action Work Plan. Ecology reserves its authority to require additional interim action(s) under a separate order or other enforcement action under RCW 70A.305, or to undertake the interim action(s) itself.

7.9

If Ecology determines that Burlington Environmental has failed to make sufficient progress or failed to implement the remedial action, in whole or in part, Ecology may, after notice to Burlington Environmental, perform any or all portions of the remedial action or at Ecology's discretion allow Burlington Environmental opportunity to correct. In an emergency, Ecology is not required to provide notice to Burlington Environmental, or an opportunity for dispute resolution. Burlington Environmental shall reimburse Ecology for the costs of doing such work in accordance with Section VIII.A (Payment of Remedial Action Costs). Ecology reserves the right to enforce requirements of this Order under Section 10 (Enforcement).

7.10

Except where necessary to abate an emergency situation or where required by law, Burlington Environmental shall not perform any remedial actions at the Site outside those remedial actions required by this Order to address the contamination that is the subject of this Order, unless Ecology concurs, in writing, with such additional remedial actions pursuant to Section 8.11 (Amendment of Order). In the event of an emergency, or where actions are taken as required by law, Burlington Environmental must notify Ecology in writing of the event and remedial action(s) planned or taken as soon as practical but no later than within twenty-four (24) hours of the discovery of the event.

8. Terms and Conditions

8.1 Payment of Remedial Action Costs

Burlington Environmental shall pay to Ecology costs incurred by Ecology pursuant to this Order and consistent with WAC 173-340-550(2). These costs shall include work performed by Ecology or its contractors for, or on, the Site under RCW 70A.305, including remedial actions and Order preparation, negotiation, oversight, and administration. These costs shall include work performed both prior to and subsequent to the issuance of this Order. Ecology's costs shall include costs of direct activities and support costs of direct activities as defined in WAC 173-340-550(2). For all Ecology costs incurred, Burlington Environmental shall pay the required amount within thirty (30) days of receiving from Ecology an itemized statement of costs that includes a summary of costs incurred, an identification of involved staff, and the amount of time spent by involved staff members on the project. A general statement of work performed will be provided upon request. Itemized statements shall be prepared quarterly. Pursuant to WAC 173-340-550(4), failure to pay Ecology's costs within ninety (90) days of receipt of the itemized statement of costs will result in interest charges at the rate of twelve percent (12%) per annum, compounded monthly.

In addition to other available relief, pursuant to RCW 19.16.500, Ecology may utilize a collection agency and/or, pursuant to RCW 70A.305.060, file a lien against real property subject to the remedial actions to recover unreimbursed remedial action costs.

8.2 Designated Project Coordinators

The project coordinator for Ecology is:

Erin Hobbs
15700 Dayton Ave N
Shoreline, WA 98133
425-515-5996
eho461@ecy.wa.gov

The project coordinator for Burlington Environmental is:

Courtney Jacobs
Permit Compliance Manager
1701 E Alexander Ave.
Tacoma, WA 98407
253-778-9732
cjacobs@cleanearthinc.com

Each project coordinator shall be responsible for overseeing the implementation of this Order. Ecology's project coordinator will be Ecology's designated representative for the Site. To the maximum extent possible, communications between Ecology and Burlington Environmental, and all documents, including reports, approvals, and other correspondence concerning the activities performed pursuant to the terms and conditions of this Order shall be directed through the project coordinators. The project coordinators may designate, in writing, working level staff contacts for all or portions of the implementation of the work to be performed required by this Order.

Any Party may change its respective project coordinator. Written notification shall be given to the other Party at least ten (10) calendar days prior to the change.

8.3 Performance

All geologic and hydrogeologic work performed pursuant to this Order shall be under the supervision and direction of a geologist or hydrogeologist licensed by the State of Washington or under the direct supervision of an engineer registered by the State of Washington, except as otherwise provided for by RCW 18.43 and 18.220.

All engineering work performed pursuant to this Order shall be under the direct supervision of a professional engineer registered by the State of Washington, except as otherwise provided for by RCW 18.43.130.

All construction work performed pursuant to this Order shall be under the direct supervision of a professional engineer or a qualified technician under the direct supervision of a professional engineer. The professional engineer must be registered by the State of Washington, except as otherwise provided for by RCW 18.43.130.

Any documents submitted containing geologic, hydrogeologic, or engineering work shall be under the seal of an appropriately licensed professional as required by RCW 18.43 and 18.220.

Burlington Environmental shall notify Ecology in writing of the identity of any engineer(s) and geologist(s), contractor(s), subcontractor(s), and other key personnel to be used in carrying out the terms of this Order, in advance of their involvement at the Site.

8.4 Access

Ecology or any Ecology authorized representative shall have access to enter and freely move about all property at the Site that Burlington Environmental either owns, controls, or has access rights to at all reasonable times for the purposes of, inter alia: inspecting records, operation logs, and contracts related to the work being performed pursuant to this Order; reviewing Burlington Environmental's progress in carrying out the terms of this Order; conducting such tests or collecting such samples as Ecology may deem

necessary; using a camera, sound recording, or other documentary type equipment to record work done pursuant to this Order; and verifying the data submitted to Ecology by Burlington Environmental. Ecology or any Ecology authorized representative shall give reasonable notice before entering any Site property owned or controlled by Burlington Environmental unless an emergency prevents such notice. All persons who access the Site pursuant to this section shall comply with any applicable health and safety plan(s). Ecology employees and their representatives shall not be required to sign any liability release or waiver as a condition of Site property access.

Burlington Environmental shall make best efforts to secure access rights for those properties within the Site not owned or controlled by Burlington Environmental where remedial activities or investigations will be performed pursuant to this Order. As used in this Section, "best efforts" means the efforts that a reasonable person in the position of Burlington Environmental would use so as to achieve the goal in a timely manner, including the cost of employing professional assistance and the payment of reasonable sums of money to secure access and/or use restriction agreements, as required by this Section. If, within [90] days after the effective date of this Order, Burlington Environmental is unable to accomplish what is required through "best efforts," they shall notify Ecology, and include a description of the steps taken to comply with the requirements. If Ecology deems it appropriate, it may assist Burlington Environmental, or take independent action, in obtaining such access and/or use restrictions. Ecology reserves the right to seek payment from Burlington Environmental for all costs, including cost of attorneys' time, incurred by Ecology in obtaining such access or agreements to restrict land, water, or other resource use.

8.5 Sampling, Data Submittal, and Availability

With respect to the implementation of this Order, Burlington Environmental shall make the results of all sampling, laboratory reports, and/or test results generated by it or on its behalf available to Ecology. Pursuant to WAC 173-340-840(5), all sampling data shall be submitted to Ecology in both printed and electronic formats in accordance with Section VII (Work to be Performed), Ecology's Toxics Cleanup Program Policy 840 (Data Submittal Requirements), and/or any subsequent procedures specified by Ecology for data submittal.

If requested by Ecology, Burlington Environmental shall allow Ecology and/or its authorized representative to take split or duplicate samples of any samples collected by Burlington Environmental pursuant to implementation of this Order. Burlington Environmental shall notify Ecology seven (7) days in advance of any sample collection or work activity at the Site. Ecology shall, upon request, allow Burlington Environmental and/or its authorized representative to take split or duplicate samples of any samples collected by Ecology pursuant to the implementation of this Order, provided that doing

so does not interfere with Ecology's sampling. Without limitation on Ecology's rights under Section 8.4 (Access), Ecology shall notify Burlington Environmental prior to any sample collection activity unless an emergency prevents such notice.

In accordance with WAC 173-340-830(2)(a), all hazardous substance analyses shall be conducted by a laboratory accredited under WAC 173-50 for the specific analyses to be conducted, unless otherwise approved by Ecology.

8.6 Public Participation

Ecology shall maintain the responsibility for public participation at the Site. However, Burlington Environmental shall cooperate with Ecology, and shall:

8.6.1

If agreed to by Ecology, develop appropriate mailing lists and prepare drafts of public notices and fact sheets at important stages of the remedial action, such as the submission of work plans, remedial investigation/feasibility study reports, cleanup action plans, and engineering design reports. As appropriate, Ecology will edit, finalize, and distribute such fact sheets and prepare and distribute public notices of Ecology's presentations and meetings.

8.6.2

Notify Ecology's project coordinator prior to the preparation of all press releases and fact sheets, and before meetings related to remedial action work to be performed at the Site with the interested public and/or local governments. Likewise, Ecology shall notify Burlington Environmental prior to the issuance of all press releases and fact sheets related to the Site, and before meetings related to the Site with the interested public and local governments. For all press releases, fact sheets, meetings, and other outreach efforts by Burlington Environmental that do not receive prior Ecology approval, Burlington Environmental shall clearly indicate to its audience that the press release, fact sheet, meeting, or other outreach effort was not sponsored or endorsed by Ecology.

8.6.3

When requested by Ecology, participate in public presentations on the progress of the remedial action at the Site. Participation may be through attendance at public meetings to assist in answering questions or as a presenter.

8.6.4

When requested by Ecology, arrange and maintain a repository to be located at:

King County Library System
Kent Regional Library
212 2nd Avenue N.
Kent, Washington 98032

At a minimum, copies of all public notices, fact sheets, and documents relating to public comment periods shall be promptly placed in these repositories. A copy of all documents related to this Site shall be maintained in the repository at Ecology's Northwest Region Office in Shoreline, Washington.

8.7 Access to Information

Burlington Environmental shall provide to Ecology, upon request, copies of all records, reports, documents, and other information (including records, reports, documents, and other information in electronic form) (hereinafter referred to as "Records") within Burlington Environmental's possession or control or that of their contractors or agents relating to activities at the Site or to the implementation of this Order, including, but not limited to, sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information regarding the work. Burlington Environmental shall also make available to Ecology, for purposes of investigation, information gathering, or testimony, their employees, agents, or representatives with knowledge of relevant facts concerning the performance of the work.

Nothing in this Order is intended to waive any right Burlington Environmental may have under applicable law to limit disclosure of Records protected by the attorney work-product privilege and/or the attorney-client privilege. If Burlington Environmental withholds any requested Records based on an assertion of privilege, Burlington Environmental shall provide Ecology with a privilege log specifying the Records withheld and the applicable privilege. No Site-related data collected pursuant to this Order shall be considered privileged, including: (1) any data regarding the Site, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, radiological, biological, or engineering data, or the portion of any other record that evidences conditions at or around the Site; or (2) the portion of any Record that Respondents are required to create or generate pursuant to this Order.

Notwithstanding any provision of this Order, Ecology retains all of its information gathering and inspection authorities and rights, including enforcement actions related thereto, under any other applicable statutes or regulations.

8.8 Retention of Records

During the pendency of this Order, and for ten (10) years from the date of completion of the work performed pursuant to this Order, Burlington Environmental shall preserve all records, reports, documents, and underlying data in its possession relevant to the implementation of this Order and shall insert a similar record retention requirement into all contracts with project contractors and subcontractors.

8.9 Resolution of Disputes

8.9.1

In the event that Burlington Environmental elects to invoke dispute resolution Burlington Environmental must utilize the procedure set forth below.

8.9.1.1 Upon the triggering event (receipt of Ecology's project coordinator's written decision or an itemized billing statement), Burlington Environmental has fourteen (14) calendar days within which to notify Ecology's project coordinator in writing of its dispute (Informal Dispute Notice).

8.9.1.2 The Parties' project coordinators shall then confer in an effort to resolve the dispute informally. The Parties shall informally confer for up to fourteen (14) calendar days from receipt of the Informal Dispute Notice. If the project coordinators cannot resolve the dispute within those fourteen (14) calendar days, then within seven (7) calendar days Ecology's project coordinator shall issue a written decision (Informal Dispute Decision) stating: the nature of the dispute; the [Subject PLP(s)'s] position with regards to the dispute; Ecology's position with regards to the dispute; and the extent of resolution reached by informal discussion.

8.9.1.3 Burlington Environmental may then request regional management review of the dispute. Burlington Environmental must submit this request (Formal Dispute Notice) in writing to the Northwest Region Toxics Cleanup Section Manager within seven (7) calendar days of receipt of Ecology's Informal Dispute Decision. The Formal Dispute Notice shall include a written statement of dispute setting forth: the nature of the dispute; Burlington Environmental's position with respect to the dispute; and the information relied upon to support its position.

8.9.1.4 The Section Manager shall conduct a review of the dispute and shall endeavor to issue a written decision regarding the dispute (Decision on Dispute) within thirty (30) calendar days of receipt of the Formal

Dispute Notice. The Decision on Dispute shall be Ecology's final decision on the disputed matter.

8.9.2

The Parties agree to only utilize the dispute resolution process in good faith and agree to expedite, to the extent possible, the dispute resolution process whenever it is used.

8.9.3

Implementation of these dispute resolution procedures shall not provide a basis for delay of any activities required in this Order, unless Ecology agrees in writing to a schedule extension.

8.9.4

In case of a dispute, failure to either proceed with the work required by this Order or timely invoke dispute resolution may result in Ecology's determination that insufficient progress is being made in preparation of a deliverable, and may result in Ecology undertaking the work under Section 7.1 (Work to be Performed) or initiating enforcement under Section 10 (Enforcement).

8.10 Extension of Schedule

8.10.1

Burlington Environmental's request for an extension of schedule shall be granted only when a request for an extension is submitted in a timely fashion, generally at least thirty (30) days prior to expiration of the deadline for which the extension is requested, and good cause exists for granting the extension. All extensions shall be requested in writing. The request shall specify:

8.10.1.1 The deadline that is sought to be extended.

8.10.1.2 The length of the extension sought.

8.10.1.3 The reason(s) for the extension.

8.10.1.4 Any related deadline or schedule that would be affected if the extension were granted.

8.10.2

The burden shall be on Burlington Environmental to demonstrate to the satisfaction of Ecology that the request for such extension has been submitted in a timely fashion and that good cause exists for granting the extension. Good cause may include, but may not be limited to:

8.10.2.1 Circumstances beyond the reasonable control and despite the due diligence of Burlington Environmental including delays caused by unrelated third parties or Ecology, such as (but not limited to) delays by Ecology in reviewing, approving, or modifying documents submitted by Burlington Environmental.

8.10.2.2 A shelter in place or work stoppage mandated by state or local government order due to public health and safety emergencies.

8.10.2.3 Acts of God, including fire, flood, blizzard, extreme temperatures, storm, or other unavoidable casualty.

8.10.2.4 Endangerment as described in Section 8.12 (Endangerment).

However, neither increased costs of performance of the terms of this Order nor changed economic circumstances shall be considered circumstances beyond the reasonable control of Burlington Environmental.

8.10.3

Ecology shall act upon any Burlington Environmental's written request for extension in a timely fashion. Ecology shall give Burlington Environmental written notification of any extensions granted pursuant to this Order. A requested extension shall not be effective until approved by Ecology. Unless the extension is a substantial change, it shall not be necessary to amend this Order pursuant to Section 8.11 (Amendment of Order) when a schedule extension is granted.

8.10.4

At Burlington Environmental's request, an extension shall only be granted for such period of time as Ecology determines is reasonable under the circumstances. Ecology may grant schedule extensions exceeding ninety (90) days only as a result of one of the following:

8.10.4.1 Delays in the issuance of a necessary permit which was applied for in a timely manner.

8.10.4.2 Other circumstances deemed exceptional or extraordinary by Ecology.

8.10.4.3 Endangerment as described in Section 8.12 (Endangerment).

8.11 Amendment of Order

The project coordinators may verbally agree to minor changes to the work to be performed without formally amending this Order. Minor changes will be documented in writing by Ecology within seven (7) days of verbal agreement.

Except as provided in Section 8.13 (Reservation of Rights), substantial changes to the work to be performed shall require formal amendment of this Order. This Order may only be formally amended by the written consent of both Ecology and Burlington Environmental. Ecology will provide its written consent to a formal amendment only after public notice and opportunity to comment on the formal amendment.

When requesting a change to the Order, Burlington Environmental shall submit a written request to Ecology for approval. Ecology shall indicate its approval or disapproval in writing and in a timely manner after the written request is received. If Ecology determines that the change is substantial, then the Order must be formally amended. Reasons for the disapproval of a proposed change to this Order shall be stated in writing. If Ecology does not agree to a proposed change, the disagreement may be addressed through the dispute resolution procedures described in Section 8.9 (Resolution of Disputes).

8.12 Endangerment

In the event Ecology determines that any activity being performed at the Site under this Order is creating or has the potential to create a danger to human health or the environment on or surrounding the Site, Ecology may direct Burlington Environmental to cease such activities for such period of time as it deems necessary to abate the danger. Burlington Environmental shall immediately comply with such direction.

In the event Burlington Environmental determines that any activity being performed at the Site under this Order is creating or has the potential to create a danger to human health or the environment, Burlington Environmental may cease such activities. Burlington Environmental shall notify Ecology's project coordinator as soon as possible, but no later than twenty-four (24) hours after making such determination or ceasing such activities. Upon Ecology's direction, Burlington Environmental shall provide Ecology with documentation of the basis for the determination or cessation of such activities. If Ecology disagrees with Burlington Environmental's cessation of activities, it may direct Burlington Environmental to resume such activities.

If Ecology concurs with or orders a work stoppage pursuant to this section, Burlington Environmental's obligations with respect to the ceased activities shall be suspended until Ecology determines the danger is abated, and the time for performance of such activities, as well as the time for any other work dependent upon such activities, shall be

extended in accordance with Section 8.10 (Extension of Schedule) for such period of time as Ecology determines is reasonable under the circumstances.

