

**STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY**

In the Matter of Remedial Action by:
University of Washington Tacoma

FIRST AMENDMENT TO
AGREED ORDER
NO. DE 97HW-S238

RECEIVED
MAR 19 2013
WA State Department
of Ecology (SWRO)

TO: University of Washington
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Senior Vice President
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TABLE OF CONTENTS

	<u>Page</u>
I. INTRODUCTION	2
II. JURISDICTION	2
III. PARTIES BOUND	2
IV. DEFINITIONS	3
V. FINDINGS OF FACT	3
VI. ECOLOGY DETERMINATIONS	5
VII. WORK TO BE PERFORMED	5
VIII. TERMS AND CONDITIONS OF ORDER	6
1. Public Notices	6
2. Remedial and Investigative Costs	7
3. Designated Project Coordinators	8
4. Performance	8
5. Access	8
6. Public Participation	8
7. Retention of Records	10
8. Dispute Resolution	10
9. Reservation of Rights/No Settlement	10
10. Transference of Property	10
11. Compliance with Applicable Laws	11
12. Implementation of Remedial Action	12
13. Sampling, Data Submittal, and Availability	13
14. Extension of Schedule	13
15. Amendment of Order	14
16. Endangerment	15
17. Hold Harmless	16
IX. SATISFACTION OF ORDER	16
X. ENFORCEMENT	17
Exhibit A Location of Howe Parcel	
Exhibit B Location of the Interim Action	
Exhibit C Interim Action Work Plan	
Exhibit D Exempt Local Government Permits or Approvals and the Applicable Substantive Requirements	
Exhibit E Certificate of Insurance	

I. INTRODUCTION

Agreed Order No. DE 97HW-S238 (Original Order) entered into by the Department of Ecology (Ecology) and the University of Washington (University) on October 1, 1997, requires that the University perform a Remedial Investigation and Feasibility Study (RI/FS), prepare a draft Cleanup Action Plan (CAP) for the Facility, and prepare a RCRA closure plan for all RCRA regulated units on the Cragle Parcel.

By this First Amendment to the Original Order (First Amendment), Ecology requires the University to perform the interim action described herein at the Howe Parcel to address the tetrachloroethene groundwater contamination within the Facility.

This First Amendment does not include a restatement of all of the provisions of the Original Order. Provisions of the Original Order not specifically addressed in this First Amendment remain in full force and effect.

II. JURISDICTION

This First Amendment is issued pursuant to the authority of RCW 70.105D.050(1) and WAC 173-303-64630.

III. PARTIES BOUND

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

IV. DEFINITIONS

Section II of the Original Order (Definitions) is hereby amended as follows:

Section II.4. "RCW 70.105D.030(2)(e)" shall replace "RCW 70.105D.030(2)(d)."

Section II.5. "WAC 173-303-64620" shall replace "WAC 173-303-646."

Section II.12. "WAC 173-303-64620" shall replace "WAC 173-303-646."

Section II.15. "RCW 70.105D.020(20)" shall replace "RCW 70.105D.020(19)."

Section II.16. "WAC 173-303-64620" shall replace "WAC 173-303-646."

The following definitions are hereby added to Section II of the Original Order:

18. 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.

19. Parties: Refers to Ecology and the University.

20. Potentially Liable Person: Refers to the University.

21. RCRA: Refers to the Resource Conservation and Recovery Act, 42 U.S.C. §§ 6901-6992k.

V. FINDINGS OF FACT

Section III of the Original Order (Findings of Fact), is hereby amended to incorporate the following Findings of Fact, without admission or agreement of the accuracy or completeness of such facts by the University:

13. The Howe Parcel is located approximately at 1754 Pacific Avenue, Tacoma, Washington within the Facility. The Howe Parcel is more particularly described in the attached Exhibit A. A five-story brick building was constructed on the parcel prior to 1890, and historically used for furniture, dry goods, records and business forms. The Howe Parcel was acquired by the University in 1994. The historic building on the Howe Parcel was renovated by the University in 1996 and is currently occupied by the University Book Store.