Nothing in this Order shall limit the authority of Ecology, its employees, agents, or contractors to take or require appropriate action in the event of an emergency.

8.13 Reservation of Rights

This Order is not a settlement under RCW 70A.305. Ecology's signature on this Order in no way constitutes a covenant not to sue or a compromise of any of Ecology's rights or authority. Ecology will not, however, bring an action against Burlington Environmental to recover remedial action costs paid to and received by Ecology under this Order. In addition, Ecology will not take additional enforcement actions against Burlington Environmental regarding remedial actions required by this Order, provided Burlington Environmental complies with this Order.

Ecology nevertheless reserves its rights under RCW 70A.305, including the right to require additional or different remedial actions at the Site should it deem such actions necessary to protect human health or the environment, and to issue orders requiring such remedial actions. Ecology also reserves all rights regarding the injury to, destruction of, or loss of natural resources resulting from the release or threatened release of hazardous substances at the Site.

By entering into this Order, Burlington Environmental does not admit to any liability for the Site. Although Burlington Environmental is committing to conducting the work required by this Order under the terms of this Order, Burlington Environmental expressly reserves all rights available under law, including but not limited to the right to seek cost recovery or contribution against third parties, and the right to assert any defenses to liability in the event of enforcement.

8.14 Transfer of Interest in Property

No voluntary conveyance or relinquishment of title, easement, leasehold, or other interest in any portion of the Site shall be consummated by Burlington Environmental without provision for continued implementation of all requirements of this Order and implementation of any remedial actions found to be necessary as a result of this Order.

Prior to Burlington Environmental's transfer of any interest in all or any portion of the Site, and during the effective period of this Order, Burlington Environmental shall provide a copy of this Order to any prospective purchaser, lessee, transferee, assignee, or other successor in said interest; and, at least thirty (30) days prior to any transfer, Burlington Environmental shall notify Ecology of said transfer. Upon transfer of any interest, Burlington Environmental shall notify all transferees of the restrictions on the

activities and uses of the property under this Order and incorporate any such use restrictions into the transfer documents.

8.15 Compliance with Applicable Laws

8.15.1 Applicable Laws

All actions carried out by Burlington Environmental pursuant to this Order shall be done in accordance with all applicable federal, state, and local requirements, including requirements to obtain necessary permits or approvals, except as provided in RCW 70A.305.090. The permits or specific federal, state, or local requirements that the agency has determined are applicable and that are known at the time of the execution of this Order have been identified in Exhibit B (Cleanup Action Plan). Burlington Environmental has a continuing obligation to identify additional applicable federal, state, and local requirements which apply to actions carried out pursuant to this Order, and to comply with those requirements. As additional federal, state, and local requirements are identified by Ecology or Burlington Environmental, Ecology will document in writing if they are applicable to actions carried out pursuant to this Order, and Burlington Environmental must implement those requirements.

8.15.2 Relevant and Appropriate Requirements.

All actions carried out by Burlington Environmental pursuant to this Order shall be done in accordance with relevant and appropriate requirements identified by Ecology. The relevant and appropriate requirements that Ecology has determined apply have been identified in Exhibit B (Cleanup Action Plan). If additional relevant and appropriate requirements are identified by Ecology or Burlington Environmental, Ecology will document in writing if they are applicable to actions carried out pursuant to this Order and Burlington Environmental must implement those requirements.

8.15.3

Pursuant to RCW 70A.305.090(1), Burlington Environmental may be exempt from the procedural requirements of RCW 70A.15, 70A.205, 70A.300, 77.55, 90.48, and 90.58 and of any laws requiring or authorizing local government permits or approvals. However, Burlington Environmental shall comply with the substantive requirements of such permits or approvals. For permits and approvals covered under RCW 70A.305.090(1) that have been issued by local government, the Parties agree that Ecology has the non-exclusive ability under this Order to enforce those local government permits and/or approvals. The exempt permits or approvals and the applicable substantive requirements of

those permits or approvals, as they are known at the time of the execution of this Order, have been identified in Exhibit B (Cleanup Action Plan).

8.15.4

Burlington Environmental has a continuing obligation to determine whether additional permits or approvals addressed in RCW 70A.305.090(1) would otherwise be required for the remedial action under this Order. In the event either Ecology or Burlington Environmental determines that additional permits or approvals addressed in RCW 70A.305.090(1) would otherwise be required for the remedial action under this Order, it shall promptly notify the other Party of its determination. Ecology shall determine whether Ecology or Burlington Environmental shall be responsible to contact the appropriate state and/or local agencies. If Ecology so requires, Burlington Environmental shall promptly consult with the appropriate state and/or local agencies and provide Ecology with written documentation from those agencies of the substantive requirements those agencies believe are applicable to the remedial action. Ecology shall make the final determination on the additional substantive requirements that must be met by Burlington Environmental and on how Burlington Environmental must meet those requirements. Ecology shall inform Burlington Environmental in writing of these requirements. Once established by Ecology, the additional requirements shall be enforceable requirements of this Order. Burlington Environmental shall not begin or continue the remedial action potentially subject to the additional requirements until Ecology makes its final determination.

Pursuant to RCW 70A.305.090(2), in the event Ecology determines that the exemption from complying with the procedural requirements of the laws referenced in RCW 70A.305.090(1) would result in the loss of approval from a federal agency that is necessary for the state to administer any federal law, the exemption shall not apply and Burlington Environmental shall comply with both the procedural and substantive requirements of the laws referenced in RCW 70A.305.090(1), including any requirements to obtain permits or approvals.

8.16 Periodic Review

So long as remedial action continues at the Site, the Parties agree to review the progress of remedial action at the Site, and to review the data accumulated as a result of monitoring the Site as often as is necessary and appropriate under the circumstances. Unless otherwise agreed to by Ecology, at least every five (5) years after the initiation of cleanup action at the Site the Parties shall confer regarding the status of the Site and the need, if any, for further remedial action at the Site. At least ninety (90) days prior to each periodic review, Burlington Environmental shall submit a report to Ecology that documents whether human health and the environment are being protected based on

the factors set forth in WAC 173-340-420(4). Ecology reserves the right to require further remedial action at the Site under appropriate circumstances. This provision shall remain in effect for the duration of this Order.

8.17 Indemnification

Burlington Environmental agrees to indemnify and save and hold the State of Washington, its employees, and agents harmless from any and all claims or causes of action (1) for death or injuries to persons, or (2) for loss or damage to property, to the extent arising from or on account of acts or omissions of Burlington Environmental, its officers, employees, agents, or contractors in entering into and implementing this Order. However, Burlington Environmental shall not indemnify the State of Washington nor save nor hold its employees and agents harmless from any claims or causes of action to the extent arising out of the negligent acts or omissions of the State of Washington, or the employees or agents of the State, in entering into or implementing this Order.

9. Satisfaction of Order

The provisions of this Order shall be deemed satisfied upon Burlington Environmental's receipt of written notification from Ecology that Burlington Environmental has completed the remedial activity required by this Order, as amended by any modifications, and that Burlington Environmental has complied with all other provisions of this Agreed Order.

10. Enforcement

Pursuant to RCW 70A.305.050, this Order may be enforced as follows:

10.1

The Attorney General may bring an action to enforce this Order in a state or federal court.

10.2

The Attorney General may seek, by filing an action, if necessary, to recover amounts spent by Ecology for investigative and remedial actions and orders related to the Site.

10.3

A liable party who refuses, without sufficient cause, to comply with any term of this Order will be liable for:

10.3.1

Up to three (3) times the amount of any costs incurred by the State of Washington as a result of its refusal to comply.

10.3.2

Civil penalties of up to twenty-five thousand dollars ($25,000) per day for each day it refuses to comply.

10.4

This Order is not appealable to the Washington Pollution Control Hearings Board. This Order may be reviewed only as provided under RCW 70A.305.070.

Effective date of this Order: _____

Burlington Environmental LLC

Melanie Frohriep

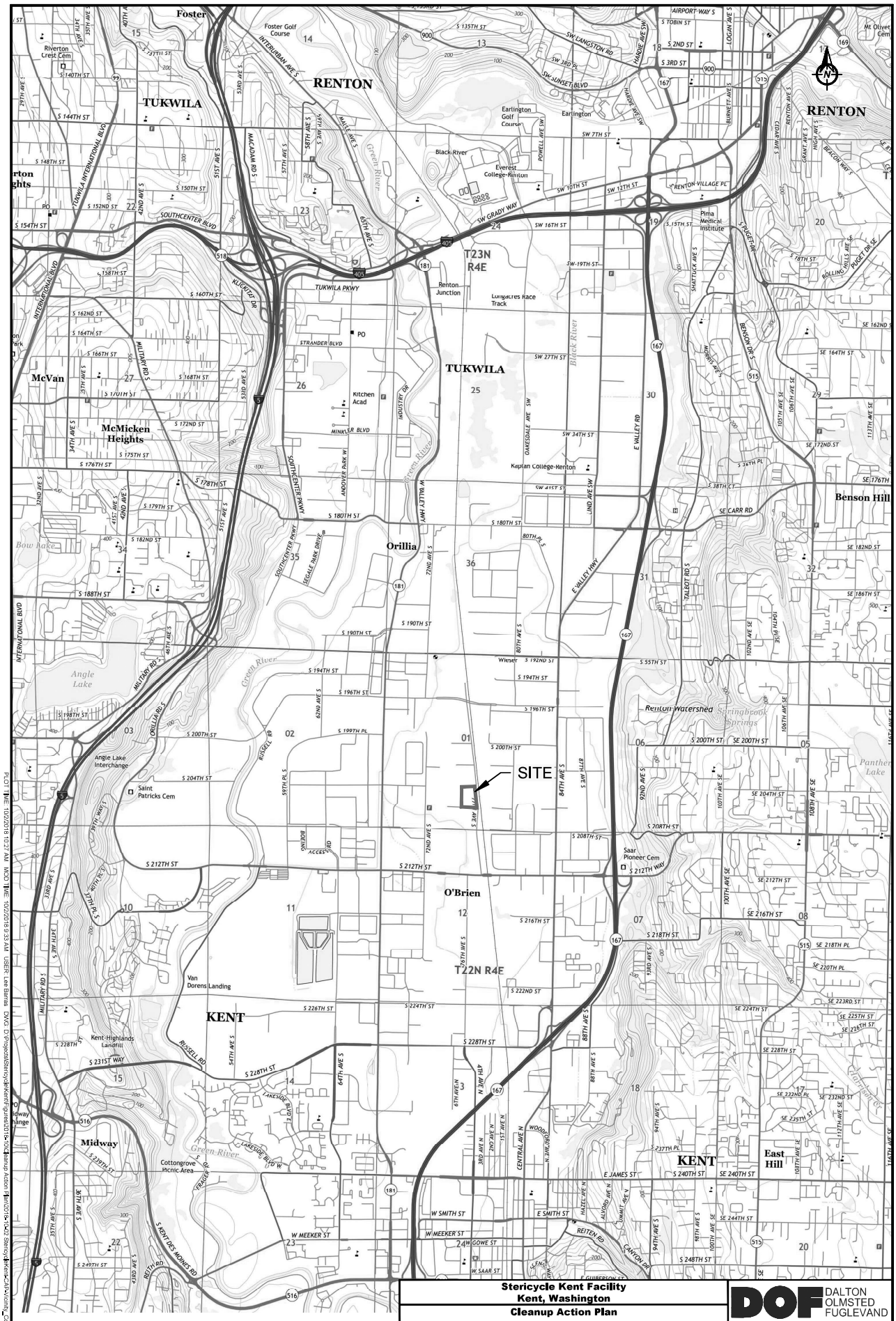
Digitally signed by Melanie Frohriep
Date: 2026.04.01 16:03:00 -04'00'

Melanie Frohriep
Vice President Regulatory Affairs and Environmental Compliance
933 First Avenue, Suite 200,
King of Prussia, PA 19406
(313) 824-5848

State of Washington
Department of Ecology

Digitally signed by Christa Colouzis
Date: 2026.03.31 09:40:20 -07'00'

Christa Colouzis
Section Manager
Hazardous Waste & Toxics Reduction Program
Northwest Region Office
(425) 324-1850



Stericycle Kent Facility
Kent, Washington
Cleanup Action Plan

SITE LOCATION

DOF DALTON OLMSTED FUGLEVAND

FIGURE 1

October 2, 2018

Exhibit A

PLOT TIME: 10/2/2018 10:27 AM MOD TIME: 10/2/2018 9:33 AM USER: Lee Barras DWG: D:\Projects\Stericycle\Kent\Figures\2018-10\Cleanup Action Plan\2018-10-02 Stericycle Kent CAP Vicinity_Concept Site Model.dwg

Cleanup Action Plan

CLEAN EARTH / BURLINGTON ENVIRONMENTAL- KENT
20245 77th Avenue South
Kent, Washington

February 2026

Issued by
Washington State Department of Ecology
Hazardous Waste and Toxics Reduction Program
Northwest Region Office
15700 Dayton Avenue N
Shoreline, WA 98133-9716

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ACRONYMS AND ABBREVIATIONS

AOC ..... Area of concern
ARAR ..... Applicable or relevant and appropriate requirements
bgs ..... Below ground surface
CAP ..... Cleanup Action Plan
City ..... City of Kent
CLARC ..... Cleanup Levels and Risk Calculations
COC ..... Constituent of concern
CPOC ..... Conditional point of compliant
CSM ..... Conceptual site model
CUL ..... Cleanup level
DOF ..... Dalton, Olmsted, and Fuglevand
Ecology ..... Washington State Department of Ecology
EDR ..... Engineering Design Report
EPA ..... U.S. Environmental Protection Agency
FS ..... Feasibility Study
FSWP ..... Feasibility Study Work Plan
IC ..... Institutional control
µg/L ..... Micrograms per liter
mg/L ..... Milligrams per liter
MNA ..... Monitored Natural Attenuation
MTCA ..... Model Toxics Control Act
POC ..... Point of compliance
PQL ..... Practical quantitation limit
RCRA ..... Resource Conservation and Recovery Act
RCW ..... Revised Code of Washington
RFA ..... RCRA facility assessment
RI ..... Remedial investigation
Site ..... Burlington Environmental Kent Facility
SPOC ..... Standard point of compliance
Stericycle ..... Stericycle Environmental Solutions
TPH ..... Total petroleum hydrocarbons
TPH-D ..... Total petroleum hydrocarbons in the diesel range
TPH-G ..... Total petroleum hydrocarbons in the gasoline range
UST ..... Underground storage tank
VOC ..... Volatile organic compound
WAC ..... Washington Administrative Code

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1.0 Introduction

This Cleanup Action Plan (CAP) describes the cleanup action selected by the Washington State Department of Ecology (Ecology) for the Clean Earth / Burlington Environmental Site located in Kent, Washington (Site). The Site is located at 20245 77th Avenue South in Kent, Washington (Figure 1). This CAP was developed using information presented in the Remedial Investigation (RI)/Feasibility Study (FS) for the Site, which was finalized by Dalton, Olmsted, and Fuglevand (DOF) in 2017 (DOF, 2017) on behalf of Burlington Environmental (formerly known as Stericycle Environmental Solutions) in accordance with their Resource Conservation and Recovery Act (RCRA) Part B permit No. WAD 991 281 767. A draft CAP was prepared in 2018 to satisfy the RCRA corrective actions requirements of the RCRA Permit as well as Chapter 70A.305 of the Revised Code of Washington (RCW), administered by Ecology under the Model Toxics Control Act (MTCA) Cleanup Regulation, Washington Administrative Code (WAC) 173-340.

The purpose of the CAP is to identify the proposed cleanup action for the Site and to provide an explanatory document for public review. More specifically, this plan:

- Describes the Site;
- Summarizes current Site conditions;
- Summarizes the cleanup action alternatives considered in the remedy selection process;
- Describes the selected cleanup action for the Site and the rational for selecting this alternative;
- Identifies Site-specific cleanup levels (CULs) and points of compliance for each hazardous substance and medium of concern for the proposed cleanup action;
- Identifies applicable state and federal laws for the proposed cleanup action;
- Identifies residual contamination remaining on the Site after cleanup and restrictions on future uses and activities at the Site to ensure continued protection of human health and the environment;
- Discusses compliance monitoring requirements; and
- Presents the schedule for implementing the CAP.

1.1 Previous Studies

The U.S. Environmental Protection Agency (EPA) completed a RCRA facility assessment (RFA) between 1993 and 1996 in preparation for issuing the Hazardous and Solid Waste Amendments (HSWA) 3004 section of the RCRA Part B operating permit. In September 1998, EPA and Ecology jointly issued the RCRA Part B permit for the Site. Areas of concern (AOCs) were identified for the Site as part of the RFAs. Burlington Environmental (and its predecessors) have conducted corrective actions work under the RCRA Part B Permit in collaboration with Ecology since that time.

An RI report was prepared in 2007 (Geomatrix, 2007) and an FS Work Plan (FSWP) was prepared in 2015 (Amec, 2015). The FSWP presented updated contaminant distribution information and outlined the process that would be used to conduct the FS. A draft FS was submitted in April 2016 (Amec and DOF, 2016) and conditionally approved by Ecology in October 2016 (Ecology, 2016). This final RI/FS (DOF, 2017) included reissuing the 2007 RI and the Revised Final FS, including revisions and additional information requested by Ecology as part of the 2016 FS conditional approval. Ecology approved that

report in a letter dated February 20, 2018 (Ecology, 2018).The RI/FS was approved by Ecology on March 20, 2018.