14. A former cistern (AOC 20) was discovered at the Howe Parcel in May 1996 during building renovation. The oil/water and sludge contents of the cistern and the sides and top of the cistern were removed at that time. A 3-inch pipe connected to the cistern was believed to be a footing drain. Water in the footing drain was analyzed and tetrachloroethene was detected. The cistern and the associated footing drain were thought to be the source of the tetrachloroethene contamination.

15. As required by the Original Order, a Remedial Investigation (RI) was conducted and the RI Report, Revision 1.1, dated November 18, 2002, and revision pages dated February 6, 2003, were approved by Ecology on February 21, 2003.

16. Environmental investigations conducted at the Howe Parcel and in the vicinity of the Federal Courthouse Building (which is across Pacific Avenue from the Howe Parcel) indicate that volatile organic compounds (VOCs) are present in groundwater. Leaks of chlorinated solvent-impacted wastewater from the former cistern at the Howe Parcel are the suspected source of the tetrachloroethene contamination that impacts the groundwater. Tetrachloroethene environmental breakdown products, including trichloroethene (TCE), are also present in groundwater.

17. The contaminated groundwater plume flows generally northeasterly from the Howe Parcel, under and to the east of the Federal Courthouse Building. Fifteen groundwater monitoring wells were installed downgradient of the tetrachloroethene source. Elevated concentrations of tetrachloroethene (up to 150 ppb during the latest sampling event on December 10, 2010) were detected above applicable Model Toxics Control Act (MTCA) groundwater cleanup levels at locations upgradient of the Federal Courthouse Building. Lower levels of tetrachloroethene were detected in some downgradient monitoring wells.

18. An interim action implementing groundwater cleanup will be required to reduce groundwater VOC levels.

VI. ECOLOGY DETERMINATIONS

Section IV of the Original Order (Ecology Determinations), is hereby amended to incorporate the following determinations:

9. Ecology has determined that additional work in the form of a certain interim action, as described herein, is necessary.

10. Ecology believes this additional work to be performed is in the public interest.

11. Based on all information known to Ecology, Ecology has determined that the interim action required herein is necessary to reduce a threat to human health or the environment by substantially reducing one or more pathways for exposure, to correct a problem that may become substantially worse or cost substantially more to address if remedial action is delayed, and to help provide for completion of an RI/FS or design of a cleanup action. WAC 173-340-430(1).

12. Ecology has determined that the interim action described herein will not foreclose alternatives for cleanup to be considered in the FS.

13. RCW 70.105D.030(2)(a) requires that, at a minimum, this First Amendment be subject to concurrent public notice. Ecology shall be responsible for providing such public notice and reserves the right to modify or withdraw any provisions of this First Amendment should public comment disclose facts or considerations which indicate to Ecology that the First Amendment is inadequate or improper in any respect.

VII. WORK TO BE PERFORMED

Section V of the Original Order (Work to be Performed), is hereby amended to authorize the proposed interim action and incorporate the following information and requirements as an integral and enforceable part of the Original Order:

16. Howe Parcel interim action regarding the tetrachloroethene groundwater plume:

a. Location of interim action. The location of the interim action work is illustrated in Exhibit B. This attachment is an integral and enforceable part of this First Amendment.

b. Interim Action. The interim remedial action will involve in-situ chemical reduction and long-term groundwater monitoring. A permeable reactive barrier wall will be constructed perpendicular to groundwater flow adjacent to the Howe Parcel. Injection of an organic substrate to promote destruction of tetrachloroethene in the groundwater will be performed over a several year period. Compliance groundwater monitoring will be performed downgradient of the barrier wall. The work plan for the interim action authorized herein is set forth in Exhibit C. This attachment is an integral and enforceable part of this First Amendment.

c. Schedule. The timeline of deliverables required for the interim action is included in the interim action work plan (Exhibit C).