Five AOCs have been identified based on these previous studies. They are defined as the following:

- AOC-1: Former Underground Storage Tanks (USTs)
- AOC-2: Tank Farm Area
- AOC-3: Stabilization Area
- AOC-4: Stormwater Drainage System
- AOC-5: Process and Storage Area

The selected cleanup alternative for the Site addresses all of the AOCs listed above.

2.0 Site Description and Background

The site is located on a 6.25-acre parcel of land that can be divided into two areas: (1) the waste management facility on the eastern 3 acres of the Site, and (2) the 10-day hazardous waste transfer yard on the western 3.25 acres of the Site (Figure 2). The site is located in a heavily industrial area of the City of Kent (the City), in an area zoned M3 for general industrial land use by the City (DOF, 2017).

The properties surrounding the Site are other commercial and industrial facilities. The City's Comprehensive Plan adopted the implementation of zoning regulations under the Growth Management Act (Chapter 36.60A. RCW), which designated a manufacturing/industrial center and discourages and limits land uses other than manufacturing, high technology, and warehousing within the boundaries of the center. The Site is located with the City's designated manufacturing/industrial center.

2.1 Site History

Historical aerial photographs reviewed as part of the RI show that land use at the Site and in the surrounding area was primarily agricultural during the first half of the 20th century. By approximately 1980 the Site appears to have been cleared of all buildings and crops, and filled/graded prior to industrial facility construction. In 1980, Crosby and Overton, Inc., began developing the site as a commercial treatment and storage facility for oily wastewater. Hazardous waste management activities commenced in the 1980s and Chemical Processors, Inc. (a predecessor of Burlington Environmental) acquired the Site in 1989 (Geomatrix, 2007).

The Site currently consists of an office, a process containment building, container storage areas, a tank farm with aboveground storage tanks, and a treatment and solidification building. Container storage areas include the north and south container storage pads and the process containment building, which has storage areas for flammable waste, laboratory packs, and household waste. Existing facility operations include wastewater treatment (non-hazardous and RCRA/WA State dangerous waste), solidification, lab packing, and waste processing (e.g., consolidation, can crushing, shredding, baling, etc.). The 10-day RCRA hazardous waste transfer yard is located on the western 3.25 acres of the Site and was undeveloped until 2001 when the transfer yard was constructed. The transfer yard includes concrete pads and containment for transfer trailers and roll-off boxes, a fully lined stormwater retention pond, and a bio-filtration swale. The swale drains to a drainage ditch and culvert running along the northern edge of the Site.

Most operations that were regulated under Washington Dangerous Waste Code WAC 173-303 were halted in 2017. Remaining operations are mainly regulated under the Washington Solid Waste Code, which includes non-Federal Hazardous or State Dangerous wastes and Household Hazardous waste. However, TSCA-related waste management including mixed TSCA/Dangerous waste continues to occur on site under Permit in a room designated for that purpose. The Kent facility remains operating under a modified RCRA Part B Permit which was updated to reflect the change in operations.

2.2 Site Geology and Hydrogeology

The near-surface geology and hydrogeology at the Site is characterized by alternating sand and silty/clayey layers and is distinguished by the following eight units, listed in order of increasing depth:

- **Sandy Fill/Shallow Water-Bearing Unit.** Depth to the base of the fill is variable, but typically is found from ground surface to 5 to 7 feet bgs, hydraulically unconfined, becomes unsaturated during the period of low rainfall in summer and early fall.
- **Upper Silt and Clay Unit/Upper Aquitard**. Typically found between 5 to 17 feet bgs (varies) and up to 9 feet thick, partially unsaturated during the late summer and early fall. High in organic carbon content which combined with the low permeability of the silt and clay should make the upper aquitard a natural barrier to downward contaminant transport. Seasonally perched groundwater influences the oxidation-reduction potential favoring a tendency toward reducing conditions in shallower groundwater zones at the site.
- **Upper Silty Sand-Sand Unit/Intermediate Aquifer**. Fully saturated year-round. This unit has a silt layer present in the eastern and southeastern portions of the Site (up to 7 feet thick), but that silt is absent in the north and south central portions of the Site. Exact starting depths vary across the site (from 10 to 15 feet bgs) but a maximum depth of 25 feet bgs.
- **Lower Silt Unit/Lower Aquitard**. Thickness varies from about 2 to 10 feet and is typically encountered between 25 and 30 to 35 feet bgs.
- **Lower Sand Unit/Deep Aquifer**. Hydraulically confined year-round by the overlying lower aquitard. Groundwater flow direction is uniform, suggesting that lower aquitard is continuous, and directed to the west (typically encountered between 22 feet to 40 feet bgs).
- **Deep Silt Unit/Deep Aquitard**. Appears to be continuous across the site (typically at depths greater than 40 feet bgs).

Groundwater within the fill unit likely perches on the upper aquitard during wet months, and this water drains slowly into the upper portion of the intermediate aquifer. The intermediate aquifer is separated from the deep aquifer by a relatively thick silt and silty sand aquitard.

The fill unit and the upper aquitard represent important considerations in the hydrogeology and potential hydrogeochemistry of the Site. The upper aquitard represents the original ground surface prior to Site development, and the aquitard consists of silt and clay related to alluvial floodplain deposits of the Green River Valley. As a result, this aquitard is high in organic carbon content, which combined with the low permeability of the silt and clay should make the upper aquitard a natural barrier to downward contaminant transport. In addition, the seasonally perched groundwater affects the groundwater chemistry. In particular, the perched groundwater influences the oxidation-reduction potential favoring a tendency toward reducing conditions in the saturated portion of the fill and in Zone A of the intermediate aquifer.

2.2.1 Groundwater Flow

In the shallow water-bearing unit the groundwater flow is westerly when saturated in the spring, but by the fall most of the shallow zone wells have gone dry.

The groundwater flow directions in the intermediate aquifer are more complex. The groundwater flows towards an apparent low that centers around MW-124-I (Figure 2). This is an area where the silt layer within the intermediate aquifer is not present. Groundwater elevations in the intermediate aquifer in the spring are all lower than those in the overlying shallow water-bearing unit, indicating that

groundwater will flow vertically from the shallow zone into the intermediate aquifer. In the fall, the same area mounds and groundwater flows away from this mound in several directions.

Groundwater flow direction in the deep aquifer is uniform and directed to the west.

The following list shows the horizontal groundwater seepage velocities calculated in the RI.

- Shallow water-bearing unit: 1.2 to 3.8 feet/day
- Intermediate aquifer: 0.008 to 0.25 foot/day
- Deep aquifer: 0.04 to 0.6 foot/day

2.3 Human Health and Environmental Concerns

The primary sources of contaminants of concern (COCs) at the Site are releases from tanks and piping and constituents spilled at the Site resulting in soil and groundwater impacts. A conceptual site model (CSM) was prepared as part of the RI/FS based on current and assumed future industrial land use at the Site and continued industrial and commercial land use in the surrounding area (Figure 3).

COCs in groundwater at the Site may migrate and affect groundwater in offsite areas. Some of the more volatile constituents detected in soil and groundwater could potentially volatilize into soil gas, which could then migrate to indoor air of nearby buildings. Groundwater concentrations in the area of the existing building at the Site continue to be monitored and have been mostly non-detect for VOCs. Future buildings would be addressed as part of institutional controls, if warranted. It is assumed that concentrations of volatile compounds migrating from soil gas to outdoor air will be negligible due to rapid mixing and dilution in ambient air under normal working conditions. However, volatile compounds may migrate from soil gas to outdoor air in trenches during excavation activities. As the site is predominantly covered with buildings, concrete, or pavement, constituents detected in surface soil are unlikely to be mobilized in fugitive dust; and constituents detected in soil are also unlikely to leach to groundwater unless the industrial development is removed in the future. Constituents in groundwater may migrate to local surface water bodies via the drainage ditch along the northern border of the Site. This ditch could also be a source of recharge to the fill unit during the winter.

Since the Site is zoned industrial, groundwater in the shallow water-bearing unit and intermediate aquifer is not a current or future source of drinking water. The deep aquifer is also not a current or potential future source of drinking water, due to the confining clay layer beneath it. All public groundwater supply wells within 1 mile of the Site are deeper than the deep aquifer and are not a possible receptor of groundwater migrating from the Site.

- **Soil.** The RI identified a list of preliminary soil COCs which was narrowed as part of the FS based on concentration and preliminary CULs. Soil COCs considered in the FS included *volatile organic compounds* (*VOCs; benzene and vinyl chloride), polycyclic aromatic hydrocarbons (PAHs; benzo(a)pyrene, benzo(b)fluoranthene, and chrysene), total petroleum hydrocarbons (TPH), arsenic, and cyanide*. Soil data indicate that the tank farm may be the primary source for releases to the soil and groundwater. The lateral and vertical extent of these COCs appear to be limited, and primarily present in the area of AOC-2 (tank farm), and they do not appear to be migrating from the site at concentrations exceeding groundwater CULs.

- **Groundwater.** In groundwater, the COCs considered in the FS were vinyl chloride, arsenic, hexavalent chromium, cyanide, and iron.
    - ***Vinyl chloride***. Concentrations of vinyl chloride in groundwater have declined and evidence of biodegradation continues. Trends at the only well where vinyl chloride has been detected recently (MW-120-I1) indicate concentrations are nearing the CUL or non-detect (see Figure 6).
    - ***Arsenic.*** In contrast, arsenic concentrations in groundwater have not exhibited any significant increasing or decreasing trends over time. Arsenic levels may be related to seasonal variability in the geochemistry of groundwater, as evidenced by seasonally higher concentrations in the shallower groundwater zones.
    - ***Iron.*** Concentrations in groundwater at the site have not exhibited any significant increasing or decreasing trends over time. Historical releases of organic constituents could have contributed to reducing conditions and solubilization of iron, leading to higher concentrations of inorganic constituents.
    - Data for ***hexavalent chromium*** in groundwater prior to the FS were flagged for data quality issues since many reported hexavalent chromium results were higher than corresponding total chromium results. Burlington Environmental collected additional samples as part of the FS. Total/dissolved chromium has not been detected at any location above the preliminary CUL (for hexavalent chromium) and is consistently lower than the reported hexavalent chromium fraction. Therefore, hexavalent chromium is not a target compound for cleanup at the site.
    - ***Cyanide*** has been detected sporadically in groundwater at the site. As part of the FS, additional samples were analyzed for total, free, and weak acid dissociable cyanide to evaluate if the cyanide detected was in strong metal bound forms or if it was more biologically available. Results indicate that the cyanide present in groundwater at the site is not free cyanide and is not biologically available. Therefore, cyanide is not a target compound for cleanup at the site.

COCs in surface soil are unlikely to be mobilized in fugitive dust since the site is mostly developed; and constituents detected in soil are also unlikely to leach to groundwater unless the industrial development is removed in the future. COCs in groundwater at the Site may migrate and affect groundwater in offsite areas. Constituents in groundwater may migrate to local surface water bodies via a drainage ditch along the northern border of the Site. This ditch could also be a source of recharge to the fill unit during the winter.

The potential for exposure to contaminated soils or the migration of the COCs identified in soil and groundwater at concentrations exceeding CULs is unlikely under both current and future land use scenarios. The surface of the Site and most of the transfer yard is entirely covered with asphalt, concrete, or buildings. This surface cover effectively minimizes the leaching of soil COCs to groundwater, except where groundwater is in direct contact with COCs, which occurs only during the wettest periods of the year. As long as this low-permeability cover remains in place on most of the Site, leaching of COCs is assumed to be low. The only area on the Site where COCs in soil have also affected groundwater is in

AOC-2. However, the COCs in groundwater are a much smaller subset of those found in soil, the concentrations are generally very low, and the areal extent of groundwater impacts is limited.

3.0 Cleanup Standards

Establishment of cleanup standards requires specification of the CULs (chemical concentrations that are protective of human health and the environment) for each COC in each impacted media and the location on the site where the CULs must be attained, i.e., the point of compliance (POC). CULs for this CAP were taken from those previously established in the FS and then updated to reflect current risk-based values presented in Ecology's Cleanup Levels and Risk Calculation (CLARC).

3.1 Soil Cleanup Levels

Soil CULs selected for the Site constitute MTCA Method C CULs under WAC 173- 340-745 and must be protective of human health and the environment. Soil CULs were developed by determining the lower value between the following:

- MTCA Method C Industrial Cleanup Level based on direct contact/ingestion obtained from the CLARC website (Ecology, 2020).
- MTCA Method A Soil Cleanup Levels for Industrial Land Use (MTCA Table 745-1) for constituents with no available Method C CULs.
- Soil CULs protective of preliminary groundwater CULs described in Section 3.2 (WAC 173-340-747[4]).

The final values were compared to Puget Sound natural background levels as calculated by Ecology (1994) and adjusted upward if that value was higher as is the case with arsenic. The soil CULs are presented in Table 1.

3.2 Groundwater Cleanup Levels

Groundwater CULs were developed to be protective of drinking water, surface water, and indoor air by determining the lower of the value between the following:

- MTCA groundwater table values obtained from the CLARC website (Ecology, 2020):
  - MTCA Method A levels for constituents that do not have a Method B level available
  - MTCA standard Method B levels based on drinking water beneficial use, which include Federal maximum contaminant levels
- Surface water applicable or relevant and appropriate regulations (ARARs):
  - Water Quality Standards for Surface Waters of the State of Washington (WAC 173-201A) – Acute and Chronic effects, Aquatic Life, Freshwater
  - National Recommended Water Quality Criteria (Clean Water Act §304) – Freshwater, Acute and Chronic effects, Aquatic Life and for the Protection of Human Health, Consumption of Water and Organisms and Consumption of Organisms Only
  - National Toxics Rule (40 Code of Federal Regulations 131) – Freshwater, Acute and Chronic effects, Aquatic Life, and Human Health, Consumption of Water and Organisms
- MTCA Method B Surface Water levels, calculated using CLARC tables if a federal or local surface water value is not found in the ARARs (Ecology, 2020)

- MTCA groundwater values protective of indoor air obtained from the CLARC website (Ecology, 2020).

The determined values were compared to the laboratory screening levels and were adjusted upward in accordance with WAC 173-340-707 if they were below the PQL.

Area background levels were also considered in developing CULs consistent with the requirements of WAC 173-340-709. Area background calculations were conducted as part of the FS for COCs that were sporadically detected within the groundwater data set and for which a historical source of contamination was not identified. This assessment was applicable only to arsenic and iron, and was done to distinguish site-related concentrations from non-site-related concentrations. Consistent with WAC 173-340-706(1)(a)(i) the CULs for the COCs arsenic and iron were set to the MTCA C values because the calculated background values were greater than the MTCA C values. The groundwater CULs are presented in Table 2.

3.3 Point of Compliance

As defined in the MTCA regulations, the POC is the point or points at which CULs must be attained and may be a standard POC (SPOC) or a conditional POC (CPOC). A SPOC requires attaining cleanup levels throughout the site. The relevant regulatory provisions for establishing a CPOC for affected groundwater at the site are presented in WAC 173-340-720(8). For groundwater, a CPOC is proposed near the site boundary as shown on Figure 4. Under MTCA (WAC 173-340-720[8][c]), a CPOC for groundwater is permissible when:

1. It is not practicable to attain the SPOC within a reasonable restoration time frame,
2. The CPOC is as close as practicable to the source of the release, and
3. All practicable methods of treatment are used in the site cleanup.

Highly disruptive remediation technologies would likely be the only way to completely remove COCs to allow for an SPOC within a short restoration time frame. However, highly disruptive remediation technologies (i.e., excavation) beneath AOC-2, the tank farm area, would likely fail a cost/benefit analysis because (1) the site is an active waste handling facility, (2) the extent of the source area is small, and (3) effects on groundwater are limited. Since other remedial technologies exist that would allow industrial activities to continue, highly disruptive remediation costs would be disproportionately high relative to the potential incremental benefit.

For soil, the POC is established under WAC 173-340-740(6) and generally requires establishment of a POC for soils throughout the site to a depth of 15 feet below ground surface (bgs). However, for cleanup actions that involve containment of contamination, WAC 173-340-740(6)(f) establishes the following provisions for the cleanup to comply with the cleanup standards:

> *"…for those cleanup actions selected under this chapter that involve containment of hazardous substances, the soil cleanup levels will typically not be met at the points of compliance specified in (b) through (e) of this subsection. In these cases, the cleanup action may be determined to comply with cleanup standards, provided:*
>
> *(i) The selected remedy is permanent to the maximum extent practicable…*
>
> *(ii) The cleanup is protective of human health…*

(iii) The cleanup action is demonstrated to be protective of terrestrial ecological receptors…

(iv) Institutional controls are put in place…that prohibit or limit activities that could interfere with the long-term integrity of the containment system;

(v) Compliance monitoring…and periodic reviews…are designed to ensure the long-term integrity of the containment system; and

(vi) The types, levels and amounts of hazardous substances remaining on-site and the measures that will be used to prevent migration and contact with those substances are specified in the draft cleanup action plan."

Based on the site conditions presented in the RI/FS soil CULs would not expected to be met at the SPOC and the provisions of WAC 173-340-740(6)(f) apply to the site. It is not practicable to attain the CULs at the SPOC for soil because buildings and the tank farm on the site limit access to some portions of the subsurface, and the presence of shallow groundwater limits the practicable depth at which many remediation technologies could be employed.

Burlington Environmental will comply with the requirements for soil cleanup standards in WAC 173-340-740(6)(f) as follows:

(i) Using practicable, permanent treatment methods to remove the source area. Treatment methods that may be applicable were described and evaluated as part of the FS and adhere to the requirements specified under WAC 173-340-360.

(ii) Meeting CULs that have been established to protect human health; in those locations where CULs will not be achieved, the receptor pathways are evaluated and suitable institutional controls (ICs) will be included in the final remedy to protect human health.

(iii, iv) Implementing ICs that maintain the integrity of the containment system and protect plants and wildlife from being exposed to any residual contamination are part of the selected final remedy.

(v) Conducting compliance monitoring and implementing long-term controls necessary for the remedy will be defined in the design of the final remedy.

3.4 Contaminant Distribution

This section summarizes the distribution of COCs present at the site, organized by the defined AOCs.

3.4.1 Soil

AOC-1: Former USTs. No COCs have been detected at concentrations exceeding CULs in this area.

AOC-2: Tank Farm Area. Historical data indicate that the tank farm may be the primary source for releases to the soil and groundwater. Compounds that have been detected in soil from the tank farm area at concentrations exceeding the soil CULs include benzene, benzo(b)fluoranthene, chrysene, arsenic, cyanide, and TPH in the gasoline range (TPH-G), diesel range (TPH-D), and lube oil range (TPH-

O). Higher concentrations of petroleum constituents have been detected in near-surface soil than in deeper soil in petroleum-impacted areas, suggesting a surficial release.

AOC-3: Stabilization Area. Benzene, vinyl chloride, arsenic, and TPH-G have been detected in soil at concentrations exceeding the CULs.

AOC-4: Stormwater Drainage System. Benzene, benzo(a)pyrene, benzo(b)fluoranthene, chrysene, TPH-G, TPH-D, and arsenic have been detected in soil at concentrations exceeding the CULs.

AOC-5: Process and Storage Area. No COCs have been detected at concentrations exceeding CULs in this area.

10-Day RCRA Hazardous Waste Transfer Yard. Arsenic was detected in soil samples from this area at concentrations exceeding CULs; however statistical assessment performed during the FS indicated a 95 percent upper confidence limit value below the CUL and does not warrant cleanup. Arsenic detections may be associated with fill material used across the site during construction.

3.4.2 Groundwater

Biodegradation appears to be reducing the concentrations of chlorinated ethenes in groundwater. Vinyl chloride has only been detected in groundwater samples above the CUL at a few wells in recent years, all located in AOC-2 and AOC-3. Given the current trend in groundwater concentrations at the historically highest concentration well (MW-120-I1), vinyl chloride would be anticipated to be less than the CUL by around 2020 (Figure 6) and has been non-detect for the first time during the most recent 2018 sampling round.

Historically, the highest concentrations of arsenic have been associated with the shallow water-bearing unit in AOC-2, and are likely associated with soil concentrations in this area combined with reducing conditions in groundwater in the same area. Recent results continue to show the highest arsenic concentrations in AOC-2, with the highest detected concentration at well MW-123-S (60 micrograms per liter [µg/L] in April 2018). Concentrations at wells MW-102-I, MW-117-I2, and MW-126-I also consistently show detections above 20 µg/L. The concentrations of arsenic detected in groundwater throughout the remainder of the site appear to represent background conditions in the area (Appendix A). An upward trend in arsenic at well MW-117-I2 has recently been detected (Appendix A-2). This well is at the far southern end of the Site. This pattern will continue to be monitored and evaluated as part of regular groundwater monitoring and progress reporting.

The highest concentrations of iron appear to be limited to AOC-2; the concentrations detected throughout the remainder of the site appear to represent area background conditions, with wells MW-102-I-1 and MW-123-I showing concentrations of 94.5 milligrams per liter (mg/L) and 109 mg/L, respectively, in 2015 – the most recent sampling round that included iron.

4.0 Cleanup Action Selection

4.1 Cleanup Action Alternatives

Cleanup alternatives to meet these remedial action objectives are evaluated as part of the FS. The FS evaluated multiple alternatives for addressing all contaminated media at the Site. The following five alternatives are based on the proposals made by the PLPs in their Feasibility Study. Note that Alternatives 3, 4, and 5 all include the use of one or more engineered cover systems. The Feasibility Study specified that several types of engineered cover systems could possibly be constructed. To comply with applicable ARARs and public input that Ecology received during the public review of the RI and FS reports, Ecology will complete its alternative analysis with the assumption that any cover system will, at a minimum, meet the requirements of the Limited Purpose Landfill Regulations, WAC 173-350-400.

4.1.1 Alternative 1 - Monitored Natural Attenuation

This alternative relies on eventual contaminated soil remediation, maintenance of surface cover over remaining source soils, and monitored natural attenuation to address affected site soil and groundwater. The following elements are included in Alternative 1:

- Remediation of contaminated soils in AOC-2 and AOC-3 when the areas become accessible;
- Assessing and repairing the existing surface cover, as necessary, in remaining source soil areas in AOCs 2 and 3;
- Long-term monitoring and maintenance of the cover over remaining soil source areas in AOC 2 and 3;
- Monitored natural attenuation of groundwater downgradient of source areas;
- Long term groundwater monitoring; and

ICs, including a deed restriction

4.1.2 Alternative 2 - Permeable Reactive Barriers and Monitored Natural Attenuation

This alternative supplements the source material soil remediation, surface cover, and natural attenuation processes that would occur under Alternative 1 with the installation of Permeable Reactive Barriers (PRBs) to prevent off-site migration of affected groundwater from all three aquifer zones to protect downgradient receptors. The configuration and layout of the PRBs includes:

- Both shallow and intermediate PRBs along the north and northwest side of AOC-2 and the east side of AOC-3 to prevent off-site migration of COC-affected groundwater;
- An intermediate aquifer PRB in the vicinity of the South Gate to prevent off-site migration of arsenic-affected groundwater near MW-117; and
- A deep aquifer PRB to prevent off-site migration of cyanide-affected groundwater downgradient of MW-24D and MW-117D.

4.1.3 Alternative 3 - In Situ Chemical Reduction and In Situ Bioremediation

This alternative supplements the source material soil remediation, surface cover, and natural attenuation processes that would occur under Alternative 1 with in situ chemical reduction (ISCR) and in situ bioremediation (ISB), which consists of the injection of a in situ chemical reductant and substrate to promote anaerobic degradation and bio-mediated precipitation of ferrous iron and sulfide. Direct push

injections allow for distribution of ISCR and ISB solutions across target depth intervals. Injections would be timed and strategically placed to make use of the seasonal changes in groundwater flow. The following elements are included in this alternative:

- Remediation of contaminated soils from AOC-2 and AOC-3 when the areas become accessible;
- Assessing and repairing the existing surface cover, as necessary, in remaining source soil areas in AOCs 2 and 3;
- Long-term monitoring and maintenance of the cover over remaining soil source areas in AOC 2 and 3;
- Seasonal injections of a chemical reductant and a substrate to facilitate in situ biological remediation;
- Monitored natural attenuation of groundwater from other known or suspected source areas;
- Long term groundwater monitoring; and
- ICs, including a deed restriction.

4.2 Regulatory Requirements

The overall objective of selecting a remedy is to reduce the risks to human health and the environment resulting from COCs in soil and groundwater at the site to acceptable levels. All remedial alternatives considered in the FS addressed the CSM and the site migration and exposure pathways of concern. The remediation considerations and remediation objectives established for the site provided the framework for development of remedial alternatives.

The MTCA regulations (WAC 173-340-360) present the general requirements for selecting cleanup actions for a contaminated site. The minimum requirements applicable to all cleanup actions include specific threshold requirements and other requirements that must be met by all cleanup actions.

The threshold requirements specify that the cleanup action should:

- Protect human health and the environment;
- Comply with cleanup standards specified in WAC 173-340-700 through WAC 173-340- 760;
- Comply with applicable state and federal laws and local requirements; and
- Provide for compliance monitoring.

The other requirements cited in the MTCA regulations specify that the cleanup action should:

- Use permanent solutions to the maximum extent practicable, as determined by the requirements of WAC 173-340-173-340-360(3);
- Provide for a reasonable restoration time, as determined by the requirements of WAC 173-340-360(4); and
- Consider public concerns.

A variety of remedial technologies were screened as part of the FS. Table 3 summarizes the alternatives screened during that process. These alternatives took into account site conditions and the remedial action objectives described below.

- Prevent direct contact with surface or subsurface soil and inhalation of dust from surface soil affected with COCs at concentrations that exceed industrial CULs or reduce the risks associated with these exposure pathways to acceptable levels.
- Reduce, as practicable, COC mass in soil and groundwater within a reasonable timeframe (including subsurface VOC concentrations).
- Protect human and ecological receptors by reducing COC concentrations in affected groundwater at the CPOC within a reasonable time frame.
- Support current and future industrial use of the property.
- Comply with applicable state and federal regulations for site cleanup, health and safety, and waste management.

Several in situ technologies (chemical oxidation, chemical reduction, caps/covers) and ex situ technologies (excavation/treatment) were considered for remediation of soil. Technologies considered for groundwater included enhanced anaerobic biodegradation, bioaugmentation, monitored natural attenuation (MNA), chemical reduction, chemical oxidation, and permeable reactive barriers.

5.0 Description of Selected Remedy

5.1 Description of Cleanup Action

The highest ranking and recommended remedial alternative defined in the FS was "Alternative 1" which is MNA relying on eventual contaminated soil remediation in AOC-2 and AOC-3 when the areas become accessible, maintenance of surface cover over remaining source soils, and MNA to address affected site soil and groundwater.

The preferred remedy includes:

- Active treatment of remaining source soils in active areas of the Site as they become accessible or at Site closure;
- Pavement or concrete surface cover;
- Treatment of arsenic in groundwater by treatment/removal of anthropogenic sources of carbon where those sources have exacerbated the existing arsenic concentrations;
- Long-term compliance monitoring; and
- ICs.

5.2 Basis for Selecting Alternative 1

The MTCA requirements for sites where natural attenuation may be an appropriate aspect of a remedy were considered as part of the FS. These considerations included those specifically cited in WAC 173-340-370(7)(a) through (d), as follows.

a. ***Source control has been conducted to the maximum extent practicable.*** Sources of contamination that remain at the Site are confined to the areas underneath the active portion of the operational facility, and covered by pavement and/or buildings and tanks controlling access and risk of contact with this material. Groundwater and surface water sampling do not show a concern for offsite migration due to remaining sources at the Site.

b. ***Leaving contaminants on site during the restoration time frame does not pose an unacceptable threat to human health or the environment.*** ICs will be included in the remedy to prevent risks of contact with contaminated media at the site and ongoing monitoring will continue to assess risk of offsite migration, which is currently not expected to occur.

c. ***There is evidence that natural biodegradation or chemical degradation is occurring and will continue to occur at a reasonable rate at the site.*** The groundwater data trends presented in the FS showed large reductions in the contaminants of potential concern (COPCs) identified in the RI, and continued degradation of remaining organic COCs at the Site. Inorganic COCs will continue to be monitored for evidence of reduction as geochemical conditions change and the remaining organic COCs attenuate. Current and historical data trends for inorganic COCs support the hypothesis that groundwater concentrations are stable for those compounds, and not increasing, as recommended under Ecology's natural attenuation related guidance (Ecology, 2005).

d. ***Appropriate monitoring requirements are conducted to ensure that the natural attenuation process is taking place and that human health and the environment are protected.*** The remedy will include ongoing groundwater monitoring.

The proposed action received a higher score than the other alternatives for technical and administrative implementability and cost, and would fully attain remediation objectives as well as:

- Prevent direct contact with soils and inhalation of dust at the site and be protective of industrial workers;
- Address groundwater COCs above CULs including chlorinated VOCs and inorganic COCs caused by anthropogenic releases of carbon sources;
- Reduce risks due to inhalation of vapors or dust by incorporating ICs;
- Protect human and ecological receptors in Mill Creek by natural degradation of groundwater COCs and limiting the further release of COCs by remediation of site soils; and
- Support current and future industrial use of the site.

The proposed action would control potential exposures related to affected soil, groundwater, and soil gas, achieving the environmental indicator goals for the Site. Details of the proposed action are described in the following subsections.

4.1.1 Institutional Controls

ICs, as described in WAC 173-340-360(2)(e), are not a remediation technology and do not result in site cleanup; rather, they are commonly used as a component of remedial alternatives to address residual soil and/or groundwater contamination. In addition, ICs may be used to protect human health and the environment during implementation of a remediation program that may require longer time frames to achieve remediation objectives. ICs typically consist of administrative controls, such as deed restrictions, and controls that prohibit actions that may result in the exposure of individuals to soil or groundwater contaminants. They also may include engineering controls that limit exposure to individuals and the environment (e.g., soil cover, hydraulic control, site fencing, etc.).

The proposed action would likely result in the attainment of groundwater CULs within approximately five to ten years after source removal.

5.3 Selected Remedial Action Components

5.3.1 Active Treatment of Source Material in Soils

The majority of elevated concentration COCs were detected in samples from AOC-2 and a few locations farther south in AOC-3. It is currently impracticable to remediate source material beneath the active areas of the Site, especially in AOC-2 and in AOC-3, without severely affecting Site operations. Remediation would require demolition or temporary removal of existing tanks, structures, and/or breaches to existing containment features that are currently necessary to minimize the risk of releases to the subsurface from Site operations.

Remediation of the soils above CULs beneath the tank farm in AOC-2 would result in severe impacts to active site operations and would require decommissioning, removing, and replacing/restoring waste storage tanks that are currently in use. Remediation of soils above CULs in AOC-3 southeast of the Treatment Stabilization Building would also severely impact operations. Sample results for arsenic in one area of AOC-3 (5307-SB-1) showed a concentration that is more than two times the CUL of 7.4 milligrams per kilogram (mg/kg). This sample is from approximately 6 to 11 feet bgs, below the shallow silt layer and underneath a vault. In order to design treatment, additional pre-design sampling and characterization would be necessary which is currently impracticable with the active operations in these areas.

Contamination remaining in soil for the majority of the active areas of the Site could be evaluated and remediated at Site closure, as maintenance on the tanks/structures is needed, and/or as redevelopment activities allow. Since many of the soil sample results are now 15 to 30 years old and for several COCs that are naturally degradable, resampling prior to remediation of these areas is warranted to specifically determine depths and extents of treatment or excavation zones.

Based on the existing data, an area encompassing the highest density of samples that showed concentrations above CULs in Site soil is assumed for future assessment and remediation during Site closure via excavation or other active measures. The areas to be assessed for further remediation at Site closure are shown on Figure 5 and include approximately 9,000 square feet within the central area of AOC-2 under the tank farm (Source Area 1) and two smaller source areas—an approximately 1,000 square foot area in the northwest corner of AOC-2 (Source Area 2) near sample location S-1, and an approximately 500 square foot area on the east side of the Treatment Stabilization Building in AOC-3 (Source Area 3).

Burlington Environmental must provide a detailed pre-design prior to remediation of soils in order to better delineate the extent of remediation that will be required. Under the July 2015 RCRA Closure Plan (included in the permit), Burlington Environmental is already required to conduct soil sampling in Source Area 1 and 3 upon Site closure, which will aid in determining design of active remediation of soils in that area. Burlington Environmental must also perform pre-remediation sampling in Source Area 2 to aid design of treatment for that remaining soil source area. ICs will be used to prevent worker exposure and any excavation work performed in known or suspected contaminated areas will be coordinated with Ecology.

5.3.2 Pavement or Concrete Surface Cover

Surface cover and containment are crucial in support of ongoing Site operations. Maintaining pavement and concrete is necessary for both ongoing operations and to prevent worker exposure to subsurface contaminants. Burlington Environmental will assess pavement in remaining source soil areas in AOCs 2 and 3 and repair pavement, as necessary. Maintaining this existing pavement and concrete surface cover/containment is a component of the proposed cleanup (Figure 5).

5.3.3 Treatment of Arsenic in Groundwater

Treatment of arsenic in groundwater will be limited to MNA to destroy anthropogenic sources of carbon in areas where anthropogenic sources of carbon have exacerbated the existing arsenic concentrations (Figure 5). The primary areas for treatment are under and around AOC-2, as well as near MW-117-I2. Since several sources of anthropogenic carbon will likely remain for some time under the tank farm in AOC-2, declines in arsenic concentrations are unlikely to occur in the near future. Once the anthropogenic contaminants are treated, the previously existing geochemistry should return and arsenic concentrations should return to levels consistent with the natural total organic carbon and iron oxide interactions in the aquifer.

Although no carbon-based groundwater COCs are currently above screening levels at MW-117-12, arsenic levels are substantially elevated when compared to the majority of the wells on site (Appendix A). Low-level detections of some chlorinated VOCs (*cis*-1,2-dichloroethene, vinyl chloride) have been reported in semiannual progress reports since 2010, indicating the presence of anthropogenic carbon, which may explain the higher arsenic concentrations.

5.3.4 Long-Term Compliance Monitoring

Compliance monitoring required under WAC 173-340-410 consists of the following.

- **Protection Monitoring.** Confirms human health and the environment are adequately protected during construction and operations of cleanup. This will be addressed in a site-specific health and safety plan.
- **Performance Monitoring**. Confirms the cleanup action attains cleanup or other performance standards.
- **Confirmational Monitoring**. Confirms the long-term effectiveness of the cleanup action.

Performance and confirmational monitoring will be addressed by a groundwater monitoring program employing the existing monitoring well network to verify that natural attenuation and degradation of COCs continue to occur, and that COC concentrations are trending toward CULs at the CPOC over time. There are currently 27 wells actively being monitored under the existing monitoring plan (Appendix B). Three new monitoring wells are proposed as part of cleanup implementation (Figure 5). Monitoring will consist of regularly scheduled groundwater sampling and analysis for COCs from a network of wells on the Site. These data will be used to document and evaluate remedy effectiveness and progress on anticipated remediation timelines to meet CULs.