17. If, at any time after the first exchange of comments on drafts, Ecology determines that insufficient progress is being made in the preparation of any of the deliverables required by the Original Order and this First Amendment, Ecology may complete and issue the final deliverable.

VIII. TERMS AND CONDITIONS OF ORDER

Section VI of the Original Order (Terms and Conditions of Order) is hereby amended as follows:

1. Section VI.1. (Public Notices) is wholly substituted and replaced with the following: RCW 70.105D.030(2)(a) requires that, at a minimum, this Order be subject to concurrent public notice. Ecology shall be responsible for providing such public notice and reserves the right to modify or withdraw any provisions of this Order should public comment disclose facts or considerations which indicate to Ecology that this Order is inadequate or improper in any respect.

2. Section VI.2. (Remedial and Investigative Costs) is wholly substituted and replaced with the following: The University shall pay to Ecology costs incurred by Ecology pursuant to this Order and First Amendment and consistent with WAC 173-340-550(2). These costs shall include work performed by Ecology or its contractors for, or on, the Facility under Chapter 70.105D RCW, 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 and First Amendment. 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 costs incurred, the University 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 70.105D.055, (to the extent applicable to the University as a state agency) file a lien against real property subject to the remedial actions to recover unreimbursed remedial action costs.

The address for mailing payments via the post office is:

Department of Ecology
Cashiering Section
P.O. Box 5128
Lacey, WA 98509-5128

Check may be sent by a messenger/overnight delivery service to:

Department of Ecology
Cashiering Section
300 Desmond Drive
Lacey, WA 98503

In order to ensure that your payment is properly credited, please enclose the bottom portion of Ecology's invoice and indicate that the check is for cost recovery on the University of Washington-Tacoma Campus Facility.

3. Section VI.3. (Designated Project Coordinator) is wholly substituted and replaced with the following: The project coordinator for Ecology is:

Linda Pang, P.E.
Department of Ecology
Southwest Regional Office
P.O. Box 47775
Olympia, WA 98504-7775
(360) 407-6344

The project coordinator for the University of Washington is:

David M Ogradnik
Environmental Project Engineer
Facilities Services, Campus Engineering
Plant Operations Annex 6
Box 352165 University of Washington
Seattle, WA 98195
(206) 221-4285

4. Section VI.4. (Performance) has not changed from the Original Order.

5. Section VI.5. (Access) is amended to add the following requirement: The University shall make all reasonable efforts to secure access rights for those properties within the Facility not owned or controlled by the University where remedial activities or investigations will be performed pursuant to this Order and First Amendment. All persons who access the Facility 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 Facility property access.

6. Section VI.6. (Public Participation) is wholly substituted and replaced with the following: A Public Participation Plan is required for this Facility. Ecology shall review any existing Public Participation Plan to determine its continued appropriateness and whether it

requires amendment, or if no plan exists, Ecology shall develop a Public Participation Plan alone or in conjunction with the University.

Ecology shall maintain the responsibility for public participation at the Facility. However, the University shall cooperate with Ecology, and shall:

a. If agreed to by Ecology, develop appropriate mailing list, 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.

b. Notify Ecology's project coordinator prior to the preparation of all press releases and fact sheets, and before major meetings with the interested public and local governments. Likewise, Ecology shall notify the University prior to the issuance of all press releases and fact sheets, and before major meetings with the interested public and local governments. For all press releases, fact sheets, meetings, and other outreach efforts by the University that do not receive prior Ecology approval, the University shall clearly indicate to its audience that the press release, fact sheet, meeting, or other outreach effort was not sponsored or endorsed by Ecology.