5.3.5 Institutional Controls

ICs are included in the proposed cleanup so that the cover is maintained, and to restrict future land use and groundwater use at the site. Since potential exposure to COCs above CULs would remain, a deed

restriction limiting the site to industrial use would be implemented. The deed restriction would also clearly identify the location of known soil and groundwater contamination. Additional ICs to limit recovery and use of groundwater beneath the site and strict health and safety requirements for conducting subsurface work in impacted areas would also be required. Formal pavement inspections would be performed during groundwater monitoring events. Facility operators would be expected to repair damage or settling in the pavement.

Deed restrictions protect the health and safety of people who may come in contact with the site in the future. Such restrictions could include preventing or limiting site excavation work and assessing potential vapor exposure pathways prior to ground disturbing activities, requirements to notify future construction workers of the presence and location of affected site soil or groundwater, or precluding future use or redevelopment of the site for certain uses, such as residential, schools, day care centers, or hospitals. Additional ICs can be established to maintain remediation technologies put in place at a site.

Administrative controls also can be non-enforceable restrictions that provide information, notification, or site security. These controls may include warning signs that inform users of the potential site hazards and access requirements. On-site security and containment fencing may be employed in addition to warning signs to prevent unauthorized individuals from entering the Site. On an industrial facility operation like this Site, administrative controls can be built into site safety plans and in employee and visitor hazard communications.

5.4 Applicable or Relevant and Appropriate Requirements

Cleanup actions conducted under MTCA must comply with applicable state and federal laws. The term "applicable state and federal laws" includes legally applicable requirements and those requirements that Ecology determines to be relevant and appropriate as described in WAC 173-340-710. Typical ARARs include location-specific, action-specific, and contaminant-specific ARARs.

The facility RCRA Part B permit specifically required that the FS comply with RCW Chapter 70A.300 (Hazardous Waste Management), Chapter 173-303 (Dangerous Waste Regulations), and Chapter 173-340 (MTCA Cleanup Regulations). Additionally, the Site is covered under RCRA as an interim status facility for the purpose of corrective action, requiring compliance with federal RCRA regulations (40 Code of Federal Regulations 240-299). Any remedial action taken at the site must comply with other applicable laws and regulations (42 United States Code Ch. 6901 et seq.). The applicable requirements under the Dangerous Waste Regulations and RCRA pertain primarily to management of remediation wastes and general compliance with the interim status RCRA permit. Corrective action requirements under RCRA and the dangerous waste rules are addressed under the RCRA permit and the MTCA regulations.

Location-specific ARARs include those based on the location of the site, such as:

- Permits from local municipalities as required for activities at the site;
- Shoreline, wetlands, and critical areas criteria; and
- Tribal and cultural protections (archaeological resources).

Action-specific ARARs include those based on acceptable management practices. They include:

- Minimum Standards for Construction and Maintenance of Wells;

- General Occupation Health Standards and Safety Standards for Construction Work; and
- State Environmental Policy Act.

Additional ARARs may apply and will be defined as part of the design for implementation. Standard industry practices often address many ARARs, such as construction of wells being performed by a Washington-licensed driller and construction work being conducted under site-specific health and safety plans compliant with federal and local safety regulations.

5.0 Implementation of the Proposed Cleanup Action

The following sections describe the activities that Burlington Environment is required to take to implement the cleanup. Specific details of the cleanup action will be provided in the EDR.

5.1 Implementation Schedule

Burlington Environmental will prepare an EDR once the CAP is finalized, which will include the following:

- Construction Work Plan for surface cover inspection and repair and installation of new groundwater monitoring wells
- Description of the administrative approach for addressing future assessment and remediation of source material beneath the active areas of the Site
- Long-Term Groundwater Monitoring Plan for MNA
- Health and Safety Plans
- Draft Long-Term Controls Plan including a draft environmental covenant consistent with the ICs proposed for the site

Following implementation, Burlington Environmental will prepare and submit to Ecology a cleanup action construction report, consistent with WAC 173-340-400(b).

5.2 Financial Assurance

Financial assurance for corrective action is required by WAC 173-303-64620. Ecology's Financial Assurance Officer shall determine when Burlington Environmental's actions and submissions meet the requirements of WAC 173-303-64620..

In addition, Burlington Environmental's Permit (Sections 2.6.4.5 and 2.6.4.8) specifies that a written cost estimate will be submitted to the Ecology within 30 days from the effective date of an Agreed Order or Consent Decree and/or within 30 days of Ecology's notice of selection of a final remedy (i.e. the CAP). Burlington Environmental must establish financial assurance within 30 days of Ecology approving the cost estimate.

5.3 Periodic Review

As long as groundwater cleanup levels have not been achieved, WAC 173-340-420 states that at sites where a cleanup action requires an institutional control, a periodic review shall be completed no less frequently than every five years after the initiation of a cleanup action.

Additionally, periodic reviews are required at sites that rely on institutional controls as part of the cleanup action. Periodic reviews will be required at this Site.

6.0 Conclusions

Although the time frame to meet CULs in groundwater is longer for the proposed action than for using more active remediation technologies, the COCs in soil are not a threat to workers on site and the COC concentrations in groundwater are very low and are unlikely to reach potential receptors.

The Site currently poses no known or suspected risk to human health or the environment. ICs would be needed for the Site over the long term to protect human health and the environment and meet the criteria under MTCA for sites utilizing MTCA Method C CULs.

The proposed cleanup action meets the threshold requirements established in WAC 173-340-360(2)(a). The action would provide short-term protection of human health and the environment through risk reduction (ICs and surface cover), and long-term protection through the permanent destruction, transformation, or immobilization of hazardous chemicals through natural attenuation processes and contaminated soil remediation. This action is in compliance with state and federal laws, and provides for long-term compliance monitoring.

7.0 References

Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler), 2015, Revised Feasibility Study Work Plan, Stericycle Kent Facility, Kent, Washington: Prepared for Stericycle Environmental Solutions, Inc., July.

Amec Foster Wheeler and Dalton, Olmsted, and Fuglevand, Inc., 2016, Draft Feasibility Study, April.

Dalton, Olmsted, and Fuglevand, Inc. (DOF), 2017, Submittal: Executive Summary, 2007 Remedial Investigation Report, and 2017 Final Feasibility Study, Stericycle Kent Facility, June 21.

Ecology-see Washington State Department of Ecology

Geomatrix Consultants, Inc. (Geomatrix), 2007, Final Remedial Investigation Report, PSC Kent Facility, Kent, Washington: Prepared for Philip Services Corporation, December.

Washington State Department of Ecology (Ecology), 2005 Guidance on Remediation of Petroleum-Contaminated Ground Water By Natural Attenuation, 05-09-091, July.

Ecology Comment and Conditional Approval of the Draft Feasibility Study, Stericycle Kent Facility, Letter to William Beck, Stericycle, from Neal Hines, Ecology, dated October 18, 2016.

Ecology Comment and Approval of the Final Feasibility Study (RI/FS), Stericycle Kent Facility, Letter to William Beck, Stericycle, from Neal Hines, Ecology, dated March 20, 2018.

Ecology, 2020, CLARC database, located at: https://fortress.wa.gov/ecy/clarc/CLARCHome.aspx.

Ecology Letter to Laura Dell'Olio, Clean Earth, re: Ecology comments on the draft Cleanup Action Plan (dCAP) prepared for Stericycle-Kent by Dalton, Olmsted, & Fuglevand (DOF); dated October 17, 2018; EPA ID No. WAD 991 281 767, September 14, 2020.

TABLES

DOF DALTON OLMSTED FUGLEVAND

TABLE 1
SOIL COC CLEANUP LEVELS
Stericycle Kent Facility
Kent, Washington

all concentrations in milligrams per kilogram (mg/kg)

Compound	CAS Number	MTCA Method C	MTCA Method A Industrial	Protective of Groundwater (@ 13 degrees C)	Soil Cleanup Level	Basis
Volatile Organic Compounds						
Benzene	71-43-2	2.39E+03	3.00E-02	2.74E-02	**2.74E-02**	Protection of groundwater
Vinyl Chloride	75-01-4	1.05E+04	--	1.67E-03	**1.67E-03**	Protection of groundwater
Semivolatile Organic Compounds						
Benzo(a)pyrene	50-32-8	1.80E+01	2.00E+00	2.33E+00	**2.33E+00**	Protection of groundwater
Benzo(b)fluoranthene	205-99-2	1.80E+02	--	2.95E+00	**2.95E+00**	Protection of groundwater
Chrysene	218-01-9	1.80E+04	--	9.55E+01	**9.55E+01**	Protection of groundwater
Inorganics						
Arsenic	7440-38-2	8.75E+01	2.00E+01	2.92E+00	**7.30E+00**	Natural background
Cyanide	57-12-5	2.10E+03	--	--	**2.10E+03**	Protection of direct contact
Total Petroleum Hydrocarbons						
TPH as gasoline	86290-81-5	--	3.00E+01[1]	--	**3.00E+01**	Protection of direct contact
TPH as diesel	68334-30-5	--	2.00E+03	--	**2.00E+03**	Protection of direct contact
TPH as lube oil	---	--	2.00E+03	--	**2.00E+03**	Protection of direct contact

Notes:

1. = Gasoline range organics, benzene present

2. Values sourced from CLARC website 2018, https://fortress.wa.gov/ecy/clarc/CLARCHome.aspx

Abbreviations:

MTCA = Model Toxics Control Act

CAS = Chemical Abstract Service

COC = Constituent of concern

TPH = Total petroleum hydrocarbons

TABLE 2
GROUNDWATER COC CLEANUP LEVELS
Stericycle Kent Facility
Kent, Washington

Compound	CAS Number	MTCA Method A Groundwater [1]	MTCA Method B Groundwater [1]	Surface Waters of the State of Washington[2]	National Recommended Water Quality Criteria[3]	National Toxics Rule[4]	MTCA Method B Surface Water	Protective of Indoor Air	Area Background	Groundwater Cleanup Level	Basis
Volatile Organic Compounds (µg/L)											
Vinyl chloride	75-01-4	2.00E-01	2.90E-02	--	2.40E+00	2.00E+00	3.70E+00	2.80E-01	--	**2.90E-02**	Method B Groundwater
Inorganics (µg/L)											
Arsenic	7440-38-2	5.00E+00	5.83E-01	3.60E+01	1.80E-02	1.80E-02	9.82E-02	--	1.05E+01	**1.05E+01**	MTCA C Value[5]
Iron	7439-89-6	--	1.12E+04	--	3.00E+02	--	--	--	2.45E+04	**2.45E+04**	MTCA C Value[5]

Notes:

1. Values sourced from CLARC website 2018, https://fortress.wa.gov/ecy/clarc/CLARCHome.aspx
2. WAC 173-201A – Acute and Chronic effects, Aquatic Life, Freshwater
3. Clean Water Act §304 – Freshwater, Acute and Chronic effects, Aquatic Life and for the Protection of Human Health, Consumption of Water and Organisms and Consumption of Organisms Only
4. 40 Code of Federal Regulations 131 – Freshwater, Acute and Chronic effects, Aquatic Life, and Human Health, Consumption of Water and Organisms
5. Method C values were selected for constituents where an area background value was calculated but the calculated value was higher than the Method C level, per WAC 173-340-706(1)(a)(i) and the approved Feasibility Stud

Abbreviations:

MTCA = Model Toxics Control Act

CAS = Chemical Abstract Service MTCA = Model Toxics Control Act

COC = Contaminant of concern

DOF DALTON OLMSTED FUGLEVAND

Table 3
Remediation Technologies Considered for Incorporation in Remedial Alternatives
Stericycle Kent Facility
Kent, Washington

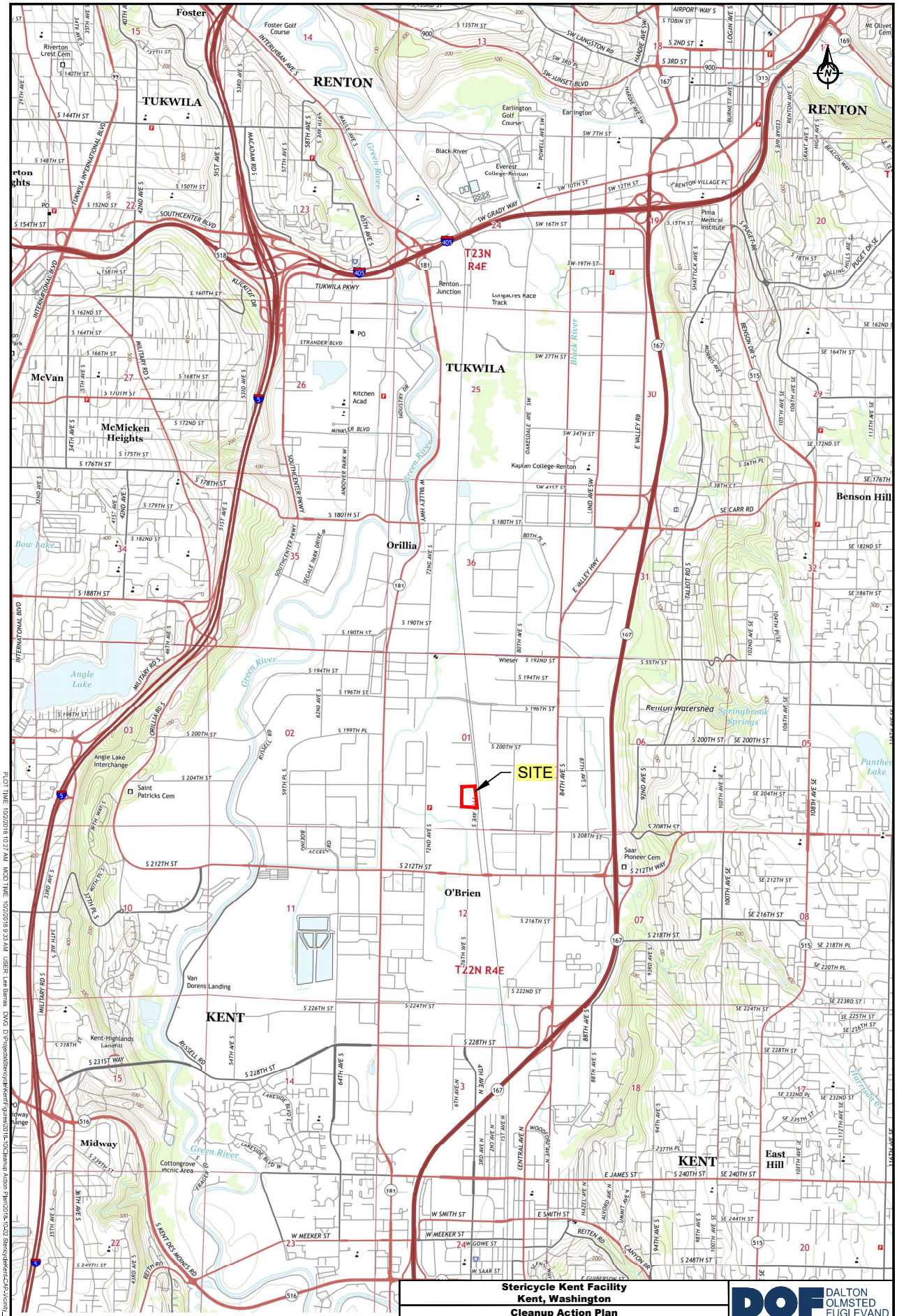
General Response Actions	Remediation Technologies	Technology Description	Technology Development Status	General Performance Record	Site Areas Addressed	Site Contaminants Addressed	Site-Specific Issues Affecting Technology or Implementation	Rationale for Retention or Rejection	Screening Result
In Situ Physical/ Chemical Treatment	Chemical Oxidation	Oxidation chemically converts hazardous contaminants to nonhazardous or less toxic compounds that are more stable, less mobile, and/or inert. The oxidizing agents most commonly used are ozone, hydrogen peroxide, persulfate or permanganate. Reaction occurs only in aqueous solution.	Full-Scale	Technology demonstrated to be moderately effective under certain site conditions. Ineffective for most inorganics.	AOC-2, AOC-3, and AOC-4	VOCs, SVOCs, TPH	Handling of oxidant chemicals during remediation presents a safety concern. Chemical oxidant demand of soil can consume large quantities of oxidant (pilot test recommended). Establishing effective oxidant delivery system for even vadose zone distribution is difficult. Oxidants can mobilize some metals and may affect ongoing anaerobic biodegradation in the groundwater.	Not effective for some COCs, and high risk of mobilization of metals and cyanide. Very high cost of implementation compared to other technologies.	Reject
	Chemical Reduction	Reduction chemically converts hazardous contaminants to nonhazardous or less toxic compounds that are more stable, less mobile, and/or inert. The reducing agents most commonly used are ZVI, ferrous sulfide, and hydrogen sulfide. Reaction occurs only in aqueous solution.	Full-Scale	Technology demonstrated to be moderately effective under certain site conditions.	AOC-2, AOC-3, and AOC-4	VOCs, SVOCs, TPH, some inorganics	Handling of reducing chemicals during remediation presents a safety concern. Site groundwater chemistry is conducive to reductive processes, and the abundance of ferrous iron in site groundwater may prevent additional dissolution of inorganics to groundwater.	Not effective for all COCs in soil. Will immobilize some metals, and will enhance bioremediation conditions for organic COCs.	Retain
Containment	Cap/Surface Cover	Surface caps constructed of asphalt concrete, Portland cement concrete, or flexible membrane liners prevent direct exposure to soil contaminants, control erosion, and reduce infiltration of stormwater into the subsurface, reducing the leaching of COCs to groundwater.	Full-Scale	Proven effective for preventing surface exposure to buried waste and for reducing infiltration of surface water through waste, limiting leaching of COCs to groundwater.	AOC-2, AOC-3, and AOC-4	VOCs, SVOCs, TPH, inorganics	The site is already largely covered in impervious surfaces in AOC-2, AOC-3, and AOC-4.	Would be effective in preventing exposure of workers at the facility to contaminated soils, and could potentially reduce migration of COCs into groundwater at the shallow water- bearing unit.	Retain
Excavation/ Disposal	Excavation and Off- Site Disposal	Wastes exceeding site remediation goals are excavated and transported off site to an appropriate hazardous waste land disposal facility.	Full-Scale	Proven effective for all COCs.	Accessible soils in AOC-2, AOC-3, and AOC-4	VOCs, SVOCs, TPH, inorganics	Extensive shoring and support systems would be required for excavations near existing structures. Some impacted soils would likely remain in place due to the presence of existing structures/buildings.	Capable of addressing all contaminants in vadose zone soil at the site. Least administratively, logistically, and technically complex ex situ remediation technology. Potentially applicable to hot spots if site structures/buildings are removed.	Retain

Table 3
Remediation Technologies Considered for Incorporation in Remedial Alternatives
Stericycle Kent Facility
Kent, Washington

General Response Actions	Remediation Technologies	Technology Description	Technology Development Status	General Performance Record	Site Areas Addressed	Site Contaminants Addressed	Site-Specific Issues Affecting Technology or Implementation	Rationale for Retention or Rejection	Screening Result
In Situ Biological Treatment	Enhanced Anaerobic Biodegradation	A carbohydrate (e.g., molasses, sodium lactate, or proprietary blend) is injected into the affected groundwater to serve as an electron donor for indigenous organisms to enhance reductive biodegradation or precipitation/stabilization of metals. The carbohydrate may be combined with ZVI for very low redox conditions.	Full-Scale	Proven effective under proper conditions for degradation of chlorinated organics and precipitation of metals.	AOC-2, AOC-3, AOC-5, and 10-Day Hazardous Waste Transfer Yard	Vinyl chloride, arsenic, iron, and hexavalent chromium.	Multiple injections of electron donor are typically required. Monitoring is required to confirm effectiveness.	May be useful to target small source areas for vinyl chloride and inorganics.	Retain
	Bioaugmentation	Injection of specialty, nonindigenous microbes to enhance biodegradation. Microorganisms are commercially available for both aerobic and anaerobic degradation of chlorinated organics. Commercially available microorganisms may be use to assist in stabilization of inorganics.	Full-Scale	Has been effective for biodegradation of chlorinated solvents, sulfate reduction, and metals stabilization. Requires application of specific microbial seed. May require repeated application.	AOC-2, AOC-3, AOC-5, and 10-Day Hazardous Waste Transfer Yard	Vinyl chloride, arsenic, iron.	Nonindigenous organisms may not compete successfully with indigenous organisms. Vinyl chloride degradation is already occurring in groundwater. May be used in conjunction with enhanced biodegradation and in situ chemical reduction to address inorganics.	Bioaugmentation may be used if enhanced bioremediation is not meeting cleanup objectives for vinyl chloride and inorganics.	Retain
	Monitored Natural Attenuation	Intrinsic attenuation of groundwater constituents via the natural processes of biodegradation (aerobic and/or anaerobic), adsorption, and dilution. This passive technology relies on natural conditions within impacted groundwater.	Full-Scale	Has been proven effective at sites with appropriate conditions.	AOC-2, AOC-3, AOC-5, and 10-Day Hazardous Waste Transfer Yard	Vinyl chloride, arsenic, iron, cyanide, and hexavalent chromium.	Natural biodegradation of vinyl chloride is active at the site. Potentially longer remediation times when compared to more active technologies.	Natural attenuation is a viable process and has been documented to be actively occurring at the site.	Retain
In Situ Physical/ Chemical Treatment	Chemical Reduction	A reducing chemical such as hydrogen sulfide, hydrogen-releasing compound, ferrous sulfide or ZVI is added to the groundwater to chemically precipitate contaminants. Usually applied through injection wells or via direct-push technology. Some chemicals formulated for chemical reduction also promote biological degradation, such as emulsified ZVI.	Full-Scale	Can be effective depending on aquifer chemistry, tightness of formation, and number of injections.	AOC-2, AOC-3, AOC-5, and 10-Day Hazardous Waste Transfer Yard	Arsenic, iron, cyanide, and hexavalent chromium. May augment biodegradation of vinyl chloride.	This technology would enhance naturally occurring anaerobic biodegradation occurring at the site. May be difficult to achieve effective reducing agent distribution in tight formations. Will immobilize all site COCs.	This technology has potential to immobilize all inorganic materials at the site under the appropriate geochemical conditions, and to accelerate the naturally occurring biodegradation of vinyl chloride.	Retain
	Chemical Oxidation	An oxidizing chemical (permanganate, hydrogen peroxide, Fentons Reagent, Regenox) is added to the groundwater to chemically oxidize contaminants. Usually applied through injection wells or via direct- push technology.	Full-Scale	Can be effective depending on oxidant demand of native material, tightness of formation, and number of injections. Not effective for most metals. May result in metals mobilization.	AOC-2, AOC-3, and AOC-5	Vinyl chloride, may reduce soluble iron and free cyanide.	Active natural biological degradation of vinyl chloride would be inhibited by the addition of chemical oxidants. High reduced iron concentrations at the site would exert a large oxygen demand, affecting efficiency of treatment. May be difficult to obtain effective oxidant distribution in tight formations. May mobilize some metals.	Effective treatment may be limited due to the variable permeability in different groundwater zones and the high oxidant demand. May result in mobilization of reduced metals.	Reject
	Passive/ Reactive Treatment Barriers	Contaminant concentrations in groundwater are reduced as the groundwater flows through the permeable reactive barrier containing ZVI.	Full-Scale	Has been effectively used to reduce all groundwater COCs.	AOC-2, AOC-3, AOC-5, and 10-Day Hazardous Waste Transfer Yard	Vinyl chloride, arsenic, iron, cyanide, and hexavalent chromium.	Would be difficult to build a passive/reactive barrier due to complex hydrogeology and seasonal groundwater flow fluctuations. Construction could interfere with activities at the facility.	May be useful in targeted locations or for contingency treatment if anaerobically biodegradable compounds or metals are recalcitrant.	Retain

Abbreviations:
AOC = Area of Concern
COC = Contaminant of concern
SVOC = Semivolatile organic compound
TPH = Total petroleum hydrocarbons
VOC = Volatile organic compound
ZVI = Zero-valent iron

FIGURES



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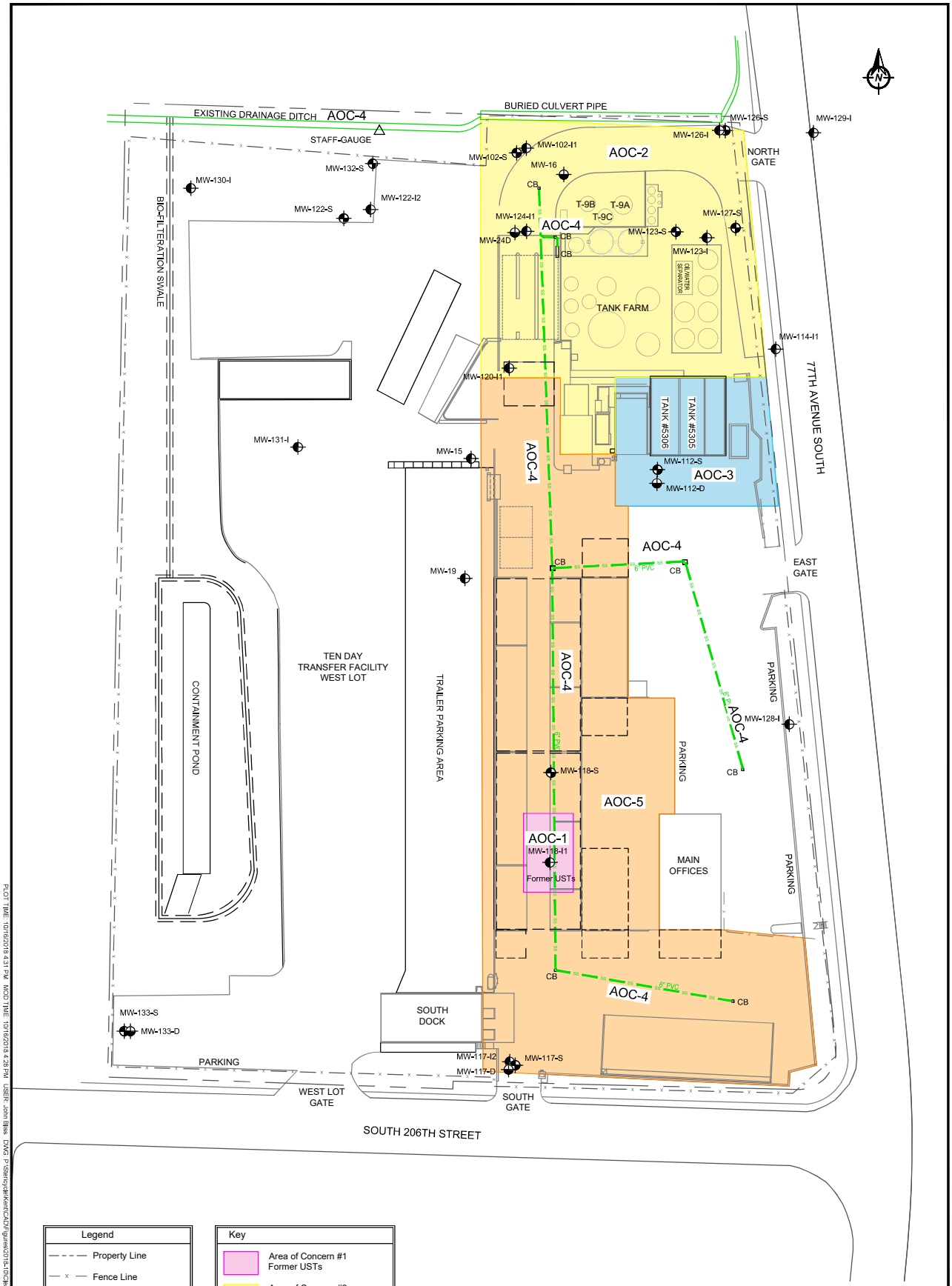
Stericycle Kent Facility
Kent, Washington
Cleanup Action Plan

SITE LOCATION

DALTON OLMSTED FUGLEVAND

FIGURE 1

October 2, 2018



Legend	Key
Property Line	Area of Concern #1 Former USTs
Fence Line	Area of Concern #2 Tank Farm Area
Shallow Monitoring Well	Area of Concern #3 Stabilization Area
Intermediate Aquifer Monitoring Well	Area of Concern #4 Stormwater Drainage System
Deep Aquifer Monitoring Well	Area of Concern #5 Process and Storage Area
CB Catch Basin	

Abbreviations:

CB = Catch Basin
UST = Underground Storage Tank

Stericycle Kent Facility
Kent, Washington
Cleanup Action Plan

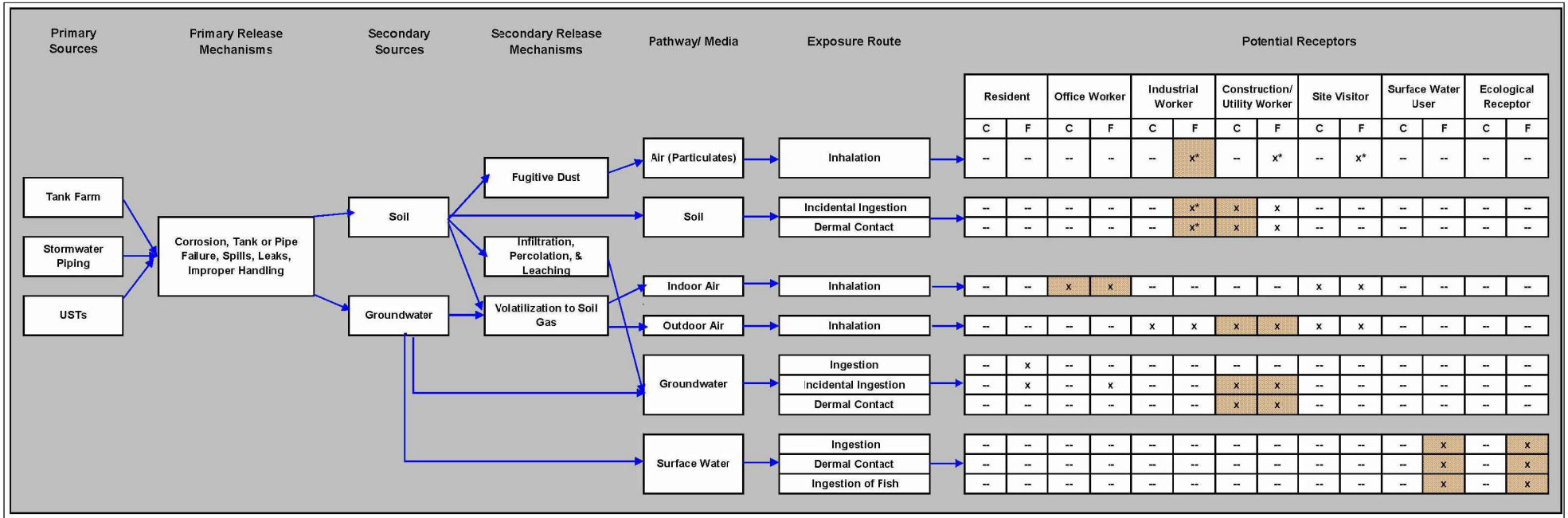
SITE LAYOUT

DALTON OLMSTED FUGLEVAND

FIGURE 2

October 2, 2018

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KEY

→	Potential Transport or Exposure Pathway
--	Incomplete Exposure Pathway
x	Potentially Complete Exposure Pathway
x	Most highly exposed receptor
*	Assumes cap removed in the future
C	Current land use
F	Future land use

USTs =Underground Storage Tanks

Note: Indoor air was considered a potentially complete pathway from contaminated soil or groundwater and therefore screening levels protective of this pathway were used in developing the FS.