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

d. When requested by Ecology, arrange and/or continue information repositories to be located at the following locations:

1. UW Tacoma Library
Tioga Library Building
Circulation Desk
Permanent Reserve
1907 Jefferson Avenue, Box 358460

Tacoma, WA 98402-8460
(253) 692-4440

2. Ecology's Southwest Regional Office
300 Desmond Drive
Lacey, WA 98503
(360) 407-6000

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 Southwest Regional Office in Lacey, Washington.

7. Section VI.7. (Retention of Records) has not changed from the Original Order.

8. Section VI.8. (Dispute Resolution) is hereby amended as follows: "Section Manager" shall replace "Program Manager."

Section VI.8. of the Original Order is hereby amended to add the following requirements: 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.

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

9. Section VI.9. (Reservation of Rights/No Settlement) has not changed from the Original Order.

10. Section VI.10. (Transference of Property) is wholly substituted and replaced with the following: No voluntary conveyance or relinquishment of title, easement, leasehold, or other interest in any portion of the Facility shall be consummated by the University without provision for continued implementation of all requirements of this Order and First Amendment and implementation of any remedial actions found to be necessary as a result of this Order and First Amendment.

Prior to the University's transfer of any interest in all or any portion of the Facility, and during the effective period of this Order and First Amendment, the University shall provide a copy of this Order and First Amendment to any prospective purchaser, lessee, transferee, assignee, or other successor in said interest; and, at least thirty (30) days prior to any transfer, the University shall notify Ecology of said transfer. Upon transfer of any interest, the University shall restrict uses and activities to those consistent with this Order and First Amendment and notify all transferees of the restrictions on the use of the property.

11. Section VI.11. (Compliance with Applicable Laws) is wholly substituted and replaced with the following:

a. All actions carried out by the University pursuant to this Order and First Amendment shall be done in accordance with all applicable federal, state, and local requirements, including requirements to obtain necessary permits, except as provided in RCW 70.105D.090. At this time, no federal, state or local requirements have been identified as being applicable to the actions required by this Order and First Amendment.

b. Pursuant to RCW 70.105D.090(1), the University is exempt from the procedural requirements of Chapters 70.94, 70.95, 77.55, 90.48, and 90.58 RCW and of any laws requiring or authorizing local government permits or approvals. However, the University shall comply with the substantive requirements of such permits 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 entry of this Order and First Amendment, have been identified in Exhibit D.

The University has a continuing obligation to determine whether additional permits or approvals addressed in RCW 70.105D.090(1) would otherwise be required for the remedial action under this Order and First Amendment. In the event either Ecology or the University determines that additional permits or approvals addressed in RCW 70.105D.090(1) would otherwise be required for the remedial action under this Order and

First Amendment, it shall promptly notify the other party of its determination. Ecology shall determine whether Ecology or the University shall be responsible to contact the appropriate state and/or local agencies. If Ecology so requires, the University 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 the University and on how the University must meet those requirements. Ecology shall inform the University in writing of these requirements. Once established by Ecology, the additional requirements shall be enforceable requirements of this Order and First Amendment. The University shall not begin or continue the remedial action potentially subject to the additional requirements until Ecology makes its final determination.

c. Pursuant to RCW 70.105D.090(2), in the event Ecology determines that the exemption from complying with the procedural requirements of the laws referenced in RCW 70.105D.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 the University shall comply with both the procedural and substantive requirements of the laws referenced in RCW 70.105D.090(1), including any requirements to obtain permits.

Section VI of the Original Order (Terms and Conditions of Order), is hereby amended to add the following provisions:

12. Implementation of Remedial Action: If Ecology determines that the University has failed without good cause to implement the remedial action, in whole or in part, Ecology may, after notice to the University, perform any or all portions of the remedial action that remain incomplete. If Ecology performs all or portions of the remedial action because of the University's failure to comply with its obligations under this Order and First Amendment, the

University shall reimburse Ecology for the costs of doing such work in accordance with Section VII.2. (Remedial and Investigative Costs), provided that the University is not obligated under this section to reimburse Ecology for costs incurred for work inconsistent with or beyond the scope of this Order and First Amendment.

13. Sampling, Data Submittal, and Availability: With respect to the implementation of this Order and First Amendment, the University 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.

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

14. Extension of Schedule: 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:

- a. The deadline that is sought to be extended;
- b. The length of the extension sought;
- c. The reason(s) for the extension; and
- d. Any related deadline or schedule that would be affected if the extension were granted.

The burden shall be on the University 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:

a. Circumstances beyond the reasonable control and despite the due diligence of the University 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 the University;

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

c. Endangerment as described in Section VIII.16. (Endangerment).

However, neither increased costs of performance of the terms of this Order and First Amendment nor changed economic circumstances shall be considered circumstances beyond the reasonable control of the University.

Ecology shall act upon any written request for extension in a timely fashion. Ecology shall give the University written notification of any extensions granted pursuant to this Order and First Amendment. 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 and First Amendment pursuant to Section VIII.15. (Amendment of Order) when a schedule extension is granted.

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:

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

b. Other circumstances deemed exceptional or extraordinary by Ecology; or

c. Endangerment as described in Section VIII.16. (Endangerment).

15. Amendment of Order: The project coordinators may verbally agree to minor changes to the work to be performed without formally amending this Order and First

Amendment. Minor changes will be documented in writing by Ecology within seven (7) days of verbal agreement.

Except as provided in Section VII.9. (Reservation of Rights), substantial changes to the work to be performed shall require formal amendment of this Order and First Amendment. This Order and First Amendment may only be formally amended by the written consent of both Ecology and the University. The University shall submit a written request for amendment to Ecology for approval. Ecology shall indicate its approval or disapproval in writing and in a timely manner after the written request for amendment is received. If the amendment to this Order and First Amendment represents a substantial change, Ecology will provide public notice and opportunity to comment. Reasons for the disapproval of a proposed amendment to this Order and First Amendment shall be stated in writing. If Ecology does not agree to a proposed amendment, the disagreement may be addressed through the dispute resolution procedures described in VII.8. (Resolution of Disputes).

16. Endangerment: In the event Ecology determines that any activity being performed at the Facility is creating or has the potential to create a danger to human health or the environment on or surrounding the Facility, Ecology may direct the University to cease such activities for such period of time as it deems necessary to abate the danger. The University shall immediately comply with such direction.

In the event the University determines that any activity being performed at the Facility is creating or has the potential to create a danger to human health or the environment, the University may cease such activities. The University 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 the University shall provide Ecology with documentation of the basis for the determination or cessation of such activities. If Ecology disagrees with the University's cessation of activities, it may direct the University to resume such activities.

If Ecology concurs with or orders a work stoppage pursuant to Section VIII.16. (Endangerment), the University'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 VIII.14. (Extension of Schedule) for such period of time as Ecology determines is reasonable under the circumstances.

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

17. Hold Harmless: Each Party shall be responsible for the actions and inactions of itself and its own officers, employees, and agents acting within the scope of their authority. Ecology and the University, as state agencies, are insured under the self-insurance program of Washington State. A copy of Ecology's and the University's certificate of insurance is attached to this First Amendment as Exhibit E.

The University shall defend, protect, and hold Ecology harmless from and against any and all claims, suits, or actions arising from the negligent acts or omissions of the University's employees and/or authorized representatives while performing under the terms of this Order and First Amendment.

IX. SATISFACTION OF ORDER

Section VIII (Satisfaction of This Order) has not changed from the Original Order.

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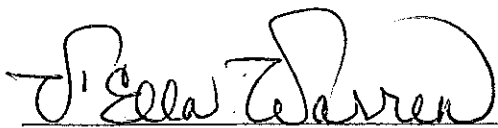
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X. ENFORCEMENT

Section IX (Enforcement) has not changed from the Original Order.

Effective date of this First Amendment to the Agreed Order: March 19, 2013

UNIVERSITY OF WASHINGTON




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