Stericycle Kent Facility
Kent, Washington
Cleanup Action Plan

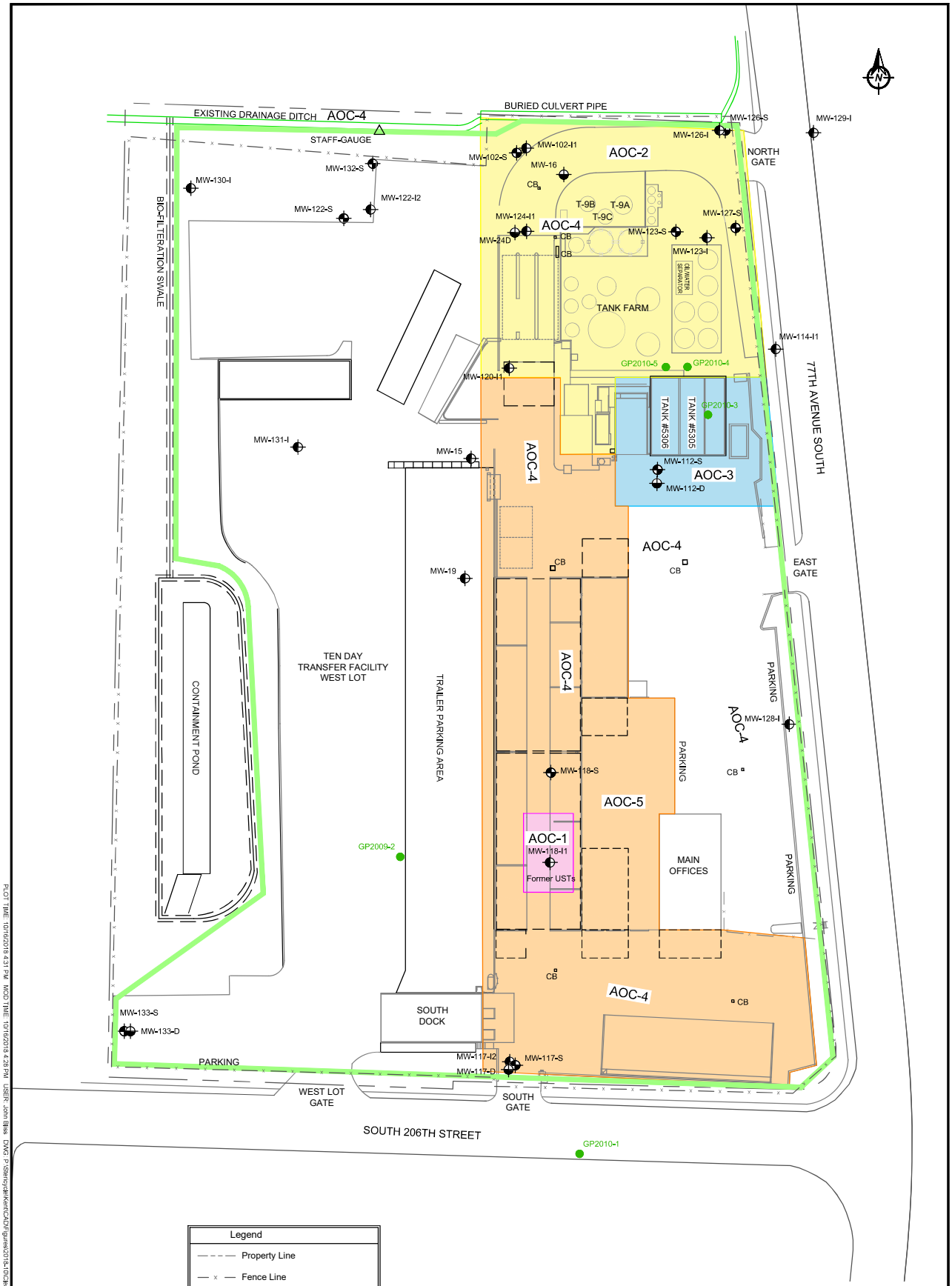
CONCEPTUAL SITE MODEL

DALTON OLMSTED FUGLEVAND

FIGURE 3

October 2, 2018

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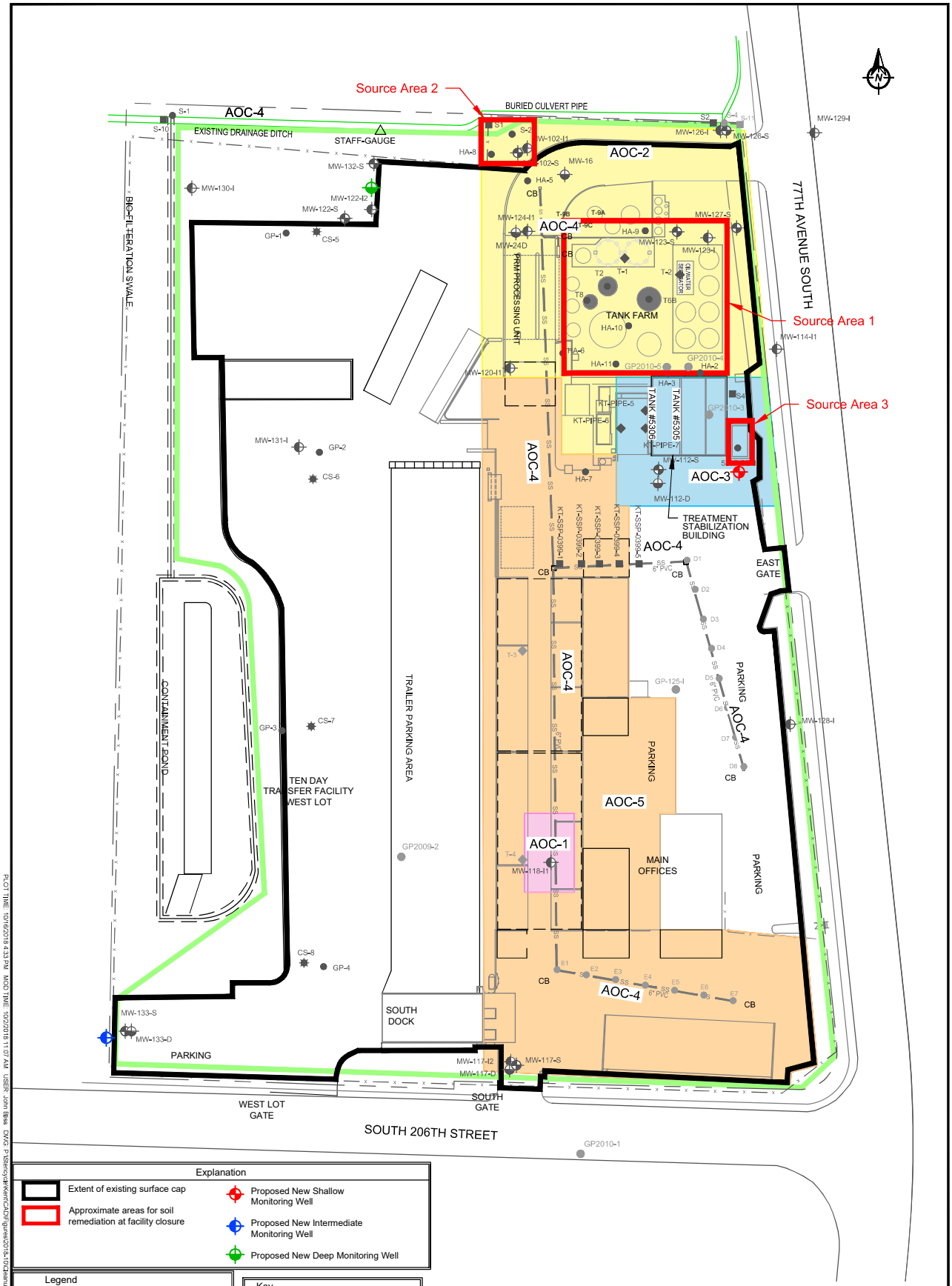
Stericycle Kent Facility
Kent, Washington
Cleanup Action Plan

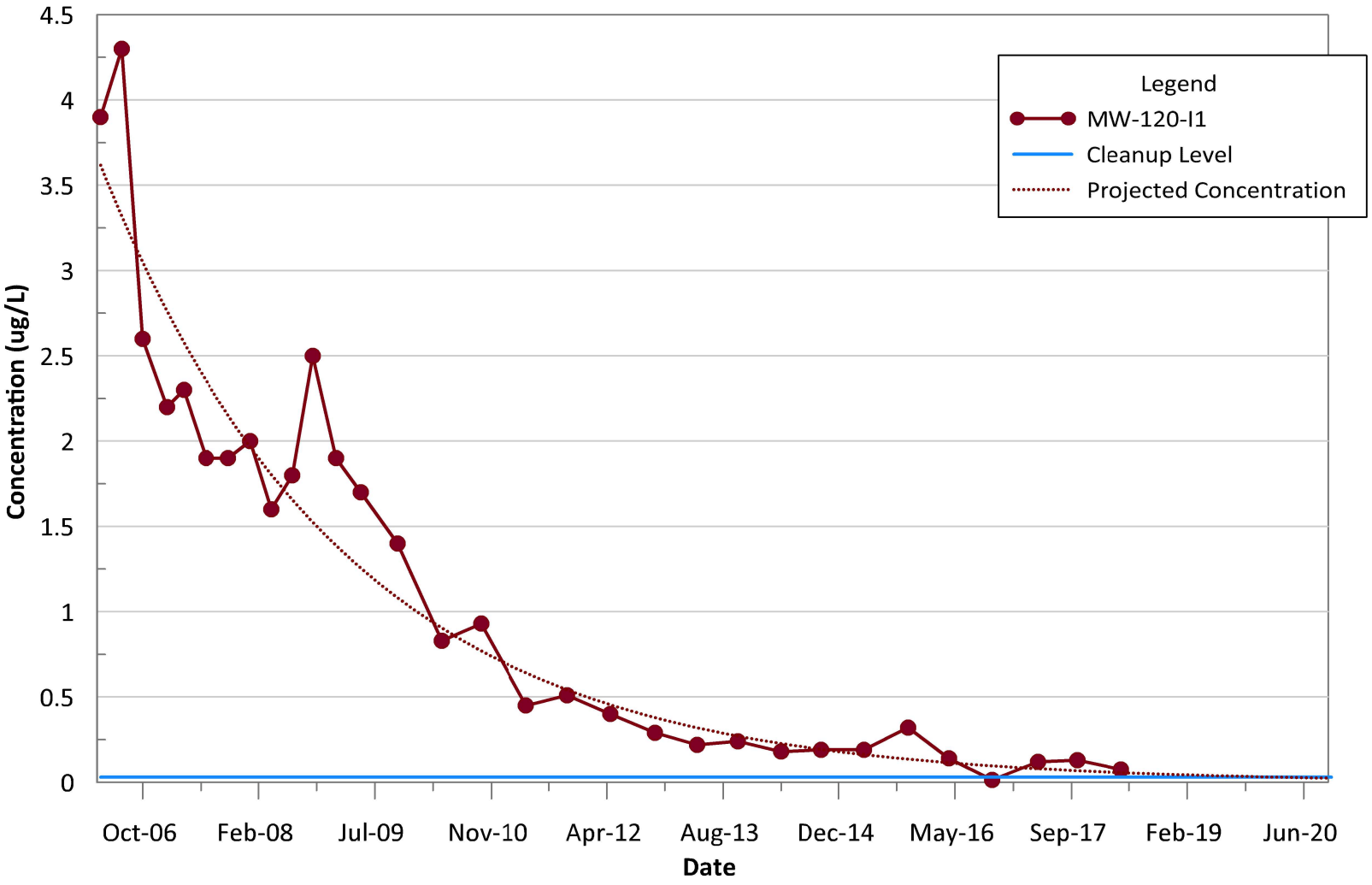
GROUNDWATER CONDITIONAL POINT OF COMPLIANCE LOCATION

DALTON OLMSTED FUGLEVAND

FIGURE 4

October 2, 2018


Source Area 2
Source Area 1
Source Area 3
AOC-4
AOC-2
AOC-3
AOC-5
AOC-1
BURIED CULVERT PIPE
EXISTING DRAINAGE DITCH
STAFF-GAUGE
BIO-FILTERATION SWALE
77TH AVENUE SOUTH
TANK FARM
PRM PROCESSING UNIT
OILWATER SEPARATOR
TANK #5306
TANK #5305
TREATMENT STABILIZATION BUILDING
EAST GATE
CONTAINMENT POND
TEN DAY TRANSFER FACILITY WEST LOT
TRAILER PARKING AREA
PARKING
MAIN OFFICES
SOUTH DOCK
WEST LOT GATE
SOUTH GATE
SOUTH 206TH STREET
Explanation
Extent of existing surface cap
Approximate areas for soil remediation at facility closure
Proposed New Shallow Monitoring Well
Proposed New Intermediate Monitoring Well
Proposed New Deep Monitoring Well
Legend
Property Line
Fence Line
Groundwater Monitoring Well
Composite Soil Sample
Soil Sample
Catch Basin
Stormwater Drainage System
Conditional Point of Compliance
Key
Area of Concern #1 Former USTs
Area of Concern #2 Tank Farm Area
Area of Concern #3 Stabilization Area
Area of Concern #4 Stormwater Drainage System
Area of Concern #5 Process and Storage Area
Abbreviations:
CB = Catch Basin
UST = Underground Storage Tank
0
60
Scale in Feet
Stericycle Kent Facility
Kent, Washington
Cleanup Action Plan
PROPOSED CLEANUP ACTION
DALTON OLMSTED FUGLEVAND
FIGURE 5
October 2, 2018



DOF

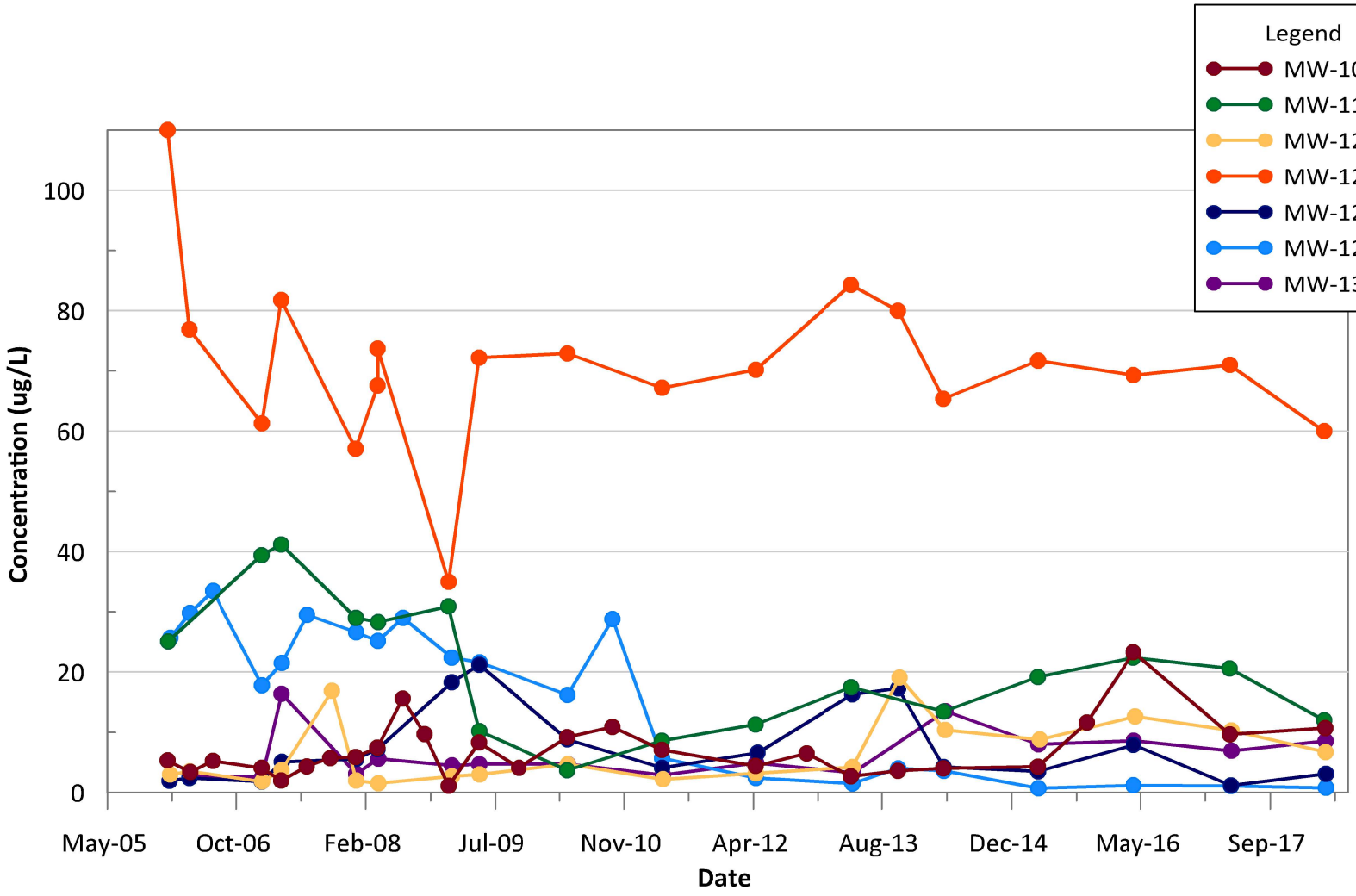
Projected Vinyl Chloride Concentrations at MW-120-I1

Stericycle Kent Facility

Kent, Washington

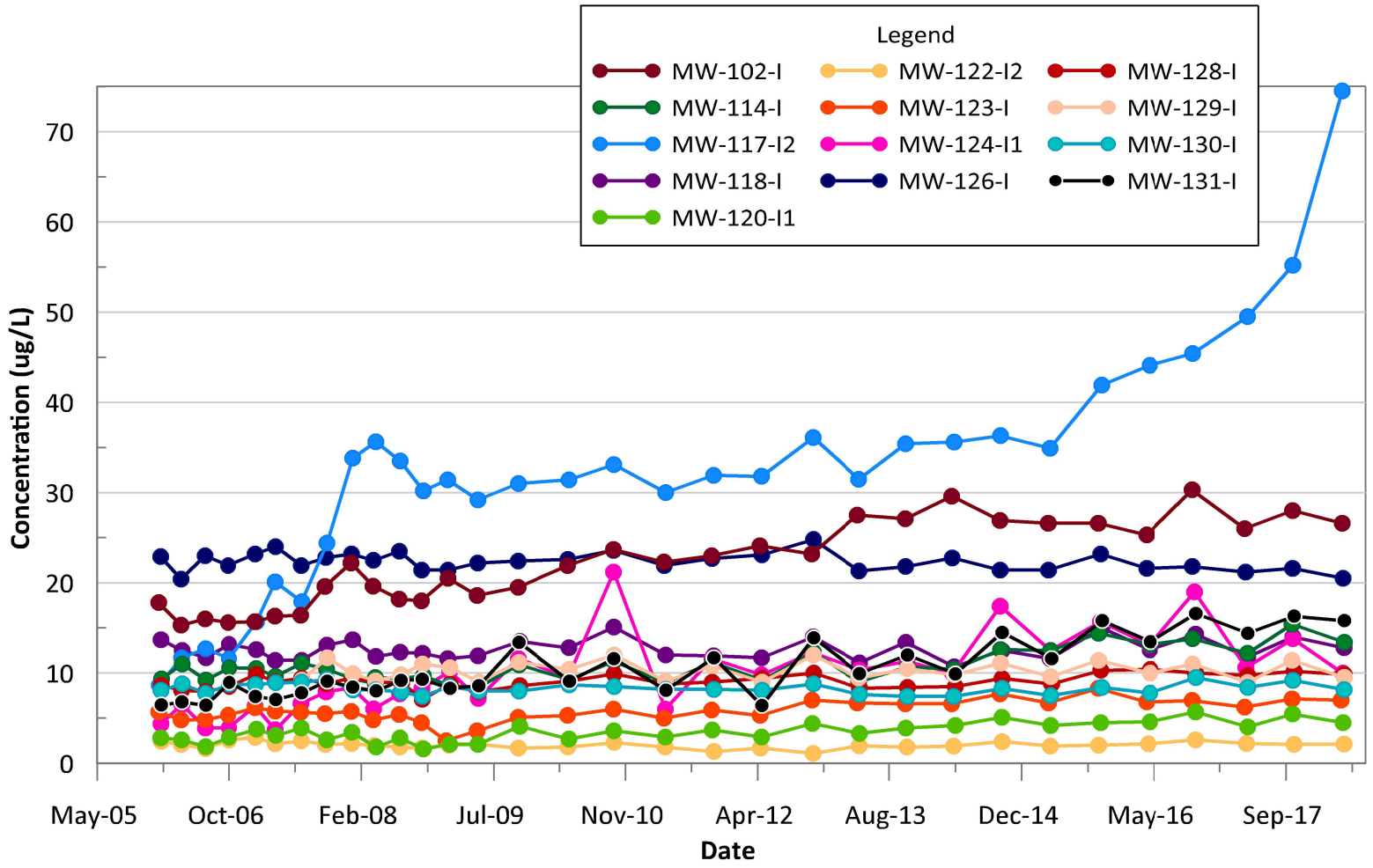
Figure 6

APPENDIX A



Total Arsenic Concentrations in Shallow Wells
2006 to 2018
Stericycle Kent Facility
Kent, Washington

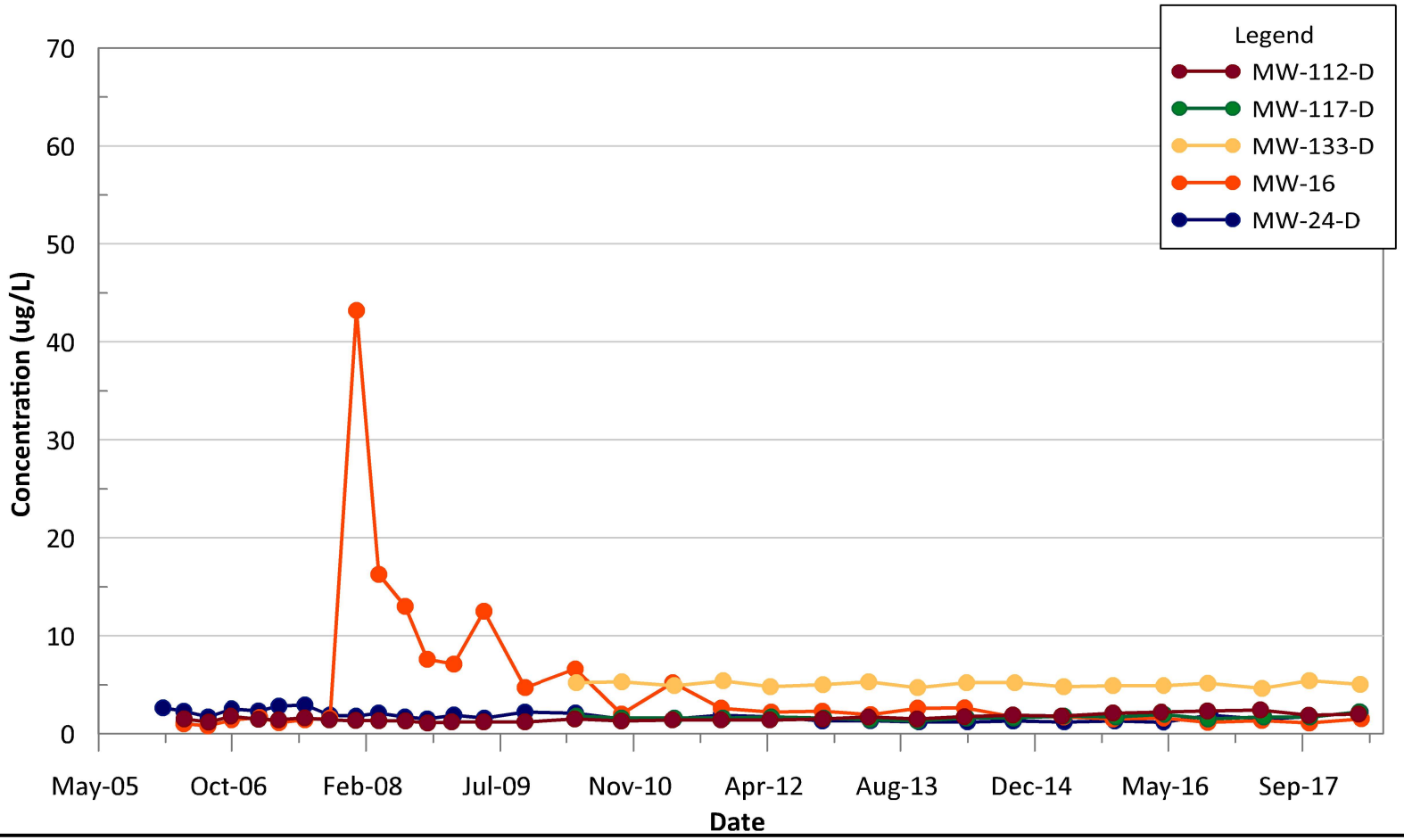
Figure A-1



DOF

Total Arsenic Concentrations in Intermediate Wells
2006 to 2018
Stericycle Kent Facility
Kent, Washington

Figure A-2



Total Arsenic Concentrations in Deep Wells
2006 to 2018
Stericycle Kent Facility
Kent, Washington

Figure A-3

APPENDIX B

DOF DALTON OLMSTED FUGLEVAND

APPENDIX B
WELL CONSTRUCTION DETAILS
Stericycle Kent Facility
Kent, Washington

Well ID	Date Installed	Screened Interval (feet bgs)[1]	Total Depth of Well Screen (feet bgs)	Top of Seal (feet bgs)	Bottom of Seal (feet bgs)	Top of Sand Pack (feet bgs)	Bottom of Sand Pack (feet bgs)	First Unit Borehole Diameter (in inches) and Depth (in feet)	Second Unit Borehole Diameter (in inches) and Depth (in feet)	Well Diameter (inches)	Riser Type	Screen Type	Sand Type	Seal Type	Standpipe (SP) or Flush Mount (FM)
Current Monitoring Well Network															
Shallow Water-bearing Unit															
MW-102-S	11/20/2002	2.75 to 5.75	5.75	1.5	2.25	2.25	5.75	8.25"	NA[2]	2	Schedule 40 PVC[3]	Schedule 40 PVC, 0.10"-slot	#2/12	Bentonite chips	FM
MW-112-S	2/1/2001	3.0 to 6.5	6.5	1	2.5	2.5	7	8.25"	NA	2	Schedule 40 PVC	Schedule 40 PVC, 0.10"-slot	#2/12	Bentonite chips	FM
MW-117-S	11/20/2002	2 to 4	4	1.5	2	2	4	8.25"	NA	2	Schedule 40 PVC	Schedule 40 PVC, 0.10"-slot	#2/12	Bentonite chips	FM
MW-122-S	11/20/2002	1.5 to 3.5	3.5	0.5	1	1	3.5	8.25"	NA	2	Schedule 40 PVC	Schedule 40 PVC, 0.10"-slot	#2/12	Bentonite chips	FM
MW-123-S	2/1/2001	3 to 6	6	1	2.5	2.5	6.5	8.25"	NA	2	Schedule 40 PVC	Schedule 40 PVC, 0.10"-slot	#2/12	Bentonite chips	SP
MW-126-S	11/22/2002	3 to 6	6	1.5	2.5	2.5	6	8.25"	NA	2	Schedule 40 PVC	Schedule 40 PVC, 0.10"-slot	#2/12	Bentonite chips	FM
MW-127-S	11/20/2002	3 to 8	8	1.5	2.5	2.5	8	8.25"	NA	2	Schedule 40 PVC	Schedule 40 PVC, 0.10"-slot	#2/12	Bentonite chips	FM
MW-132-S	11/20/2002	1.5 to 4	1.5	0.5	1	1	4	8.25"	NA	2	Schedule 40 PVC	Schedule 40 PVC, 0.10"-slot	#2/12	Bentonite chips	FM
MW-133-S	1/7/2010	3 to 8	8.0	1.5	2.5	2.5	8.5	8.25"	NA	2	Schedule 40 PVC	Schedule 40 PVC, 0.10"-slot	#10/20	Bentonite chips	FM
Intermediate Aquifer															
MW-102-I1	2/8/2001	13.5 to 18.5	18.5	2	12.5	12.5	19	14.25" to 5.5'	8.25" from 5' to 19.0'	2	Schedule 40 PVC	Schedule 40 PVC, 0.10"-slot	#2/12	Bentonite chips and grout	SP
MW-114-I1	2/4/2001	11.5 to 13.5	13.5	1	11	11	14	14.25" to 5'	8.25" from 5' to 15.0'	2	Schedule 40 PVC	Schedule 40 PVC, 0.10"-slot	#2/12	Bentonite chips and grout	FM
MW-117-I2	2/6/2001	14 to 19	19	1	13	13	19.5	14.25" to 5'	8.25" from 5' to 19.5'	2	Schedule 40 PVC	Schedule 40 PVC, 0.10"-slot	#2/12	Bentonite chips and grout	FM
MW-118-I1	1/30/2001	13.5 to 16	16	1	13	13	16.5	14.25" to 9'	8.25" from 9' to 17.0'	2	Schedule 40 PVC	Schedule 40 PVC, 0.10"-slot	#2/12	Bentonite chips and grout	FM
MW-120-I1	2/12/2001	12 to 17	17	1	11.5	11.5	17.5	14.25" to 6'	8.25" from 6' to 17.5'	2	Schedule 40 PVC	Schedule 40 PVC, 0.10"-slot	#2/12	Bentonite chips and grout	FM
MW-124-I1	2/8/2001	12 to 16.5	16.5	1	11.5	11.5	17	14.25" to 6'	8.25" from 6' to 18'	2	Schedule 40 PVC	Schedule 40 PVC, 0.10"-slot	#2/12	Bentonite chips and grout	FM
MW-129-I	6/15/2007	11 to 16	16	1	3	3	16	2	NA	1	Schedule 40 PVC	Pre-pack Schedule 40 PVC, 0.010"-slot, #20/40 sand	#2/12	Bentonite chips	FM
MW-131-I	11/19/2002	8.5 to 13.5	13.5	2	8	8	14.5	14.25" to 4.5'	8.25" from 4.5' to 14.5'	2	Schedule 40 PVC	Schedule 40 PVC, 0.10"-slot	#2/12	Bentonite chips and grout	FM

DOF DALTON OLMSTED FUGLEVAND

APPENDIX B
WELL CONSTRUCTION DETAILS
Stericycle Kent Facility
Kent, Washington

Well ID	Date Installed	Screened Interval (feet bgs)[1]	Total Depth of Well Screen (feet bgs)	Top of Seal (feet bgs)	Bottom of Seal (feet bgs)	Top of Sand Pack (feet bgs)	Bottom of Sand Pack (feet bgs)	First Unit Borehole Diameter (in inches) and Depth (in feet)	Second Unit Borehole Diameter (in inches) and Depth (in feet)	Well Diameter (inches)	Riser Type	Screen Type	Sand Type	Seal Type	Standpipe (SP) or Flush Mount (FM)
Current Monitoring Well Network															
Intermediate Aquifer															
MW-122-I2	2/7/2001	15.5 to 20.5	20.5	1	12.5	15	20.5	14.25" to 5.5'	8.25" from 5.5' to 21.5'	2	Schedule 40 PVC	Schedule 40 PVC, 0.10"-slot	#2/12	Bentonite chips and grout	SP
MW-123-I	1/31/2001	21 to 26	26	1	20	20	26.5	14.25" to 8.5'	8.25" from 8.5' to 26.5'	2	Schedule 40 PVC	Schedule 40 PVC, 0.10"-slot	#2/12	Bentonite chips and grout	SP
MW-126-I	11/22/2002	20.5 to 25.5	25.5	2	20	20	26.5	14.25" to 6.5'	8.25" from 6.5' to 26.5'	2	Schedule 40 PVC	Schedule 40 PVC, 0.10"-slot	#2/12	Bentonite chips and grout	NA
MW-128-I	11/22/2002	21.5 to 26.5	26.5	2	21	21	29.5	14.25" to 5.5'	8.25" from 5.5' to 27.5'	2	Schedule 40 PVC	Schedule 40 PVC, 0.10"-slot	#2/12	Bentonite chips and grout	FM
MW-130-I	11/19/2002	18.5 to 22	22	2	18	18	23	14.25" to 6'	8.25" from 6' to 23'	2	Schedule 40 PVC	Schedule 40 PVC, 0.10"-slot	#2/12	Bentonite chips and grout	SP
Deep Aquifer															
MW-16	3/7/1990	33.3 to 38.3	38.5	2	31.7	31.7	40.3	14.25" to 4'	8.25" from 4' to 50'	2	Schedule 40 PVC	Schedule 40 PVC, 0.20"-slot	#2/12	Bentonite chips and grout	FM
MW-112-D	2/5/2001	38.5 to 43.5	43.5	1	37.5	37.5	44	14.25" to 7'	8.25" from 7' to 44'	2	Schedule 40 PVC	Schedule 40 PVC, 0.10"-slot	#2/12	Bentonite chips and grout	FM
MW-117-D	1/8/2010	37 to 42	42	3	36	36	45	14" to 3"	8.25" from 35' to 42'	2	Schedule 40 PVC	Schedule 40 PVC, 0.10"-slot	#10/20	Bentonite chips	FM
MW-24D	6/28/2000	29 to 39	39	2.5	27	27	39	8.25"	NA	2	Schedule 40 PVC	Schedule 40 PVC, 0.10"-slot	#2/12	Bentonite chips	FM
MW-133-D	1/7/2010	27.75 to 38	38	3	26.5	26.5	38	14" to 3"	8.25" from 26' to 38"'	2	Schedule 40 PVC	Schedule 40 PVC, 0.10"-slot	#10/20	Bentonite chips	FM

Abbreviations
bgs = Below ground surface
NA = Not available
PVC = Polyvinyl chloride

Exhibit C

EXHIBIT C
Clean Earth / Burlington Environmental - Kent
Scope of Work and Schedule

Scope of Work

This Scope of Work (SOW) implements the Cleanup Action Plan (CAP), Exhibit B to the Agreed Order to address soil and groundwater contamination at the Burlington Environmental Kent Site (Site) in Kent, Washington. Burlington Environmental, LLC, will implement this SOW to perform Site cleanup and shall furnish all personnel, materials, and services necessary for, or incidental to, performing the cleanup action selected for the Site. All work completed for this SOW must meet the requirements of the Model Toxics Control Act (MTCA) Cleanup Regulation, Chapter 173-340 Washington Administrative Code (WAC).

The actions to be accomplished under this SOW are described in Section 4.0 of the CAP (Exhibit B). The selected cleanup remedies for the Site consist of:

A. Conducting long-term monitoring of groundwater (quality and levels for hydraulic control purpose).
B. Implementing institutional and engineering controls.
C. If contingency is triggered for source materials in site soils, performing pre-design sampling and characterization to determine the active treatment to be implemented.

Schedule

The Schedule includes tasks involving the completion of certain milestone activities and the submission of documents. Each of the documents required below are subject to Ecology's review and approval. Ecology will approve, approve with conditions, or disapprove of these documents. If Ecology disapproves of a draft document, Ecology will provide comments to Burlington Environmental, LLC who will submit a revised document that addresses Ecology's comments. Burlington Environmental, LLC may request a schedule modification in accordance with Section 8.10 (Extension of Schedule) of the Agreed Order.

	Work Scope	Schedule[1]
A. Administrative		
A.1	Progress Reports	Submit to Ecology semiannually, beginning after the first year following the effective date of the Agreed Order
B. Design		

B.1	Ecology Review Draft Engineering Design Report (EDR)[2]	Within 90 days of the effective date of the Agreed order
B.2	Draft Final EDR	Within 90 days of receipt of Ecology's comments on the Ecology Review Draft EDR (B.1)
B.3	Final EDR	Within 90 days of receipt of any additional comments on Draft Final EDR (B.2)
B. Groundwater Monitoring		
B.1	Long-term groundwater monitoring	As agreed by the Ecology and Burlington Environmental, LLC as part of the Long-Term Groundwater Monitoring Plan
B.2	Final Groundwater Monitoring Report	Submit to Ecology within 60 days of receipt of all analytical results from sampling event
C. Institutional Controls		
C.1	Proof of recording of an Environmental Covenant with the King County Recorder's Office	Submit to Ecology within 60 days of the effective date of the Agreed Order
C.2	If Ecology or Burlington Environmental, LLC determines that Burlington Environmental, LLC must revise its closure cost estimate due to information learned during its implementation of the CAP, Burlington Environmental, LLC must submit a request to modify the closure plan to Ecology.	Within 30 days after Burlington Environmental, LLC after it is determined that the closure cost estimate must be revised
C.3	Burlington Environmental, LLC must establish and maintain continuous coverage of financial assurance in the amount of the approved cost estimate and submit the applicable financial assurance documentation to Ecology.	30 days after Ecology's final approval of Burlington Environmental, LLC's cost estimate amount

Notes:

1. Schedule is in calendar days. Deliverable due date may be modified with Ecology concurrence without amendment to the Consent Decree.

2. The Engineering Design Report includes:
    - Construction Work Plan for surface cover inspection and repair and installation of new groundwater monitoring wells.
    - Description of the administrative approach for addressing future assessment and remediation of source material beneath the active areas of the Site.
    - Long-Term Groundwater Monitoring Plan (Sampling and Analysis Plan) for MNA.
    - Quality Assurance Project Plan.
    - Health and Safety Plan.
    - Draft Long-Term Controls Plan including a draft environmental covenant consistent with the ICs proposed for the site.
    - Construction Quality Assurance Project Plan.
    - Contingency Response Plan.

- Inspection and Maintenance Plan.

Burlington Environmental, LLC will submit all plans to Ecology for review, comment, and approval. All plans must include a schedule for implementation as applicable.